Cathedral City

CITY OF CATHEDRAL CITY

DRAFT COMPREHENSIVE GENERAL PLAN

July 1, 2019

Prepared By:

Community Development Department
City of Cathedral City
68-700 Avenida Lalo Guerrero
Cathedral City, CA 92234

and

Terra Nova Planning & Research, Inc.®
42635 Melanie Place, Suite 101
Palm Desert, CA 92211

City of Cathedral City

Riverside County, California

Draft COMPREHENSIVE GENERAL PLAN

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Community Development Department
City of Cathedral City
68-700 Avenida Lalo Guerrero
Cathedral City, CA 92234

Terra Nova Planning & Research, Inc.®
42635 Melanie Place, Suite 101
Palm Desert, CA 92211

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DRAFT
COMPREHENSIVE GENERAL PLAN

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CITY OF CATHEDRAL CITY

DRAFT GENERAL PLAN

CHAPTER I

INTRODUCTION TO THE GENERAL PLAN

INTRODUCTION

All incorporated cities and counties are required by the California Government Code to prepare a comprehensive, long-term general plan, which directs the development of the community. As an official document of the City of Cathedral City, the Comprehensive General Plan provides the goals, policies and programs to guide the development of the City and to preserve its valued assets, resources and quality of life. In addition to goals and policies, the General Plan includes issue discussions, factoids, diagrams and maps, tables and charts that provide direction for the prudent and conscientious management of existing and future development.

The makeup and composition of Cathedral City are briefly described below. The planning area, including the City limits, the City Sphere-of-Influence and additional lands are described, as are the regional context and long-term perspective taken by the City in developing this document. Finally, this brief discussion provides an overview of the Comprehensive General Plan and the Environmental Impact Report, and their roles as the principal guidance for the development of the community.

CITY OF CATHEDRAL CITY

The City of Cathedral City is located in the Coachella Valley, in central portion of Riverside County. The City is bordered on the west by the City of Palm Springs and Desert Hot Springs, Rancho Mirage and unincorporated county lands on the east, and unincorporated county lands to the south and north. The City currently encompasses 27.7± square miles and extends from the foothills of the Santa Rosa Mountains on the south to Edom Hill and the Indio Hills on the north, with most of the City occurring on the valley floor. This General Plan addresses not only the 14,557± acres located within the City limits. The City's Sphere of Influence (SOI) encompasses 23,544± acres. These SOI lands are located north of US Interstate-10 and the Union Pacific Railroad corridor and extend east to Cook Street.

Cathedral City is the second largest and one of the most diverse communities in the Coachella Valley with a 2016 population that is 61% Hispanic, 30.4% non-Hispanic white, 6.2% Asian and 6.0% African American. Incorporated in 1981, development in the City began in the early part of the 20th century and today hosts a diverse mix of residential neighborhoods, commercial and industrial developments, and an array of artists, musicians, makers and doers from all walks of life. With major hotels and golf courses, excellent schools and a thriving and expanding commercial and service base, the City is working to further diversify its economy and employment opportunities.

Cathedral City is well served by major transportation routes and is actively working with its neighbour cities and the Coachella Valley Association of Governments (CVAG) to expand multi-modal transportation and other attributes of a *healthy city*, and to bring commuter rail and express mass transit service to its regional access system. Major recreational and educational facilities are also becoming integral parts of the range of services and facilities available in the City. Cathedral City has become one of the valley's most desirable and affordable places to live, and leads the way in preserving open space, parks and recreation facilities, and integrating public art into the fabric of the community.

Most of the City south of US Interstate-10 is already developed and the remaining vacant lands in this area are generally located east of Date Palm Drive and north of Dinah Shore Drive. In recent years, the City's corporate limits have expanded to include lands north of US I-10 and have extended east to Bob Hope Drive, where large-scale master planned communities have already been approved for development. As noted, the City's Sphere-of-Influence extends eastward on the north side of US I-10 taking in the community of Thousand Palms, continuing eastward beyond Cook Street and including the Classic Club and the surrounding master planned community.

Development over the past decades has been focused along the East Palm Canyon Drive (SR 111) corridor, and the northern areas of the City on the valley floor. The City is situated across a variety of geographic and geologic conditions, including a mid-valley alluvial plain and limited mountain foothills, as well as the sandy desert floor. The Santa Rosa Mountains bound the City on the south and Edom Hill and the Indio Hills bound the City on the north.

The extensive deposits formed by drainage from these mountains form the alluvial fans and plains on which much of the City has developed. The adjoining Santa Rosa Mountains, and the San Jacinto and Little San Bernardino Mountains to the west and north, respectively, also provide dramatic and valuable viewsheds. The City is a geographically and biologically important location, where significantly differing wildlife habitat, landscapes and geology meet.

PUBLIC PARTICIPATION

The public has played a vital role in this most recent General Plan update. Through a program of numerous public workshops and study sessions, members of the general public, including residents and business owners, described their hopes, concerns and vision for the community.

Workshops were held throughout the City where an overview of the General Plan and update process was presented. Information handouts on the General Plan, and the environmental review and public hearing process were also provided. Comments were recorded during many one-on-one and group sessions, on comment cards and by other means.

Focused public study sessions were also held jointly with the Planning Commission and City Council, and continued the review of land use assignments throughout the City. These study sessions also reviewed and discussed the City's roadway network and roadway classifications, as well as the new *Active Transportation Plan*, which is a part of the *Circulation and Mobility Element.* In addition, draft General Plan Elements were taken to various City committees and commissions, including the Planning Commission, Parks and Recreation Commission, and Public Arts Commission. Following these final study sessions and committee and commission meetings, which provided additional opportunity for public input, the Draft General Plan and environmental review document were made available for a 45-day public review period, during which additional comments were received and considered. The adopted General Plan reflects the values and aspirations of the community and provides vision and guidance for the City's development through the Year 2040.

BASIS OF THE GENERAL PLAN

The General Plan update is an evolution that stretches back to a time well before the City's incorporation in 1981. Urban development in the Coachella Valley has occurred in only about the past 100 years and for many centuries before that the region was settled by the Cahuilla Indians.

"A city is not gauged by its length and width, but by the broadness of its vision and the height of its dreams."
- Herb Caen

"What is the City but the people?"
- Wm. Shakespeare

The knowledge and history of the Cahuilla and the valley has been handed down from generation to generation. In modern times, science and technology have been brought to bear with first railroads and later highway transportation crossing the distance and connecting the valley with the outside. Early in the 20th Century large-scale agriculture, and the development of settlements, towns and cities has followed.

The General Plan update has also been informed by a deepening understanding of local air and water resources, changing climate and hydrologic cycles, flooding, earthquakes and other geologic hazards. Modern technology has also introduced many new hazards. But we have chosen to better cherish and protect our cultural, biological and other environmental resources. These have shaped the *Imagine 2040* General Plan update.

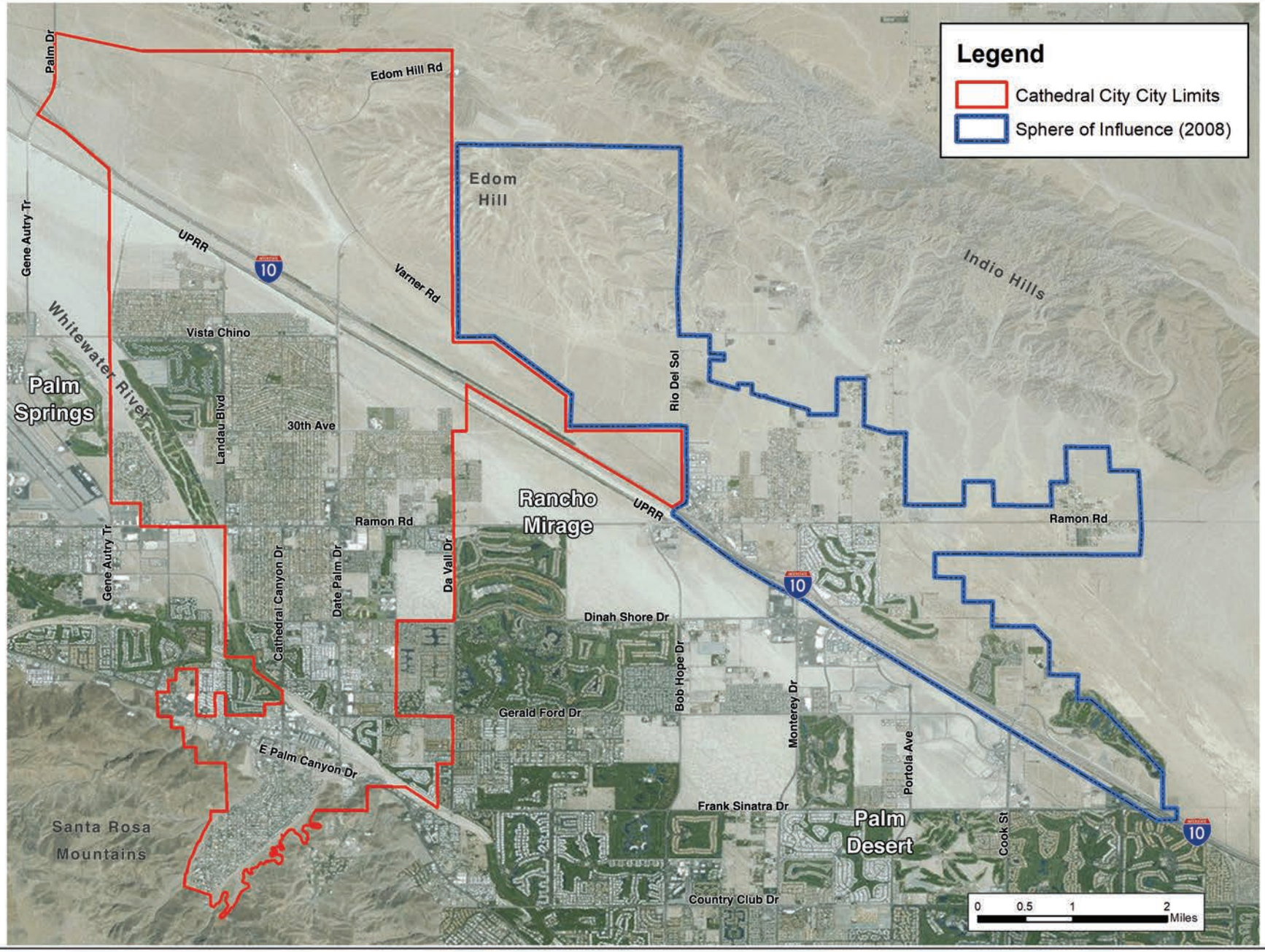
GENERAL PLAN VISION STATEMENT

The General Plan Vision Statement is a distillation of the expressions of concern, hope and aspiration for the City of Cathedral City and its citizens. Hundreds of members of the community provided comments and various forms of input about the City's future. These are summarized in the following vision statement:

> *"A sustainable Cathedral City that continues to grow culturally and economically, that celebrates and embraces diversity, that provides a wide variety of housing and employment opportunities, that ensures community health and safety, that protects and celebrates the environment, and that promotes a high quality of life for all of its residents."*

Fountain of Life

Water is the source of life and most precious in our desert environment. It is also a symbol of flexibility, adaptability and persistence that can be as giving as a gentle rain and as powerful as a mighty flood. So too, the City must be progressive, adaptable and flexible to meet the changing needs of the community and take advantage of emerging opportunities. The Fountain of Life is a perfect symbol of Cathedral City and joyously celebrates our desert realm, its unique and diverse character, and our appreciation for the things that make life possible. The City General Plan serves as a strategic policy and action plan that reflects the values of the community and provides a way of making our vision and dreams for the City a reality.



06.26.19 Source: Esri, City of Cathedral City, 2018

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Exhibit I-1 - City Limits and Sphere of Influence
Cathedral City General Plan - Imagine 2040

Cathedral City

GENERAL PLAN UPDATE – WHAT'S NEW?

Since the General Plan was last updated in 2009, the State of California's Governor's Office of Planning and Research (OPR) has updated the General Plan Guidelines (2017). The last update to the guidelines was in 2003 and there have been many changes to state law, regulations and case law. Some of the most significant changes to state law and the guidelines include the elevation of such topics as transportation, climate change, and environmental justice and other considerations of social equity.

The 2017 Guidelines are also explicit in requiring that the General Plan provide detailed data and information in each element. While it is meant to be a policy document, the reasoning behind the goals, policies, objectives and programs of the General Plan must be supported by the information and analysis set forth in the General Plan. The state planning priorities, which are intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety, including in urban, suburban, and rural communities, are as follows:

(a) To promote infill development and equity by rehabilitating, maintaining, and improving existing infrastructure that supports infill development and appropriate reuse and redevelopment of previously developed, underutilized land that is presently served by transit, streets, water, sewer, and other essential services, particularly in underserved areas, and to preserving cultural and historic resources.

(b) To protect environmental and agricultural resources by protecting, preserving, and enhancing the state's most valuable natural resources, including working landscapes such as farm, range, and forest lands, natural lands such as wetlands, watersheds, wildlife habitats, and other wildlands. It also directs the protection of recreation lands such as parks, trails, greenbelts, and other open space, and landscapes with locally unique features and areas identified by the state as deserving special protection.

(c) To encourage efficient development patterns by ensuring that any infrastructure associated with development, other than infill development, supports new development that does all of the following:
   (1) Uses land efficiently.
   (2) Is built adjacent to existing developed areas to the extent consistent with the priorities specified pursuant to subdivision (b).
   (3) Is located in an area appropriately planned for growth.
   (4) Is served by adequate transportation and other essential utilities and services.
   (5) Minimizes ongoing costs to taxpayers.

In general, but with important exceptions, the State General Plan Guidelines are advisory. However, the courts frequently refer to the them when trying cases and interpreting planning law. For this reason, the Guidelines closely adhere to and frequently cite statutes and current case law. They also rely and are based upon commonly accepted principles of contemporary planning practice. The following words are used to indicate whether a particular subject in the guidelines is mandatory, advisory, or permissive:

(a) "Must" or "shall" identifies a mandatory statutory requirement that all public agencies are required to follow.

(b) "Should" or "suggest(ed)" identifies guidance provided by OPR based on policy considerations contained in California's planning laws.

(c) "May" or "can (could)" identifies a permissive recommendation that is left fully to the discretion of the City.

MAJOR ENVIRONMENTAL THEMES

Over the past decade, the State of California has adopted regulations that have included a focus on climate change, social equity, environmental justice, and healthy communities. OPR believes that thoughtful planning based on such considerations will foster a future with a strong economy, thriving built and natural environments, and a healthy, prosperous citizenry. These themes and how they are embodied in the General Plan Guidelines are briefly discussed below.

Climate Change

In California, climate change has been the subject of multiple Executive Orders (EO) and legislation, and is a high priority subject for any General Plan update. They include establishing interim emissions reduction targets for 2030, long–term targets for 2020 and 2050, and climate change adaptation and resilience as a priority. Additional state goals include reduction of petroleum use by up to 50 percent by 2030, and an increase of renewable energy to 50 percent by 2030 through the Clean Energy and Pollution Reduction Act of 2016. California has set greenhouse gas (GHG) emissions reduction requirements in numerous sectors including land use and transportation planning. OPR's recommendations focus on how the General Plans can achieve GHG emissions reductions, increase resiliency to climate change impacts, and lead to healthier and more prosperous communities.

Economics

Policies related to all elements of the General Plan greatly affect economic opportunity, development, and stability. Decisions regarding land use and circulation have direct and indirect fiscal implications for local economies and, in turn, economies of urban and rural centers affect the health, climate, and equity of communities. As with all General Plan topics, even if addressed in a separate section, economic development must link and integrate with other elements in order to be successful.

Healthy Communities

In 2012, the Governor created the *Let's Get Healthy California Task Force*. Chronic disease, such as obesity, diabetes, cancer, heart disease, and asthma affect quality of life and productivity. In addition, social, economic, and environmental factors where people live, work, and play affect their health and well–being. The Task Force identified the creation and expansion of healthy communities to be one of three major focus areas for the promotion of overall health improvement. Because a General Plan allows a community to envision its future growth and development planning offers one important way to improve the community's health, local jurisdictions are encouraged to incorporate health–supporting policies into their General Plan.

Equitable Opportunities

Planning decisions affect the entire community, and the entire community must be allowed equal access to the public process (Gov Code Section 11135). Community planning and policy affects everyone and ranges from determining proximity to localized noise or air pollution, to providing healthy grocery options, to creating access to employment and education opportunity. Incorporating equity into all aspects of planning will ensure that residents of the City benefit from reduced GHG emissions, climate change adaptation policies, active transportation options, and healthy communities with access to economic opportunity for all.

CITY OF CATHEDRAL CITY

DRAFT GENERAL PLAN

CHAPTER II

ADMINISTRATION

INTRODUCTION, PURPOSE AND BACKGROUND

INTRODUCTION

The City 2040 General Plan is a policy and program document addressing all facets of community planning and management. The Administration Element provides direction on the implementation of the Plan. It provides background on the information set forth in the General Plan, describes its organization, the Plan's function and its relationship to other regulatory documents, including the California Environmental Quality Act (CEQA), the Subdivision Map Act, and the City Zoning Ordinance. General Plan review and amendment procedures are also set forth in this chapter.

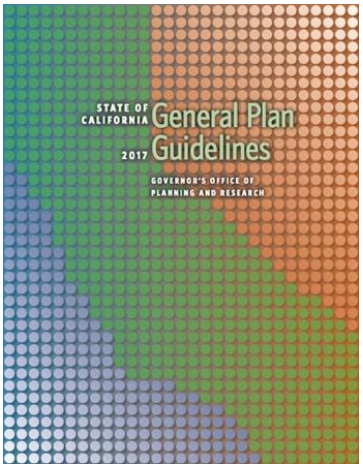
PURPOSE

It is the purpose of the Administration Element to describe the various ways in which the General Plan is structured, how it complies with State General Plan Guidelines, and how the General Plan is organized. This element also sets forth how the General Plan is implemented, including element-specific implementation strategies that are incorporated throughout the General Plan. The Administration Element also sets forth goal, policies and programs intended to effectively administer the General Plan. It is intended to ensure the fair, just and equitable management of all City lands and services, and the fair and equitable implementation of public policy.

BACKGROUND

The Administration Element facilitates the review and regulation of land use and development on public and private lands. It also provides the framework by which the appropriateness of municipal actions is determined, including a review of applicable policies and standards for consistency with the General Plan. California Government Code (Section 65300) requires incorporated communities and counties to prepare and adopt a comprehensive, long-term General Plan.

The General Plan regulates the physical development of lands under the jurisdiction of, or having an influence upon, the community, including the City's legally recognized Sphere-of-Influence. The General Plan and its various elements are required to function as an integrated, internally consistent and compatible statement of policies (Government Code Section 65300.5).



Conditions and circumstances unique to the community must also be accommodated and therefore the General Plan may take different forms, while meeting its minimum requirements (Government Code Section 65300.7). A General Plan must be designed to be responsive to the variations in community size and density, fiscal and administrative capabilities, land use and development issues, and the needs of the community's residents (Government Code Sections 65300.9, 65302). The Administration Element provides for the periodic review and amendment of the General Plan, establishing formal procedures to ensure that the Plan is maintained and kept current with changing conditions, and that it continues to reflect the goals of the community.

GENERAL PLAN ORGANIZATION AND USE

Introduction

Sometimes described as the "constitution" of the City, the General Plan is the foundation upon which all land use decisions are to be based. The Plan is a comprehensive information and planning guide established by State law to provide a framework for making informed decisions about the future of the community. The Plan identifies the community's land use, circulation, environmental, economic and social goals and policies as they relate to land use and development. The General Plan and supporting environmental documentation identify concerns and issues important to the community, analyze them, and establish goals, policies, and program implementation measures, which resolve or effectively address these issues. It also provides the basis for a rational nexus to support development, mitigation measures and exactions. Special studies and performance programs are also integral parts of the goals, policies, programs, which assure effective implementation of the General Plan.

A Charter City

Cathedral City is a charter city operating under the council-manager form of government. Policymaking and legislative authority are vested in a City Council comprised of the Mayor and four other Council members. The City Council is responsible for, among other things, passing ordinances, adopting minute orders and resolutions (such as the budget), appointing committees, and hiring both the City Manager and City Attorney. The City Council is elected on a nonpartisan basis. Council members serve four-year staggered terms. The Mayor is appointed by the City Council to serve a one-year rotating term.

In addition to sitting as the governing board of the City, the City Council also acts as the Board of Directors of two blended component units: the Cathedral City Public Financing Authority and the Cathedral City Community Services District. The City Manager is responsible for carrying out the policies and ordinances of the City Council, overseeing the day-to-day operations of the City, and for appointing the various department heads.

The General Plan Process

The City's previous General Plan was last comprehensively updated in 2002. Since that time, there have been numerous updates to individual elements of the Plan (2009) but no comprehensive update. Based upon a need to respond to current social, economic, physical and political conditions, the City Council determined that a comprehensive update to the General Plan was necessary. The General Plan development team is comprised of the Planning Commission and City Council and various departments of the City, including Community Development, Public Works, Economic Development, and Fire and Police.

The City was assisted by a consulting team with extensive knowledge of the City and the Coachella Valley. A variety of other agencies, districts and authorities were also helpful in the development of the updated General Plan, including the Desert Water Agency, Coachella Valley Water District, Riverside County, the Coachella Valley Association of Governments (CVAG), and our sister cities of the Coachella Valley. Finally, and most importantly, the general public provided essential and valuable insight and input that has helped make this General Plan a reflection of our diverse community.

"By far the greatest and most admirable form of wisdom is that needed to plan and beautify cities and human communities."
-Socrates

General Plan Format

State General Plan Guidelines do not mandate a specific structure or format for the General Plan, nor do they specify an appropriate number of elements. "Elements" are referred to as "topics that California law require to be covered in a General Plan" (Gov. Code Sec. 65302). Mandatory element discussion topics include: Land Use, Circulation, Housing, Conservation, Open Space, Noise, Safety, Environmental Justice, and Air Quality. These topics may be discussed separately or logically grouped within a common element.

The General Plan stands at the apex of a pyramid of City regulatory documents. As such, zoning, subdivisions, public works, specific plans, and other regulatory documents must be consistent with the General Plan and its elements. Likewise, the City's Climate Action Plan (CAP), Sustainability Plan and other implementing documents are linked to the General Plan, are internally consistent with it and support policies, programs and implementation measures set forth in the General Plan.

The 2040 Cathedral City General Plan is organized into three major chapters: *Introduction to the General Plan*, *General Plan Administration*, and *General Plan Elements*. This update also consolidates elements that fall into certain categories, including those that fall under mandatory elements like Open Space and Conservation. The California General Plan Guidelines specifically cite the appropriateness of organizing the General Plan in a manner that is clear and accessible.

Goals, Policies and Programs

Each element contains at least one goal statement and frequently more, depending on the number of discrete topics addressed in each element. In the context of a General Plan, a "goal" is a general expression of community values and direction, expressed as ends or an end state (not actions). They can reflect a desired community state (adequate housing), and environmental conditions (clean air), an economic state (full employment), or a social goal (low crime rates). A goal in the General Plan is the most general statement of community values and is expressed as a desirable end-state condition to be achieved now or in the future.

The heart of the General Plan is contained within its policy statements. Policies further refine the goal statements and provide a clear direction for decision-making. Policies frequently include "shall" statements to provide unequivocal directives (see Chapter I). Decision-making criteria, major development standards and funding priorities are best established by clear General Plan policies. Solid policy is based on a solid foundation of information. The analysis of data collected during the planning process has provided the City with valuable knowledge about trends, existing conditions, and projections that policy is designed to address.

General Plan programs are included as implementation measures needed to carry out related policy statements and help achieve declared General Plan goals. Programs provide the basis for scheduling and assigning staff and other City resources to specific actions, which are needed to implement certain directives of the Plan.

Maps, Diagrams and Graphics

The maps and graphics included in the General Plan help to illustrate existing and future conditions, desired end-states (goals), strategic approaches to meet goals (policies) and actions or measures (programs) to be taken. For example, the land use map represents a series of policies for the type and intensity of future development to occur at various locations throughout the City and the planning area. Diagrams may show data, physical or schematic relationships, processes or approaches. The General Pan also relies on a wide range of graphics depicting various types of urban development, designs and plans, and symbology that supports the text. Finally, the GIS files for the City's General Plan Land Use Plan have been updated and refined to make them more user-friendly and to facilitate Plan-level statistical analyses.

Specific Plans of Land Use

A Specific Plan can play an important role as a refined version of the General Plan, applicable to a specific portion of the community, and can combine policy statements with development regulations (Gov. Code Sec. 65450). Specific Plans emphasize concrete standards and development criteria, often providing detailed design and analysis of complex mixed-use projects, and indicate precise land use locations and designs. Specific Plans contain text, exhibits, and diagrams indicating the distribution, location, and intensity of proposed land uses and the necessary public and private urban support systems, including streets, utilities and drainage facilities.

The standards and criteria by which development and, where applicable, conservation will proceed on the property are also defined in the Specific Plan. Additionally, a Specific Plan provides a program of implementation measures and financing necessary to carry out the project. It must also be consistent with all facets of the General Plan. In turn, zoning, subdivisions, and public works projects must be consistent with an existing Specific Plan (Government Code Section 65455).

Specific Plans are prepared, adopted and amended in the same manner as a General Plan, may be adopted by resolution or ordinance, and may be amended as often as deemed necessary by the City Council. In most cases, development proposals within areas for which a Specific Plan has been prepared cannot proceed until it is determined that the project is consistent with the Specific Plan and the General Plan. In areas where the Specific Plan encompasses more than one property, the plan must be completed and adopted prior to development on any affected property. Specific Plans may be prepared either by the applicant or the City. Should the City prepare the Specific Plan, it is entitled to reimbursement by affected property owners pursuant to Section 65456 of the California Government Code.

Since its incorporation in 1981, Cathedral City has frequently used Specific Plans as a means of implementing the General Plan in a highly focused and "specific" manner. In many instances, the Specific Plans were prepared to incentivize or facilitate development at that site, which did not always result in development or development of the type envisioned. Therefore, as a part of the 2040 General Plan update, the City has evaluated several Specific Plans, which are further discussed in the Land Use Element.

Capital Facilities

Among the statutory responsibilities of California, incorporated towns, cities and counties is to "*annually review the capital improvement program of the city or county and the local public works projects of other local agencies for their consistency with the General Plan.*" Also, pursuant to Government Code Section 65401, all departments within the City and all other local government agencies must submit a list of proposed projects to the City. The City is responsible for reviewing these projects for conformity with the General Plan.

IMPLEMENTATION OF THE GENERAL PLAN

California Government Code Section 65103(c) requires that local jurisdictions implement the General Plan once it has been adopted. The Cathedral City General Plan relies on element programs and implementation strategies, as well as the related mitigation measures and programs set forth in the General Plan Program EIR; together they serve as implementation measures. The City Zoning and Subdivision Ordinances also play critical roles in implementing the goals and policies of the General Plan, and Specific Plans provide detailed implementation programs for specific portions of the General Plan area.

The Zoning Ordinance

The development and enforcement of the City Zoning Ordinance is an exercise of police powers granted to the City by the State, and is the primary tool for implementing the General Plan. The Zoning Ordinance regulates land use by distinct development zones and permitted uses. Text, maps, diagrams and other materials describe the distribution and intensity of land uses into such categories as residential, commercial and industrial uses. Written regulations establish minimum development standards for each of the land use zones in a manner consistent with the General Plan. Permitting processes set forth in the Zoning Ordinance, including Conditional Use Permits, Variances, Architectural Reviews and other land use permitting, also implement the General Plan. The implementation of the General Plan is further regulated by Government Code Sections 65800 et. seq.

The Subdivision Ordinance

As with the Zoning Ordinances, subdivision regulation is also an exercise of police powers and a principal instrument for implementing the General Plan. Establishing state-wide uniformity in local subdivision procedures, the State Subdivision Map Act (Government Code Sections 66410 et seq.) leaves the standards for regulating the design and improvement of subdivision to local government. The broadest authority for regulating subdivisions lies in Government Code Sections 66473.5, 66474, 66474.60, and 66474.61, requiring findings that, among other things, the subdivision is consistent with the City General Plan and any applicable Specific Plan.

Development Agreements

Development agreements have become an important adjunct to development plan processing and approval. State law provides for the adoption of development agreements between a project proponent and the City, in accordance with Government Code Section 65865 et seq. The purpose of development agreements is to provide developers with additional assurances that development approvals will not be nullified by some future local policy or regulation change. In exchange, the developer may be required to meet certain conditions or performance criteria, which become part of the agreement.

Development agreements must specify the duration of the agreement, the permitted uses of property, the density or intensity of use, the maximum height and size of proposed buildings, and the provisions for reservation or dedication of land for public purposes (Gov. Code Sec. 65865.2). In addition, development agreements may include the conditions, terms, restrictions, and requirements for subsequent discretionary actions; provide that such stipulations shall not prevent development of the land with regard to the uses, densities, and intensities set forth in the agreement; specify the timing of project construction or completion; and set forth the terms and conditions relating to applicant financing of necessary public facilities and subsequent reimbursement, if any, over time.

Development agreements can be a useful means of meeting General Plan goals and policies, while removing some of the risks faced by developers. Agreements can remain in effect for a few or several years, the term typically being set forth in the agreement. It is important to emphasize that, as set forth in Government Code Section 65866, the City, unless otherwise provided by the development agreement, is not prevented from applying new rules, regulations, and policies which do not conflict with those rules, regulations, and policies applicable to that property. Neither is the City prevented from denying or conditionally approving any subsequent development application on the basis of such existing or new rules, regulations or policies.

Building and Housing Codes

The City Building Department is responsible for enforcing state building standards and housing codes. These are intended to encourage uniformity and establish minimum standards to protect the health, safety and general welfare of the public and occupants of residential buildings. Building and housing codes have their greatest effect on new construction and rehabilitation, but certain parts of the codes apply to the use, maintenance, change in occupancy, and public health and safety hazards of existing buildings. The State Housing Law applies to buildings such as apartments, hotels, motels, lodging houses, manufactured housing, and dwellings but not to mobile homes. In addition to meeting the requirements of state housing law, the City's codes must also comply with other state requirements related to fire safety, noise insulation, soils reports, earthquake protection, energy insulation, and access for the disabled.

When adopting the California Building Standards Code, the City can make such changes *"as it determines ... are reasonably necessary because of local climatic, geological or topographical conditions"* (Health & Safety Code Section 17958.5). The City can authorize the use of materials and construction methods other than those specified in the California Building Standards Code where the City finds the proposed design satisfactory and the materials or methods at least equivalent to those prescribed by the California Building Standards Code with regard to performance, safety, and the protection of life and health. These provisions can be used to promote the construction of affordable housing and the rehabilitation of substandard housing.

Other provisions are particularly useful where the City intends to encourage historic preservation. Health and Safety Code Section 17958.8 allows the use of original materials and construction methods in existing buildings. Health and Safety Code Section 17980(c)(2) requires the City to consider needs expressed in its Housing Element when deciding whether to require abandonment or repair of a substandard dwelling. In the reconstruction of existing buildings that would be hazardous in the event of an earthquake, the law allows cities and counties to use building standards that provide for the protection of the occupants but that are less rigorous in other respects than current building standards.

Code enforcement and abatement procedures are another means of implementing the General Plan, particularly the Housing and Safety Elements. Various state laws and regulations spell out abatement procedures that the City may enforce upon buildings that, because they are substandard or unsafe, constitute a public nuisance. The most common procedures involve citation and misdemeanor action on the part of the City to mandate abatement by repair, abandonment, or demolition.

Land Acquisition

The City's acquisition of real property rights can help to implement the policies of the Land Use, Circulation and Open Space/Conservation Elements. The City may acquire land designated for government offices, police and fire stations, parks, access easements, etc., or for public purposes such as urban redevelopment. With regard to the Circulation Element, the City may acquire land for public rights-of-way (e.g., streets, sidewalks, bicycle paths, LSEVs, etc.), transit stops, etc. And it may advance Open-Space/Conservation Element policies and proposals through the acquisition of open-space and conservation easements.

Open-space acquisition has some advantages over purely regulatory approaches to implementation, such as zoning. Ownership ensures that the land will be controlled by the City or another public agency. Another option is acquiring an open-space or conservation easement, rather than full ownership. This ensures that development will be limited, while the private landowner who continues to hold the underlying rights is compensated for lost development opportunities. This avoids the question of whether regulatory limitations have unconstitutionally "taken" private property without just compensation.

Commissions and Committees

All levels of government institute committees and commissions to facilitate the local review of community development projects. The City is empowered to establish advisory commissions or committees, which may be comprised of public officials as well as private individuals, to review and make recommendations on policies or programs facilitating implementation of the General Plan.

Commissions and committees typically address such issue areas as parks and recreation, trails, libraries, public safety, community and architectural design, affordable housing and emergency preparedness. The City Council may establish commissions or committees to address specific and focused issues, or to provide recommendations on an ongoing basis. The Council may perpetuate or dissolve these commissions or committees as it sees fit.

Annual Review

California Government Code requires that the planning agency "render an annual report to the legislative body (City Council) on the status of the Plan and the progress in its implementation" (Section 65400(b)). State law further requires that the Housing Element be reviewed and updated at least once every eight (8) years.

Amending the General Plan

Although the 2040 General Plan is developed with a long-term perspective, it is not a static document. Rather, it is dynamic, evolving and multi-faceted, continuously defining and addressing the changing needs of the community. It is also based on an ongoing assessment and understanding of existing and projected community needs and conditions.

To assure that the General Plan is kept current, short-term programs and policies may be reviewed annually to reflect compatibility with budgetary priorities and the status of related programs. Long-term programs and implementation measures must also be given forward planning consideration to assure timely funding and development of critical infrastructure, and public services and facilities. Mandatory elements of the General Plan may be amended up to four (4) times in each calendar year. The City Council or any citizen may initiate a General Plan Amendment. It is left to the discretion of the local jurisdiction to establish an amendment schedule to be published one year in advance.

Interpretation of the General Plan

When uncertainty exists regarding the location of boundaries of any land use category, proposed public facility symbol, circulation alignment, or other symbol or line found on the official maps of the 2040 General Plan, the following procedures will be used to resolve such uncertainty.

Boundaries shown in the General Plan and on official maps, as approximately following the limits of the City's corporate limits, are to be construed as following these limits. Boundaries shown as following or approximately following section lines, half or quarter section lines shall be construed as following such lines. Boundaries shown as following or approximately following the centerline of streams, creeks, rivers, or other continuously or intermittently flowing streams or creeks are to be construed as following the channel centerline of these water courses taken at mean low water, and, in the event of natural change in the location of such streams or other water courses, the zone boundary is to be construed as moving with the channel centerline.

Where a land use category applied to a parcel is not mapped to include an adjacent street or alley, the category shall be considered to extend to the centerline of the right of way. Boundaries shown as separated from, parallel, or approximately parallel to any of the features listed above shall be construed to be parallel to such features and at such distances therefrom as are shown on the map. Symbols that indicate appropriate locations for proposed public facilities are not property-specific. Rather, they indicate only the general area within which a specific facility should be established.

THE GENERAL PLAN ENVIRONMENTAL IMPACT REPORT

The 2040 General Plan and associated Environmental Impact Report (EIR) have been developed to serve as a framework and tool for decision-making regarding the appropriate types, intensities and conditions by which development is to be permitted in the City. The process of preparing these documents has involved thoughtful and extensive community consultation, research and analysis of a wide range of data and information, the identification of issues, and the development of goals, policies, and programs. It also involves the consideration of various alternatives, the consensus selection of preferred courses of action, and finally, the development of strategies to implement the General Plan.

As required by state law, each jurisdiction must prepare and adopt a General Plan and supporting documentation to provide the basis for the community's development. The Plan and EIR identify the environmental, social and economic goals, and sets forth policies, standards, programs and mitigation measures that address the potential effects of existing and future development. The General Plan also provides the framework to analyse and respond to changing circumstances as the City continues to grow and evolve.

The background information and issues summarized in the General Plan are discussed in greater depth in the General Plan EIR and numerous technical appendices, reports and plans on file at the City. Together, the General Plan and EIR provide City officials and the general public with vital information necessary to make informed decisions. The 2040 General Plan and the EIR also serve as the basis for subsequent planning efforts, including the preparation of Specific Plans and special environmental and planning studies.

Because general plans govern the type and location of new development, new or amended general plans may lead to significant changes in the environment. The California Environmental Quality Act, also known as "CEQA," requires cities and counties to study those potential environmental impacts as part of the adoption or update process

(Pub. Resources Code 21000, et seq.; see also CEQA Guidelines 15378).

CEQA Review of Consistency

State CEQA Guidelines require that an initial study prepared for an environmental assessment include "an examination of whether the project is compatible with existing zoning and plans." The CEQA Guidelines further stipulate that, *"A project will normally have a significant effect on the environment if it will conflict with adopted environmental plans and goals of the community where it is located."* These may include air quality or climate action plans, wildlife and habitat conservation plans, airport land use plans, etc. If a determination is made by the Planning Commission or the City Council that the proposed action is inconsistent with the General Plan, no further action shall be taken without the completion and processing of an EIR or other detailed analysis which would support a finding of overriding consideration.

FUTURE DIRECTIONS

This Administration Chapter of the General Plan is essential to its effective enactment. The Plan relies on the development and maintenance of City regulatory documents, including the Zoning Ordinance, Specific Plan, the Subdivision Ordinance, and City Rules for the Implementation of CEQA. The General Plan itself is a living document with mandates for frequent review and updating. Amendments to the Plan should be given careful consideration and not be granted casually. The goal, policies, programs and implementation strategies of the Administration Chapter assure the effective administration and implementation of all elements of the Cathedral City 2040 General Plan.

GOAL, POLICIES AND PROGRAMS

Goal
The comprehensive, coordinated and integrated administration and implementation of all elements of the Cathedral City General Plan through consistent and effective policies and programs.

Policy 1
Provide for the periodic revision and updating of the General Plan and ensure that associated City ordinances, including the Zoning and Subdivision Ordinances, are maintained in conformance with the General Plan.

Program 1.A
The City Council shall, through the public hearing process, receive an annual report from the Planning Commission on the status of the General Plan and shall make recommendations which address identified inadequacies or opportunities for updating the Plan.
Responsible Agency: City Council; Planning Commission; Planning
Schedule: Annually.

Program 1.B
The City shall comprehensively review and amend, as necessary, the Zoning and Subdivision Ordinances to maintain consistency with the General Plan.
Responsible Agency: Planning; Planning Commission; City Council
Schedule: Annually

Policy 2
The City shall provide for the use of Specific Plans as a preferred method of detailed and systematic implementation of the General Plan for large or complex planning areas.

Program 2.A
Maintain up-to-date application materials and guidelines for the preparation of Specific Plans and encourage their use for large and/or complex residential, commercial or industrial projects on lands contemplated for annexation into the City.
Responsible Agency: Planning
Schedule: Ongoing

Policy 3
On a periodic and on-going basis, the City shall examine and review the long-term implications of Comprehensive General Plan policies and programs as they relate to the City's ability to provide public services and facilities.

Program 3.A
The annual review of the General Plan, as set forth in Program 1.A, above, shall include a report on interrelationships, impacts or enhancements of the General Plan with regard to the City's ability to fund public services or secure public facilities.
Responsible Agency: City Council; Planning Commission; Planning
Schedule: Annually.

Policy 4
The City shall establish and maintain a cooperative planning process with Riverside County, assuring an effective advisory role regarding any and all development and other land use planning issues or proposals within or in close proximity to the City's Sphere-of-Influence.

> **Program 4.A**
> Effectively coordinate and cooperate with Riverside County to review all proposed land use and other development proposals, recognize the City's advisory role, and request that the County forward copies of all development plans proposed within the advisory area to the City for review and comment.
> **Responsible Agency**: City Council; Planning, Public Works
> **Schedule**: Continuous.

Policy 5
The City shall assure that properly filed development applications shall be processed in an expeditious and timely manner.

> **Program 5.A**
> The City shall maintain application processing procedures that assure expeditious and timely processing of land development applications, including "fast tracking" procedures for priority development proposals.
> **Responsible Agency**: City Council; Planning Commission Planning
> **Schedule**: Continuous.

Policy 6
Master facility and similar plans shall be utilized by the City to address the recreation, drainage/flood control, infrastructure, utility management, traffic control, and other facility needs of the community.

> **Program 6.A**
> The City shall develop and maintain master facility plans to establish need and availability of funding for additional public services and facilities. Master plans should also include schedules for phased implementation, which shall be incorporated into the City's capital improvement programs.
> **Responsible Agency**: City Council; Public Works Department; Planning
> **Schedule**: 2020-22; as required by development.

Policy 7
The City shall encourage in-fill development within already urbanized areas of the corporate boundaries of the City, and expansion of new development shall be logically phased and, as appropriate, guided by the development of existing and new Specific Plans.

Policy 8
City shall provide opportunities for review and comment on development proposals through public hearing notices sent to owners of property located at least within 300 feet of development proposal sites.

Policy 9
The City shall continuously explore and take every opportunity to work with other public and quasi-public entities in the development of cooperative public/private ventures and partnerships to better provide public services and facilities that benefit the community.

CITY OF CATHEDRAL CITY

DRAFT GENERAL PLAN

CHAPTER III

INTRODUCTION TO THE ELEMENTS

INTRODUCTION TO THE ELEMENTS

Chapter III of the General Pan presents the full range of elements and sub-elements that provide the information, data, goals, policies and programs that direct the development of the City. As noted in Chapter II, the General Plan is comprised of both mandatory and other topical elements required and recommended in the State General Plan Guidelines.

The term "element" refers to the topics that California law requires to be covered in a General Plan (Gov. Code § 65302). There is no mandatory structure or maximum number of elements that a General Plan must include. Once a part of the General Plan, each element, regardless of statutory requirement, assumes the same legal standing, and must be consistent with other elements (Gov. Code § 65300.5).

The General Plan elements are rich in information and innovation, and they reflect the unique history and character of Cathedral City. They also identify and address the challenges and goals identified through community engagement. The General Plan elements reflect the unique circumstances and vision of the community. The elements are organized by the values that the community wants to enhance and uphold. They include a strong sense of social equity and justice, social and economic diversity, sustainability, and of a strong and cohesive community.

Land Use Element

PURPOSE

Of all the General Plan elements, the effects of Land Use are the most direct and consequential. The purpose of the Land Use Element is to reflect the City's vision of physical development and promote a thoughtful, equitable and accessible distribution of different land uses, including residential, commercial, industrial, agricultural, and open space. It is also intended to harmonize the City's land uses with other regional land use plans, including airport land use and resource conservation plans. It directly responds to the legal mandate for the regulation of land use, establishes and describes the designations for each land use category, and sets forth general and type-specific goals, policies and programs that guide land use in the community. The accompanying Land Use map shows the general allocation and distribution of land uses throughout the City.

The Land Use Element also serves as a statement of standards also elaborated elsewhere in the General Plan, and establishes expectations for residential population density and building intensity. The element also identifies areas planned for commercial, institutional, industrial and open space uses, and areas of existing and planned public and quasi-public uses. It is the broadest of the elements and is ideally the basis for and the product of coherent land use policy. The purpose of the Land Use Element is to provide sufficient land for all the needs of the community, while preserving the community's environment and quality of life.

BACKGROUND

California Government Code Section 65300 requires cities and counties to prepare and adopt "a comprehensive, long-term general plan for the physical development" of the community. The General Plan must also designate lands for housing, business, industry, open space, as well as other uses deemed appropriate by the City (Government Code Sections 65302(a). The Element also incorporates designations reflecting physical development and land use, consistent with Government Code Section 65303. It incorporates mapping of the General Plan land use distributions and provides statements relating to standards of development, intensity and population density. Policies and programs associated with each of the major land use categories are set forth in the Land Use Element and reflect the compatible and integrally planned distribution of land uses reflected in the Plan.

California's land is an exhaustible resource, not just a commodity, and is essential to the economy, environment and general well-bring of the people of California. It is the policy of the state....to protect California's land resource, to insure its preservation and use in ways which are economically and socially desirable in an attempt to improve the quality of life in California."

Gov. Code 65030

The location and intensity of the various land uses established by the General Plan have the direct consequence of generating traffic and affecting the capacity of local and regional roads. Resulting traffic also affects accessibility for pedestrians, bicyclers and other alternative modes of travel, and results in noise that can have an adverse impact on adjoining land uses. Therefore, the selection of the type, intensity and location of land uses has a profound effect on the movement along all forms of transportation.

Other elements with strong dependence or influence upon the Land Use Element and its land allocation model include Housing, Community Design, Economic and Fiscal, Environmental Justice, as well as those elements reflecting recognition of environmental hazards and resources of the community. Policies and programs associated with each of the major land use categories are set forth in the Land Use Element and reflect the compatible and integrally planned distribution of land uses reflected in the Plan.

Development Density and Intensity

Achieving land use efficiency in any community is a challenge but perhaps never more than today. If properly met, the challenge can strengthen the social fabric of the community and the local economy, while making development more cost-effective and (for the private sector) more profitable. An important consideration and one responsive to increased density is the provision of adequate and affordable housing that allows the City to meet its regional fair-share as established in the Regional Housing Needs Assessment (RHNA, also see the *Housing Element*). Parameters that have been evaluated include population growth and trends, City and regional demographics, the local mix of jobs, economic trends, and infrastructure needs.

The purpose of higher density development, especially when married with commercial and other services, is to allow a critical mass of people and activities that can be well-served by transit and multi-modal means. Several fundamental conditions are necessary for a successful mixed-use development, including connectivity and infrastructure (roads, sidewalks, bike/NEV paths, buses). Density adds to the housing choices the community can offer and fits the needs and desires of a variety of people in the community.

Intensity of development includes non-residential commercial/professional/medical needs that can be met close by, including everyday shopping and services that don't require a car to access. Density and intensity must be supported by quality design that creates places that feel and look attractive, are solid and soft (like home) at the same time, with well-designed transit, sidewalks, landscaping and architecture that contribute to a neighborhood that is up-to-date and dynamic.

Land Use, Land Conservation and Quality of Life

As discussed in the *Community Design Element* and elsewhere in the General Plan, there is an intimate relationship between land use planning, land conservation and the quality of life enjoyed by a community. In consideration of land conservation values for purposes of preservation of open space and protection of important natural resources, the planning process is appropriately directed to the efficient planning of lands for urban uses. This implies the establishment and preservation of a logical, contiguous and efficient urban pattern that optimizes land use interactivity and the use of public infrastructure. Applying this principle results in increased land use efficiencies and the preservation of local and regional open space for public use and wildlife conservation. Within the City planning area, lands in the foothills and mountains constitute important conservation lands that benefit local residents and the local economies.

AIRPORT LAND USE COMPATIBILITY

Most of the City is located within the boundaries of the Palm Springs International Airport (PSP) land use compatibility plan as set forth in the most recent airport master plan update (2005), which in 2019 is in revision and updating. The PSP is an important regional transportation facility located within the City of Palm Springs. However, its area of influence extends well beyond that city's corporate limits and also affects Cathedral City and Rancho Mirage. Airport influences include aircraft and other operational noise, and safety and airspace protection. An important goal of airport and community planning is to minimize conflicts and ensure that existing and future land use patterns do not adversely affect airport operations or the long-term viability of the airport.

At the same time, the airport compatibility analysis ensures that City land uses are compatible with existing and future airport operations. Airport-related noise can adversely impact City lands, is generally perceived to be the most significant concern generated by aircraft operations, and can be audible for miles from the airport. With regard to noise and overflight, the goal of airport compatibility planning is to reduce annoyance and minimize the number of people exposed to excessive levels of aircraft noise.

Airport safety issues are considered for both those living and working near an airport, as well as those using the airport. Safety compatibility is focused on evaluating "risk" and determining the locations around the airport that are at the greatest risk associated with potential aircraft accidents. Typically, accidents occur along the extended runway centerline but can also occur along take-off and landing flight paths. Proper safety and airspace protection minimize the number of people on and off of the airport that are exposed to the risks associated with potential aircraft accidents and avoids flight hazards that interfere with aircraft navigation.

PSP Airport Land Use Compatibility Zones

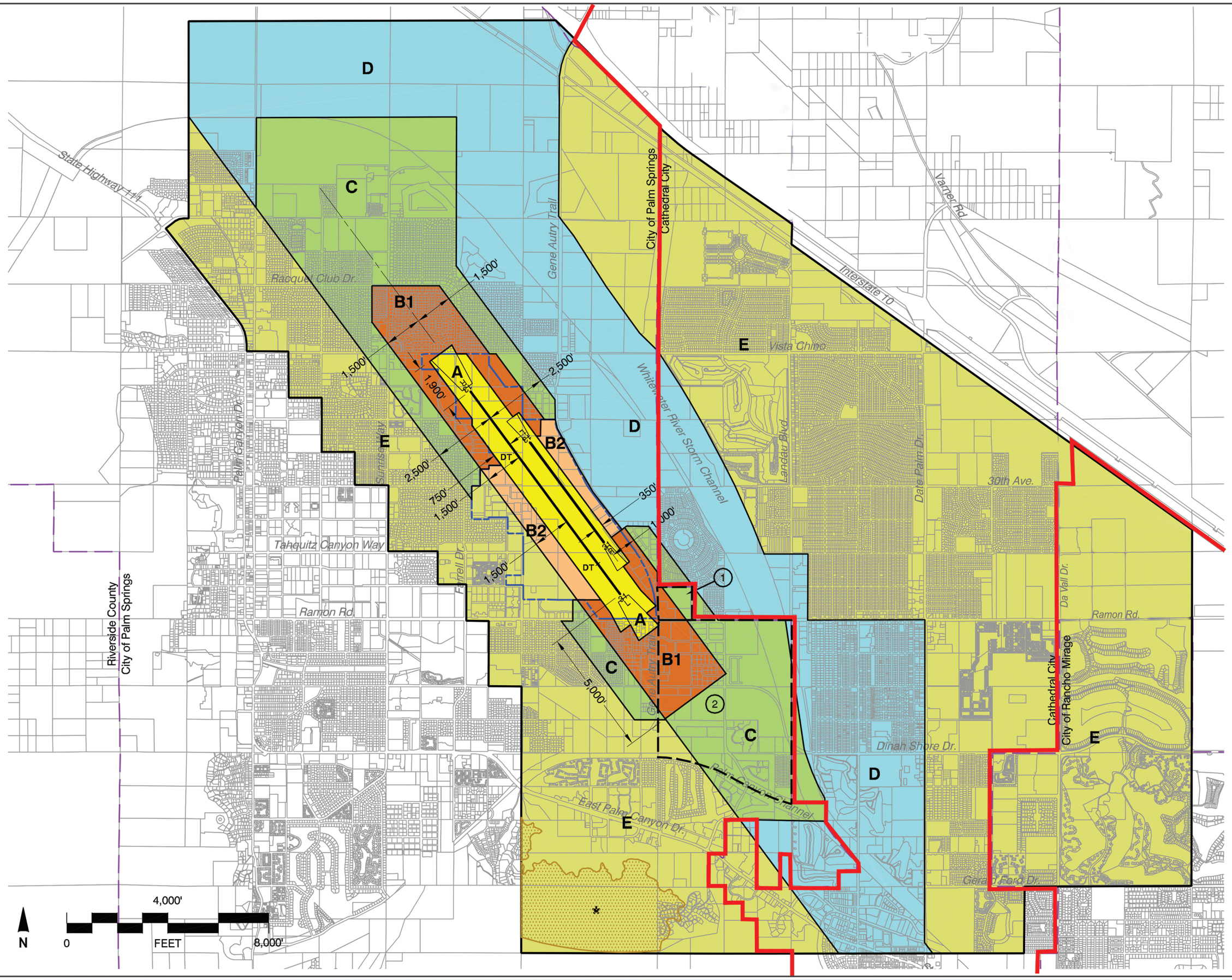
The City of Palm Springs owns and operates the PSP airport. Airport land use compatibility is overseen and regulated by the Riverside County Airport Land Use Commission (ALUC), which is comprised of members appointed by various jurisdictions, including cities and the county. Land use compatibility zones are established for the airport and surrounding lands, and take into consideration the noise and safety risk factors mentioned above.

There are five compatibility zones, A through B, with B separated into B1 and B2 sub-zones. Zone A is the most restrictive and E the least restrictive. The PSP compatibility zones established by the ALUC are set forth in the *Riverside County Airport Land Use Compatibility Plan Policy Document (2005)*, which as noted is currently (2019) being updated. Both policies and quantitative thresholds are used to determine whether a specific land use at a specific location is compatible with airport noise and safety influences, now and in the future. Exhibit LU-1 shows the land use compatibility zones surrounding PSP airport.

The General Plan must be consistent with airport land use compatibility plans, unless overridden by a two–thirds vote of the local government (City Council), pursuant to Public Utility Code Section 21676 (also see Government Code Section 65302.4). The General Plan planning area includes lands primarily within compatibility zones C, D and E, with a very small portion east of Gene Autry drive also occurring in Zone B1. Based on the updated Land Use Map, there are no existing or planned land uses that are incompatible with the PSP airport compatibility zones map.

Land Use Capacity Analysis

The City's future is tied to the type and amount of new development it can accommodate based on a "buildout" basis. Projecting future buildout capacity requires consideration of several variables and is based on assumed densities (dwelling units per acre) and intensity factors that include allowed lot coverage and floor-to-area ratios (FAR), parking requirements, etc. While some of today's developed lands may change in use in the coming years, most of the assumed City buildout is on remaining vacant lands planned for residential and employment-generating uses. The consequences of the General Plan *Imagine 2040* buildout are discussed below.



Legend

Compatibility Zones

- Airport Influence Area Boundary
- Zone A
- Zone B1
- Zone B2
- Zone C
- Zone D
- Zone E
- Height Review Overlay Zone

Boundary Lines

- Airport Property Line
- City Limits
- Cathedral City City Limits

Notes

All dimensions measured from runway ends and centerlines.

DT = Displaced Threshold

Source: Riverside County Airport Land Use Compatibility Plan Policy Document, March 2005

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LU-1 - Airport Land Use Compatibility Map
Cathedral City General Plan Update - Imagine 2040

Cathedral City

LAND USE CATEGORIES

The Land Use Element and the official General Plan Land Use Map describe and designate the distribution of land uses by type, location, intensity and/or extent of use. Uses to be considered are diverse and include residential, commercial, industrial, open space, recreation, public buildings and facilities, and other categories of public and private land uses.

Prior to the adoption of the Cathedral City General Plan comprehensive update, the City utilized the land use designations and assignments adopted in the 1987 Plan. Land use categories and their assignment, as well as the City corporate limits, have evolved through two previous General Plan updates (2002 and 2009). The *Imagine 2040* update includes a comprehensive assessment of land uses and their distribution in 2018 and was conducted using a computer-based geographic information system (GIS), aerial photo analysis, field surveys and extensive consultations with residents and property and business owners.

Table LU-1 provides a summary description of the City's updated General Plan land use designations, and Table LU-2 provides statistical summaries of these land uses. Overall land use goals, policies and programs then follow. A discussion of each major land use category is also presented, followed by related goals, policies and programs.

Abbreviations and Symbols

Abbreviations of land use codes are comprised of letters that summarize the land use and its range of potential intensity. It also uses these codes to define individual sub-uses within a given land use category, such as Open Space and Public/Quasi-Public categories.

Specific Plans of Land Use

A Specific Plan plays an important role as a refined version of the General Plan, applicable to a specific portion of the community. Specific Plans can provide objectives and policies, or they can include detailed design and analysis of complex mixed-use land use plans. They can also be used to indicate precise land use locations and designs. Depending upon their scope, Specific Plans can contain text, exhibits, and diagrams indicating the distribution, location, and intensity of land uses and the necessary public and private urban support systems, including streets, utilities and drainage facilities.

The standards and criteria by which development and, where applicable, conservation will proceed in the planning area are also defined in the Specific Plan. Additionally, a Specific Plan can also provide a program of implementation measures and financing necessary to carry it out. It must also be consistent with all facets of the General Plan and in turn, zoning, subdivision, and public works projects must be consistent with an existing Specific Plan (Government Code Section 65455).

The City currently (2018) has numerous Specific Plans ranging in size from a few to hundreds of acres. In some instances, these Specific Plans are no longer relevant or their purpose has already been achieved and several have been rescinded with the *Imagine 2040* update. Specific Plans are used in conjunction with other underlying land use designations and can be applied to any designation as an overlay on the General Plan Land Use Map. It is also appropriate as a means of planning and processing community-scale commercial and mixed-use development proposals. Specific Plan boundaries, objectives and regulations may be amended from time to time to adapt to changing circumstances and opportunities.

Sustainable Land Use Planning

The Cathedral City sustainable community strategy is embodied in the City's *Sustainability Plan*, *Climate Action Plan* and *Energy Action Plan*, as well as its *Green for Life* program. The City was an early proponent of sustainable planning and development, and these values and strategies are incorporated throughout the *Imagine* 2040 General Plan. The Land Use Element is also coordinated with local and regional transportation planning and the expanded development of alternative transportation, including CV Link and other multi-modal facilities (also see Circulation and Mobility Element).

The Land Use and other elements support and encourage integrated mixed-use development and where appropriate will work to facilitate such opportunities for higher density development as a part of its overall sustainability strategy. The element identifies areas of development that are ripe for repurposing and in some cases replacement. Creative land planning and design is encouraged in areas with infill opportunities, and especially where circumstances require thoughtful innovation. These efforts not only serve to harmonize land use and transportation planning, but also help to insure a sustainable environment.

The General Plan and supporting sustainability planning promote urban development that is compact with more opportunity for greater residential density integrated with mixed-use, neighborhood-serving commercial and other "neighborhood" services. The Plan supports multi-modal mobility by enhancing existing and creating new walkable neighborhoods, and expanding the opportunity for safe and convenient biking and low-speed electric vehicles.

Sustainable land use also requires that open space lands are conserved and preserved both on a local and regional level. The City is a partner with other valley cities in the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP) that is designed to conserve approximately 750,000 acres for permanent protection. The *Conservation Areas* established by this plan include City lands in the Santa Rosa Mountains and in the west Indio Hills and Edom Hill Conservation Areas (also see the *Open Space and Conservation Element*).

In urbanized areas and throughout the City, the General Plan promotes the use of native and non-invasive plants in landscaping to protect the surround desert and mountain habitats. City parks are also using more desert and other drought-tolerant landscaping as part of park design and management.

Land Use Intensities

Residential land use designations establish both minimum and maximum densities ranging from 1 unit per 20 acres to 45 units per acre. The average household size in 2018 was 3.16 persons. In general, the City has increased residential densities as part of its sustainability strategy and is supported by its *Community Design Element* standards and guidelines.

Industrial and commercial development has also been intensified in an effort to increase land use efficiencies and to achieve a greater return on the City's investment in infrastructure and services. In this regard, the General Plan also encourages mixed-use development and a reduction in parking requirements commensurate with achieved land use synergies. While commercial development in the City has generally averaged a floor : area ratio (FAR) of 0.22 in predominantly single story development, multi-story development is supported and encouraged consistent with the standards and guidance set forth in the Community Design Element. Mixed-use development with commercial components may achieve FARs as high as 1.0 with an appropriate complimentary mix of uses.

Industrial development in the desert has traditionally been single story with an FAR of 0.33; however, cannabis and other emerging industrial uses may be able to take cost-effective advantage of multi-story buildings. The *Community Design Element* supports higher FARs for all development, including industrial uses that are compatible with that elements design standards and guidelines.

Table LU-1 City of Cathedral City Draft General Plan Proposed Land Use Designations

Land Use Designation (Density)	Purpose of Land Use
Residential	
(HR) Hillside Reserve (0-1 du/20 ac)	This designation provides for development densities of one dwelling unit per 20 acres. Development could be precluded on these lands due to topographic, hydrologic, aesthetic or other constraints. In such cases, it may be possible for development rights to be preserved by density transfer or similar mechanism.
(RE) Estate Residential (0-2 du/ac)	The residential estate designation provides for larger lot subdivisions with single-family residential development. This designation is envisioned for rural areas, as well as lands which may also be constrained by topography or other natural restrictions. This type of development may also incorporate a "greenbelt" buffer to help define the City's urban boundary.
(RL) Low Density Residential (2-4.5 du/ac)	The Low-Density Residential designation provides for single-family residential development on individual lots typically ranging from about 7,500 to 20,000 square feet. These lands serve to buffer more dense residential development from estate residential uses and may be appropriate in areas with some site constraints.
(RR) Resort Residential (3-6.5 du/ac)	This low-density designation is intended to accommodate single-family and attached residential development in a master planned resort setting. On-site amenities typically include golf courses, tennis and swimming facilities, as well as tourist/resort-serving commercial uses. This designation also allows hotels/motels and ancillary visitor and tourist-serving commercial uses.
(RM) Medium Density Res. (4.5-10 du/ac)	This designation provides for moderately low to medium density subdivisions and Planned Unit Developments (PUDs). It serves to transition between lower and more moderate (medium) residential densities. Product types typically range from single-family to multi-family development, with much of existing development being duplex units on 8,000 square foot lots.
(RMH) Medium-High Density Res. (11-20 du/ac)	This designation allows for a range of attached housing, including apartments and condominiums. It is also suitable for planned communities and affordable and senior housing, where smaller units and higher densities may be appropriate. Multi-family development provides for PUDs comprised of a varying range of residential types and on-site amenities. These lands are typically located in proximity to neighborhood commercial uses, thereby maximizing pedestrian and other multi-modal access to these essential services. Mobile home parks or subdivisions with PUD-type development may also be allowed.

(RH) High Density Res. (20-24 du/ac)	This designation allows for the greatest diversity and highest density of residential development, providing for a full range of multi-family dwellings, including apartments and condominiums. It is also suitable for planned communities and affordable and senior housing, where smaller units and higher densities may be appropriate. Multi-family development provides for PUDs comprised of a varying range of residential types and on-site amenities. These lands are typically located in proximity to neighborhood commercial uses, thereby maximizing pedestrian and other non-motorized access to these essential services.
(PUD) Planned Unit Developments	While not a land use designation, Planned Unit Developments (PUDs) consolidate areas for structures, common open space and recreation areas, and integrate access onto private internal roadways. PUDs permit the transfer of densities from open space/recreation areas provided within a development, thus consolidating open space. The purpose of the PUD is to promote planned residential development and amenities beyond those typically provided within conventional subdivisions. PUDs are also intended to achieve greater flexibility in design, varying ranges of densities, and to encourage well planned neighborhoods through creative and imaginative planning. The PUD also allows an appropriate mix of housing types, which are unique in their physical characteristics to warrant special methods of residential development. A full range of residential development is permitted, consistent with the underlying land use designation.

Commercial

(CG) General Commercial (FAR: 0.35)	These lands include a wide variety of commercial centers, ranging from general merchandising and strip commercial centers, to community and regional scale centers. Office development is also appropriate in areas with this designation. Development may range from free-standing retail buildings and restaurants to planned commercial centers. Hotels and motels may also be appropriate on these lands, which are located primarily along major corridors and take advantage of convenient access to tourist and business amenities. This designation also allows the cultivation and sale of cannabis and related products with approval of a discretionary permit. This designation also provides for the development of commercial centers that serve the entire community and the larger regional market, including supermarket anchors and big box retailers. Community-scale development should take advantage of regional transportation networks and be designed to accommodate transit facilities. Such centers may also host ancillary office components, as well as regional institutions and services.

(CN) Neighborhood Commercial (FAR: 0.35)	This designation is assigned to existing neighborhood centers and vacant lands appropriate for this use. It provides for neighborhood-scale shopping integrated with, and conveniently located as a part of, residential areas. A mix of land uses may also be considered appropriate within this category. Neighborhood commercial uses are also employment centers and should facilitate pedestrian, bicycle and public transit access to the greatest extent practicable. Neighborhood Commercial centers may be anchored by supermarkets and super drugstores and provide a wide variety of supporting commercial services, including banking and similar financial services, businesses and offices, dry cleaners, restaurants, barber shops/beauty salons, and similar commercial outlets serving day-to-day neighborhood needs. These centers typically range in size from 8 to 10 acres and provide about 40,000 to 100,000 square feet of gross leasable floor area.
(DTC) Downtown Commercial (FAR: 0.80)	This designation is assigned to a limited area in the Downtown core (as defined by the Downtown Precise Plan) and takes advantage of the convenient access of the East Palm Canyon Drive corridor. Land use, zoning policies and design criteria for the area are established by the Downtown Precise Plan. Permitted land uses include Downtown Residential Neighborhood and Mixed-Use Commercial. This designation provides for a variety of commercial centers, ranging from storefront scale buildings and office space, to lodging and entertainment establishments. The Civic Center and associated civic facilities are also appropriately located within this area, providing venues for community events and festivals that complement the entertainment retail theme of the downtown.
(MU-N) Mixed-Use Neighborhood (FAR: 1.0)	This designation is assigned to limited areas in North City (as defined in the North City and Extended Specific Plans) and takes advantage of proximity to the Interstate 10 freeway, while acknowledging adjacency to *Conservation Area* lands established by the Multiple Species Habitat Conservation Plan area. Land use, zoning policies and design criteria for the area are contained in the North City Specific Plans. Permitted land uses include a mix of residential, up to 25 dwelling units per acre, commercial retail, office and public gathering spaces. Uses may be mixed either horizontally or vertically, with an emphasis on residential with neighborhood-serving commercial.
(MU-U) Mixed-Use Urban (FAR: 1.0)	This designation is assigned to limited areas in North City (as defined in the North City and Extended Specific Plans) and takes advantage of proximity to the Interstate 10 freeway. Land use, zoning policies and design criteria for the area are contained in the North City Specific Plans. Permitted land uses include a mix of residential, up to 45 dwelling units per acre, commercial retail, office and public gathering spaces. Uses may be mixed either horizontally or vertically, with an emphasis on commercial and allowing “big box” development.

Industrial

(BP) Business Park (FAR: 0.50)	This designation is intended for light industrial and related uses which are compatible with one another, as well as with neighboring residential and commercial uses. Other potentially appropriate uses include professional offices, including administrative, corporate, institutional, legal, medical, financial, insurance, real estate, and government offices. This designation also allows the cultivation, sale and in some cases manufacture of cannabis and related products with approval of a discretionary permit.
(I) Industrial (FAR: 0.50)	This designation provides for the development of any and all industrial uses operating entirely in enclosed buildings, and those requiring limited and screenable outdoor storage. Examples include clean manufacturing operations, warehousing and distribution facilities, mini-warehouse storage, and a variety of light manufacturing businesses. This designation also allows the cultivation, sale and in some cases manufacture of cannabis and related products. Siting industrial lands in close proximity to major regional highway and railroad facilities is desirable. Preferred development includes master planned industrial parks with integrated access and internal circulation. Business parks may also be permitted, provided their compatibility with other industrial uses is assured. This designation may also allow conditional and/or discretionary development of more intense industrial uses with the potential to generate substantial levels of noise, smoke or odor, dust, glare, traffic, vibration, or other nuisances. Examples include the manufacturing of durable goods, such as appliances, furniture, fabricated metal products, and light electrical and transportation equipment. These uses may also have a potential for greater dependence on outdoor storage. Proponents will be required to mitigate any adverse impacts to acceptable or insignificant levels, demonstrate conformance with all community environmental standards, and be compatible with existing and planned land uses.

Institutional Services and Facilities

(P) Public/Quasi-Public	This designation serves as a prefix for a variety of quasi-public and public uses delineated on the Land Use map. It is used to recognize such uses as the Civic Center and other governmental offices, libraries, schools, hospitals, police and fire stations, utility substations, and other public and quasi-public facilities.

Institutional Symbols

(P/CC) Civic Center	Civic Center and related facilities
(P/FS) Fire Station	Fire Station
(P/PS) Police Station	Police Station

(P/M) Medical Facility	Hospitals and similar in/out patient medical facilities. Also may be assigned to convalescent and skilled nursing facilities.
(P/L) Library	Library
(P/S) School	Educational facilities such as daycare, elementary, intermediate, high, special, and technical schools.
(P/PO) Post Office	Post Office
(P/C) Cemetery	Cemetery
(P/T) Transportation	Interstate-10 and Union Pacific Railroad transportation corridors.
(P/U) Utilities	Utility substations, including wells and water tanks, electric, telephone, gas, water and similar facilities.

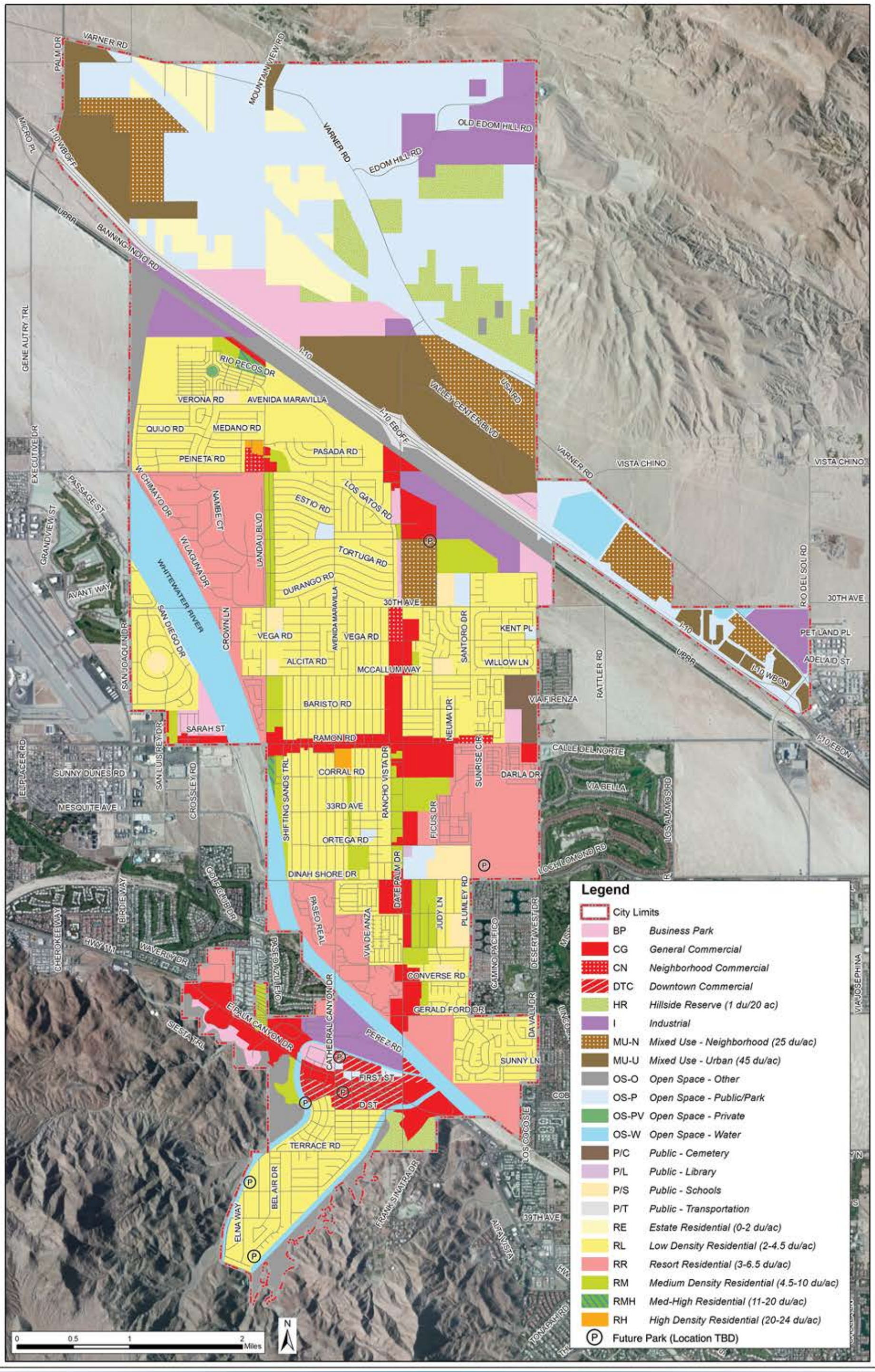
Open Space

(OS-P) Parks and Public Open Space	Public parks and open space lands determined to be special, important or valuable natural resources which warrant protection. This designation is assigned to park lands and other recreational amenities.
(OS-PV) Open Space - Private	This designation may be assigned to private open space areas that are preserved for this use. These lands include private golf courses, lakes, tennis facilities, pools and other open space/recreation facilities, which are typically located within planned residential communities.
(OS-O) Open Space - Other	This designation may be used to define a variety of open spaces and special resource areas, or those that may pose threats or hazards to development. Examples include large habitat areas preserved for biological purposes, as well as geologic hazard areas, detention or retention basins, trails, etc.
(OS-W) Open Space-Watercourse	This designation is used to delineate floodways, including natural and man-made floodway and drainage channels.

Specific or Precise Plans

In the past, Specific Plans have been used extensive as development tools for projects or locations which have special development needs or opportunities, including the Downtown and other master-planned areas. Specific Plans are most appropriately applied to projects which propose a mix of uses, or projects which have either environmental or geophysical issues associated with the property. Specific (and Precise Plans) will provide detailed design guidelines and analyses of the projects to which they apply, including the distribution, location, and intensity of proposed land uses.

Specific and Precise Plans also examine and address the required level of public facilities and services and their availability, and they should help establish the economic viability of proposed developments. Standards and requirements for Specific Plans are to be included in the Zoning Ordinance. Specific Plans must be consistent with the City General Plan, and must be developed in conformance with Government Code Section 65451. Also see Chapter II of the General Plan.



05.22.19 Source: City of Cathedral City General Plan, 2009; ESRI 2019, City of Cathedral City and Terra Nova Planning & Research, 2019.

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Exhibit LU-2 - Proposed Land Use Map
Cathedral City General Plan - Imagine 2040

Cathedral City

Table LU-2 Cathedral City General Plan (2018) Proposed Land Use

Land Use Category	ROW Acres	Land Use Acres	Total Acres	Vacant	Percentage of Vacant Lands	Developed	Percentage Developed Lands	Total	Percentage	Existing SF/Units	Potential SF/Units*	Buildout SF/Units*
Residential												
Hillside Reserve (1du/20ac)	1.77	457.28	459.05	451.22	98.67%	6.06	1.33%	457.28	3.52%	0	23	**23**
Estate Residential (0-2du/ac)	8.09	420.69	428.78	420.10	99.86%	0.59	0.14%	420.69	3.24%	1	630	**631**
Low Density Residential (2-4.5du/ac)	791.59	3144.12	3935.71	762.77	24.26%	2381.35	75.74%	3144.12	24.19%	11,841	2,574	**14,415**
Resort Residential (3-6.5du/ac)	46.62	1337.54	1384.16	942.80	70.49%	394.74	29.51%	1337.54	10.29%	5,153	4,596	**9,749**
Medium Density Res (4.5-10du/ac)	47.21	415.26	462.47	166.65	40.13%	248.61	59.87%	415.26	3.19%	4,224	1,250	**5,474**
Medium-High Density Res (11-20du/ac)	0.53	21.53	22.06	21.53	100.00%	0.00	0.00%	21.53	0.17%	-	323	**323**
High Density Residential (20-24du/ac)	2.01	38.43	40.44	38.43	100.00%	0.00	0.00%	38.43	0.30%	-	692	**692**
Mixed Use - Neighborhood	9.25	240.64	249.89	240.64	100.00%	0.00	0.00%	240.64	1.85%	-	5,114	**5,114**
Mixed Use - Urban	29.86	482.49	512.35	475.67	98.59%	6.82	1.41%	482.49	3.71%		18,194	**18,194**
Total Residential Acreage	**936.93**	**6557.98**	**7494.91**	**3519.81**	**53.67%**	**3038.17**	**46.33%**	**6557.98**	**50.45%**	**21,219**	**33,396**	**54,615**
Commercial												
Neighborhood Commercial	6.55	32.42	38.97	20.63	63.63%	11.79	36.37%	32.42	0.25%	112,986	197,701	**310,687**
General Commercial	129.27	559.73	689.00	193.24	34.52%	366.49	65.48%	559.73	4.31%	3,516,986	1,851,858	**5,368,844**
Downtown Commercial	37.54	93.39	130.93	40.70	43.58%	52.69	56.42%	93.39	0.72%	504,939	390,036	**894,975**
Mixed Use - Neighborhood	13.87	360.98	374.85	360.98	100.00%	0.00	0.00%	360.98	2.78%	-	3,459,344	**3,459,344**
Mixed Use - Urban	19.91	321.66	341.57	317.11	98.59%	4.55	1.41%	321.66	2.47%	43,604	3,038,929	**3,082,532**
Total Commercial Acreage	**207.14**	**1368.18**	**1575.32**	**932.66**	**68.17%**	**435.52**	**31.83%**	**1368.18**	**10.53%**	**4,178,508**	**8,937,867**	**13,116,382**
Industrial												
Industrial	26.20	761.38	787.58	688.40	90.41%	72.98	9.59%	761.38	5.86%	1,080,863	10,195,479	**11,276,342**
Business Park	24.54	439.26	463.80	362.52	82.53%	76.74	17.47%	439.26	3.38%	1,136,550	5,369,066	**6,505,616**
Total Industrial Acreage	**50.74**	**1200.64**	**1251.38**	**1050.92**	**87.53%**	**149.72**	**12.47%**	**1200.64**	**9.24%**	**2,217,413**	**15,564,546**	**17,781,959**
Open Space												
Open Space - Other	10.73	528.61	539.34	499.69	94.53%	28.92	5.47%	528.61	4.07%	N/A	N/A	**N/A**
Open Space - Public	150.08	2303.85	2453.93	2303.85	100.00%	0.00	0.00%	2303.85	17.72%	N/A	N/A	**N/A**
Open Space - Water	8.56	772.77	781.33	477.32	61.77%	295.45	38.23%	772.77	5.94%	N/A	N/A	**N/A**
Total Open Space Acreage	**169.37**	**3605.23**	**3774.60**	**3280.86**	**91.00%**	**324.37**	**9.00%**	**3605.23**	**27.73%**	**N/A**	**N/A**	**N/A**
Public												
Cemetery	4.64	55.74	60.38	0.00	0.00%	55.74	100.00%	55.74	0.43%	N/A	N/A	**N/A**
Library	0.77	2.80	3.57	0.00	0.00%	2.80	100.00%	2.80	0.02%	N/A	N/A	**N/A**
Schools	7.29	149.38	156.67	0.00	0.00%	149.38	100.00%	149.38	1.15%	N/A	N/A	**N/A**
Transportation	181.20	58.97	240.17	0.00	0.00%	58.97	100.00%	58.97	0.45%	N/A	N/A	**N/A**
Total Public Acreage	**193.90**	**266.89**	**460.79**	**0.00**	**0.00%**	**266.89**	**100.00%**	**266.89**	**2.05%**	**N/A**	**N/A**	**N/A**
Totals	**1558.08**	**12998.92**	**14557.00**	**8784.25**	**67.58%**	**4214.67**	**32.42%**	**12998.92**	**100.00%**			

*Existing and future conditions of Mixed-Use, Commercial, and Industrial land uses are calculated using the following assumptions: residential development is assumed to occur at 75% of the maximum density permitted, 22% lot coverage for commercial and mixed-use development, and 34% lot coverage for industrial development. Mixed-use Neighborhood is developed as 60% commercial and 40% residential. Mixed-use Urban is developed as 60% residential and 40% commercial. Updated 5.30.19

LAND USE PLAN: THE CONSEQUENCES

Implementation of the Land Use Element will have concrete consequences for the community in terms of the number and type of dwelling units that may be built and the level of demand for public services, facilities and infrastructure needed to support future residents. Planned land uses will also affect the level and extent of commercial and other services the City will be able to provide, as well as the potential for job-creating development in the commercial and industrial sectors. In this regard, the data from the Land Use Plan has been used to make projections of future residential units and square footages of commercial and industrial development, and lands dedicated to public facilities and open space.

Residential Land Use and Population Projections

Existing and planned residential land uses have been broken down into nine (9) separate categories as set forth in Tables LU-1 and LU-2, above. The General Plan provides approximately 7,495± acres for residential development. with 3,519± acres of vacant residential lands that could accommodate an additional 33,396± dwelling units. Buildout of the General Plan study area could generate approximately a total of 54,615 dwelling units. Based on 100 percent occupancy and an average household size of 3.16 persons, the City's buildout population could reach about 159,998. This represents a 194% increase over the City's existing (2018) population. Most new residents would live north of I-10, where new residential units would be developed consistent with the North City Specific Plan and North City Extended Specific Plan and would be comprised of multi-family units. Therefore, the average household population in the City may be reduced over time and the City's buildout population could be substantially less than that projected.

Table LU-3
Projected Population
at General Plan Buildout

Existing Population[1]:	54,466
Projected Additional Population: 33,396 potential new dwelling units x 3.16 persons/occupied household[1]	105,532
Total Population at Buildout:	**159,998**
[1] City/County Population and Housing Estimates (Report E-5), January 1, 2018, California Department of Finance. Current (2018) average HH size for all existing units = 2.56 persons.	

Commercial Land Uses and Employment Potential[1]

The General Plan provides for a total of 1,575± acres of commercial land across five categories, with approximately 435.52± acres currently developed and providing about 4,178,508 square feet of commercial space. The General Plan buildout could potentially result in an additional 8,937,867± square feet with a total of up to 13,116,382± square feet of commercial space. It is difficult to estimate the potential number of jobs that could be created due to the wide range of employment associated with different commercial uses. For instance, average employment for commercial space ranges from about 4.17 employees per 1,000 square feet of office space and 4.3 employees per 1,000 square feet of medical office space, to about 2.5 employees per 1,000 square feet of retail space.

Industrial Land Uses[2]

The General Plan provides 1,251± acres of designated industrial land in two use designations, "Industrial" and "Business Park" (see Table LU-1). These industrial land uses are located north and south of the East Palm Canyon corridor and especially on lands north and south of the Union Pacific Railroad corridor. Approximately 150 acres of industrial land has been developed (2018) and the General Plan provides for an additional 1,051± acres of industrial lands for future development. The General Plan buildout could result in an additional 15,564,546± square feet with a total of up to 17,781,959± square feet of industrial space.

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1 "Draft Master EIR-Corbin & Nordhoff Redevelopment Project" City of Los Angeles, SH 2002051125. 2002.
2 Ibid.

It is difficult to estimate the potential number of jobs that could be created due to the wide range of employment associated with different industrial and business parks uses. For purposes of providing a rough estimate of the employment potential associated with industrial development, it is assumed that average employment generation will be at the rate of about 1.5 employees per 1,000 square feet of industrial space. Up to 26,670 total industrial jobs could be generated upon General Plan buildout.

Open Space Land Uses

Open space land use designations represent lands that are preserved for outdoor recreation, including parks and golf courses, floodways and watercourses, and areas with outstanding scenic, biological, historical and cultural value. The General Plan provides a total of 3,775 ± acres of open space lands in three categories. Although not counted with Open Space lands, lands designated as Hillside Reserve (HR) allow development at a density of no more than one dwelling unit per 20 acres. The General Plan includes 459± acres designated as HR. These lands are generally constrained by topography and other conditions, and disturbed areas associated with their development would be expected to be limited.

Public Lands

Other land use designations pertain to lands allotted for community and public facilities and are categorized as cemetery, library, schools, and transportation lands. Transportation lands comprise the majority of the public lands designated in the General Plan and are associated with US Interstate-10 and Union Pacific Railroad rights-of-way. The General Plan designates 461± acres as Public.

In summary, the General Plan provides for an additional 33,396± dwelling units with a greater mix of multi-family than currently is found in the community. It also provides for almost 9 million additional square feet of commercial development and up to 15.5 million additional square feet of industrial development. Overall, the General Plan allocation model provides a good balance between housing and employment, which is also designed to better support alternative modes of travel. The Plan also will improve opportunities for local employment and affordable housing, as well as convenient access to commercial, professional and other services.

FUTURE DIRECTIONS

The Land Use Element is a critical but not the only important element that shapes the community. It works directly with the *Circulation and Mobility Element* (and the *Active Transportation Plan*) to increase opportunities for City residents to access places of employment and services, as well as parks and other open space, by walking, bicycling, use of LSEVs and via transit. In conjunction with the Community Design Element, the Land Use Element provides a land use pattern that allows the City to more fully implement the principles of *New Urbanism* and provide more opportunities for live/work/play development, and for a generally better and more equitably connected City of neighborhoods and urban villages.

GENERAL LAND USE GOALS, POLICIES AND PROGRAMS

Goal 1: A complete, balanced and integrated pattern of land uses appropriately scaled and designed to meet the domestic, productive and social needs of all members of the community, while providing a varied and cohesive fabric that is sustainable, empowering and humanizing.

Goal 2: A land use plan and pattern that preserves and enhances the integrity of neighborhoods, districts and corridors, while optimizing the community's natural assets, local and regional transportation systems and accessibility, and opportunities for housing, employment and economic base-building.

> **Policy 1:** Land use categories and zoning districts shall reflect the Ahwahnee (neo-traditional or new urbanism) Principles by providing land planning and development standards that encourage the creation of integrated and well-served neighborhoods, districts and corridors.

Policy 2: All land use planning shall be directed toward the creation of internally integrated neighborhoods and development districts, which also enhance and optimize their connections to surrounding neighborhoods and districts through enhanced multi-modal access.

> **Program 2.A:** The City shall ensure that development plans are responsive to the wishes and aspirations of the neighborhood or district in which they are located, and shall require that land uses provide an appropriate interface with adjoining neighborhoods and districts.
> **Responsible Agency:** Planning Department, Planning Commission, City Council
> **Schedule:** On-going
>
> **Program 2.B:** The Zoning Ordinance shall be amended to include standards and requirements for the preparation of Specific Plans as set forth in Government Code Section 65451 and the OPR Specific Plan Guidelines.
> **Responsible Agency:** Planning Department, Planning Commission, City Council
> **Schedule:** 2020

Policy 3: The City shall encourage mixed-use development that integrates a mix of residential product, commercial services, recreational areas and open space, and convenient access to alternative transportation, including transit.

> **Program 3.A:** The City shall implement and periodically review and update the City Design Guidelines, and ensure that they are responsive to the guiding Ahwahnee principles to provide a vibrant and dynamically integrated mixed-use neighborhoods throughout the community.
> **Responsible Agency:** Planning Department, Planning Commission, City Council
> **Schedule:** On-going, Update 2020

Policy 4: In-fill development and lot consolidation shall be encouraged as means of enhancing existing development and as a means of optimizing the use of existing roadways and utility infrastructure.

> **Program 4.A:** Where appropriate, the City shall identify areas where in-fill development and lot consolidation are best suited for efficient and timely development. The City shall consider such incentives as density/use intensity bonuses, City participation and other approaches that encourage in-fill and lot consolidation and development. An ongoing program shall be developed, implemented and regularly monitored and reported upon.
> **Responsible Agency:** Economic Development, Planning Department, Planning Commission, City Council
> **Schedule: 2020**, On-going monitoring, Annual reporting.

Policy 5: Land use planning and development proposals north of Interstate-10 shall take into consideration and address physical constraints, including geotechnical and flooding hazards, sensitive biological resources and MSHCP Conservation Areas, and limited infrastructure of the area. , Development proposals shall conform to approved Specific Plans in this part of the City.

Policy 6: Land use planning and development in the vicinity of the City's mountains and hillsides shall be consistent with MSHCP Conservation Area lands, the City's Hillside Protection Program and inherent physical constraints, and shall be applied to City lands as well as those located in adjoining jurisdictions.

Policy 7
The goals, policies and programs of the Land Use Element and other related elements, including but not limited to the Circulation/Mobility and Environmental Hazards Elements, shall be periodically reviewed in the context of land development activities.

Program 7.A: The City shall annually review the progress made in implementing the Land Use Element of the General Plan, including evaluating land use trends and their correspondence to the Plan's goals and policies. Applicable goals, policies and programs shall be updated and revised, as appropriate, in response to this evaluation.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going, annual reporting

Policy 8: The development districts and standards of the City Zoning Ordinance/Development Code shall correspond to the goals, policies and programs of the General Plan and the guidance provided by the Plan Program Environmental Impact Report.

Program 8.A: The City shall periodically review and maintain the consistency of the Zoning Ordinance/Development Code and the General Plan, and shall amend or revise the ordinance/code to ensure compatibility and consistency, and to optimize the function of the ordinance/code as the primary implementing tool of the General Plan.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: 2020; Annual review & report

Policy 9: The consideration of major development proposals shall include an assessment of their economic viability, and community fiscal costs and benefits associated with such proposals.

Program 9.A: The City shall consider and, as deemed appropriate, shall require the preparation of market feasibility studies and/or fiscal impact analyses for major development projects, including but not limited to those involving General Plan Amendments.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

RESIDENTIAL LAND USES BACKGROUND

As noted in the *Economic and Fiscal Element*, the City's broad and balanced mix of housing types and values and its geographic location have made it a preferred residential address in the Coachella Valley. Its housing affordability is second only to Desert Hot Springs and it provides a diversity of residential product. At the same time, the City has the lowest percentage of owner-occupied housing. Since incorporation in the early 1980s, the City has evolved to provide residents with a wide range of residential opportunities, ranging from neighborhood and resort single-family development, to quality high-density affordable and senior housing.

In 1990, the City had approximately 15,229 housing units, of which about 56% were single-family (attached and detached), 24% were multi-family, and 20% were mobile homes. By the Year 2000, the City had a total of 17,916 dwelling units. In 1990, the City's population was approximately 30,085, and the City had an average household size of 2.75 persons. By 2000, the City population had risen to 42,647 (a 42% increase over 1990) and the average household size had risen to 3.03 persons.

The City population increased 25%, from 42,467 to 53,842, between 2000 and 2016. In 2016, the total number of housing units in the City was approximately 21,080 (Ca Dept. of Finance, E-5 Data). Based on a DOF-estimated vacancy rate of 16.7%, the average household size in the City in 2016 was approximately 3.07 persons, with owner-occupied housing having smaller average household size than renter-occupied units. By January of 2018, the Department of Finance had revised the City's average household size upward to 3.16 person.

The City's 2000 average household size was comparable to that of the Riverside County average of 2.98 persons per household, but was substantially larger than that of neighboring Palm Springs (2.05) and Rancho Mirage (1.92). By 2016, the DOF estimates that the County average household size was 3.2 persons, while Palms Springs' had

dropped to 1.98, while Rancho Mirage had modestly increased to 1.99 persons per household. In general, Cathedral City households are 50% larger than those in Palm Springs and Rancho Mirage. Also see the *Economic and Fiscal Element*.

Residential Development: Looking Forward

The General Plan provides for a wide range of residential unit types and densities ranging up to twenty-four (24) dwelling units per acre within seven basic residential land use categories, including Hillside Reserve (1 du/20 ac) and High Density (20-24 du/ac). Two additional land use designations, the *Mixed-Use Urban* (MU-U) and *Mixed-Use Neighborhood* (MU-N), provide residential densities ranging from 25 to 45 dwelling units per acre. Upon buildout of the General Plan planning area, the currently (2018) incorporated City could have a total of up to 54,615 dwelling units and a permanent population of up to 159,998 (assumes 100% occupancy). This projected population assumes the Department of Finance estimated 2018 household size of 3.16 persons, but this number is expected to go down somewhat as more multi-family units are developed.

The City and all other jurisdictions in California are required by law to ensure the provision and availability of decent housing and a suitable living environment for all economic segments of the community, with special attention to very low, low and moderate-income groups. The elderly, those paying too much for rent/mortgages and those living in overcrowded conditions are identified special groups that require special attention when providing for the community's housing needs. Each of these groups has found acceptable housing opportunities in Cathedral City and the General Plan serves to expand those opportunities.

As noted above, the General Plan includes and encompasses the North City Specific Plan planning area, which provides residential densities of from 25 to 45 dwelling units per acre within a master-planned, mixed-use development context. These designations, MU-U and MU-N, have also been applied to lands south of US I-10 and provide the City an important tool to further mixed-use, high density residential development elsewhere in the community. For additional information addressing these and other related issues associated with community housing stock, please see the *Housing Element*.

RESIDENTIAL LAND USE GOALS, POLICIES AND PROGRAMS

Goal 1: Residential neighborhoods and developments that provide safe, wholesome and enhancing environments for living, enjoyment, growth and development of all residents, including the community's children and seniors.

Goal 2: Residential developments of distinctive character that provide a full range of housing types, products and costs to accommodate the needs of the City's existing and future residents of the community.

> **Policy 1:** Existing residential neighborhoods and vacant residential lands shall be managed and regulated to enhance the distinct character of each, while assuring compatibility between existing and future development.
>
> **Policy 2:** In-fill development shall be encouraged on partially built-out subdivided lands, where major investments in streets and infrastructure have already been made, while maintaining and enhancing the integrity of the neighborhood.
>
> **Policy 3:** Development proposals on non-contiguous or isolated lands shall be discouraged to avoid the creation of irregular, disruptive and inefficient development patterns.

Policy 4: Require that all development provide the full range of urban services and facilities found in the urban core areas of the community.

Policy 5: Vest existing and future residents in their neighborhoods by prioritizing efforts to improve and enhance neighborhoods and actively addressing core issues, including absentee and negligent property owners, encouraging and facilitating home ownership, and through effective code compliance.

> **Program 5.A:** The City shall pursue an active program of code compliance and owner education to ensure that absentee owners are responsive to the needs of their tenants and neighborhoods, and the codes and regulations of the City.
> **Responsible Agency:** Building Department, Planning Department, Fire Department
> **Schedule:** On-going

> **Program 5.B:** The City shall develop a program that enhances opportunities for affordable home ownership in single-family and multi-family development by encouraging such development through the City's affordable housing program, coordination and cooperation with financial institutions and other entities including Habitat for Humanity and others.
> **Responsible Agency:** Community Development, Economic Development, Planning Commission, City Council
> **Schedule:** 2020, On-going

Policy 6: The General Plan shall be reviewed every five years to ensure that the City provides a balanced mix of moderate and high-income housing that addresses the City's potential to meet the needs of high-end residents within the corporate limits.

> **Program 6.A:** The General Plan and its Land Use Map shall be periodically updated to ensure the provision of adequate lands designated for low density, high value development, including single family subdivisions on larger lots, estate residential ranchette-type lands and development.
> **Responsible Agency:** Planning Department, Planning Commission, City Council
> **Schedule:** 2024, Min. every 5 years

Policy 7: In areas undergoing redevelopment and other locations where integrated planning is possible the City shall encourage the thoughtful integration of a mix of residential and commercial uses, including high-density residential development that can take advantage of close and pedestrian-accessible employment and commercial centers, and alternative modes of transportation.

> **Program 7.A:** The City shall require the preparation of Specific and/or Precise Plans in areas where the integration of a mix of land uses is desirable or is to be encouraged, and where development plans can integrate the Ahwahnee and New Urbanism Principles to enhance land use efficiencies and quality of life.
> **Responsible Agency:** Community Development, Planning Commission, City Council
> **Schedule:** On-going

Policy 8: Development densities set forth in the General Plan represent a range of development densities that may be approved by the City, based upon the carrying capacity of lands, the availability of services and infrastructure, and the compatibility of proposed development with existing land uses.

> **Program 8.A:** Development proposals shall be analyzed by City staff to determine the appropriate density for each development, independent of the proposed development density. Criteria to be considered shall include land carrying capacity, the quality of proposed development, the availability of services and infrastructure, the compatibility of proposed development with existing land uses, and other appropriate criteria.
> **Responsible Agency:** Planning Department, Planning Commission, City Council
> **Schedule:** On-going

Policy 9: The City shall encourage the use of Specific Plans and Precise Plans to master plan complex mixes of land uses, to ensure the appropriate mix and distribution of uses, support facilities and open space areas, and for projects which have environmental or geophysical issues associated with them.

Policy 10: All residential development shall be subject to review by the City Architectural Review Committee and/or the City Planning staff for compliance with City architectural standards and guidelines.

Program 10.A: Residential subdivision applications, which include models of residential product to be developed, shall be reviewed and approved by the Architectural Review Committee. All other residential development applications shall be reviewed by Planning staff for compliance with applicable architectural design standards and guidelines.
Responsible Agency: Planning Department, Planning Commission, City Council
Schedule: On-going

COMMERCIAL LAND USE BACKGROUND

From the time of its incorporation, Cathedral City has innovated and executed major plans, including a very successful auto center, a well-activated and attractive Civic Center, community space and related downtown development, and other steps that have enhanced the City's local and regional competitiveness. While the City has continued to add homes and their associated demand for commercial services, "brick and mortar" and other conventional retail outlets has been undergoing a major sea-change.

The advent, growth and scale of on-line retail and marketing has made it difficult for many commercial businesses to compete. The geographical requirements of big-box retail have also changed, leaving vacant in its wake once highly successful and function buildings. As this shift continues, the City sees the need to continue to innovate, repurpose and broaden the commercial vision for Cathedral City.

The health of the City's commercial sector is of critical importance to the economic and fiscal health of the community. As an essential part of the City's mix of land uses and the local economic base, commercial lands and development generate important tax revenues and employment opportunities.

The City's success has been due part to its central location and excellent access from major intra-regional arterial roadways. Increasing household incomes, both in Cathedral City and surrounding communities, are also enhancing the City's retail environment and creating new or expanded commercial markets in such areas as entertainment retailing, dining, and specialty and niche shopping. One of the City's commercial and economic foundation has been the implementation of the Downtown Precise Plan, which is revitalizing the downtown core area along the East Palm Canyon Drive corridor.

New development stimulated by the civic center complex, CVRep Theater, Mary Pickford Theaters, the Event Lawn, the Amphitheater and the growing arts district next door are providing the foundation for growth in local-serving and tourist commercial development, as well as mixed use residential and hotel projects. The City's growth in taxable sales, from about $399 million in 1995 to almost $610 million in 1999, and over $790 million by 2016, is testament to the effective effort the City continues to make in building an economically vital community.

The commercial retail market continues to change with the legalization of cannabis cultivation, sales and use. The cannabis industry has emerged as a new business sector comprised of cultivators, manufacturers, and dispensaries. The City introduced new ordinances and started accepting development applications for cannabis facilities in 2016 almost immediately generating revenue for the City. The market for cannabis cultivation, related manufacturing and sales is steadily growing and is posed to be a major component of City economic activity in the coming years. It is still in its infancy, and the relationship of state and federal cannabis laws and regulations is still evolving. Presently, cannabis represents a major new opportunity for the City's economy.

COMMERCIAL GOALS, POLICIES AND PROGRAMS

Goal: A balanced mix of commercial lands and services serving neighborhood, community, regional and visitor needs of all sectors of the community, which are appropriately distributed to take advantage of pedestrian/bikes/NEVs and vehicle access, which maximize the City's comparative advantages.

Policy 1: Ensure that neighborhood-serving commercial development is strategically sited within or in proximity of residents and complementary businesses to maximize multi-modal access and minimize the need for vehicle travel to meet daily shopping and other commercial needs.

Program 1.A: The City shall encourage the development of integrated neighborhoods that include residential and neighborhood-serving commercial in a convenient and compatible manner, consistent with appropriate development standards set forth in the City Zoning/Development Code.
Responsible Agency: Community Development, Economic Development, Planning Commission, City Council
Schedule: On-going

Policy 2: Community and regional-scale commercial development shall be located to take advantage of major roadways and highways, such as Interstate-10 and East Palm Canyon Drive, maximizing the capture of the drive-by market along such arterials and minimizing impacts on residential neighborhoods.

Policy 3: Through implementation of the General Plan and by other means, the City shall enhance opportunities for the development of additional tourist/visitor-oriented commercial development, including business and resort hotels, theaters, golf courses and other recreational facilities.

Policy 4: Planning and capital improvement projects shall be developed to improve and enhance access, safety and appearance of commercial corridors, including neighborhood retail and service commercial areas of the City serving a wide range of consumers.

Program 4.A: The City shall continue and expand its corridor improvement program through the holding of public workshops and the development of corridor improvement plans that address the full range of traffic, multi-modal access and safety, and appearance issues on commercial corridors. The City shall continue to expand and implement its program of staged improvements to optimize these important commercial corridors.
Responsible Agency: Community Development, Public Works, Planning Commission, City Council
Schedule: On-going

Policy 5: The City General Plan and Zoning Ordinance/Development Code shall establish policies, programs and development standards that limit isolated and stand-alone commercial development and enhance the functional synergies and appearance of existing centers.

Program 5.A: The City Zoning Ordinance/Development Code shall be reviewed and, as appropriate, revised to ensure that development standards and guidelines address the development issues inherent in strip commercial development, including but not limited to access and other site constraints, building heights, and compatibility with surrounding land uses.
Responsible Agency: Community Development, Public Works, Planning Commission, City Council
Schedule: 2020-22

Policy 6: The City shall encourage lot consolidation and the submission and processing of integrated development plans along major arterials and other roadways where strip commercial may develop, including East Palm Canyon Drive, Date Palm Drive, East Ramon Road, and other locations.

INDUSTRIAL LAND USE BACKGROUND

The City is home to a wide range of service-oriented businesses, industrial and commercial, and most located on City industrial lands. Existing businesses and residences, in the City and beyond, generate a significant ongoing demand for capital improvements and services. Since the last General Plan update, less light industry and more business park development has occurred within the City's "industrial" areas.

Customers for industrial space are also changing. For instance, Perez Road is emerging as a venue for an ad hoc arts district within a multi-tenant industrial park. At the same time, demand for industrial lands is also being generated by the rapidly expanding cannabis industry, including cannabis product manufacturers some of which use processes most appropriate to industrial lands.

Cathedral City and the Coachella Valley are benefitting from the continuing expansion of College of the Desert campus and the valley's California State University campus. Both schools are focusing on curricula that support sustainable technologies and services, as well as the hospitality and allied health industries, which are major employers in the valley. These synergies have been key to diversifying economies in many communities, and the Coachella Valley provides many natural advantages for a wide range of industrial development. The type of industrial development envisioned generates limited demand for public services and facilities, including low traffic generation and limited impacts on other public and environmental resources.

The Land Use Element and map address the need for additional industrial lands by taking advantage of existing physical constraints and opportunities, including the proximity of the US Interstate-10/Union Pacific Railroad transportation corridor. Other lands assigned industrial uses include those adjoining the Edom Hill Landfill and along Rio del Sol north of I-10. The Plan also designates lands partially developed lands west of the cemetery for business park development, building upon existing development along Ramon Road.

The Land Use Element provides two industrial categories, a general "Industrial" designation and a "Business Park" designation. As discussed above, the Industrial land use category provides for a wide range of uses that are expected to be readily permissible with the caveat that they do not generate meaningful environmental impacts and operate entirely in enclosed buildings. The designation also provides for "discretionary" uses, the suitability of which is determined on a case-by-case basis. Alternative energy projects and associated manufacturing development are also important opportunities the City may wish to consider in these areas.

The Business Park designation is meant to provide for a wide variety of mutually compatible uses, ranging from light industrial to professional office development. Land uses under this designation are expected to be compatible with neighboring residential and commercial uses. Other potentially appropriate office uses include administrative, corporate, institutional, legal, medical, financial, insurance, real estate, and government uses. Limited and primarily business-park-serving commercial, including restaurants, printing and copying services, can also be compatible within this environment.

Planning Future Industrial Land

For the past several decades there has been a limited demand for industrial lands in Cathedral City and the Coachella Valley. The agri-business industry in the east valley, construction and utility industries, and the many service businesses that support the broader economy have been the prime users of industrial and business park space. Demand for industrial lands has also been limited by the valley's relative isolation from the much larger markets to the west. Nonetheless, major and diverse industrial land users, including and especially regional distribution centers, have pushed farther east into Moreno Valley and San Gorgonio Pass communities. Whether and when this ongoing geographic shift will reach the Coachella Valley is uncertain.

Meanwhile, there are new economic development opportunities, including the emerging cannabis industry, sustainable technologies, allied health and the hospitality industries, that are placing a substantial demand on the City's limited industrial lands. Therefore, the *Imagine 2040* General Plan update has evaluated areas of the City where additional industrial/business park lands could be compatible with environmental conditions and surrounding lands, and are economically viable. These include the addition of industrial lands along the south side of the UPRR corridor and in the cove areas of the community where there are few land use compatibility issues. These new land use assignments add to the industrial/business park lands that have recently been assigned north of US-10 and within the NCSP and NCSP Extended planning areas.

An area worthy of further consideration and analysis involves lands located between the UPRR corridor and the US Interstate-10 rights of way. These lands are constrained in terms of primary and secondary access, existing and long-term flooding hazards, and other concerns that require further consideration and analysis. Nonetheless, given the growing importance of industrial and business park lands in the City and valley, it would be appropriate for the City to explore the potential of these lands with owners and other parties of interest.

INDUSTRIAL GOALS, POLICIES AND PROGRAMS

Goal 1: A balanced mix of business park and industrial uses and lands that are clean and non-polluting, and are developed in a manner compatible with non-industrial uses.

Goal 2: Sufficient and well-located mix of industrial and business park lands that provides a diversity of employment opportunities in the community and broadens the economic base of the City.

Policy 1: To the greatest extent practicable, the City shall host and support development of safe and non-polluting businesses on industrial and business park lands.

Policy 2: The City shall encourage the development of industrial uses that provide a diversity of employment opportunities in such clean technologies as renewable energy and alternative transportation, allied health and hospitality industries.

Policy 3: Protect and enhance the broadly-based business park nature of industrial development in the Perez Road corridor and other industrial areas of the City by preventing the development of particularly sensitive or otherwise incompatible land uses in the vicinity.

Policy 4: Recognize and preserve appropriate lands north of Interstate-10 for future business park and industrial development by precluding land uses that are inconsistent or incompatible with physical constraints of the area, and which may create land use compatibility issues with business park/industrial development.

Policy 5: Limit business park and industrial development to those uses which complement the overall economic development goals of the community by enhancing the type and value of new jobs for the community, while assuring that the City's high environmental quality standards are not compromised.

Program 5.A: The City shall develop and initiate a program of business park and industrial recruitment, which focuses on users with moderate to high employment potential and salaries that provide a standard of living consistent with the City's economic development goals.
Responsible Agency: Economic Development, Community Development, Planning Commission, City Council
Schedule: On-going

Program 5.B: Business park and industrial development proposals shall be carefully reviewed in the course of conducting the CEQA Initial Study and through subsequent analysis, as necessary, to ensure that the proposed land use(s) will not contribute to the degradation of the community's air, water or other environmental resource, including the City's aesthetic values.
Responsible Agency: Community Development, Planning Commission, City Council
Schedule: On-going

Policy 6: The City encourages the exploration of assigning additional industrial/business park lands between the UPRR and I-10 corridors, and will consider property owner-sponsored research, analysis and design that could make such uses viable at these locations.

Program 6.A: The City shall continue to explore the potential and viability of reassigning lands located between the UPRR and I-10 corridor for future industrial/business park uses. The City will cooperate and, as appropriate, facilitate this analysis and alternative land use assignment.
Responsible Agency: Economic Development, Community Development, Planning Commission, City Council
Schedule: On-going

Policy 7: The City shall encourage the preparation of Specific and/or Precise Plans for major business park and industrial developments on 10 acres or more, to ensure the efficient use of these lands and the roadways, drainage facilities and utilities to serve these developments.

Program 7.A: As a means of properly controlling and optimizing the development of business parks and industrial projects, the City may require the preparation of Specific and/or Precise Plans, which address circulation, infrastructure, drainage and development standards and design guidelines to ensure compatible development that reflects the values and standards set forth in the General Plan.
Responsible Agency: Community Development, Planning Commission, City Council
Schedule: On-going

Policy 8: All proposals for development of business and/or industrial parks shall be considered within the context of the City's aesthetic and health and safety concerns and goals.

Program 8.A: Business park and/or industrial park development proposals shall demonstrate a thoughtful consideration for surrounding land uses and the appearance of these developments from adjoining lands and public rights of way by integrating generous landscape areas, walls and other appropriate visual enhancements and screening.
Responsible Agency: Community Development, Police Department, Fire Department, Riverside County Environmental Health, Planning Commission, City Council
Schedule: On-going

Program 8.B: Industrial and business park development proposals shall be reviewed with a special consideration for their potential to generate public health or safety issues. The issues shall be taken into consideration when assessing the appropriateness of proposed development and surrounding existing and planned land uses.
Responsible Agency: Community Development, Police Department, Fire Department, Riverside County Environmental Health, Planning Commission, City Council
Schedule: On-going

PUBLIC SERVICES AND FACILITIES BACKGROUND

One of the primary functions of municipal government is to provide or ensure adequate levels of public facilities and services. Land uses for public facilities and services include such governmental functions as the Civic Center, fire and police stations, and the City's corporate yard. Other public and quasi-public services and facilities include those associated with schools and libraries, hospitals and other medical facilities, and utility infrastructure. (Also please see the *Public Services and Facilities Element*).

The level of public services and facilities needed to support residential, commercial and industrial development, and community needs in general, is directly related to the scale and intensity of development and the socio-economic structure of the community. The planned logical extension of the City's urbanizing areas cannot occur without the careful and timely planning for and coordination of the extension of public services and facilities.

The viability and nurturing of the development environment, and the economic life and future of the City, are directly tied to the level and cost of services and facilities, the types and intensity of land use, and the level of demand generated for public services and facilities. The economic health of the City is also dependent upon a balance between service costs and revenues generated by current and future development.

While the extension of many urban services and facilities is provided by various public agencies and regulated private companies, some of these service providers are not under the City's regulatory jurisdiction. Nonetheless, the City has the essential responsibility to cooperate with the appropriate agencies, public districts and private companies, to facilitate the timely availability of services, but to also ensure that premature and inappropriate land uses are not encouraged.

PUBLIC SERVICES AND FACILITIES GOALS, POLICIES AND PROGRAMS

Goal 1: Municipal services and facilities that are of adequate capacity and sufficiently well served and staffed to meet the service and safety needs of all sectors of the community now and in the future, while being compatible with the full range of community land uses.

Goal 2: Municipal services and facilities that are consistent with and facilitate the goals of the Ahwahnee Principles and New Urbanism through the provision of convenient access to public transit and multi-modal transportation systems, provide convenient and cost-effective water and wastewater treatment facilities, other infrastructure, and public safety services and facilities.

> **Policy 1:** Ensure the planning, development and provision of public facilities and services through City programs and requirements placed on development, which results in adequate levels of service and staffing requirements, while continuing to be compatible with surrounding land uses.
>
> **Policy 2:** All proposals and plans for development of public buildings shall be assessed and approved through the same review process established for private sector development. The review process shall ensure project compliance with City land use regulatory documents, compatibility with surrounding land use, and adherence to applicable design standards and guidelines.
>
> **Policy 3**: The City shall pro-actively cooperate and coordinate with all providers of utility and public safety services in the community.
>
>> **Program 3.A**: Establish and/or maintain protocol and procedures to regularly consult, coordinate and cooperate with providers responsible for public utilities, police, fire, health, and other service, protection and care services in the community.
>> **Responsible Agency:** Community Development, Building Department
>> **Schedule:** Ongoing

OPEN SPACE AND CONSERVATION BACKGROUND

Cathedral City has been a leader in local and regional open space and conservation planning, including its role in the development and implementation of the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP), of which the City is a "permittee". The City and the Coachella Valley are host to a wide variety of open space and conservation lands and resources, which are important assets for all of the valley's communities. The open space and conservation spaces in the City are important areas of aesthetic, recreational and natural resource value, which also give the community its essential character. Also see the *Open Space and Conservation Element*.

Open space and conservation areas within the City include rugged and imposing elevated terrain of the foothills and mountains, major drainages and waterways, and lands serving as utility corridors. These lands are also designated for the preservation of natural resources (plant and animal communities), washes and their banks, mineral deposits, parks and recreation facilities, multi-use trails, and areas where the presence of hazardous conditions limits or precludes development.

Parks and Public Open Space lands include special, important or valuable natural resources that warrant protection. Open Space-Private designations may be assigned to private open space areas which are preserved for this use. Open Space–Other lands define a variety of open spaces and special resource areas, or those that may pose threats or hazards to development, and Open Space-Watercourse lands delineate floodways, including natural and man-made floodway and drainage channels.

The General Plan recognizes the need for and desirability of more and a broader variety of open spaces in community parks in residential areas and general locations have been identified but without designating a precise location. Accordingly, the plan Land Use Map provides a generalized location for possible future parks, including enhanced trailheads, pocket parks, tot-lots and neighborhood and community-scale parklands.

OPEN SPACE AND CONSERVATION GOALS, POLICIES AND PROGRAMS

Goal 1: Environmental resources that are protected through the establishment and preservation of managed and conserved open space areas, which also protect residents and property from environmental hazards while providing recreational opportunities and enhancing the beauty and attractiveness of the community.

Goal 2: Preservation and enhancement of the City as a balanced mix of built and natural environments that contribute to the overall quality of life for its citizens and visitors, while preserving scenic resources of the desert and mountains.

> **Policy 1:** The preservation of open-space land as necessary for the maintenance of the economy of the City and region, and for the assurance of the continued availability of land for the enjoyment of scenic beauty, for recreation and for the use of natural resources.
>
> **Policy 2:** The General Plan and supporting documents shall provide comprehensive descriptions and mapping of open space and conservation areas that are valued for their community-wide asset value, including the Multiple Species Habitat Conservation Plan areas, and/or areas identified as constituting environmental hazards such as flood plains, high voltage electric transmission corridors, earthquake fault zones and blowsand hazard areas.
>
> **Policy 3:** All development proposals shall be reviewed for the degree or extent to which they encroach upon sensitive resource areas or may subject people and/or improvements to damage from environmental hazards. Mitigation measures shall be promulgated, to the extent practicable, to avoid significant impacts and determine the feasibility of development proposals.
>
> **Policy 4**: The City shall explore and exploit all legitimate and appropriate opportunities to secure and protect valuable open space and conservation lands for the benefit of the entire community.
>
>> **Program 4.A**: Through all available contacts and opportunities, including those associated with the granting of development permits, the City shall provide opportunities and mechanisms for public and/or private donations of open space lands to the City or appropriate conservation land management entity for the benefit of its residents and the entire community.
>> **Responsible Agency:** Community Development, Planning Commission, City Council
>> **Schedule:** On-going
>
> **Policy 5:** Allow for appropriate public access to open space lands for recreation activities while protecting and restoring the natural ecosystem and minimizing environmental damage, as appropriate.

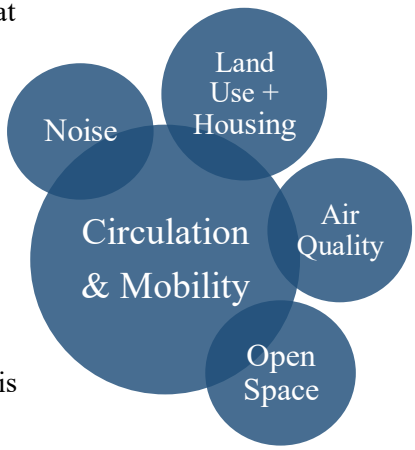
Circulation & Mobility Element

PURPOSE

The purpose of the Circulation and Mobility Element is to ensure that the City has a safe, efficient and equitable multi-modal transportation system that provides for the full range of the City transportation needs. It also addresses those segments of the local transportation system that interface with and serve as extensions of the regional system connecting Cathedral City with the rest of the Coachella Valley and other communities in Southern California. The element takes into account existing and long-term regional traffic and transportation infrastructure needs. The element is also correlated with community and regional land use plans to assure a diverse multimodal transportation network that moves motorized and non-motorized vehicles, and pedestrians, safely and efficiently through the City and region. The Circulation and Mobility Element also sets forth goals, policies, programs and standards that correlate the City's transportation system with the types, intensities and locations of land uses within the City. This element also serves as the blueprint for future land use policy decisions, social equity and economic vitality.

BACKGROUND

The Circulation and Mobility Element is an infrastructure and mobility plan that provides connectivity between the various existing and planned land uses of the City and the region, and addresses the dynamic access issues associated with the mix of residential, employment, commercial, industrial and institutional uses in the community. In addition to its effects on the physical, social and economic environment of the City, the Circulation and Mobility Element also has a direct relationship with the Housing, Economic and Fiscal Health, Open Space and Conservation, Noise and Air Quality and Climate Stability elements. Mobility is also an issue of environmental justice and this element and the General Plan promote equal access to a variety of transportation options. The goals of the *Healthy and Sustainable Community Element* are also reflected and supported in this Circulation and Mobility Element.



Being integrally tied to the Land Use Element, the Circulation and Mobility Element is predictably influenced by the types, intensities and distribution of land uses within the community and surrounding area. Local and regional air quality issues are closely related to the efficiency of the local and regional transportation system. As the population in Cathedral City and the Coachella Valley continues to grow, vehicle miles traveled will increase and travel speeds will be reduced, resulting in higher emissions per mile traveled. The policies and programs established by the Circulation and Mobility Element play an important role in maintaining and enhancing the flow of vehicular traffic and other modes of travel and preserving air quality in the community.

The Circulation and Mobility Element has been developed as a comprehensive transportation management strategy, in conjunction with the City's Active Transportation Plan, General Plan Program EIR and City Capital Improvement Plan. It sets forth specific goals, policies and programs, which are based upon an engineering and computer modeling analysis of existing and projected future traffic conditions. Future vehicular traffic volumes have been forecast using the Cathedral City Transportation Model (a focused version of the RivTAM transportation model), anticipated buildout land use patterns and intensities, projected regional growth and a wide range of socioeconomic data, information and assumptions.

Regulatory Environment

California Government Code sets forth the information and data analysis requirements of the Circulation and Mobility Element. Government Code Section 65302 requires that the element describe major thoroughfares and that their planned development be closely coordinated with the Land Use Element of the General Plan. It also requires that the element include development or improvement standards that are responsive to changes in demand for capacity created by implementation of the Plan.

Land use patterns and the existing transportation network play a direct role in the rate and growth of vehicle miles traveled (VMT). They influence the distance that people travel and the mode of travel they choose. Even with aggressive state and federal vehicle efficiency standards and the use of alternative fuels, meeting the State's greenhouse gas (GHG) reduction goals will require a reduction in how much the average Californian drives as well as a change in the type of vehicles we drive. Reducing miles traveled is challenged by conventional land use planning. For instance, between 1970 and 2000, California's population grew by about 70 percent, while vehicle miles traveled during that same period grew by 162 percent.

"Transportation determines how we get to the places where we live, work and play. It is imperative we advance an equity agenda that is people-centered, protects our health, encourages sustainable communities and gives everyone a voice in stimulating a vibrant economy."

Joint Center for Political and Economic Studies

Government Code Sections 65103(f) and 65080 et seq. require that the City coordinate Circulation Element provisions with applicable regional and state transportation plans. In the City General Plan planning area, the following agencies are responsible for preparing these transportation plans: Coachella Valley Association of Governments (CVAG), Southern California Association of Governments (SCAG), and California Department of Transportation (Caltrans). The state is also required to coordinate its planning efforts with those of local jurisdictions (§65080(a)); the federal government is under a similar mandate (§134, Title 23 of the U.S. Code).

The initiator and driving force in California to address climate change is State Assembly Bill 32 (AB 32), also known as *The Global Warming Solutions Act of 2006*. It requires the reduction of pollutants that contribute to greenhouse gas (GHG) emissions and climate change, including vehicular emissions. The California Air Resources Board (CARB) has identified passenger vehicles as the number one emitter of GHG emissions in California and asserts that improved land use and transportation policy are essential to meeting AB 32 goals locally and state-wide.

Another piece of landmark climate change legislation is Senate Bill 375 (SB 375). It builds on the existing regional transportation planning process and connects the reduction of transportation-related GHG emissions to regional land use and infrastructure planning. Under SB 375, all cities and counties are required to establish policies that reduce vehicle trips and vehicle miles traveled, and to encourage the use of transit and other forms of alternative transportation. It requires that the City forecast development patterns that integrate land use with transportation planning with the goal of increasing opportunities for alternative modes of travel.

Finally, consistent with SB 743 and Chapter 728 of the Statutes of 2008, popularly known as the *Sustainable Communities and Climate Protection Act of 2008*, the state encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT) and contribute to the reductions in greenhouse gas emissions required in the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500 of the Health and Safety Code). Similarly, the California Complete Streets Act of 2008 (Chapter 657 of the Statutes of 2008) requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel.

Community Constraints and Opportunities

Each region and community is faced with a particular set of constraints and opportunities that establish how transportation-related issues can best be addressed. Many of these are typical of those of Coachella Valley's "cove communities" that rely heavily on major east-west connectors to tie the City to other local communities and the regional network. Constraints include the Santa Rosa Mountains and Indio Hills, and major drainages of the Whitewater River and those north of US I-10 US I-10 itself and the Union Pacific Railroad are also impediments to north-south travel in the northern portion of the City.

The City's Cove Neighborhood is located in a geographic cul-de-sac at the south end of the City with access to the local and valley roadway network from a few streets that intersect with East Palm Canyon Drive (Hwy 111). On the valley floor, portions of the City's roadway network are interrupted by major drainages, especially the Whitewater River, and by earlier development that eliminated parts of the street grid, thereby concentrating local traffic in some areas onto a constrained street grid.

Regional Transportation Plans (RTPs)

The regional transportation plan (RTP) establishes regional goals, identifies present and future transportation needs, deficiencies and constraints, analyzes potential solutions, estimates available funding, and proposes areas of investments. Consistent with SB 375 and other legislation, RTPs include a sustainable community strategy to align transportation investments with a land use pattern designed to reduce travel and regional greenhouse gas emissions. In order to be eligible for federal and state funding, transportation projects must be consistent with the adopted regional transportation plan, including an applicable sustainable community strategy.

The City's local transportation plan complements and is consistent with the regional transportation planning efforts of CVAG and SCAG, and the City has been coordinating with these agencies in the updating of the City Circulation and Mobility Element and the RTP. The goal is to achieve an integrated and balanced regional transportation system, including mass transit, highways, railroads, bicycle and low-speed electric vehicles(LSEVs), walking, goods movement, and aviation. The RTP is meant to be action-oriented and pragmatic, and to consider both short-term and long-term issues. It establishes the region's priorities for funding transportation infrastructure projects and other transportation programs.

The RTP Guidelines promote multi-modal transportation networks and the identification of the financial resources necessary to accommodate them. As a near-term solution, local and regional transportation planning considers opportunities to accelerate projects that retrofit or rehabilitate existing roads to provide safe and convenient travel by all users. CV Link is a good example of this multiple use of regional flood control facilities. Regional planning requires working with CVAG, Riverside County and valley cities to ensure that local street and road standards are coordinated, complete and support the current and future needs of all transportation system users.

Land Use and Transportation Planning

Now and in the future, the type, intensity and location (distribution) of land uses has a profound effect on the community's transportation system. Existing and future land use patterns shape the demand for transportation services and facilities. The efficient distribution of land uses has a direct effect on how, when and where traffic is generated and how well it is accommodated. Land use efficiencies are affected by densities, diversity and proximity of mixed land uses.

The close correlation of land use and transportation planning reflects long-term development trends in the City and globally. Multi-modal networks encouraged by *Complete Streets* and *New Urbanism* are diversifying and making efficient and safe transportation more accessible and equitable. Included in this effort is moving toward a more closely integrated grouping of land uses, including "mixed-use" designations in the General Plan. Efficient land use planning can reduce the need to travel outside the neighborhood by, for example, providing shopping and other "services" within walking or biking distance of homes.

Through the year 2040 and beyond, it is assumed that the City will continue to diversify with the community providing affordable housing and a wide range of commercial services and employment opportunities. Permanent City and valley residents will continue to comprise the majority of community traffic, but seasonal traffic volumes increase on some major streets by up 30% between late fall and early spring. Low occupancy per vehicle, a substantial physical separation between employment and housing in the region, and the established roadway network are some of the transportation issues faced by the City and the Coachella Valley.

Optimizing Land Use and Mobility

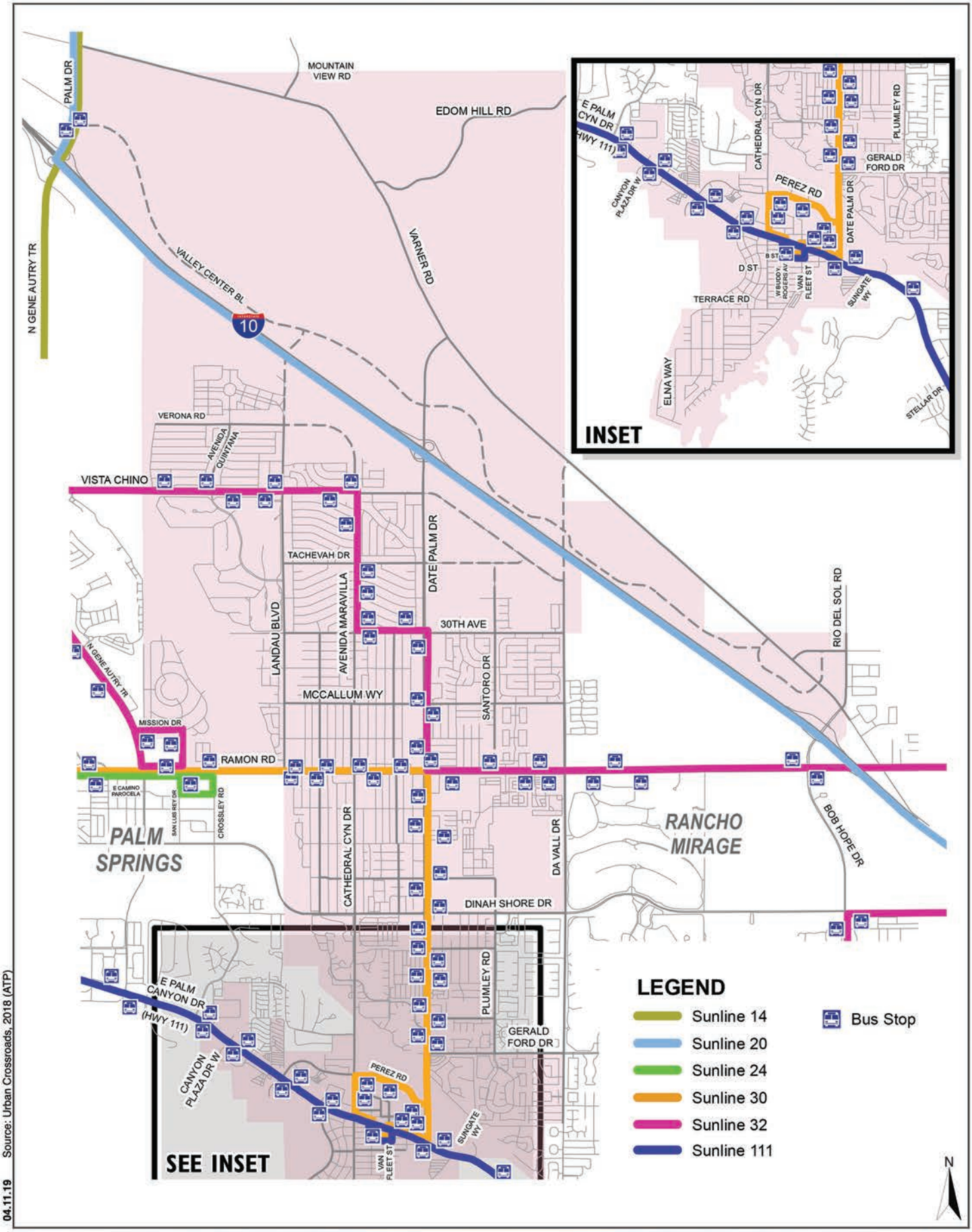
The Federal Highway Administration (FHWA) National Household Travel Surveys find that on average, 25% of vehicle trips are between home and work, while most of the other 75% are short trips -- running errands, picking up the kids and other local trips. Knowing this, land planning can better reflect the need for proximity and multi-modal accessibility from homes to schools and parks, shops and business centers. This proximity of complementary land uses and good multi-modal access allows more people to walk, bike or use low-speed electric vehicles (LSEVs) and reduces demand for roadway capacity.

SB 375 sets forth several mandates, including increasing vehicle occupancy, mixed-use and transit-oriented development, and use of mass transit systems. Cathedral City is well suited to take advantage of alternative modes of travel, especially golf carts, NEVs and other LSEVs. With the high number of service jobs and residents that work in the service industry, the City should encourage the location of bus stops within a ten-minute walk, or easy bicycling distance between residential neighborhoods and employment centers. The City's neighborhoods can be protected from the impacts of noise, and vehicle emissions can be minimized by shortening or eliminating vehicle trips.

Coordinating land use and transportation planning is the basis for creating connected, accessible, and complete mobility networks. Due in part to the connection between transportation funding and greenhouse gas reduction established in SB 375, vehicle miles traveled (VMT) is an increasingly important metric of impact in the circulation element. Because the circulation element is required to correlate with the land use element, it must account for the features of the City as much as possible.

Transit and Land Planning

In older cities, most urban development was more diversified with a mix of uses in proximity to one another and accessible by walking, or by horse (and wagon). Many towns and cities were founded along the coast or on navigable rivers and the earliest mass-transit was provided by boat. In the 19th century, railroads and trams were the next leg in mass transit. Train stations became centers of commercial activities providing buses, taxis and car rental services, hotels, restaurants, shopping, newsstands and convenience services. With the emergence of the "smart city" and the application of principles of *New Urbanism*, transit-oriented developments are becoming the basis for new urban villages incorporating employment centers, such as professional and medical office space, entertainment retail and high-density housing.



04.11.19 Source: Urban Crossroads, 2018 (ATP)

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit CM-1 - Sunline Transit Routes & Bus Stops (2018)
Cathedral City General Plan - Imagine 2040

Cathedral City

SunLine Transit Agency services are not currently well utilized in the City or the region. SunLine reports that boardings on fixed-route buses decreased by 4.8% in its 2016/2017 fiscal year, and that a further reduction of 5.4% is expected in the 2018/2019 year[1]. Transit-oriented land planning may have limited application in the City in the immediate future, but it is evolving, and future efforts should be made to maximize the accessibility and efficiency of the bus transit system. Features that make transit systems efficient include short direct routes and minimum travel time between the point of origin and destination. Frequent buses on a route reduce headway (waits between buses) and thoughtful interconnectivity with other routes increases the efficiency of transfers.

The East Palm Canyon Drive corridor and the core downtown area of the City offer some potential for transit-based land use planning, as does Date Palm Drive. Higher-density mixed-use development planned in the northern portions of the City also provide opportunities for transit-oriented development. To be effective, higher density residential development should be planned in the vicinity of bus routes and must be affordable and appealing to those in the service and retail industries that are more likely to take advantage of and benefit from efficient transit services.

Transit-oriented residential development should also be located close to schools and commercial services. Bus stops should be located within a ten-minute walk of housing and major employment areas, and preferably within a five-minute walk. Residents within a 2.5-minute walk of a stop with frequent buses are likely to use an efficient bus route twice as much as residents within a five-minute walk. To enhance the available modal mix, major stops should include facilities that enhance the attractiveness of taking the bus, including providing shade, wi-fi, park-and-ride facilities, and parking for bicycles and golf carts, NEVs or other LSEVs.

To justify investment in transit-oriented facilities and services, critical levels of ridership are needed. Low-density and widely dispersed development results in fewer riders per route mile, and longer trips from trip origin to destination. Together with regional partners, the City and SunLine Transit Agency will work toward a balance of riders and destinations, and assure logical and efficient connections through simple and direct routes. Future development in the northern portions of the City will provide important opportunities for the type of integrated mixed-use neighborhoods that can be well-served by efficient bus service.

Mobility at the Neighborhood Level

To the greatest extent practicable, local streets should serve primarily local neighborhoods. The City's roadway network ranges from small local streets to major arterial streets with six travel lanes. Major arterials define the edges of neighborhoods and separate them from others. Planned in coordination with land use, City streets should be distributed and scaled to address existing and projected demand. At the same time, the street system should be designed to assure that local traffic stays local, and regional travel is efficiently channeled to collectors and arterials. The roadway network should facilitate arterial use while protecting local neighborhoods from cut-through and other non-local traffic. This segregation of local and through-traffic occurs throughout the City and especially its gated communities.

Traffic Calming and Safe Streets

Traffic calming is typically accomplished by imposing constraints on movement and speed. The use of traffic calming designs, such as narrower road widths, medians, and circuitous routes convenient only to local traffic, serve to protect neighborhoods from undue traffic impacts. Traffic calming slows down traffic and improves safety, requires greater awareness of the driver and results in fewer vehicle collisions and those involving pedestrians and bicyclists.

[1] "Short-Range Transit Plan • FY 2018/2019", prepared by SunLine Transit Authority.

Traffic calming design is used to adjust the flow of traffic to levels compatible with surrounding land uses, such as residential neighborhoods, parks, schools and pedestrian-oriented shopping areas. Where more generous landscaping results from narrower paved streets, expanded multi-modal facilities and improved neighborhood appearance can be just some of the beneficial results.

Traffic calming must provide adequate access for police, fire and other emergency vehicles. A fundamental requirement is a minimum 20-foot clear lane for emergency vehicles along streets or alleys, regardless of whether on-street parking is permitted. Traffic calming and adequate emergency vehicle access can be achieved through thoughtful design of the roadway network to shorten segments of narrower streets, providing alleys for alternative access, parking restrictions along narrow streets, and through other means. Even with design features that assure adequate emergency access it may still be possible to reduce rights-of-way and pavement widths. Design elements include narrower lanes, chicanes (weaving patterns), mini-traffic circles, median-constrained slow points or chokers, and intersection pop-outs. Other devices include road bumps or speed tables, speed bumps and raised crosswalks; these devices each have their own pros and cons, and their use should be considered carefully.

Goods and Materials Movement

Goods move through the City primarily at three levels, by rail, by truck and by passenger vehicle. Local airports provide some freight service but it is quite limited. Rail transport is a major activity in the northern portions of the City, but local service is indirect and serves major distribution centers, none of which are located in the City or most of the valley. Whether by truck, rail or passenger vehicle, freight movement is essential for the City to thrive, facilitating the exchange of needed goods and stimulating the local and regional economy. With the growth of on-line shopping has come a commensurate growth in delivery services by Fed-X, UPS and the USPS, which may reduce overall traffic associated with goods movements.

Utility Services and Facilities

While the Circulation and Mobility Element focuses on moving people, goods and materials, the General Plan also addresses other public infrastructure, including drainage, water and sewer lines, electricity, telephone and cable. These will generally be comparable in scale to the capacity of the roadway, but their installation and maintenance within the right-of-way can sometimes conflict with roadway operations, including line-of-sight issues, unsatisfactory pavement closure and re-paving of utility trenches, and the manner and efficacy of traffic control. These facilities are discussed below and in the *Public Services and Facilities Element*.

INDICATORS OF ROADWAY EFFICIENCY

The efficient movement of vehicular traffic on our local and regional roadways is critical to the normal day-to-day functioning of our community. Obstructions in traffic flow can have serious consequences, including economic loss due to delays in transporting goods, increased psychological stress for the traveling public, increased risk for motor vehicle and other accidents and increased emission of GHGs and other pollutants. The efficiency of a particular roadway can be determined by assessing the roadway's capacity, level-of-service, and average daily traffic volume, each of which is described below. It can also be determined based on how well a given roadway accommodates other modes of travel, including buses, bicycles, LSEVs and pedestrians. The following discussion focuses on the movement of motor vehicles.

Level-of-Service

Roadway capacity is defined as the number of vehicles that may pass over a section of roadway in a given time period under prevailing conditions. Roadway capacity is most restricted by intersection design and operation, and by the number of access drives along a given roadway segment. The vehicular capacity of a roadway and the degree to which that capacity is being utilized is typically described as the roadway's "Level-of-Service" (LOS). Level-of-Service is a qualitative measure of the efficiency of traffic flow and is defined by alphabetical connotations, ranging from "A" through "F," that characterize roadway operating conditions.

LOS A represents an optimum or free-flowing condition, and LOS F indicates extremely slow speeds and system failure. Levels-of-Service are represented as volume-to-capacity (V/C) ratios, or vehicle demand divided by roadway capacity. V/C ratios smaller than 1.00 imply better operational characteristics and levels-of-service. V/C ratios that exceed 1.00 imply worse operating conditions and LOS F, where traffic demand exceeds roadway capacity. The table below defines the various LOS classifications.

Table CM-1
Roadway Level Of Service Description

Level of Service	Quality of Traffic Flow
A	Primarily free-flow operations at average travel speeds usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalised intersections is minimal.
B	Reasonably unimpeded operations at average travel speeds usually about 70% of the free-flow speed of the arterial classification. Ability to maneuver within the traffic stream is only slightly restricted. Stopped delays are not bothersome, and drivers generally are not subject to appreciable tension.
C	Traffic operations are stable. However, mid-block maneuverability may be more restricted than in LOS B. Longer queues, adverse signal coordination, or both may contribute to lower average travel speeds of about 50% of the average free-flow speed for the arterial classification. Motorists will experience some appreciable tension while driving.
D	Borders on a range where small increases in flow may cause substantial increases in approach delay and decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these factors. Average travel speeds are about 40% of the free-flow speed. For planning purposes, this level-of-serve is the lowest that is considered acceptable.
E	Characterized by significant approach delays and average travel speeds of one-third or less of the free-flow speed. Typically caused by some combination of adverse progression, high signal density (more than two signalised intersections per mile), high volumes, extensive queuing, delays at critical intersections, and/or inappropriate signal timing.
F	Arterial flow at extremely slow speeds, below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalised intersections, with high approach delays and extensive queuing. Adverse progression is frequently a contributor to this condition.

Source: Highway Capacity Manual, Transportation Research Board - Special Report 209, National Academy of Science, Washington, D.C. 2010.

Traffic engineers and transportation planners work to strike a balance between providing ideal roadway operating conditions and controlling the costs of infrastructure and right-of-way needed to assure those conditions. The need to accommodate other modes of travel as much as possible can also affect LOS for motor vehicles. For General Plan purposes, the upper level of LOS D is assumed to be the “acceptable” level-of-service for vehicular traffic on a given roadway in the City.

The updated roadway classifications shown in Exhibit CM-7 has been based on a detailed analysis of the roadway network and the desire to maximize multi-modal access as required by the *Complete Streets* program, downsizing a few roadways and upsizing others. While the vast majority of roadways in the City are expected to operate at acceptable levels-of-service at General Plan buildout, several segments may operate at LOS E or F unless special designs, control measures or intersection improvements are implemented to mitigate traffic impacts in these areas.

Typically, capacity can be increased by adding travel or turning lanes, constructing raised medians, and/or restricting vehicle access to a roadway. By reducing the number of vehicle conflict points, traffic flow on a roadway can be substantially improved, avoiding the loss of capacity caused by disruptions to traffic flow from vehicles entering or leaving the roadway (see Section 2.16, General Plan Program EIR for more information about mitigating traffic impacts).

Adaptive Application of Level of Service (LOS)

Determining whether a roadway is operating at an acceptable manner cannot be viewed solely on the basis of acceptability LOS. There is and will continue to be a need to provide adaptability in determining an acceptable level of service for a given roadway or intersection. Although accepting a lower level of service (LOS E or even F) at certain intersections and segments during peak season may result in periodic congestion; however, once familiar with network constraints, travelers will use alternative modes of travel, and/or seek alternative routes. Traffic will find its way to those parts of the network with surplus capacity and faster and safer travel.

Part of this consideration includes the application of the *Complete Streets* design philosophy, which is especially relevant to Cathedral City and is discussed below. While taking every measure to accommodate vehicular traffic may help move cars and trucks more efficiently through the community, this effort can result in streets that will not safely accommodate pedestrian, cyclists or LSEVs. Therefore, the need to move vehicles must be balanced with the need to provide opportunities for other modes of travel.

Analyzing Intersection Operations

While travel lanes are important to move vehicles, intersections are generally the most constrained portion of the roadway network. In the General Plan Transportation Analysis study, intersection levels of service were analyzed using the Highway Capacity Manual (HCM) 2010 operations method. The Highway Capacity Manual expresses the Level of Service at an intersection in terms of delay or waiting time to get through the various intersection approaches. For signalized intersections, average total delay per vehicle is used to determine the LOS. Intersection LOS is defined quantitatively in the following table. A more detailed discussion of LOS values can be found in the General Plan Transportation Analysis in the Program EIR Technical Appendices.

"Motorists understandably dreaded this change (to a roundabout) before it was made. But they found that instead of waiting 24 seconds for a pedestrian to cross 72 feet of road, they now only wait 3-4 seconds, or don't wait at all. Businesses that feared the loss of customers arriving in cars actually improved their trade about 35 percent, new stores were built, noise levels were reduced 77 percent, and the value of land within walking distance climbed. Far more people started walking and bicycling."

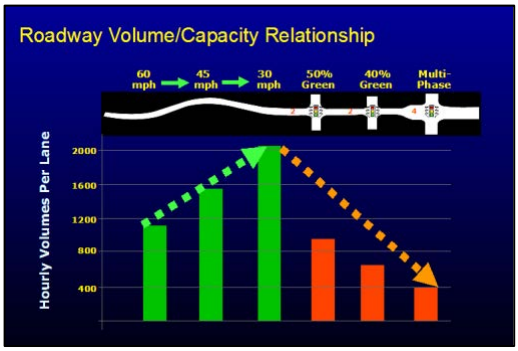
Dan Burden, Walkable Streets Advocate

Table CM-2
Intersection Levels of Service (LOS)
(seconds per vehicle)

LOS	Description	Signalized Intersection Delay	Unsignalized Intersection Delay
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	< 10	< 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and < 20	>10 and < 15
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	>20 and < 35	>15 and < 25
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35 and < 55	>25 and < 35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections.	>55 and < 80	>35 and < 50
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80	> 50

Source: Highway Capacity Manual 2010, Transportation Research Board, 2010.
Note: If the volume-to-capacity (v/c) ratio exceeds 1.0, LOS F is assigned an individual lane group for all unsignalized intersections, or minor street approach at two-way stop-controlled intersections. Overall intersection LOS is determined solely by control delay.

Average Daily Traffic Volumes/Roadway Capacity



Average Daily Trips (ADT) is the total number of vehicles that travel a defined segment of roadway over a twenty-four-hour period. ADT is a useful benchmark number for determining various roadway configurations and design aspects. The peak hour ADT, which is the highest volume of traffic to pass over a segment of roadway during a one-hour period, is also a useful means of determining a roadway's capacity and level-of-service. Traffic counts at intersections can provide an even more detailed picture of existing and future operating conditions at these locations. Roadways are generally classified in a hierarchical manner, according to the number of vehicle travel lanes provided but also by the other facilities and capacities they provide. Table CM-3, below, lists the various roadway types/cross-sections found in the planning area and the maximum daily traffic volumes each type of roadway can carry at various levels-of-service.

For example, for a Major Highway to operate at LOS C, it should accommodate no more than 24,000 vehicles per day. These roadway capacities are “rule-of-thumb” estimates, and actual capacities may vary depending on specific factors, such as the number of travel lanes, number and configurations of intersections, number of mid-block access drives, roadway grades, sight distances, percentage of truck and bus traffic, accommodation of other travel modes (pedestrians, bikes, LSEVs) and degree of access control.

Table CM-3
Level-of-Service Volumes/Capacity Values
For Various Roadway Classifications

		Average Daily Volume @ Upper Limit of Each LOS (Veh.s/Day)[a]				
Classification	**Typical Lane Configuration**	**Ac (60%)**	**Bc (70%)**	**Cb (80%)**	**Dc (90%)**	**Eb (100%)**
Collector	2-Lane Undivided	6,000	9,000	12,000	15,000	18,000
Secondary Highway	4-Lane Undivided	10,000	15,000	20,000	25,000	30,000
Major Highway	4-Lane Divided	10,000	17,000	24,000	31,000	38,000
Arterial Highway	6-Lane Divided	17,000	27,500	38,000	48,500	59,000
Freeway	8-Lane Divided	74,000	103,000	132,000	161,000	190,000

[a] The upper limit of LOS D was assumed as the "design" capacity for Cathedral City. All capacities are based upon improvements to full City standards under optimum operating conditions. Capacity can be significantly reduced by a high pedestrian traffic and vehicle turning movements. Substandard vertical and horizontal alignment or any combination which might restrict sight distance will also reduce capacity.

Climate Change and Transportation

California has taken the lead in aggressively addressing the causes of climate change, including and especially those associated with transportation, which is a significant source of GHGs; in California, transportation is the largest source of emissions. According to the California Air Resources Board (CARB), about 37% of the state's GHG emissions come just from vehicle tailpipes, compared to 28% nationally. Considering life-cycle emissions (extraction, fuel refining and transport, roadway construction, etc.) in addition to tailpipe emissions, transportation is the source of over half of California's GHG emissions.

The Circulation and Mobility Element provides measures for reducing motor vehicle travel and other sources of transportation GHG emissions that are critical to meeting our City's and State's GHG reduction goals. Also see the City's *Climate Action Plan*, *Energy Action Plan* and *Sustainability Plan*. Strategies to reduce transportation-related GHG emissions fall into three general categories: vehicle efficiency, switching to low- and zero-carbon energy sources, and reduction of vehicle miles traveled. The General Plan's most important policy levers focus on vehicle miles traveled (VMT) and their reduction by creating low-VMT land use patterns (mixed-use, for instance) and specifying transportation network characteristics and travel demand management strategies. Further, policies and programs are set forth to help the City prepare for Zero-Emission Vehicles (ZEV), e.g. by encouraging provision of alternative fuel and low-speed electric vehicles (LSEV) charging stations.

Vehicle Miles Traveled (VMT): A New Metric

The State has adopted a new metric for measuring the effectiveness of transportation and land use planning, and their regulation to reduce VMTs. The goal of this effort is a reduction in motor vehicle miles traveled, which will result in a reduction in GHG emissions. The focus on VMTs is intended to reduce and shorten vehicular trips, and encourage land development that supports non-motorized modes of travel, including walking, biking and LSEVs. Building housing near jobs/services/schools, expanding transportation options, and creating local jobs increases the use of the multi-modal transportation system and can reduce VMTs. When affordable housing is not available near jobs, people may have to commute long distances and generate higher VMTs, and air pollutants and GHG emissions.

Denser development can increase the effectiveness of these land use relationships, while reducing travel time and air pollutants, travel costs and the GHG emissions responsible for accelerating climate change. Reducing parking requirements, encouraging mixed-use development, and implementing innovative ownership strategies and higher residential densities can contribute to more efficient development patterns. Active transportation options,

including biking and walking, allow for less time spent in vehicles. In addition, greater individual activity also improves health, helps reduce VMTs and greenhouse gas (GHG) emissions, and improve air quality. The City has developed an *Active Transportation Plan* (ATP) and design guidelines that are an extension of this element and complement other General Plan policies serving to reduce VMTs.

The traffic analysis conducted for the 2040 General Plan update calculated future average daily VMTs for both the previous Plan and the 2040 update, indicating that the buildout of the 2040 Plan will result in a modest (90,000± miles per day) decrease in total daily VMTs when compared to the previous Plan. The decrease in average daily VMTs for the 2040 General Plan is due to a reduction in trip generation, combined with a shift in the relationship between residential and non-residential uses. This translates to a per capita and per trip VMT reduction of approximately one half of one percent.

ENVIRONMENTAL JUSTICE

Responding to and promoting environmental justice, the Circulation and Mobility Element includes policies and programs that prioritize improvements and programs that address the needs of the more disadvantaged portions of the community, including the elderly. The General Plan and this element incorporate strategies to improve access to affordable transportation and thereby to jobs and other economic opportunities, education, arts and culture, and commercial and professional services. The General Plan and the *Active Transportation Plan* promote affordable alternatives to the personal motor vehicle, including improving the walkability of the community, expanding the availability of bike lanes and paths, and dedicating and expanding facilities for LSEVs. Discussed above, an important component of an affordable transportation network in the City is bus transit, including expanded routes, reduced headways, and increased numbers of bus stops with climate-responsive bus shelters. Enhancing bus transit is further discussed below.

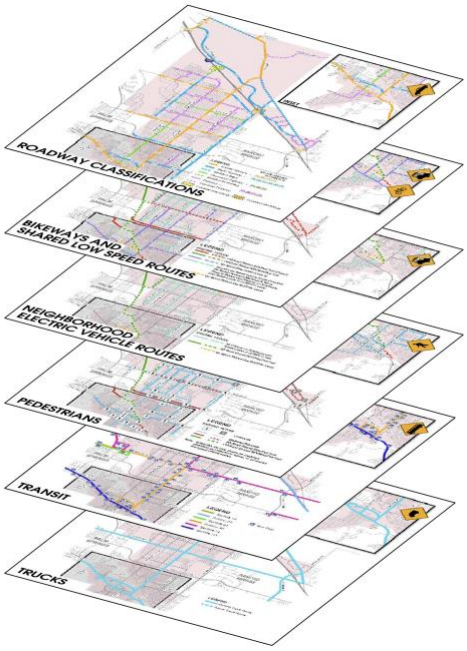
CATHEDRAL CITY TRAFFIC MODEL

The City traffic model is unique and specific to the existing and future City transportation network. It also is context-sensitive and takes into account the surrounding communities and their portions of the regional roadways that enter and leave the City. The traffic on Cathedral City streets comes from every household, every business, every public and quasi-public institution, every service and all the activities associated with them. Traffic on City roads also comes from neighboring communities. Therefore, in order to properly account for local and regional traffic the model is a focused and tailored version of the regional transportation model. To model existing and future traffic conditions a variety of socio-economic data for the City and the Coachella Valley are set forth in the local (City) version of the Riverside County Transportation Model (RivTAM). The RivTAM model and the various land use assignments in the City serve as the basis for modeling local traffic.

Modern roadway networks are designed and analyzed using sophisticated computer models but in truth the transportation network is a very diverse, complex and highly variable system. Data is infrequently and narrowly collected along major roadway segments and at important intersections. These data are supplemented by data collected for the General Plan update in 2017 and 2018. Therefore, the General Plan traffic modeling is a useful tool for predicting future traffic volumes, but there is substantial potential to affect future trip reduction and enhanced mobility beyond the predictions of the traffic model. A detailed description of the Cathedral City Model is provided in the General Plan EIR and technical appendices and is summarized below.

The Cathedral City model forecasts future traffic using Geographic Information System (GIS) mapping, a variety of socio-economic data for the City and the region, enhanced roadway network editing and travel demand modeling based on land use and other data. The City traffic model consists of a traditional four-step modeling process including (1) trip generation, (2) trip distribution, (3) mode split (choice), and (4) traffic assignment.

At the City level, the traffic modeling process begins with defining the traffic analysis zones (TAZ) and the roadway network, establishing efficient/logical traffic routes, collecting land use and socio-economic data on each TAZ, calculating trip generation in each TAZ, distributing traffic and its assignment to individual road segments. The regional traffic model divides the General Plan planning area into 42 TAZs following RivTAM zone boundaries, General Plan land use boundaries, street centerlines and other GIS data boundaries, thereby greatly increasing the detail of the analysis.



Traffic volumes are then loaded onto the roadway network, and the model approximates how actual traffic enters and travels through the local roadway system. A variety of roadway characteristics are then considered, including the type of roadway, free-flow speeds, and hourly travel per lane. The projected volume of traffic from buildout of the General Plan and growth in other areas of the valley are factored into the model. These volumes are then distributed by the model based on the origins and destinations of each trip. From this information the design requirements to maintain acceptable traffic flows are determined. Two model scenarios were included in the Cathedral City Model, the base year 2018 and the forecast year 2040.

Trip Generation and Modal Split

Vehicle trips generated within each TAZ of the modeling area are based on land use data as designated by existing land uses and the General Plan Land Use Element. The total number of vehicle trips produced in or attracted to a geographic area is directly related to the land use and demographic variables found in each TAZ. The model estimates the number of autos and trucks using the roadway (modal split).

Trip Distribution and Traffic Assignment

Traffic has origins (home, for instance) and destinations (work, shopping, etc.). The distribution and assignment of trips involves providing a general directional distribution of these trips and then assigning the trips to specific streets. Trip distribution is based on the formula that the distribution is proportional to the “attractiveness” of the land use (school or shopping center, for instance) and the distance (or travel time) from the point of trip production or origin. The resulting forecasts of daily traffic volumes yield the aggregate assignment of trips to roadways between and connecting TAZs throughout the City, and take into account trips passing through the City.

Transportation System Management

Transportation System Management (TSM) is an essential part of the Circulation and Mobility Element. According to the Federal Highway Administration (FHWA), about 5 percent of urban and suburban roadway congestion is due to poor traffic signal timing. The costs associated with optimizing signals are moderate but it takes dedicated staff time to analyze traffic patterns and develop an optimal timing scheme. TSM improves the efficiency of the existing transportation system by better using these facilities and by shifting user demand to times of day when volumes are lower. It identifies improvements that enhance the operational capacity of the existing system that will improve traffic flow and air quality, reduced GHG emissions, and more efficiently move vehicles and goods throughout the City.

The costs of implementing TSM strategies are relatively low, but are a highly efficiency way of improving roadway operations. They include intersection and signal improvements, vehicle detector upgrades, optimized signal timing, systems monitoring and responsive management, turning and slip lanes, restriping for bikes and LSEVs, traffic calming, and effective signage and lighting. TSM includes the ability to monitor, in real time, the traffic and travel conditions on major roadways and to share that information with drivers and system managers to improve the operation of the roadway system. TSM components enhance system accessibility and safety.

To achieve the highest degree of TSM success possible, the City's planning and implementation of TSM should be coordinated with adjoining cities, the County and CVAG. SunLine Transit Agency, developers, and employers should also be consulted on an on-going basis. TSM should correlate land use and circulation elements to assure that planned street and highway capacities will adequately accommodate traffic generated by planned land uses. TSM programs that promote flexible hours at places of employment may improve the levels of service for area streets and highways by reducing peak hour traffic. The City's Community Design, Air Quality and Climate Stability, and Open Space and Conservation Elements include clean air and energy conservation policies, which may be implemented through TSM programs to reduce and shorten motor vehicle trips, expand use of alternative travel modes, and reduce air pollution, GHG emissions and energy use.

CATHEDRAL CITY COMPLETE STREETS

The *Complete Streets* movement is a counter-revolution and reaction to the overwhelming dominance of the motor vehicle and its own revolution more than a century ago. The intent is to make public streets and other parts of the transportation network accessible to the full range of users, including bus transit, pedestrians, bicyclists and low-speed electric vehicles. To this end, Assembly Bill 1358 was signed into law in 2008 and cites as its purpose:

> *"In order to fulfill the commitment to reduce greenhouse gas emissions, make the most efficient use of urban land and transportation infrastructure, and improve public health by encouraging physical activity, transportation planners must find innovative ways to reduce vehicle miles traveled (VMT) and to shift from short trips in the automobile to biking, walking and use of public transit."*

AB 1358 is codified in Government Code Section 65302(b)(All-2)(A) and subsection (B) and requires jurisdictions to substantially revise their Circulation Element to achieve a balanced, multimodal transportation network that provides a variety of safe and convenient travel options that are suitable for and appropriate to the local context of the General Plan planning area. The goal is roads and other facilities that provide safe mobility for all travelers, not just motor vehicles; this is at the heart of complete streets. The act also states that the Circulation and Mobility Element:

> *"P[p]lan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan".*

Complete Streets Design

Complete Streets is at the heart of the City's *Active Transportation Plan* (2019), and an integral part of this Element. As noted above, complete streets include sidewalks, bicycle lanes (or wide, paved shoulders), shared-use paths, designated bus lanes, safe and accessible transit stops, and frequent and safe crossings for pedestrians, including median refuge islands, accessible pedestrian signals, and curb extensions. In low-density neighborhoods, the complete street design may look quite different from one in a more intense urban or suburban area. A complete street in a rural area may provide wider shoulders or a separate multiuse path instead of sidewalks, while a complete street in a more urban/suburban area such as the East Palm Canyon Drive, Date Palm Drive or Perez Road corridors, may be customized to accommodate more destination-oriented needs and expectations of urban travelers.

Within the City's suburban or urban areas, street design will strive to accommodate pedestrian, bicycle and NEV travel with the inclusion of sidewalks, bicycle lanes, combined bike/NEV lanes, and dedicated off-street paths. An essential component of *Complete Streets* design is controlled street crossings that maximize multi-modal access while minimizing vehicular delay. Where there are greater distances between destinations, benches, covered resting areas, and other facilities should be provided that allow for people to successfully walk or ride a bicycle to frequently visited destinations. For more information, also see the City *Active Transportation Plan*.

Complete Streets and Existing Roads

As the internal combustion engine replaced the horse and buggy, so today are a variety of electric vehicles and a wide range of other travel modes replacing fossil-fueled motor vehicles. Even zero-emission buses are on the roadway running on fuel-cell technology that generates electricity without fuel combustion. Since the golden age of highway construction starting after World War II, roadway networks have evolved in a manner largely incremental with rapid urban development to the essentially exclusive service of motor vehicles.

The lands in the City and valley have been divided by historic land surveys, grants and assignments to Native American Tribes, and the Southern Pacific/Santa Fe Railroad (today's Union Pacific Railroad rights-of-way). Over the years, cities have formed and established their own standards sometimes resulting in inconsistent road rights-of-way and substantial variability in existing and potential future roadway improvements. The element provides reasonable flexibility to address these special conditions.

The Circulation and Mobility Element provides a comprehensive set of roadway classifications that address all existing and future City roads, maximize the integration of multi-modal facilities and enhance safety on the roadway network. The element and *Complete Streets* design principles also allow flexible and adaptive management to blend and harmonize various nuances in design and assure a responsive and well-balanced multimodal transportation network.

Funding Complete Streets

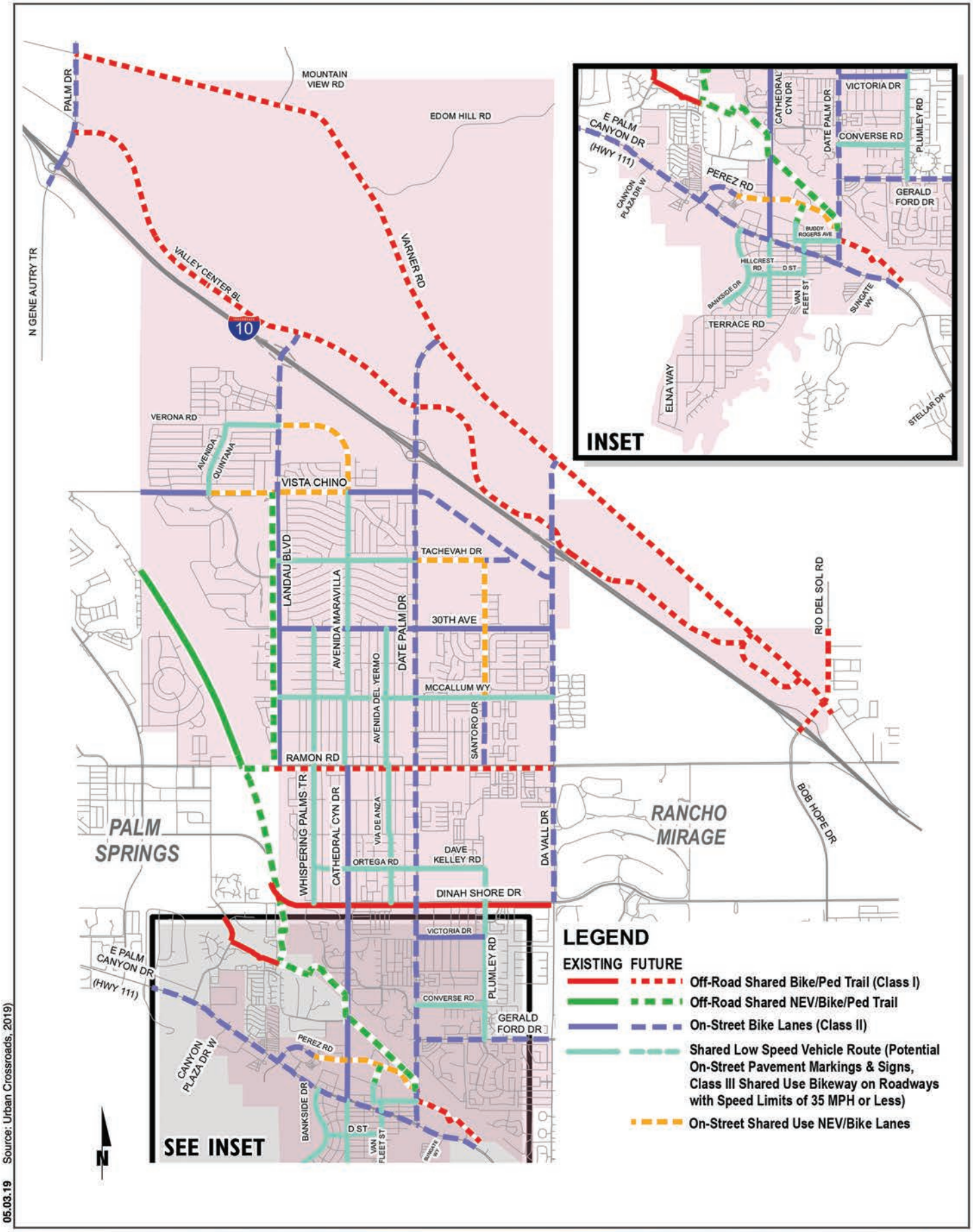
The City will strive to take advantage of all available potential sources of *Complete Streets* funding, as well as revenue sources for on-going maintenance and upkeep. Federal, state and local transportation funding focuses on economic competitiveness, livability, state of repair, and environmental benefits. The federal government, including the FHWA and EPA, is expected to continue to be a source of funding for a *Complete Streets* program. Other sources are expected to include individual new project improvements, state funds, local Measure A funds, Developer Impact Fees (DIFs) and even bonding financing.

Complete Streets: Return on Investment

According to *Complete Streets.org*, Americans spend 18 cents of every dollar on transportation. The poorest fifth of families spend more than double that figure. Complete Streets give people more control over their expenses, replacing expensive car travel with cheaper options like walking, riding bikes, and taking public transportation. In most urban areas studied, every one-point increase in the 100-point Walk Score scale is associated with an increase in home value of $500 - $3,000. And residents of walkable communities are more likely to be socially engaged and trusting, and report being in good health and happy more often.

ACTIVE TRANSPORTATION PLAN

Concurrent with the 2040 update to the General Plan, a City-focused active transportation plan (ATP) was developed to evaluate the potential for expanded multi-modal facilities. The ATP is by reference a part of the General Plan. The City ATP has been developed to complement the General Plan Circulation and Mobility Element by providing a broader range of transportation alternatives. A multi-layered network of bike, pedestrian, and low speed electric vehicle routes has been developed that increase diversity and choice, and efficiency and convenience, while preserving accessibility for automobile travelers.



05.03.19 Source: Urban Crossroads, 2019)

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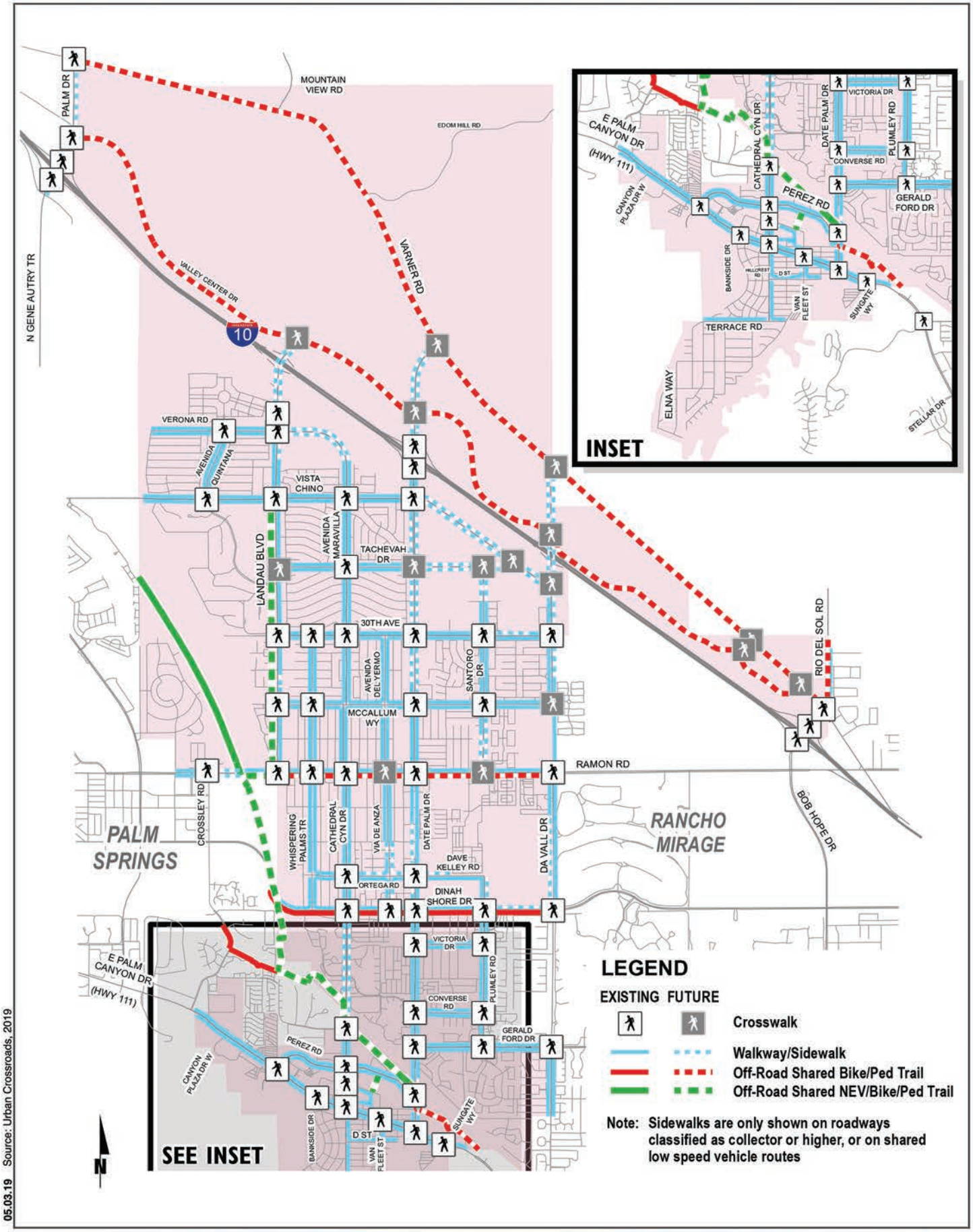
CM-2 - Existing and Future Multi-Modal Facilities
Cathedral City General Plan - Imagine 2040

Cathedral City



05.03.19 Source: Urban Crossroads, 2019

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit CM-3 - Existing and Future Pedestrian Facilities
Cathedral City General Plan - Imagine 2040

Cathedral City

"Active transportation" refers to human powered transportation and also to low-speed electric-assist devices. The ATP generically refers to active transportation trips as pedestrian, bicycle and LSEV trips, since these represent the majority of active transportation trips. The Circulation and Mobility Element and the ATP envision a progressively expanding network of sidewalks, bikeways, and LSEV paths that provide active alternatives to using a car. By planning for and making thoughtful and strategic investments in ATP facilities and improvements, the evolving multi-modal network will help to reduce emission of air pollutants and GHGs, reduce roadway congestion and improve overall community character. Effective linkages within the multi-modal network will reduce the number and average length of motor vehicle miles travelled.

The City Active Transportation Plan identifies the multi-layer transportation network, discusses their respective roles in personal mobility and provides a framework for a cohesive and comprehensive local transportation system. The ATP also addresses legislative requirements, provides a basis for securing future strategic transportation investment and ensures a vibrant community through active mobility options. The Circulation and Mobility Element and ATP help serve to balance infrastructure needs with limited available resources. In this regard, the multi-layered ATP will allow the City to access and more effectively compete for various local, state and federal funding sources.

This element and the ATP also emphasize the City's goal of diversifying the local transportation network and making it as safe and easy as possible to walk, bike or use a LSEV instead of a motor vehicle. The broadened menu of roadway classifications and their assignment to the specific streets set forth in this element makes explicit provision for these multi-modal facilities as an essential part of the City's transportation network. Please see Exhibits CM-2 and CM-3 above, showing existing and planned multi-modal facilities. Additional detail on these facilities can be found in the Cathedral City *Active Transportation Plan*.

Multi-Modal Lanes and Paths

Multi-modal lanes and paths can provide convenient pedestrian, bicycle and LSEV user-connections between neighborhoods, schools, parks and dog parks, shopping, restaurants and other activity centers. They are designed to support a good mix of cyclists, walkers, joggers and low-speed electric vehicles. CV Link is a backbone component of the City's multi-modal path system. In addition to accessibility, multi-modal pathways provide opportunities for economic benefit and growth by providing pedestrian, bicycle and LSEV access to restaurants and other businesses, without the need for additional auto parking and traffic congestion. In addition, these paths increase property values and tourism and recreation-related spending on items such as bicycles, in-line skates and lodging. As noted above, property values are also positively affected in communities with a well-developed multi-use path network that enhances health and recreation benefits. According to a 2017 National Association of Realtors survey of a socio-economic cross section of prospective homebuyers, they want to be able to walk to shopping, parks and other community amenities, and use sidewalks and paths in general for walking and jogging.

INNOVATIVE TRANSPORTATION DESIGN

In conjunction with the drive for greater multi-modal access to the City's transportation network, a variety of design innovations have emerged and re-emerged as the needs of the traveling public have changed. These include dedicated bike lanes, restricted access, roundabouts, slip-lanes, and other design features that increase efficiency and safety.

Roundabouts have evolved into smooth-flowing, high capacity roadway systems and are an ideal solution for many types of intersections. In addition to streets, multi-modal paths have been developed along stormwater channels, areas of public open space, and networks of community bike paths, including CV Link. These facilities are being woven together to provide area-wide access. Diversifying the City transportation network with multi-modal facilities provides enhanced mobility and quality of life for residents and visitors.

Roundabouts

One of the first American roundabouts (sometimes called a rotary) was constructed in San Jose, California in 1907 but historically they were to be found largely in Europe, especially France and England in the 17th and 18th century. In the past three decades roundabouts have made significant in-roads into roadway networks in the United States. While the City has only one roundabout (in 2019), their use has real advantages that may be applicable to some existing and future City intersections.

The driving rules in the US, including driving on the right side of the street, drive the design of roundabouts. Therefore, vehicles traveling on the modern roundabout in this country do so in a counterclockwise direction and usually around a raised center island. Traffic entering the roundabout yields to traffic already circulating within it and may be directed to an inside or outside lane depending on how far around one needs to travel before exiting the roundabout.

Roundabout speeds are relatively low (15 to 25 mph); however, traffic never stops, so there is a lot of capacity in this type of intersection design if properly used. Another advantage of roundabouts is the general avoidance of having to stop traffic for other vehicular traffic.

The Federal Highway Administration (FHWA) finds that roundabouts are generally safer than signalized intersections for several reasons. Traffic in modern roundabouts travel at lower speeds when entering and exiting. They have fewer conflicting points than do conventional intersections, and right-angle and head-on crashes are eliminated. A four-leg (one feeder lane in each direction) roundabout has about 75% fewer conflict points compared to STOP-controlled intersections. They can also be effective as a traffic-calming device in areas with low vehicle volumes and higher numbers of pedestrians and bikers, where they may in some cases also have four-way stop controls. Generally, pedestrian and bicyclist safety is increased in a roundabout; for instance, pedestrians only need to look in one direction at a time at each approach.

Constructing a roundabout will typically exceed the cost of a signalized intersection, but the annual savings in electricity and operations and maintenance results in a payback within five to seven years. Additional long-term savings is realized as long as the roundabout is in service. They also contribute to a decrease in pollutant emissions and GHGs with little or no stop-and-go traffic, efficient operating speeds and shortened travel time.

All-Weather Access

The Coachella Valley and several portions of the City are prone to flooding during major rain events. A significant investment has already been made in the City on bridges and other all-weather construction primarily along and across the Whitewater River Stormwater Channel and the East and West Cathedral Canyon Channels. The Whitewater River is the principal drainage affecting all-weather access in the City. In the northern portions of the City, lands south of the Union Pacific Railroad lines and north US Interstate-10 are affected by only partially managed storm flows emanating from Morongo Canyon and Long Canyon drainages. Also see the *Flooding and Hydrology Sub-Element* of the *Safety Element*.

All-weather access and roadway capacity are also affected by local stormwater runoff, which is frequently conveyed by local streets into dedicated surface and sub-surface stormwater facilities. Areas of inadequate drainage can result in on-road ponding, unsafe conditions, and reduced accessibility and capacity.

Preserving Roadway Capacity

One of the most-costly public expenses is the construction and maintenance of City roadways. Rights-of-way for roads also create a substantial demand for limited land and can have adverse impacts on adjoining property. Therefore, roadway design, operation and maintenance must be as cost-effective as possible. Along major arterial roadways, such as East Palm Canyon Drive, Date Palm Drive, Cathedral Canyon Drive, Ramon Road, Vista Chino and other major roadways, access from adjoining properties should be controlled and limited. In more densely developed areas, limited access and median islands will also improve roadway operation for vehicles and pedestrians.

Securing Right of Way

Roadway standards have evolved over the years and are in yet another period of transition brought about by an increased emphasis on multi-modal transportation. The need for six-lane divided roadways in some of our neighborhoods was not imagined decades ago, nor were they provided for everywhere they should have been. As a result, there are network capacity constraints and bottle necks that community traffic contends with every day. Nonetheless, the City has generally been able to secure right-of-way adequate to provide full-width segment roadway improvements. The City may be able to secure additional right-of-way along major arterials designated as *Image Corridors*, described below. The need for expanded intersection improvements in some areas may require additional on-street lanes and new and upgraded multi-modal parkway facilities. The greatest demand for additional right-of-way may be at future critical intersections, where dual left turn lanes and dedicated right turn lanes would be needed. Please see the Table CM-7 below and the General Plan Program EIR regarding future intersection design requirements.

Roadway Access and On-Site Parking

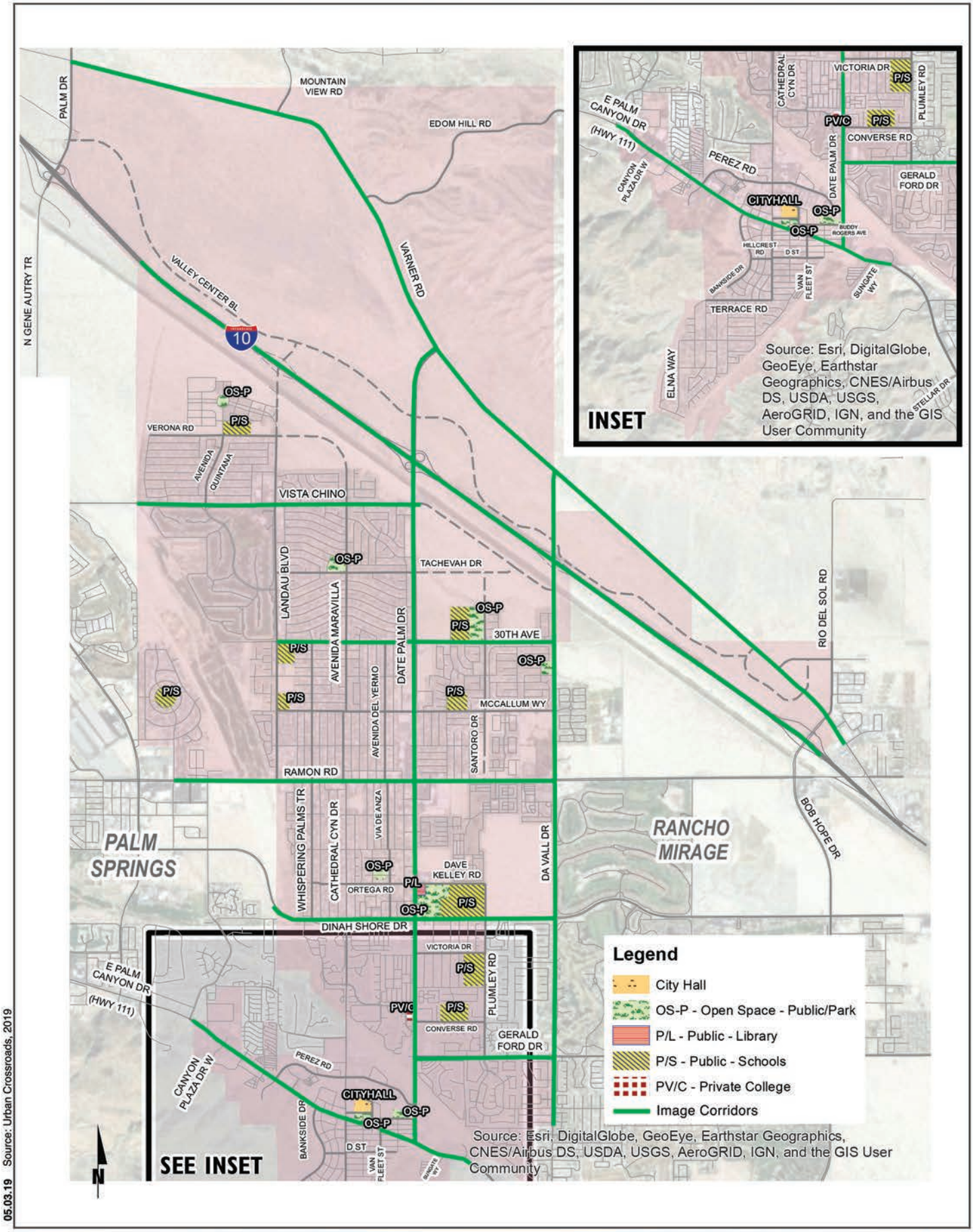
Beyond basic capacity, the City's roadway network can also be affected by the design and location of access drives and on-site parking. Access onto major roadways, especially from such high-volume land uses as commercial centers, creates "friction " and slows the flow of traffic. In addition to providing safe access, businesses must provide safe and efficient parking to serve customers. Some of the City's existing developments are limited in their ability to provide sufficient off-street parking. Conversely, large commercial developments have in some cases been designed to accommodate parking needs during peak season, resulting in large expanses of vacant parking during much of the year.

New development and lands undergoing redevelopment should be required to provide on-site parking adequate to meet regular demand, without providing excessive parking and associated expanses of asphalt. Parking lot ingress and egress must also be thoughtfully controlled and consolidation encouraged to minimize disruption to traffic flow and facilitate the preservation of roadway capacity, while assuring safety. Enhanced access for pedestrians, bicyclists and LSEVs should also be addressed within and along streets and sidewalks surrounding developments. While the types and mix of vehicles may change, the need for roadway capacity will not.

Wherever possible, adjoining development should be encouraged to integrate and share access drives and implement reciprocal parking design and management as a means of better matching parking availability with varying parking demand.

Roadway Image Corridors

The City takes its name from the "cathedral of stone" that is the Santa Rosa Mountains. Most visitors and residents enjoy the City's most magnificent views from the City's streets and highways. Our scenic mountain and desert landscape provide some of the most beautiful views in the western Coachella Valley and add significantly to the quality of life the community has to offer. The Cathedral City viewsheds give the City its sense of place, from the intimate to the grand and panoramic.



05.03.19 Source: Urban Crossroads, 2019

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit CM-4 - Image Corridors
Cathedral City General Plan - Imagine 2040

Cathedral City

The City's scenic resources are varied and diverse, and include the Cathedral Cove nestled in the foothills and the expansive backdrop of the Santa Rosa Mountains. The valley floor and the rising terrain of Edom Hill and the Indio Hills provide another, different landscape that impresses in its own way. And the rising terrain of the San Jacinto, San Bernardino and Little San Bernardino Mountains add to our unique desert panorama. The City's scenic resources also include varied streetscapes and parks and open space. Protection of these resources is important to preserving the City's scenic corridors and unique quality of life.

The City's scenic image corridors are subject to a variety of threats, including inappropriate and unattractive land uses, unattractive or inadequate landscaping, inadequately buffered parking lots, excessive or inappropriate signage, high walls and berms that block views, and overhead power lines.

Protecting and enhancing these scenic corridors is furthered by securing parkway easements along major roadways, resulting in greater building setbacks and enhanced parkway landscaping. Enhanced parkways better assure viewshed protection and also provide more room for alternative modes of travel. Parkway easements along image corridors help assure that the traveling public (and adjoining property owners) share in a quality landscaped parkway experience that enhances the image of these scenic corridors. Important image corridors and key locations where community gateway treatments enhance the local and city-wide sense of place, are shown on Exhibit CM-4 above.

CURRENT ROADWAY CONDITIONS

Cathedral City and the other communities of the Coachella Valley located primarily south of US Interstate-10 have grown into an area of continuous urban development, tied together by state and interstate highways and a network of arterial roadways. The Mid-Valley Parkway (Dinah Shore Drive) is an additional intra-regional arterial that extends from the Palm Springs International Airport entrance on Ramon Road, southeast to Frank Sinatra Drive in Palm Desert. Each of these regional facilities is briefly described below. A variety of physical influences and constraints have impacted development on local roadways, including the geography of the City and valley, major drainages, the constrained development pattern between U.S. Interstate-10 and the Santa Rosa Mountains, and the existing roadway network. The regional and City roadway network is further described in the General Plan EIR and its technical appendices.

Major Regional Roadways

Two regional routes provide primary access to the City: East Palm Canyon Drive (State Highway 111) and US Interstate-10. Interstate-10 connects the Los Angeles region with Arizona and other cities and states to the east. East Palm Canyon Drive is designated as State Highway 111 at its junction with Interstate-10 several miles west of Palm Springs. As it enters Palm Springs, Highway 111 proceeds east along Vista Chino, then south along Gene Autry Trail, where it intersects and becomes East Palm Canyon Drive and proceeds east through Cathedral City. East of Cathedral City, East Palm Canyon Drive is once again designated as "Highway 111," and it continues southeast to Brawley in the Imperial Valley.

U.S. Interstate-10

I-10 provides essential inter-city and inter-regional access and is a critical part of the local road network, moving people and goods into and out of the Valley. Where it passes through Cathedral City, U.S. Interstate-10 is built as an eight-lane divided freeway, which is accessed from a diamond-shaped interchange at Bob Hope Drive, a cloverleaf interchanges at Date Palm Drive and a modified cloverleaf/diamond interchange at Palm Drive. The General Plan also reflects the long-established plans for a future interchange at the northerly extension of Da Vall Drive, approximately one mile east of the I-10/Date Palm Drive interchange. An I-10 interchange with Landau Boulevard (extended) is also planned.

East Palm Canyon Drive

East Palm Canyon Drive follows the approximate route of the Old Bradshaw Trail (see the Cultural Resources Sub-Element), which runs along the toe of the Santa Rosa Mountains and the Whitewater River. This roadway again becomes the state-classified Highway 111 at the City's easterly boundary with Rancho Mirage. Its classification notwithstanding, East Palm Canyon Drive is an important intra-regional connector serving local cities. Over the past several years, some through-traffic appears to have moved north to Dinah Shore Drive and I-10 in response to congestion along this roadway.

East Palm Canyon Drive is an integral part of the Cathedral City Downtown planning area and has been designed to improve traffic flow while providing enhanced access to the adjoining commercial and institutional land uses. Improvements vary from four to six travel lanes between the City's east and west boundary, with the western portion west of Canyon Plaza Drive being a divided four-lane roadway, with east-bound lanes expanded to three lanes east of Canyon Plaza Drive and extending to Cathedral Canyon Drive. East of Cathedral Canyon Drive this roadway becomes a four-lane divided roadway with slipstream turn pockets from Cathedral Canyon Drive eastward to Date Palm Drive. East of Date Palm Drive, East Palm Canyon provides three westbound travel lanes and two eastbound travel lanes to the City's east limits.

Dinah Shore Drive: The Mid-Valley Parkway

The Mid-Valley Parkway, now named Dinah Shore Drive, was originally conceived as an east-west, inter-city arterial that would serve as a high capacity linkage between Palm Springs and the various communities to the east, and as an alternate route to East Palm Canyon Drive/Highway 111. It was envisioned as a six-lane, high-speed, restricted access roadway located mid-way between Highway 111 and Interstate-10 and provide access to regional transportation hubs, including the Palm Springs International Airport. Unfortunately, cost constraints and problems securing adequate right-of-way in adjoining cities reduced the size of this arterial to a four-lane divided roadway. Today, the parkway follows a circuitous route in Palm Springs to Palm Desert and provides marginally better performance than other regional arterials. The Dinah Shore Drive bridge over the Whitewater River has reduced some of the traffic volume on nearby Ramon Road; however, development along much of this roadway limits its capacity through the City.

Other Major Local Roadways

The City has constructed and maintains a variety of other major roadways of local importance, including Gerald Ford Drive, Ramon Road, Vista Chino, Date Palm Drive and Cathedral Canyon Drive. These roadways have been built along a compass-based grid that interconnects with major arterials passing through adjacent jurisdictions. The convenience they provide in traversing through the City is of importance to residents and businesses alike. The planned Valley Center Drive north of I-10 will provide similar arterial service through the master planned communities approved for development in this area of the City.

Existing Roadway Traffic Conditions

A variety of traffic data was collected to evaluate existing (2018) traffic conditions in the planning area, including traffic counts from the City, CVAG and Caltrans, and traffic and intersection counts in the planning area collected for the latest General Plan update. The following table lists major roadway segments and describes existing capacities, average traffic volumes, and levels-of-service. Existing Average Daily Traffic (ADT) volumes are displayed graphically on Exhibit CM-5, and General Plan street cross-sections are illustrated on Exhibits CM-8A, 8B & 8C.

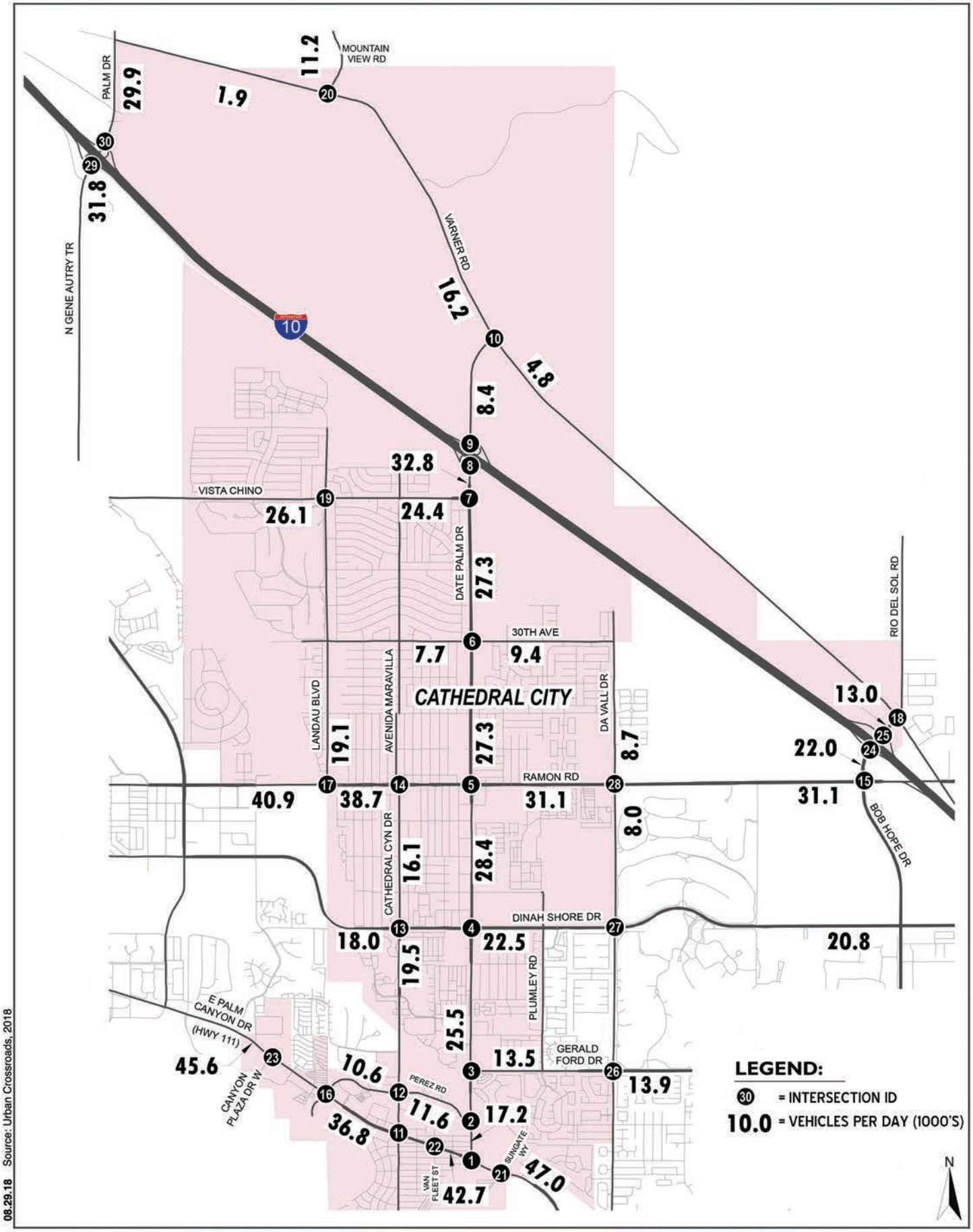
Table CM-4
Existing Conditions Summary
Major Roadways in the Planning Area

Roadway Link	Current ADT	Daily Capacity[a.] (Veh./Day).	Ratio V/C[b.]	Level of Service
U.S Interstate-10				
– W of Indian Canyon Drive	86,000	190,000	0.42	A
– W of Palm Drive	88,000	190,000	0.46	B
– E of Date Palm Drive	94,000	190,000	0.49	B
Gene Autry Trail/Palm Drive				
– N of Interstate-10	29,920	38,000	0.78	D
– S of Interstate-10	31,782	46,000	0.85	E
Mountain View Road				
– N of Varner Road	11,200	18,000	0.62	C
Landau Boulevard				
– N of Ramon Road	19,070	38,000	0.50	C
Cathedral Canyon Drive				
– S of Ramon Road	16,052	38,000	0.42	B
– S of Dinah Shore Drive	19,450	38,000	0.51	C
Date Palm Drive				
– S of Varner Road	8,410	18,000	0.47	B
– N of Vista Chino	32,806	59,000	0.56	C
– N of 30th Avenue	27,295	59,000	0.46	B
– N of Ramon Road	27,250	59,000	0.49	B
– N of Dinah Shore Drive	28,383	38,000	0.46	D
– N of Gerald Ford Drive	25,454	38,000	0.67	D
– N of East Palm Canyon Drive	17,226	38,000	0.45	C
Da Vall Drive				
– N of Ramon Road	8,704	18,000	0.48	B
– S of Ramon Road	8,014	38,000	0.21	A
Bob Hope Drive				
–N of U.S. I-10	12,983	38,000	0.34	B
–N of Ramon Road	22,023	38,000	0.58	B
Varner Road				
– E of Palm Drive	1,900	18,000	0.11	A
– E of Mountain View Road	16,200	18,000	0.90	E
– E of Date Palm Drive	4,753	18,000	0.26	A
Vista Chino				
– W of Landau Boulevard	26,134	38,000	0.69	D
– W of Date Palm Drive	24,370	38,000	0.64	D
30th Avenue				
– W of Date Palm Drive	7,663	18,000	0.42	B
– E of Date Palm Drive	9,402	18,000	0.52	C
Ramon Road				
– W of Landau Boulevard	40,908	59,000	0.69	D
– W of Cathedral Canyon Drive	38,712	59,000	0.66	D
– E of Date Palm Drive	31,058	59,000	0.53	C
– W of Bob Hope Drive	31,064	59,000	0.53	C

Table CM-4 (continued)
Existing Conditions Summary
Major Roadways in the Planning Area

Roadway Link	Current ADT	Daily Capacity[a.] (Veh./Day).	Ratio V/C[b.]	Level of Service
Dinah Shore Drive				
– W of Cathedral Canyon Drive	29,053	38,000	0.76	D
– E of Date Palm Drive	22,490	38,000	0.59	C
– W of Bob Hope Drive	20,800	38,000	0.55	C
Gerald Ford Drive				
– E of Date Palm Drive	13,452	30,000	0.45	C
– E of Da Vall Drive	13,862	38,000	0.36	B
Perez Road				
– W of Cathedral Canyon Drive	10,587	30,000	0.35	B
– W of Date Palm Drive	11,570	30,000	0.38	B
East Palm Canyon Drive				
– W of City Limits	45,550	38,000	1.19	F
– W of Cathedral Canyon Drive	36,787	38,000	0.97	E
– W of Date Palm Drive	42,655	38,000	1.12	F
– E of Sungate Way	47,023	59,000	0.80	D

[a] These values represent the current "physical" capacity at the upper limit of LOS E, as shown in the table entitled "Level-of-Service Volumes/Capacity Values for Various Roadway Classifications."
[b] These values were calculated using the "physical" capacity at the upper limit of LOS E.
Source: "Cathedral City General Plan Transportation Analysis", Urban Crossroads, Inc. 2019



08.29.18 Source: Urban Crossroads, 2018

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit CM-5 - Existing ADT Volumes
Cathedral City General Plan - Imagine 2040

Cathedral City

GENERAL PLAN BUILDOUT

Trip Generation

The number of trips generated at buildout of the planning area is based on the land use types, acreages and intensities assigned by the General Plan Land Use Plan. The transportation model estimates the average number of peak season vehicle trips that will be produced on a weekday for each transportation analysis zone (TAZ), and gives special consideration to seasonal peak trips to address the increased travel demand that occurs when visitors and seasonal residents use the City roadway network. Based on the land use types and intensities established by the Land Use Plan, 2040 buildout of the General Plan planning area is expected to generate a total of approximately 1,052,619 daily two-way trips during peak season.

Levels-of-Service

Buildout of the General Plan is expected to provide LOS D or better operations on a daily basis for most (81%) major roadway segments in the planning area. However, thirteen segments (15%) are expected to operate at LOS E, and four (4%) are expected to operate at LOS F. Typically, impacts to roadway links that are projected to operate at LOS E on a daily basis can be adequately mitigated by providing additional turning lanes at intersections. Where roadway links are projected to operate at LOS F, the construction of additional through lanes is usually required to adequately reduce delays or provide alternative parallel routes.

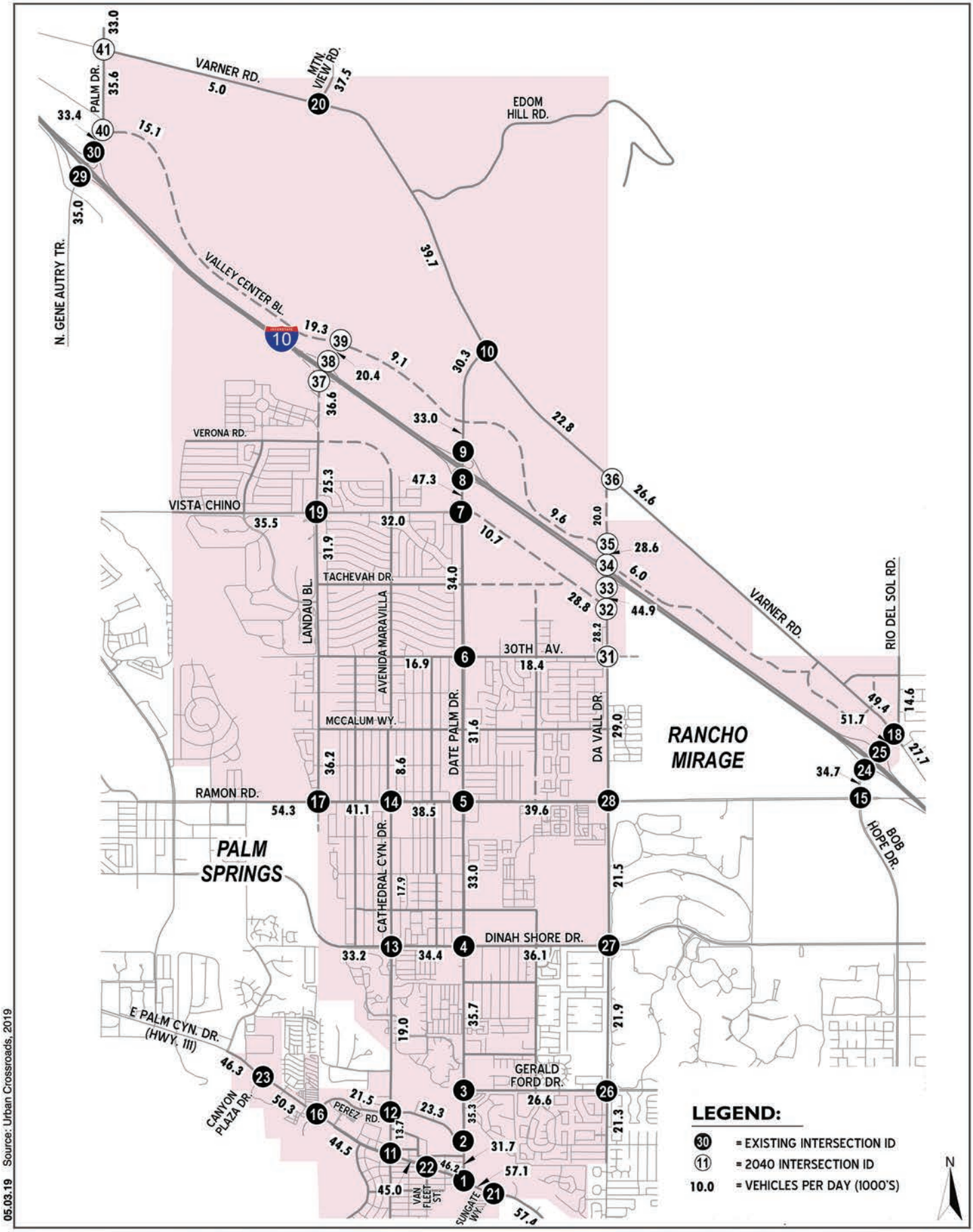
The preservation of adequate right-of-way at major intersections is critical to improving conditions on roadways projected to function at LOS E and F, in order to allow space for future intersection improvements. Areas where future impacts remain unacceptable will require more detailed and focused analysis to alleviate anticipated impacts. These areas are addressed in subsequent sections of this element.

Anticipated average daily traffic (ADT) volumes and volume-to-capacity ratios (levels-of-service (LOS)) for major roadway segments in the planning area are described in the following Table CM-5. Daily traffic volumes are illustrated graphically in Exhibit CM-5. Volume to capacity ratios that exceed 0.99 are operating at LOS F. Of course, both the following table and exhibit refer only to vehicular traffic. As discussed in the *Complete Streets* section of this element, the City is mandated to design and manage the transportation system to accommodate all users, as is illustrated below.

Table CM-5
General Plan 2040 Buildout Traffic
Roadway Segment Impact Analysis

Roadway	Segment	Roadway Designation	Through Travel Lanes[1]	Capacity[2]	ADT[3]	Volume/ Capacity Ratio
Date Palm Dr.	north of Palm Canyon Dr.	Arterial (A)	6	59,000	31,700	0.54
	north of Gerald Ford Dr.	Arterial (A)	6	59,000	35,700	0.61
	north Dinah Shore Dr.	Arterial (A)	6	59,000	33,000	0.56
	north of Ramon Rd.	Arterial (A)	6	59,000	31,600	0.54
	north of 30th Av.	Arterial (A)	6	59,000	34,000	0.58
	north of Vista Chino	Arterial (A)	6	59,000	47,300	0.80
	north of I-10 WB Ramps	Arterial (A)	6	59,000	33,000	0.56
Cathedral Cyn. Dr.	south of Dinah Shore Dr.	Secondary (B)	4	30,000	19,000	0.63
	south of Ramon Rd.	Secondary (B)	4	30,000	17,900	0.60
Landau Blvd.	north of Ramon Rd.	Major (B)	4	38,000	36,200	**0.95**
Bob Hope Dr.	north of Ramon Rd.	Arterial (D)	6	59,000	34,700	0.59
DaVall Dr.	south of Ramon Rd.	Major (A)	4	38,000	21,500	0.57
	north of Ramon Rd.	Major (A)	4	38,000	29,000	0.76
East Palm Canyon Dr.-Hwy. 111	east of Sungate Wy.	Arterial (A)	6	59,000	57,400	**0.97**
	west of Date Palm Drive	Arterial (A)	6	59,000	46,200	0.78
	west of Cathedral Cyn. Dr.	Arterial (A)	6	59,000	44,500	0.75
	west of Canyon Plaza Dr. W.	Arterial (A)	6	59,000	46,300	0.78
Perez Road	west of Date Palm Dr.	Major (D)	2	19,000 [5]	23,300	**1.23**
	west of Cathedral Cyn. Dr.	Major (D)	2	19,000 [5]	21,500	**1.13**
Gerald Ford Dr.	east of Da Vall Dr.	Major (C)	4	38,000	23,500	0.62
	east of Date Palm Dr.	Major (C)	4	38,000	26,600	0.70
Dinah Shore Dr.	west of Bob Hope Dr.	Major (E)	4	39,000 [4]	32,200	0.83
	east of Date Palm Dr.	Major (E)	4	39,000 [4]	36,100	**0.93**
	west of Cathedral Cyn. Dr.	Major (E)	4	39,000 [4]	33,200	0.85
Ramon Road	west of Bob Hope Dr.	Arterial (B)	6	59,000	48,500	0.82
	east of Date Palm Dr.	Arterial (B)	6	59,000	39,600	0.67
	west of Cathedral Cyn. Dr.	Arterial (B)	6	59,000	41,100	0.70
	west of Landau Bl.	Arterial (B)	6	59,000	54,300	**0.92**
30th Ave	east of Date Palm Dr.	Collector (C)	2	18,000	18,400	**1.02**
	west of Date Palm Dr.	Collector (A)	2	18,000	16,900	**0.94**
Vista Chino	west of Date Palm Dr.	Arterial (C)	4	40,000 [4]	34,400	0.86
	west of Landau Bl.	Arterial (C)	4	40,000 [4]	35,500	0.89
Varner Road	east of Date Palm Dr.	Modified Major	4	38,000	22,800	0.60
	west of Date Palm Dr.	Arterial (B)	6	59,000	39,700	0.67
Bob Hope Dr.	north of I-10 WB Ramps	Arterial (D)	6	59,000	51,700	0.88
Gene Autry Tr. - Palm Dr.	south of I-10 EB Ramps	Arterial (A)	6	59,000	35,000	0.59
	north of I-10 WB Ramps	Arterial (A)	6	59,000	33,400	0.57

[1] Existing Number of Through lanes
[2] LOS "E" Capacity per Cathedral City Roadway Segment Capacity LOS Thresholds
[3] Average Daily Traffic (ADT) expressed in vehicles per day.
[4] Estimated capacity for 4-lane Arterial capacity.
[5] Estimated capacity for 2-lane Major capacity.



05.03.19 Source: Urban Crossroads, 2019

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit CM-6 - 2040 Buildout ADT Volumes
Cathedral City General Plan - Imagine 2040

Cathedral City

ROADWAY CLASSIFICATIONS

To adequately serve future traffic volumes at General Plan buildout, an updated and expanded roadway classification system and cross-sections have been developed for the planning area. Developed in conjunction with the City's *Active Transportation* Plan, these classifications optimize opportunities to include multi-modal facilities within roadway cross-sections. Each major roadway within the study area has been assigned a specific design classification, based on existing and projected traffic demands generated by buildout of the General Plan. Anticipated future traffic volumes and overall community design goals set forth in the General Plan have been used to establish the need for and appropriateness of each roadway classification. The classification plan is illustrated in Exhibit CM-7. Each classification corresponds with the street cross-sections illustrated in the exhibits below. Certain refinements may be required when securing rights-of-way and constructing improvements at specific locations.

Roadway Design Innovations

The updated roadway classifications and cross-sections have been spurred by existing conditions, projected future traffic volumes and changes in state, regional and local transportation policies. In addition to including the road classifications and alignments established by the North City Specific Plan and North City Extended Specific Plan, the updated classifications include:1) three new Arterial Highway designations that address bike lane and buffer options, 2) four new Major Highway designations that account for conditions with and without bike lanes, street parking and buffers, 3) two new Secondary Highway designations that address striped medians and conditions with and without bike lanes, shared NEV/bike lanes, street parking and buffers, and 4) three new Collector designations provide for striped medians and conditions with and without bike lanes, street parking and buffers.

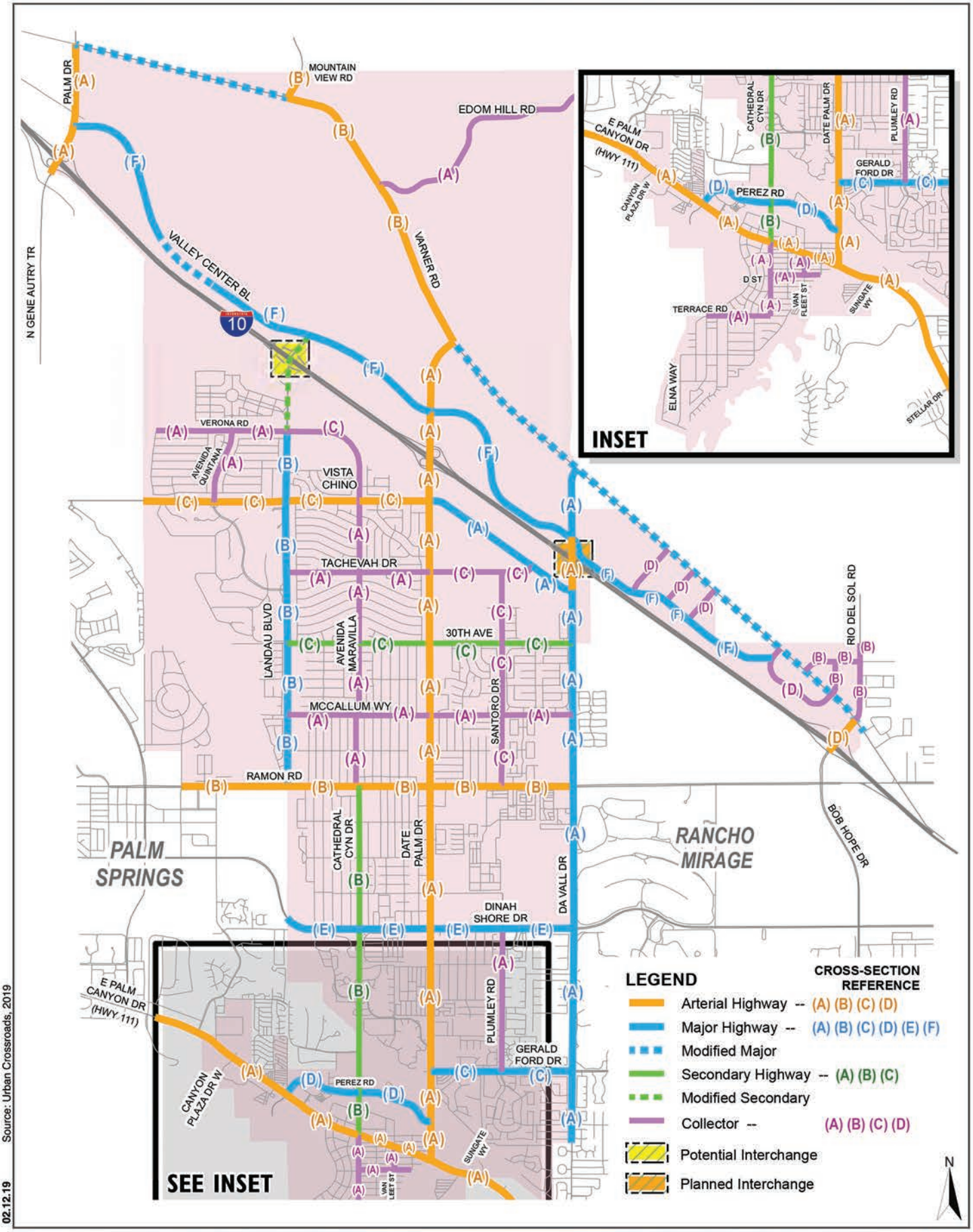
The updated cross-sections explicitly account for and assign bike lanes/shared NEV lanes, while also doing a better job of accounting for existing built road features. The roadway classifications are responsive to Complete Streets and Sustainable Communities strategies that focus on safely serving all transportation users (motorists, delivery services, cyclists, pedestrians, LSEVs). And they take into account existing and projected traffic volumes and previous traffic projections prepared for the North City and North City Extended Specific Plans. Previously analyzed network features are retained in undeveloped areas of the City.

Roadway Segments Capacity Analysis

The roadway capacities identified in Table CM-5, above, are approximate figures that take into consideration the variations in existing and future available rights-of-way, intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian and bicycle traffic. The broadened set of classifications allows the General Plan to adapt to these conditions and optimize long-term capacities. All analysed roadway segments are expected to operate at acceptable levels of service in 2040 with the following exceptions:

Table CM-6
General Plan 2040 Segment Deficiencies

Roadway Segment	Future Level of Service
• Landau Boulevard, north of Ramon Road	(LOS E)
• Highway 111, east of Sungate Way	(LOS E)
• Perez Road, west of Date Palm Drive	(LOS F)
• Perez Road, west of Cathedral Canyon Drive	(LOS F)
• Dinah Shore Drive, east of Date Palm Drive	(LOS E)
• Ramon Road, west of Landau Boulevard	(LOS E)
• 30th Avenue, east of Date Palm Drive	(LOS F)
• 30th Avenue, west of Date Palm Drive	(LOS E)



Source: Urban Crossroads, 2019

02.12.19

TERRA NOVA® PLANNING & RESEARCH, INC.

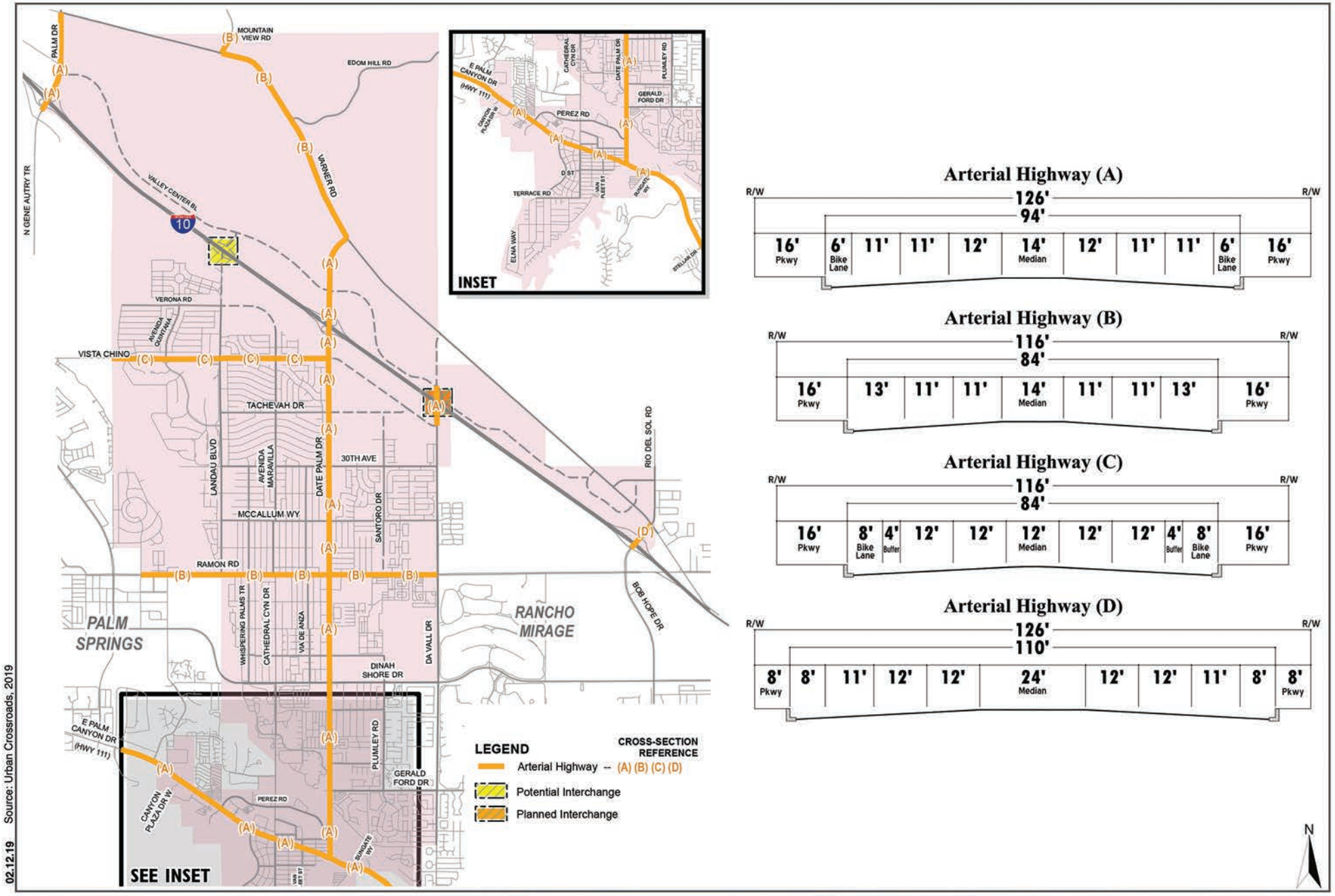
Exhibit CM-7 - Master Roadway Classifications
Cathedral City General Plan - Imagine 2040

Cathedral City

Perez Road currently has four travel lanes with a continuous center turn lane. The future LOS F operating condition assumes that the road will be restriped to provide two travel lanes and enhanced multi-modal facilities that may reduce vehicle traffic volumes in the future. The existing curb-to-curb cross-section will be maintained. If this road approaches LOS E or F in the future, it can be restriped to the four travel lane configuration. Future LOS for 30th Avenue is projected to reach LOS E west of Date Palm Drive and LOS F east of Date Palm Drive. These segments also currently have striped Class II bike paths, which may reduce future vehicle traffic volumes.

The same future condition is projected for Landau Boulevard north of Ramon Road, which could operate at LOS E by 2040, but existing and enhanced future multi-modal facilities may reduce long-term vehicular traffic volumes on this roadway as well. Ramon Road west of Landau Boulevard is projected to operate at LOS E by 2040; however, new and planned multi-modal facilities, including Class I and Class II bike paths, may also reduce long-term vehicular traffic volumes on this segment.

Finally, East Palm Canyon Drive/Highway 111 east of Sungate Way is projected to operate at LOS E by 2040. This LOS constraint is caused by a narrowing of this roadway east of Date Palm Drive to two eastbound travel lanes, which returns to a six-lane configuration immediately east of Buddy Rogers Avenue. Further widening of this constrained roadway segment would require significant modifications to steep mountainous terrain that currently bounds this segment on the south. Nonetheless, it may be possible in the future to add a third eastbound lane if future conditions warrant.

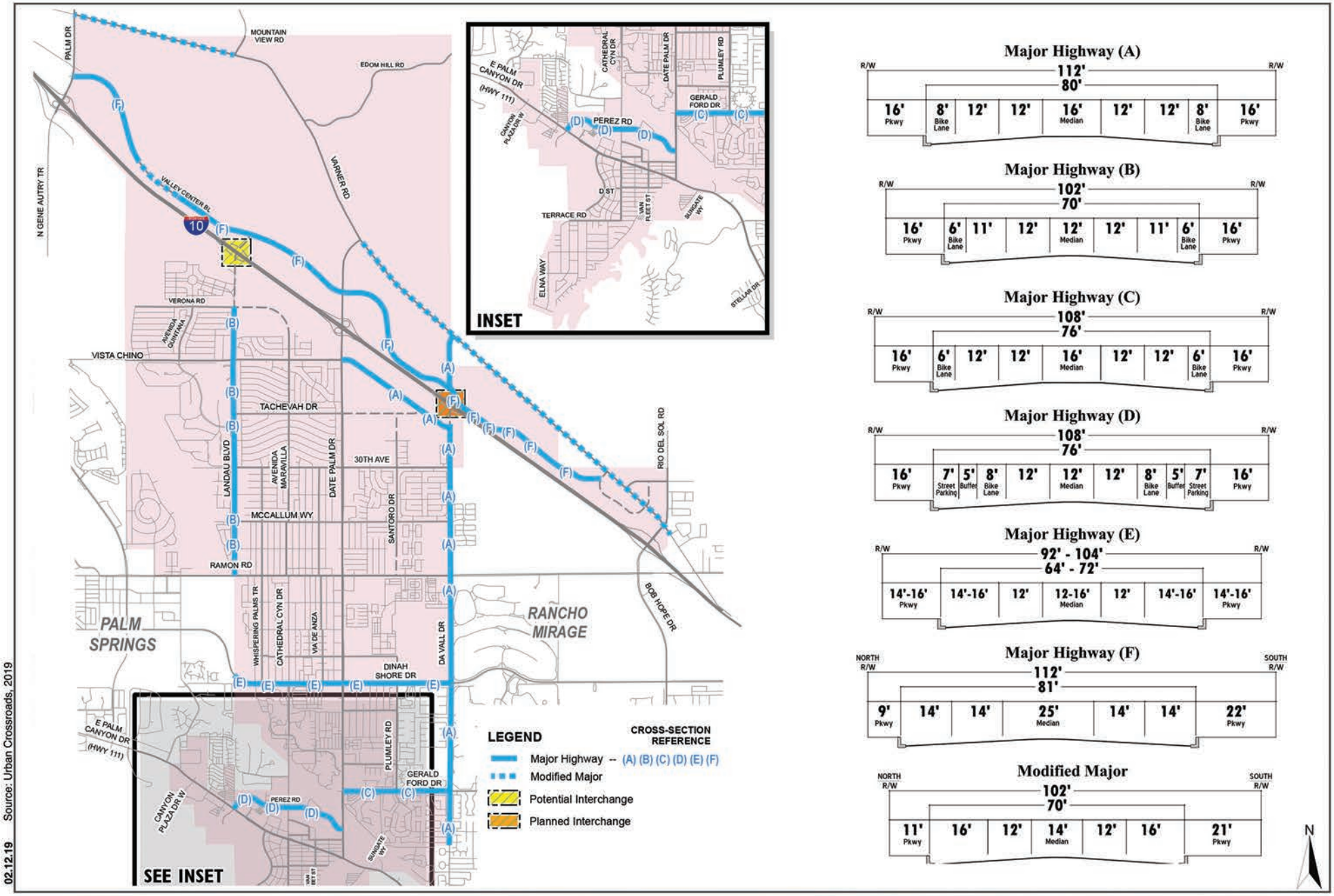


02.12.19 Source: Urban Crossroads, 2019

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit CM-8A - Arterial Highway Classifications
Cathedral City General Plan Update - Imagine 2040

Cathedral City

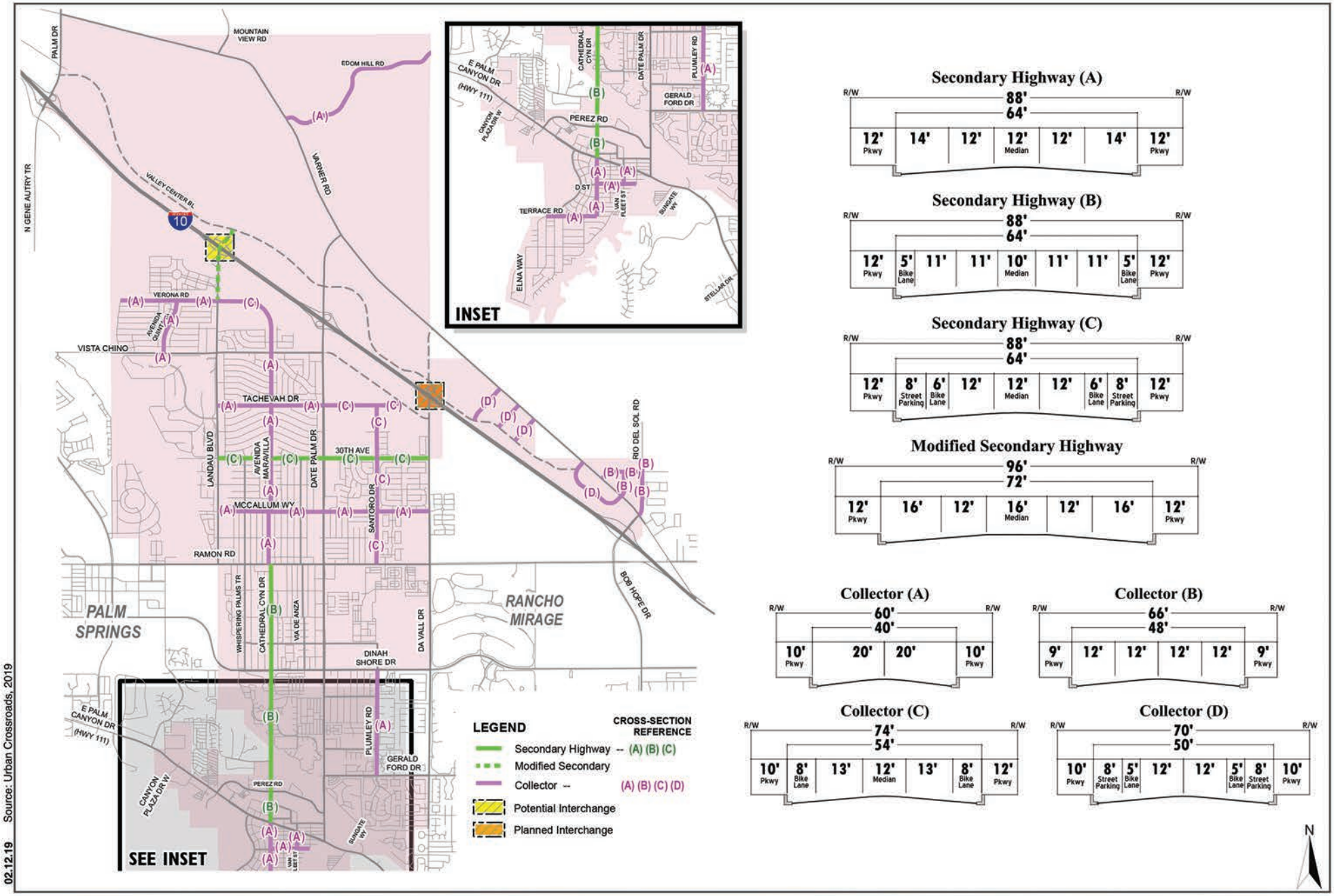


02.12.19 Source: Urban Crossroads, 2019

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit CM-8B - Major Roadway Classifications
Cathedral City General Plan Update - Imagine 2040

Cathedral City



02.12.19 Source: Urban Crossroads, 2019

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit CM-8C - Secondary and Collector Roadway Classifications
Cathedral City General Plan Update - Imagine 2040

Cathedral City

Table CM-7 Intersection Future (2040) Operating Condition

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Date Palm / E. Palm Cyn. Dr. (Hwy 111)	TS	0	0	0	3	0	1>	2	3	0	0	3	1	18.4	41.4	B	D
2	Date Palm / Perez Rd.	TS	1	2	0	0	2	1>	***1***	0	1	0	0	0	14.0	26.9	B	C
3	Date Palm / Gerald Ford Dr.	TS	1	2	1	1	2	d	1	2	0	1.5	0.5	1	43.7	54.4	D	D
4	Date Palm / Dinah Shore Dr.	TS	2	2	1	2	3	0	**2**	***2***	1	1	2	1>	44.4	42.0	D	D
5	Date Palm / Ramon Rd.	TS	2	**3**	1	1	**3**	1	**2**	3	**1**	1	3	**1**	45.6	43.2	D	D
6	Date Palm / 30th Av.	TS	**2**	3	0	**2**	3	0	1	**2**	**1**	1	**2**	**1**	48.0	46.4	D	D
7	Date Palm / Vista Chino	TS	**2**	3	0	1	**2**	**2>**	2	1	***1>***	1	***2***	***1***	54.0	39.8	D	D
8	Date Palm / I-10 EB Ramps	TS	0	3	1>>	0	3	1>>	1	1!	1	0	0	0	27.5	6.9	C	A
9	Date Palm / I-10 WB Ramps	TS	0	3	1>>	0	3	1>>	0	0	0	1	1!	1	14.8	14.7	B	B
10	Date Palm / Varner Rd.	**TS**	**2**	0	1	0	0	0	0	1	**1>**	**1**	1	0	34.8	45.5	C	D
11	Cathedral Cyn. Dr./E. Palm Cyn. Dr. (Hwy 111)	TS	1	1	1	1	1	1>	1	2	1	1	3	1	31.3	43.1	C	D
12	Cathedral Cyn. Dr. / Perez Rd.	TS	1	2	0	1	2	0	1	***1***	***1***	1	***1***	***1***	39.2	54.8	D	D
13	Cathedral Cyn. Dr. / Dinah Shore Dr.	TS	1	2	0	1	2	0	1	2	0	1	2	0	**65.4**	**>80**	**E**	**F**
14	Cathedral Cyn. Dr. - Avenida Maravilla/Ramon Rd.	TS	1.5	0.5	1>	0.5	0.5	1>	1	3	0	1	3	0	**>80**	**>80**	**F**	**F**
15	Bob Hope Dr. / Ramon Rd.	TS	2	3	**1>>**	2	3	**1>>**	2	**3**	**1>**	2	**3**	1	48.3	39.8	D	D
16	Perez Rd. / E. Palm Cyn. Dr. (Hwy 111)	TS	1	1	0	1	0.5	1.5>	2	3	0	1	2	1	28.3	38.9	C	D
17	Landau Bl. / Ramon Rd.	TS	**1**	**1**	0	2	**0.5**	**1.5**	**2**	**3**	0	**1**	**3**	**1>**	45.3	49.0	D	D
18	Bob Hope Dr. / Varner Rd.	TS	2	2	1>>	2	**3**	1	2	2	**2>>**	2	2	0	54.4	44.2	D	D
19	Landau Bl. / Vista Chino	TS	**2**	2	0	***2***	2	0	1	2	**1>**	1	2	***1>***	54.7	45.6	D	D
20	Mountain View Rd. / Varner Rd.	**TS**	0	0	0	**2**	0	**1**	0	1	0	0	1	**2**	42.4	38.0	D	D
21	Sungate Wy. / E. Palm Cyn. Dr. (Hwy 111)	TS	1	1	0	0.5	0.5	1	1	2	1	1	3	0	18.0	34.0	B	C
22	Van Fleet St. / E. Palm Cyn. Dr. (Hwy 111)	TS	0.5	0.5	1	1	1	0	1	2	1	1	2	1	16.7	39.7	B	D
23	Canyon Plaza Dr. / E. Palm Cyn. Dr. (Hwy 111)	TS	0.5	0.5	d	0.5	1.5	0	1	2	1	1	2	1	33.4	52.6	C	D
24	Bob Hope Dr. / I-10 EB Ramps	TS	0	2.5	1.5	2	**3**	0	1	1!	1	0	0	0	28.4	31.1	C	C
25	Bob Hope Dr. / I-10 WB Ramps	TS	2	**3**	0	0	3	1	0	0	0	1.5	0.5	1>>	13.5	45.0	B	D
26	Da Vall Dr. / Gerald Ford Dr.	TS	**2**	2	1	**2**	2	**1**	**2**	2	**1**	**2**	2	**1**	34.3	36.6	C	D
27	Da Vall Dr. / Dinah Shore Dr.	TS	**2**	2	1	**2**	2	**1**	**2**	2	1	**2**	2	**1**	36.6	39.0	D	D
28	Da Vall Dr. / Ramon Rd.	TS	**2**	2	1	**2**	**2**	**1**	**2**	3	**1>**	**2**	3	**1>**	42.8	46.1	D	D
29	Gene Autry Tr. / I-10 EB Ramps	TS	0	3	1>>	0	3	1>>	1	1!	1	0	0	0	6.7	5.8	A	A
30	Gene Autry Tr.-Palm Dr. / I-10 WB Ramps	TS	0	3	1>>	0	3	1>>	0	0	0	1	1!	1	16.0	10.2	B	B

Table CM-7 Intersection Future (2040) Operating Condition

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (Secs)		Level of Service[2]	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
31	Da Vall Dr. / 30th Av.	**TS**	**1**	**2**	0	**1**	**2**	0	1	1	d	0.5	0.5	d	29.2	54.3	C	D
32	Da Vall Dr. / Vista Chino	**TS**	**1**	**2**	0	0	**2**	**1>**	**2**	0	**1**	0	0	0	25.7	44.7	C	D
33	Da Vall Dr. / I-10 SB Ramps	**TS**	0	**2**	**2**	**1**	**2**	**0**	0	**1!**	**1**	0	0	0	54.8	20.1	D	C
34	Da Vall Dr. / I-10 NB Ramps	**TS**	**2**	**2**	0	0	**2**	**1**	0	0	0	**2**	0	**1**	34.1	46.3	C	D
35	Da Vall Dr. / Valley Center Bl.	**TS**	**2**	**2**	0	**1**	**2**	0	**1**	**2**	**1**	**1**	**2**	0	17.7	20.2	B	C
36	Da Vall Dr. / Varner Rd.	**TS**	**1**	**1!**	**1**	0	0	0	0	**2**	0	**1**	**2**	**0**	43.0	53.0	D	D
37	Landau Bl. / I-10 SB Ramps	**TS**	0	**3**	***1***	**1**	**3**	0	**0.5**	**0.5**	**1**	0	0	0	53.8	54.4	D	D
38	Landau Bl. / I-10 NB Ramps	**TS**	**1**	**3**	0	0	**3**	0	0	0	0	**0.5**	**0.5**	**1**	48.9	54.2	D	D
39	Landau Bl. / Valley Center Bl.	**TS**	**1**	0	**1**	0	0	0	0	**2**	**1>**	**1**	**2**	0	13.6	23.4	B	C
40	Palm Dr. / Valley Center Bl.	TS	1	2	**1**	**2**	2	0	**1**	**2**	0	1	**1**	**1**	29.8	31.3	C	C
41	Palm Dr. / Varner Rd.	TS	1	2	0	1	2	0	**1**	1	0	**1**	1	0	40.2	30.1	D	C

1. When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
   L = Left; T = Through; R = Right; 1! = Shared Left/Through/Right Lane; 0.5 = Shared Lane; > = Right-Turn Overlap Phasing;
   >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; 1 = Lane Improvement; 1 = Lane Configuration Change in comparison to Adopted Improvements
2. Per the Highway Capacity Manual 6th Edition (HCM6), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control.
   For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
   Delay and level of service is calculated using Synchro 10.1 analysis software.
   BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
3. TS = Traffic Signal

R:*\UXRjobs_11100-11500\11326\Excel\[11326 - LOS Results - values.xlsx]2040 Proposed*

Intersection Operations Analysis (2040)

While the General Plan analysis focuses on the capacity and operation of roadway segments, the most influential controlling factors of the roadway system are found at intersections. Intersections are generally the most critical and constrained locations within the local street network and the ultimate arbiters of capacity. The acceptable level of service established by the General Plan is LOS D. As shown in Table CM-7, study area intersections are anticipated to operate at an acceptable LOS during the peak hours in 2040, with the exception of the following:

- Cathedral Canyon Drive @ Dinah Shore Drive – LOS E AM peak hour / LOS F PM peak hour
- Cathedral Canyon Drive & Avenida Maravilla @ Ramon Road – LOS F AM and PM peak hours

City Truck Routes

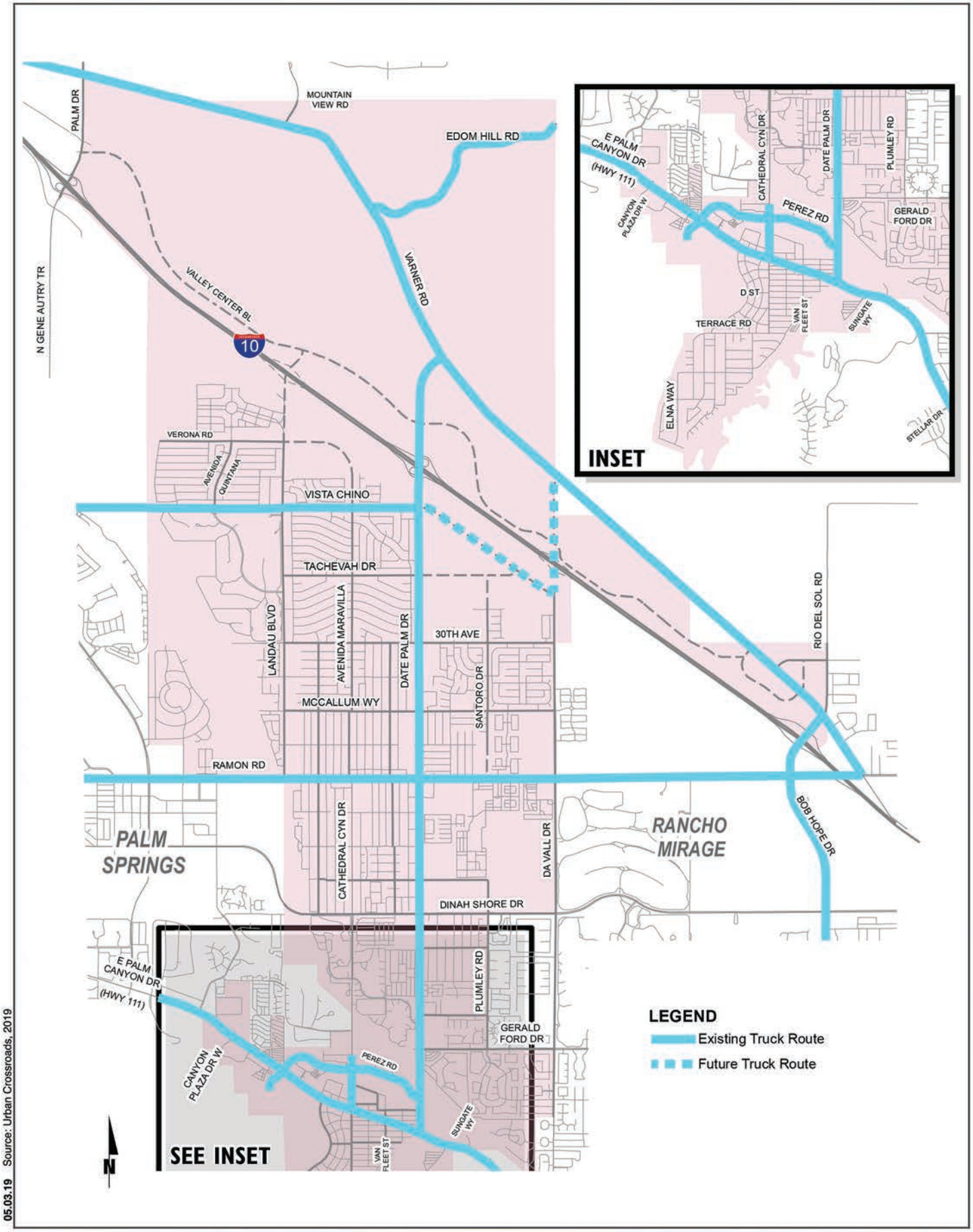
Previously established truck routes include Varner Road, Edom Hill Road, Date Palm Drive, Bob Hope Drive, Vista Chino, Ramon Road, Perez Road, a section of Cathedral Canyon Drive, and East Palm Canyon Drive/Highway 111. Although not so designated by the General Plan, US Interstate-10 is, of course, an important truck route that is outside the City's authority to manage. And I-10 interchanges are the only points of access from the interstate onto the City roadway network.

Truck routing involves several considerations. First, truck drivers do not always have good information about approved truck routes or truck-restricted routes. In some cases, truck routes are not consistent from one jurisdiction to another, leading to driver confusion. Some routes are also not well signed. Truck drivers often use internet-sourced maps to determine routing, which may be misleading because not all "major" routes on map sources actually allow trucks. Some may in fact be truck restricted but there is no easy way for the drivers to know.

Finally, in some cases all of these factors lead trucks to use a route that should not be used due to adjacent sensitive land uses such as residences or schools, or they use routes that are not adequate for heavy vehicle activity due to physical design features such as horizontal and vertical curves, or pavement condition. To support the demand for truck activities, two additional truck routes have been identified for Cathedral City:

- Da Vall Drive from Vista Chino (extended) to Varner Road
- Vista Chino (extended) from Date Palm Drive to Da Vall Drive

It should also be noted that the assignment of truck routes must follow the procedures set forth in the California Vehicle Code. The existing and future truck routes are shown on Exhibit CM-9, below.



05.03.19 Source: Urban Crossroads, 2019

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit CM-9 - Existing and Future Truck Routes
Cathedral City General Plan - Imagine 2040

Cathedral City

LONG RANGE DEFICIENCIES AND RECOMMENDATIONS

As noted above, certain, limited deficiencies are projected to occur within the City roadway network by the 2040 General Plan buildout, including eight roadway segments and two intersections. Special attention will be required at these portions of the roadway network to minimize and/or avoid reaching unacceptable operating conditions.

Cathedral Canyon Drive Corridor and Intersections

Cathedral Canyon Drive from Perez Road to Ramon Road is identified as a special study corridor. As noted, the Cathedral Canyon Drive intersection at Dinah Shore Drive and at Cathedral Canyon Drive -Avenida Maravilla at Ramon Road are projected to operate at unacceptable level of service by or before the year 2040. These intersections are constrained by existing development, and intersection geometry/signalization changes have not been identified to reasonably improve operations. In addition, the intersection of Cathedral Canyon Drive - Avenida Maravilla at Ramon Road experiences unacceptable operations for existing (2018) conditions. The existing (2018) unacceptable level of service at the intersection of Cathedral Canyon Drive at Ramon Road is expected to continue. Intersection geometry / signalization changes have not been identified that can reasonably improve operations.

Intersections along Cathedral Canyon Drive are constrained by existing development, and mobility enhancements for all modes are desirable and have been considered. Sections of Cathedral Canyon Drive (from Dinah Shore Drive to Ramon Road) provide direct access to/from single-family home driveways. Parallel roads to the east and west of Cathedral Canyon Drive provide limited alternative access through residential areas, but are discontinuous.

The City will continue to study the Cathedral Canyon Drive corridor and other roadway segments projected to operation at unacceptable LOS in 2040, and monitor their operations on an ongoing basis to develop further recommendations for improvements. Specific tasks would involve identifying a corridor's strengths, weaknesses, and opportunities for improvements. This special study will serve as a valuable step in achieving the City's desire to implement long-term community and citywide mobility and parking improvement projects. Recommendations for further enhancements must balance the needs to improve mobility, safety, parking, and the corridor's appearance.

Other Roadway Segments

As noted in Table CM-7 above, six additional roadway segments are projected to operate at unacceptable (LOS E & F) levels of service within the 2040 General Plan buildout period. Application of the City's *Active Transportation Plan* and re-striping of the existing and future street cross-sections may delay or avoid projected inadequacies. The City will monitor these segments on an ongoing basis and require detailed assessments when proposed future development is inconsistent with the Land Use Plan.

Monitoring and Adaptive Management

As noted above, eight roadway segments are projected to operate at LOS E or F by 2040. As a part of the General Plan traffic analysis, a more detailed peak hour intersection analysis conducted for the General Plan explicitly accounts for factors that affect roadway segment capacity. Therefore, roadway segment widening is typically only recommended if the peak hour intersection analysis indicates the need for additional through lanes. The detailed analysis indicates that no roadway widening to provide additional through-lanes will be needed. Therefore, those segments projected to operate at LOS E or F may in fact operate at acceptable LOS in 2040. Nonetheless, the City will continue to analyze these segments and other portions of the roadway network to ensure acceptable long-term operating conditions.

It should also be noted that while limited portions of the existing and planned roadway network are projected to operate at unacceptable levels of service, the City's substantial push to integrate expanded multi-modal facilities may reduce future impacts to roadway segments and intersections. The City shall continue to conduct ongoing monitoring and adaptation be conducted to address existing and future deficiencies.

Pedestrian Circulation

The General Plan and associated documents support planning that allows and enhances access to commercial services and places of employment and recreation without the essential use of motorized vehicles. In this regard, pedestrian and other non-motorized circulation are encouraged in the City wherever possible. Master planning sidewalks, bike lanes and off-street trails is especially important along major roadways in the community. Development that occurred prior to the City's incorporation includes areas where sidewalks are non-existent or discontinuous, limiting their usefulness as safe alternatives to vehicle travel. When considering future development, pedestrian and bicycle accommodation and safety should be given emphasis equal to that currently given to automobile access.

Parking: A New Paradigm

The issue of parking creates angst for just about everyone, including community residents, shoppers, business owners and developers, and municipalities. Surface parking is a major and frequently wasteful use of land in almost all types of development. For instance, commercial parking standards are frequently designed to meet the demand generated during just a few days of peak holiday shopping and demand, leaving a sea of largely unused parking the rest of the year. In addition to being an inefficient use of land, vacant parking lots are not attractive and send the wrong message to the shopper that can discourage shopping at these locations.

A similar case of residential over-parking is associated with applying rental housing standards to owner-occupied housing. Also, consideration is not always given to differing demand from single-family versus multi-family housing or the size of housing units. At the same time, there is a shift in home ownership and motor vehicle ownership patterns, and many are foregoing car ownership altogether and relying on transit and other modes of travel. Some of the factors that affect parking demand include geographic location and proximity to other land uses, residential density, employment density, land use mix, access to transit, car-sharing, walkability and bikeability, demographics, income, housing tenure, and other factors.

Parking lot ingress and egress can also affect adjoining roadway capacity and should be thoughtfully controlled. Consolidation of parking lot entrances should be encouraged to reduce curb cuts, minimize disruptions to traffic flow and facilitate the preservation of capacity, while still assuring vehicular and multi-modal safety.

Transportation Demand Management

The urbanization of the Coachella Valley is expected to continue in the decades to come, and with continued growth, transportation demand and systems management will be necessary to preserve and increase available roadway capacity. Transportation Demand Management (TDM) requires the development and implementation of policies, plans and programs that result in the use of a wider range of transportation alternatives, including public transit and bicycles.

While an emphasis on alternative travel modes, such as carpooling, van pooling and mass transit will help, TDM can also include employee flex-time work schedules that reduce peak hour travel and associated traffic congestion. In response to state mandates, the Riverside County Transportation Commission (RCTC) prepared a regional Congestion Management Program, which required Cathedral City and other cities to prepare TDM ordinances or risk the loss of federal transportation funds. The City has adopted a TDM ordinance.

Railroad Facilities

The City is host to a major railroad corridor located immediately south of and parallel to US I-10. Rail freight service through the Coachella Valley is provided by the Union Pacific Railroad (UPRR), with freight transfer facilities located in Indio and Coachella. These Union Pacific facilities carry between 30 and 40 freight trains per day. In recent years, Union Pacific has added a full second track, which is projecting an associated 50%-70% increase in rail traffic. In addition, Amtrak passenger service is accessible at the Palm Springs station located just west of Indian Canyon Drive in Palm Springs on Union Pacific's line. One eastbound Amtrak train stops at the station at 12:36 AM and one westbound passenger train stops at 2:02 AM.

These rail lines are designated as Centralized Track Control (CTC) facilities and include extensive electronic switching and communication facilities. Construction of drill spurs is possible to serve adjoining passenger or industrial uses and can range from $84,000 to $92,000 (2017). These costs do not include special engineering requirements associated with potential engineering constraints.

Palm Springs International Airport (PSP)

Primary air transportation for Cathedral City, the Coachella Valley and the region is provided by the Palm Springs International Airport (PSP), which is classified in the National Plan of Integrated Airport Systems (NPIAS) as a long-haul commercial service airport. PSP is accessed from Ramon Road and El Cielo Road and provides short-term parking near the terminals and long-term parking farther south.

PSP encompasses 930± acres and is capable of supporting non-stop commercial service to destinations over 1,500 miles away and is classified as a small hub air passenger airport, based upon the percentage of national airline enplanements it supports. Since 1972, airport services have increased from 143,809 passenger enplanements to 486,644 in 1994. In 1998, the number of enplanements reached 629,473, and deplanements totaled 628,068. For all of 1998, the number of passengers arriving and departing the airport totaled 1,256,541. By 2007, full-year enplanements totaled 1,610,943 with March being the peak month.

Major destination cities include Los Angeles, San Francisco, Chicago, Denver, Las Vegas, Seattle, Dallas and New York. Major carriers include Alaska, American, United Express, Delta and others. Commercial traffic is clearly seasonal, with the peak season being the January-February-March period and the slowest period occurring during the summer months. Commercial and passenger operations are expected to continue to grow.

Major Utility Corridors

Major corridors and easements for the transport of natural gas, electricity, communications, domestic water and sewerage, and storm drainage are also important components of the Circulation and Mobility Element. Generally, the need for utility corridors is met through the provision of easements in or adjacent to City streets and along common lot lines.

Major electricity, natural gas and petroleum product transmission corridors were established prior to incorporation of the City and are generally located north of Interstate-10. These include a Southern California Edison high voltage transmission corridor located on Flat-top Mountain and just south of Edom Hill. Future land use planning, including the development of subdivisions and the processing of development applications, require coordination between the City, developers, utility companies, and other service providers to assure the availability and provision of easements and rights-of-way for the extension of roads, utility lines, and public services (also see *Public Facilities and Services Element*).

FUTURE DIRECTIONS

Transportation technology and vehicular travel in general may change profoundly in the coming decade. Beyond the ongoing electrification of cars and trucks, the technology to allow the use of self-driving (autonomous) vehicles (AVs) is rapidly developing and in use in limited ways in 2019. A wide range of other traffic control and optimization technologies are also emerging that will allow our roads to carry more and a more varied mix of vehicles, and enhance safety.

Automated Vehicles

Driverless cars or autonomous vehicles have made their debut on streets in many American cities and their full deployment may be only a few years away. As G5 cellular networks and other advance communication technologies are deployed they will further enable the launch of AVs and this could have profound effects on the use of the roads, roadway capacity, travel time, and even on vehicle ownership.

In the next few years, the City can capture a comparable (and competitive) advantage by developing regulations and incentives that could have a significant effect on the implementation of AVs in the City. A robust AV market would allow residents to "mix and match" bus transit and low-cost, point-to-point travel in AV-taxis, and autonomous shuttles and buses. Priorities to serve AV travel include synchronization of insurance regulations, uniform safety rules, common data standards, and solid communication protocols.

A safe AV network in the City and Coachella Valley is likely to require new types of hardware and regulation, including storage and maintenance facilities for shared autonomous fleets, fast-charging infrastructure, and dedicated AV lanes equipped with vehicle-to-vehicle and vehicle-to-infrastructure communications, and associated IT systems. California and the federal government are working to address these issues.

The Future: For Now

As a whole, the General Plan policy document, transportation technical reports and Program EIR provide direction for the future planning of the City's roadway and circulation system. Areas of special concern have been identified and are further addressed in the General Plan Program EIR and Transportation Analysis report (see Appendix E of the EIR. The above cited "Special Study Zones" and other areas of future focused analysis should be initiated as soon as is reasonably possible.

In addition to focused studies, the City will also continue to monitor and review land use trends and changes in traffic volumes and patterns. Periodic adjustments to planning and program implementation may be made by utilizing roadway improvement and maintenance management programs, regular traffic monitoring on major roadways, and conducting ongoing inventories of current traffic and circulation patterns. Formal traffic monitoring should be conducted, at a minimum, once every two years.

The City will also pursue on-going coordination with state, regional and local agencies that have shared jurisdiction over the state highways in the community. Through the implementation of this element and involvement with regional, state and federal regulators, the City will progressively alleviate current problems, improve capacity for all modes of travel and avoid future system inadequacies.

GOALS, POLICIES AND PROGRAMS

Goal 1: An intra- and inter-city transportation system that provides for the safe, efficient, diverse and cost-effective movement of people and goods, and enhances commerce and the overall economic well-being of the entire community.

Goal 2: A City-wide and neighborhood-specific transportation system that is responsive to, and which implements the New Urbanism principles of community design, through land use and transportation planning.

> **Policy 1:** The City circulation and mobility network shall be planned and developed to assure the provision of safe and efficient vehicular, pedestrian, bicycle and LSEV access to all parts of the community, effectively linking residents and visitors to the full range of residential, employment, shopping, and recreational land uses.
>
> > **Program 1.A:** The City shall establish a schedule to study and evaluate "Special Study Zones" identified in the General Plan to assure that these areas are appropriately designed, and improvement funding is planned to address projected impacts.
> > **Responsible Agency**: Public Works Department, Planning Department, City Engineering, Planning Commission, City Council
> > **Schedule:** 2020, On-going

Program 1.B: The Public Works Department shall establish and implement a prioritized roadway and intersection study and analysis program to assure the provision of adequate future rights-of-way and facilities at critical roadways and intersections. This program may be incorporated into the five-year Capital Improvements Program, which should be reviewed and amended, as necessary, annually.
Responsible Agency: Public Works Department, Planning Department, City Engineer
Schedule: 2020, On-going

Policy 2: Transit stops and pedestrian, bicycle and LSEV paths shall be sited in conformance with the General Plan roadway classifications and the City Active Transportation Plan. Standards and guidelines shall be applied in a manner that encourages the use of alternatives modes of transportation and provides safe, convenient access to commercial and employment centers, as well as institutional and recreational land uses.

Program 2.A: A planning and engineering project review checklist will be developed, which addresses all major roadway components and ensures compliance with the provisions of the Circulation and Mobility Element and the Active Transportation Plan. The checklist will be used in reviewing development proposals.
Responsible Agency: Public Works Department, Planning Department, City Engineer
Schedule: 2020, On-going

Policy 3: The City shall assure that the current and future City roadway segments and intersections maintain minimum operating standards that do not exceed Level-of-Service (LOS) "D" during peak hours of traffic. Along roadway segments and intersections where LOS D may not be achievable after applying all practicable measures, the City shall find LOS "E" during peak hours to be provisionally acceptable.

Program 3.A: The Circulation and Mobility Element and supporting technical reports shall be periodically reviewed to compare current conditions with the goals and policies of the element, and to assure that adopted facility standards and classifications are consistent with actual and projected traffic volumes.
Responsible Agency: Public Works Department, Planning Department, City Engineer
Schedule: 2020, On-going

Program 3.B: Identified roadway segments and intersections projected to operate at LOS E or worse at General Plan buildout are hereby designated as "Special Study Zones" where detailed analysis shall be conducted to minimize further degradation of operating conditions at these locations.
Responsible Agency: Planning Department, Engineering, Transportation Commission
Schedule: Immediately, On-going

Program 3.C: The City shall develop and implement roadway improvement standards which limit direct access to arterial roadways and provide raised median islands, to the greatest extent practical, in order to maximize roadway capacity and limit turning movement conflicts.
Responsible Agency: Planning Department, Engineering, Transportation Commission
Schedule: 2020, On-going

Program 3.E: The City shall coordinate with Caltrans, City of Rancho Mirage, CVAG and other interested parties in the planning, design, engineering and development of an Interstate-10 interchange with Da Vall Drive, extended.
Responsible Agency: Public Works Department, City Engineer, Planning Commission, City Council, Caltrans, CVAG, Rancho Mirage
Schedule: Immediately, On-going

Policy 4: Given the programmatic nature of the General Plan traffic analysis, development proposals which may generate traffic volumes or other impacts beyond the scope of the General Plan analysis should be required to conduct project-specific traffic studies to assure that project impacts are adequately mitigated.

> **Program 4.A:** City staff shall analyze development proposals to determine the potential of the project to adversely impact mid-block segments or intersections. Development impacts shall be identified, and fair-share mitigation shall be established and incorporated into the conditions of approval.
> **Responsible Agency:** Planning Department, City Engineer, Public Works, Planning Commission, City Council
> **Schedule:** On-going

Policy 5: Mixed-use and other integrated development plans may propose the construction of public and/or private streets that conform with the New Urbanism and Complete Streets design principles, assuming sufficient technical support to argue for their safe and efficient use is provided, and the concerns of all public service and protection providers are satisfied.

> **Program 5.A:** The City shall encourage and if necessary require developers to explore alternative designs of streets and other transportation facilities by providing, as appropriate, information on Complete Streets design concepts and standards that may meet basic performance and safety needs, while still being responsive to the New Urbanism principles.
> **Responsible Agency:** Planning Department, Engineering, Transportation Commission, Planning Commission, City Council
> **Schedule:** Immediately, On-going

Policy 6: In order to preserve the capacity of the City's major roadways and assure a safe and economical circulation system, development proposed along arterial roadways shall be designed to limit access to these arterials to the minimum needed to effectively serve the development.

> **Program 6.A:** The City shall apply to all development plans the adopted roadway classifications, and implement the Active Transportation Plan to maximize walking, bicycling, and use of LSEVs, and assure safe and efficient connections to City-wide and regional multi-modal facilities.
> **Responsible Agency:** Public Works, Planning Department, City Engineer, Planning Commission, City Council
> **Schedule:** Immediately; Ongoing
>
> **Program 6.B:** On Arterial Highways the minimum intersection spacing shall be 1,060 feet. The design speed shall be 50 mph. Left-turn median cuts may be authorized if the proposed turn pocket does not interfere with other existing or planned left-turn pockets. Right in/right out access driveways shall meet or exceed the following minimum separation distances (in all cases, distances shall be measured between the curb returns):
> • more than 250 feet on the approach leg to a full turn intersection;
> • more than 150 feet on the exit leg from a full turn intersection;
> • more than 275 feet between driveways.
> All access configurations shall require City Engineer review and approval.
> **Responsible Agency:** Public Works, Planning Department, City Engineer, Planning Commission, City Council
> **Schedule:** Immediately; Ongoing

Program 6.C: On Major Highways, the minimum intersection spacing shall be 600 feet. The design speed shall be 40 mph. Full access to adjoining property shall be avoided and shall exceed the following minimum separation distances (in all cases, distances shall be measured between the curb returns):

- more than 250 feet on the approach leg to a full turn intersection;
- more than 150 feet on the exit leg from a full turn intersection;
- more than 250 feet between driveways.

All access configurations shall be subject to City Engineer review and approval.
Responsible Agency: Public Works, Planning Department, City Engineer, Planning Commission, City Council
Schedule: Immediately; Ongoing

Program 6.D: On Collectors, the minimum intersection spacing shall be 300 feet. The design speed shall be 30 mph. Access driveways shall exceed the following minimum separation distances (in all cases, distances shall be measured between the curb returns):
- more than 250 feet on the approach leg to a full turn intersection;
- more than 150 feet on the exit leg from a full turn intersection;
- more than 250 feet between driveways.

All access configurations shall be subject to City Engineer review and approval.
Responsible Agency: Public Works, Planning Department, City Engineer, Planning Commission, City Council
Schedule: Immediately; Ongoing

Policy 7: The City shall periodically review and update its transportation system Capital Improvement Program to ensure that it keeps pace with the need for network improvements that continue to provide an acceptable level of service and a safe and efficient system.

Program 7.A: Based on biennial monitoring of the roadway network, maintain a transportation Capital Improvement Program (CIP) that sets forth timelines for the construction of new roadway, bike and LSEV lanes and paths, and other transportation infrastructure in the community. The program shall plan in five-year increments.
Responsible Agency: Public Works, City Engineer , Planning Commission, City Council
Schedule: Immediately; Every two years

Program 7.B: Based on annual monitoring of the roadway network, establish and maintain a roadway pavement management program (PMP) that sets forth timelines and schedules for the maintenance of existing roads in the community. The program shall establish funding levels each fiscal year.
Responsible Agency: Public Works, City Engineer, Planning Commission, City Council
Schedule: Immediately; Annually

Program 7.C: On Local streets, the minimum intersection spacing shall be 250 feet. The design speed shall be 25 mph. All access configurations shall be subject to City Engineer review and approval.
Responsible Agency: Public Works, Planning Department, City Engineer
Schedule: Immediately; Ongoing

Program 7.D: Within subdivisions, private streets may be designed to provide a reduced minimum paved width of 28 feet with no on-street or restricted on-street parking, subject to City Engineer and Fire Department approval, and in consideration of other improvements that encourage pedestrian, bicycle and LSEV use.
Responsible Agency: Public Works, Planning Department, City Engineer
Schedule: Immediately; Ongoing

Policy 8: The implementation of this element may require flexibility in applying and adapting roadway design standards and specifications, therefore, the Public Works Director is authorized to make consistency findings to permit modifications that do not compromise the operational capacity of the subject roadway or intersection.

Program 8.A: The City shall maintain a liaison with adjoining cities, Caltrans, CVAG, Riverside County planning and engineering staffs to study and implement effective means of preserving and improving capacity along major roadways serving inter-city traffic. Strategies shall include but are not limited to synchronized signalization and other improvements to major roadways and intersections.
Responsible Agency: Public Works, Planning Department, City Engineer, CVAG TAC
Schedule: Immediately; Ongoing

Policy 9: The City shall facilitate the design, installation and maintenance of a community locational/directional sign program to efficiently direct traffic to high use areas, including the downtown/civic center, parks, golf courses, Palm Springs International Airport, and other facilities and major attractions and destinations in and around the City.

Policy 10: The City shall coordinate and cooperate with the Palm Springs Airport Commission and the Riverside County Airport Land Use Commission to assure that the Palm Springs International Airport continues to meet the City's existing and future transportation, commercial and emergency response needs.

Policy 11: On an ongoing basis, the City shall confer and coordinate with the SunLine Transit Agency on the expansion of routes, facilities, services and ridership especially in congested areas and those with high levels of employment and commercial services, and encourage the use of most energy efficient and least polluting transportation technologies.

Program 11.A: When initiating review of development proposals, the City shall consult and coordinate with SunLine and solicit comments and suggestions on bus stops and other public transit facilities and design concepts, including enhanced handicapped access, should be integrated into project designs.
Responsible Agency: Public Works, Planning Department, City Engineer
Schedule: Immediately; Ongoing

Housing Element

INTRODUCTION

The Housing Element was adopted in 2014 and has not be revised in the 2019 General Plan Update but shall be in the 2019-2020 update cycle. Table numbering is also from the 2014 update, and only the "H-" prefix has been added to this version of the element.

CATHEDRAL CITY HOUSING ELEMENT 2014

The Housing Element addresses the housing characteristics and needs of the City, including, but not limited to, a description of existing housing types, condition of existing units, overcrowding, overpayment, homelessness, and the demand for affordable housing in the area. It also offers programs and recommendations for addressing housing needs within the City.

California Government Code requires that every City and County prepare a Housing Element as part of its General Plan. In addition, State law contains specific requirements for the preparation and content of Housing Elements. According to Article 10.6, Section 65580, the Legislature has found that:

(1) The availability of housing is of vital statewide importance, and the early attainment of decent housing and a suitable living environment for every California family is a priority of the highest order.

(2) The early attainment of this goal requires the cooperative participation of government and the private sector in an effort to expand housing opportunities and accommodate the housing needs of Californians of all economic levels.

(3) The provision of housing affordable to low and moderate-income households requires the cooperation of all levels of government.

(4) Local and state governments have a responsibility to use the powers vested in them to facilitate the improvement and development of housing to make adequate provision for the housing needs of all economic segments of the community.

(5) The legislature recognizes that in carrying out this responsibility, each local government also has the responsibility to consider economic, environmental, and fiscal factors and community goals set forth in the General Plan and to cooperate with other local governments, and the state, in addressing regional housing needs. Section 65581 of the Government Code states that the intent of the Legislature in enacting these requirements is:

   (a) To assure that local governments recognize their responsibilities in contributing to the attainment of the State housing goal.
   (b) To assure that cities and counties prepare and implement housing elements which, along with federal and State programs, will move toward attainment of the State housing goal.
   (c) To recognize that each locality is best capable of determining what efforts are required by it to contribute to the attainment of the State housing goal as well as regional housing needs.
   (d) To ensure that each local government cooperates with other local governments to address regional housing needs.

Government Code Section 65583 outlines the required content of all housing elements, including identification and analysis of existing and projected housing needs, and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. Specific requirements include the following:

(1) An assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs. The analysis should include population and employment trends; documentation of household characteristics; inventory of land suitable for residential development; governmental and other constraints to new housing development; analysis of any special housing needs and an assessment of existing affordable housing developments.

(2) A program which sets forth a five-year schedule of actions the local government is undertaking or intends to undertake to implement the policies and achieve the objectives of the housing element in order to meet the housing needs of all economic segments of the community.

CONSISTENCY WITH OTHER GENERAL PLAN ELEMENTS

The Cathedral City General Plan is comprised of four major components: 1) Community Development; 2) Environmental Resources; 3) Environmental Hazards; and 4) Public Services and Facilities. Background information and policy direction presented in one element is also reflected in other General Plan elements. For example, residential development capacities established in the Land Use Element are incorporated into the Housing Element.

This Housing Element builds upon other General Plan elements and is consistent with the policies and proposals set forth by the General Plan. For example, the Land Use Element identifies use designations at densities that will facilitate the provision of a range of residential housing products for all income groups. The Circulation Element plays a role in the location of residential development in relation to roadways, transit, pedestrian, and bicycle facilities. The Noise Element establishes noise levels appropriate for residential uses. Whenever one element of the General Plan is amended, other elements, including the Housing Element, will be reviewed and modified, if necessary, to ensure consistency between elements.

Government Code §65302 requires amendments to the Safety and Conservation elements to include analysis and policies regarding flood hazard and management information upon the next revision of the Housing Element after January 1, 2009. If necessary, amendments to this Housing Element will be processed concurrently in order to maintain consistency between elements.

State law also requires that water and sewer providers grant service priority to new developments with units that are affordable to lower-income households. The Housing Element will be transmitted to these providers upon adoption of the element to ensure that they have up-to-date information regarding the housing needs and objectives in Cathedral City.

Senate Bill 244 of 2011 amended the Government Code and the Water Code to require cities and counties to analyze unincorporated island, fringe and legacy communities and amend the Land Use Element of the General Plan prior to or concurrent with the next update of the Housing Element. This bill also imposes requirements on Local Agency Formation Commissions (LAFCOs) regarding annexations and the analysis of municipal services in disadvantaged unincorporated communities (DUCs). The City is working with Riverside County and LAFCO staff to compile the required information regarding unincorporated communities and the water, sewer and fire protection services in these communities for inclusion in the Land Use Element concurrent with the Housing Element update.

PREVIOUS HOUSING ELEMENT EVALUATION

For purposes of this Housing Element, the term "previous planning period" is defined as the period from July 1, 2008 through October 15, 2013[1]. The previous Housing Element established policies and programs to encourage a balanced range of housing, available to all income levels and household compositions, in quantities sufficient to meet the needs of the community by:

- adding 1,932 units to the housing stock at prices that are affordable to very-low-, low-, and moderate-income households; and

- encouraging a variety of residential development that promotes the availability of housing to all segments of the community, recognizing such factors as: age, income, family size, single-person households, and mobility.

The City's progress in meeting the objectives of the policies and programs set forth during the previous planning period is described in Housing Element Technical Appendix A.

DEMOGRAPHIC BACKGROUND

Housing needs for Cathedral City are based on a comprehensive assessment of current and projected housing needs for all segments of the community and all economic groups. Rising costs and increasing competition for available physical and financial resources make it difficult for some families, especially lower income and special needs families, to find affordable housing. This section of the Housing Element presents the demographic background necessary for the comprehensive analysis of the City's housing needs.

Regional Setting

Cathedral City is located in the Coachella Valley, a subregion of Riverside County. The County encompasses a large portion of Southern California, and over the past two decades has experienced extremely rapid growth. According to Census and Department of Finance data, the County's population increased by 32%, from 1,170,413 in 1990 to 1,545,387 in 2000, and by 44% from 2000 to 2,227,577 in 2012. The incorporated cities of the Coachella Valley generally followed similar trends for population growth within the same time period.

Population

The 2000 U.S. Census estimated Cathedral City's population to be 43,647. Based on recent Department of Finance data, the population in Cathedral City grew by 19% to 51,952 by 2012. This represents an average annual growth rate of approximately 1.6% in the 12-year period between 2000 and 2012.

Ethnic Characteristics

Table H-3 below, shows the ethnic distribution for Cathedral City and Riverside County in 2010.

[1] Under state housing element law, a distinction is made between the "planning period" and the "projection period." The planning period runs from the due date of a housing element to the next due date, while the projection period is the timeframe established by the Regional Housing Needs Assessment (RHNA) for allocating housing growth needs. The previous planning period was originally established as July 1, 2008 to June 30, 2014, but the adoption of SB 375 in 2008 recalibrated housing element cycles to coincide with Regional Transportation Plan updates. SCAG's adoption of the 2012 RTP resulted in the housing element planning period being shortened to end on October 15, 2013 when the 2013-2021 Housing Element update is due.

Table H-3
Ethnic Characteristics 2010

Racial/Ethnic Group	Cathedral City		Riverside County	
	Persons	%	Persons	%
Not Hispanic or Latino	21,115	41%	1,194,384	55%
-White	16,531	32%	869,068	40%
-Black or African American	1,108	2%	130,823	6%
-American Indian/Alaska Native	228	0%	10,931	0%
-Asian	2,449	5%	125,921	6%
-Native Hawaiian/Pacific Islander	47	0%	5,849	0%
-Other races or 2+ races	752	1%	51,792	2%
Hispanic or Latino (any race)	30,085	59%	995,257	45%
Total	51,200	100%	2,189,641	100%

Source: 2010 Census, Table DP-1

Age Distribution

Table H-4 shows the number of persons in various age groups and the percentage of each within the total population for Cathedral City and Riverside County.

Table H-4
Age Distribution – 2010

Age Group	Cathedral City		Riverside County	
	Persons	%	Persons	%
Under 5 years	3,546	7%	162,438	7%
5 to 9 years	3,671	7%	167,065	8%
10 to 14 years	4,024	8%	177,644	8%
15 to 19 years	4,138	8%	187,125	9%
20 to 24 years	3,383	7%	154,572	7%
25 to 29 years	3,129	6%	143,992	7%
30 to 34 years	3,050	6%	138,437	6%
35 to 39 years	3,235	6%	143,926	7%
40 to 44 years	3,534	7%	149,379	7%
45 to 49 years	3,698	7%	152,722	7%
50 to 54 years	3,264	6%	140,016	6%
55 to 59 years	2,658	5%	114,765	5%
60 to 64 years	2,507	5%	98,974	5%
65 to 69 years	2,118	4%	78,495	4%
70 to 74 years	1,841	4%	62,103	3%
75 to 79 years	1,461	3%	49,003	2%
80 to 84 years	1,042	2%	36,793	2%
85 years and over	901	2%	32,192	1%
Total	51,200	100%	2,189,641	100%
Median age	36.0		33.7	

Source: 2010 Census

Household Income

Recent Census data identified a Riverside County median household income of $58,365. The median household income in Cathedral City for the same time period was $45,088, 23% below the median income of Riverside County as a whole (Table H-5).

Table H-5
Median Income

Jurisdiction	Median Income	% of County Median Income
Cathedral City	$45,088	77%
Riverside County	$58,365	100%

Source: U.S. Census, 2007-2011 ACS, Table DP-3

Employment

As shown in Table H-6, a significant proportion (35%) of Cathedral City residents are employed in service-related occupations such as waiters, waitresses and beauticians. Approximately 25% are employed in sales and office-related occupations, and 22% are employed in management and professional occupations. Blue collar occupations such as construction, maintenance, production and transportation occupations constitute approximately 18% of the workforce.

Table H-6
Employment by Occupation

Occupation	Cathedral City	
	Persons	%
Civilian employed population 16 years and over	22,351	100%
Management, business, science, and arts occupations	4,824	22%
Service occupations	7,848	35%
Sales and office occupations	5,651	25%
Natural resources, construction, and maintenance occupations	2,477	11%
Production, transportation, and material moving occupations	1,551	7%

Source: U.S. Census 2006-2010 ACS, Table DP3

Historic Housing Patterns

According to the 2000 Census, there were a total of 17,813 total housing units in Cathedral City as shown in Table H-7 below. It should be noted that approximately 49.3% of all dwelling units were single family homes, and 14.7% were mobile homes, RVs or trailers.

Table H-7
Housing Characteristics – 2000 vs. 2013

	2000		2013	
Unit Type	Number of Units	% Total Units	Number of Units	% Total Units
Single-Family Detached	8,785	49.3%	11,702	55.6%
Single-Family Attached	2,575	14.5%	2,845	13.5%
Multi-Family, 2–4 Units	2,270	12.7%	2,270	10.8%

Table H-7
Housing Characteristics – 2000 vs. 2013

	2000		2013	
Unit Type	**Number of Units**	**% Total Units**	**Number of Units**	**% Total Units**
Multi-Family, 5 or More Units	1,559	8.7%	1,757	8.3%
Mobile home, RV, Trailer, Other	2,624	14.7%	2,476	11.8%
Total	**17,813**	**100.0%**	**21,050**	**100.0%**

Source: 2000 Census; Department of Finance Table E-8, 2013

The Department of Finance (DOF) offers estimates for Cathedral City's 2013 housing characteristics, which are also presented in Table H-7 for comparison. This table shows that the single-family detached portion of the housing stock increased from just under half to 55.6% during this 2000-2013 period, while the proportion represented by other housing types declined slightly.

Vacancy Status

The 2010 Census showed an overall vacancy rate of 19% in Cathedral City. The number of vacant units for each unit type is shown in the table below. As with many communities in the Coachella Valley, a significant number of units are second homes used on a part-time basis. Correcting for these seasonal or recreational units, which are considered vacant by the Census but are not available or used for permanent occupancy, the vacancy rate decreases to 9%. It is also likely that a number of vacant units are bank-owned due to foreclosure.

Table H-9
Vacancy Status

	Cathedral City		Riverside County	
Housing Type	**Units**	**%**	**Units**	**%**
Occupied housing units	17,047	81%	686,260	86%
Owner-occupied housing units	10,769	51%	462,212	58%
Average household size of owner-occupied units	2.81		3.10	
Renter-occupied housing units	6,278	30%	224,048	28%
Average household size of renter-occupied units	3.29		3.22	
Vacant housing units	3,948	19%	114,447	14%
For rent	786	4%	23,547	3%
Rented, not occupied	56	0.3%	1,107	0.1%
For sale only	472	2%	18,417	2%
Sold, not occupied	72	0.3%	3,255	0.4%
For seasonal, recreational, or occasional use	2138	10%	50,538	6%
All other vacants	424	2%	17,583	2%
Homeowner vacancy rate (%)	4.2		3.8	
Rental vacancy rate (%)	11		9.5	
Total housing units	20,995	100%	800,707	100%

Source: 2010 Census, Table DP-1

Overcrowding

The 2010 Census reported that the average household size for renter-occupied units was 3.29 persons and the average household size for owner-occupied units was 2.81 persons in Cathedral City.

Recent Census data estimated the number of households with overcrowding by persons per room. Overcrowding is defined by the Census Bureau as more than 1.01 persons per room. In Cathedral City, there were 499 owner-occupied households that were considered to be overcrowded. For renter occupied units, there were 770 households that were overcrowded in the same time period. These data are shown below:

Table H-10
Overcrowding

Persons Per Room	Owner Households	Renter Households
1.01 to 1.50	415	524
1.51 to 2.00	65	205
2.01 or More	19	41
Total Overcrowded	499	770

Source: Census 2006-2010 ACS, Table B25014

Overpayment

Overpayment is defined as more than 30% of gross household income being dedicated to the cost of housing. Table H-12, below, shows recent overpayment estimates for the City. As seen in this table, lower-income households have a high rate of overpayment, especially those in the extremely-low-income (ELI) category.

Table H-12
Overpayment by Income Level

	Owners		Renters	
Income Category	**Households**	**Percent**	**Households**	**Percent**
Extremely low households	379		645	
Households overpaying	375	98.9%	620	96.1%
Very low households	1,595		2,565	
Households overpaying	1,255	78.7%	2,220	86.5%
Low households	2,080		1,030	
Households overpaying	1,495	71.9%	720	69.9%
Subtotal: All lower-income households	**4,054**		**4,240**	
Subtotal: Households overpaying	**3,125**	**77.1%**	**3,560**	**84.0%**
Moderate households	2,125		935	
Households overpaying	1,330	62.6%	455	48.7%
Above moderate households	4,520		610	
Households overpaying	1,130	25.0%	40	6.6%

Source: U.S. Department of Housing and Urban Development, CHAS, based on the 2006-2008 ACS. Table 15.

HOUSING CHARACTERISTICS

Housing Prices and Affordability

Housing affordability is determined by the ratio of income to housing costs. According to the HCD guidelines for 2013, the area median income (AMI) for a family of four in Riverside County is $65,000. Based on state guidelines, income limits for a four-person family along with rents and estimated sales prices generally considered to be "affordable" are shown in Table H-13.

An affordable housing payment is considered to be no more than 30% of a household's gross income. For rental units, this includes rent plus utilities. Assuming that a potential homebuyer within each income group has acceptable credit, a typical down payment (5% to 10%), and other housing expenses (taxes and insurance), the maximum affordable home price can be estimated for each income group, as seen in Table H-13. Based on the current home prices described below, both low- and moderate-income households would generally be able to purchase a home with a sufficient number of bedrooms to avoid overcrowding. Very-low-income households may be able to purchase a home, but it would most likely be a smaller, older unit or a condominium or mobile home.

Table H-13
Income Categories and Affordable Housing Costs – Riverside County

2013 Areawide Median Income = $65,000	Income Limits	Affordable Rent	Affordable Price (est.)
Extremely Low (<30% AMI)	$20,100	$503	--
Very Low (31-50% AMI)	$33,500	$838	$135,000
Low (51-80% AMI)	$53,600	$1,340	$220,000
Moderate (81-120% AMI)	$78,000	$1,950	$320,000
Above moderate (120%+ AMI)	$78,000+	$1,950+	$320,000+

Assumptions: Based on a family of 4; 30% of gross income for rent or PITI; 5% down payment, 4% interest, 1.25% taxes & insurance
Source: Cal. HCD; J.H. Douglas & Associates

Ownership Housing

According to DataQuick Information Systems, the 2012 median resale single-family home price in Cathedral City was $159,000, which was significantly lower than the median price of $205,000 for Riverside County as a whole. The median resale price for condos was $100,000, also well below the county median of $157,000. Based on these prices, even many lower-income households should be able to find affordable homes.

Rental Housing

The rental housing market in Cathedral City includes apartments, townhomes, mobile homes and single-family homes. Typical rents range from $900 to $1,350 for 2- or 3-bedroom apartments in complexes[2]. Based on Riverside County income limits and current rental rates, low-, and moderate-income households can find affordable market rents in Cathedral City. However, households with very-low or extremely-low incomes face an "affordability gap." Programs to facilitate development of new assisted rental housing and Section 8 vouchers can help to address this gap, and are discussed in the housing programs section of the Housing Element.

Inventory of Lands for Housing

There is a substantial amount of vacant land within the City available for affordable residential development. Table H-15 illustrates lands available in the multiple-family land use designations, as well as City-owned single-family lots proposed for self-help housing. This includes the Resort Residential zone, which has been calculated at a density

[2] Rent.com, accessed 5/29/2013

of 7 units per acre consistent with historical development patterns and zoning regulations; the R-2 zone, which allows 10 units per acre; the R-3 zone, which allows 20 units per acre; and the Downtown Residential Neighborhood and Mixed Use Commercial zones, which both allow up to 36 units per acre, although an average of 27 units per acre has been used to estimate the capacity of these sites.

The following listing demonstrates the typical densities at which projects in the City have been approved.

Crossley/Ramon Road Project: Zoned R-2, this project consists of 29.68, entitled for 294 units, or a density of 10 units per acre.

34260 Corregidor Project: This 4.5 acre property is zoned R-2, and is approved for 13 units per acre, and a total of 60 units.

Landau and Quijo Project: This 6.73 acre parcel in the R-3 zone is approved for 149 units, or a density of 22 units per acre.

Melrose Drive Project: This 0.39 acre site, although small, is approved for 5 units, or a density of 13 units per acre.
A Street/Buddy Rogers Project: This DRN zoned, 2.48 acre parcel is approved for 75 units, or a density of 30 units per acre.

Mary Pickford Project: This MXC site, which consists of 1.31 acres, is approved for 61 units, at a density of 47 units per acre.

In addition, the City has traditionally developed affordable housing projects in the R-2, DRN and MXC zone, as shown in Table H-14, which illustrates the existing affordable housing projects. As shown in the table, the assumptions for density used in Table H-15 are conservative, and are likely to represent an under-counting of the densities at which the available sites will build out.

Table H-14
Existing Affordable Project Density

Project	Zoning	Acreage	Density
Casa Victoria	R-2	1.8 acres	28 d.u./acre
Heritage Park	R-2	5.8	25 d.u./acre
Creekside Apts.	R-2	21	9 d.u./acre
Ocotillo Place Apts.	R-M	8.34	16 d.u./acre
Park David	R-2	10.6	23 d.u./acre
Canyon Vista	R-2	4.88	17 d.u./acre
Casa San Miguel de Allende	DRN	1.15	33 d.u./acre
Tierra del Sol	DRN	2.5	30 d.u./acre
Cathedral Town Villas	MXC	1.31	47 d.u./acre

Finally, assumptions for density in the DRN and MXC zones are feasible because the zones allow both residential and commercial uses, with no requirement for ground floor commercial development. They require a minimum building height of 20 feet and a maximum building height of 55 feet and allow 5-story development with no setback requirements; and with reduced parking requirements. Therefore, even when accounting for surface parking and open space requirements, a density of well over 30 units can be achieved in either zone.

Developers of affordable housing in the City and in the Coachella Valley, including Palm Desert Development and the Coachella Valley Housing Coalition, have stated that densities for their projects are calculated at 14 to 18 units per acre, in order to provide the quality of projects that they strive for. A recent project, the Cathedral Family project (Assessor's Parcel #673-140-010 to -013 & 017 in Table H-15), was approved for 13 units per acre in the R-2 zone.

The project will cost $253,570 per unit. This project, as described below, is funded through a variety of programs, and has been demonstrated to be feasible. The development of affordable units at a density of less than 15 units per acre is therefore feasible in Cathedral City.

As stated below, land cost in Cathedral City ranges from $50,000 to $70,000 per acre. At a density of 10 units per acre, this equates to $5,000 to $7,000 per unit. The affordable housing community estimates that construction costs for affordable housing units are approximately $250,000 to $325,000. When added to land cost, this represents a total cost per unit of $255,000 to $337,000 per unit. Projects in this cost range can be funded, when including HOME funds, tax credit funds or other programs, and built in the range of 14 to 16 units per acre. Most importantly, the affordable housing community has indicated that projects above this range are not marketable, insofar as more dense projects cannot be built and include the amenities and common areas which make a project a liveable community for the families who are looking for rental units. The Coachella Valley Housing Coalition and Palm Desert Development, which attended the City's workshops, clearly stated that they will not plan projects at densities over 16 units per acre, since the higher densities do not allow them to create communities which they can lease, because they cannot provide the services and amenities which create a healthy living environment.

Small lots included in the inventory in the Downtown area are adjacent to each other, and could benefit from lot consolidation. A program has been added to encourage lot consolidation.

Appendix B contains the maps for all lands listed in Table H-15.

As shown in Table H-15, there is current realistic capacity for 2,467 total additional units. The City has a RHNA allocation of 236 units for low-, very-low- and extremely-low-income units. The inventory of sites could accommodate 1,561 lower-income units in the DRN, MXC, MF-2 and R-3 zones, which exceeds the lower-income RHNA allocation by a substantial margin. Seven of the sites in the Mixed Use area are one acre or more in size and allow a density of 36 units/acre, which exceeds the "default density" of 30 units/acre in Riverside County. The estimated capacity of these large sites is 586 units based on a conservative realistic density of 27 units/acre, which is more than double the lower-income RHNA of 236 units for this planning period.

Table H-15
Inventory of Available Vacant Land

Description	GP/Zone	Permitted Density	Realistic Density	Site Acreage	Potential Units
Lower-Income Sites					
687-195-002 to 010 & -012	DTC/DRN	36	27	1.11	29
687-475-001	DTC/MXC	36	27	1.81	48
687-180-005	DTC/DRN	36	27	6.67	180
687-500-001	DTC/DRN	36	27	4.26	115
687-500-018	DTC/DRN	36	27	5.89	159
687-500-003	DTC/DRN	36	27	1.07	28
687-198-001 to -006	DTC/DRN	36	27	1.0	27
Subtotal – Sites allowing >30 du/ac				**21.81**	**586**
687-085-005	DTC/DRN	20	20	0.25	5
687-085-006	DTC/DRN	20	20	0.24	5
687-092-002	DTC/DRN	20	20	0.24	5
687-101-007	DTC/DRN	20	20	0.38	7
687-096-003	DTC/DRN	20	20	0.32	6
687-193-003	DTC/MXC	20	20	0.2	4
687-193-004	DTC/MXC	20	20	0.18	3
687-197-004 to-007 & -016	DTC/DRN	27	27	0.72	19
687-198-014 & -015	DTC/DRN	20	20	0.25	5
687-475-002	DTC/MXC	20	20	0.34	6

Table H-15
Inventory of Available Vacant Land

Description	GP/Zone	Permitted Density	Realistic Density	Site Acreage	Potential Units
687-170-007	DTC/MXC	20	20	0.48	9
687-472-005	DTC/MXC	27	27	0.54	14
687-473-008	DTC/MXC	27	27	0.67	18
687-213-001, 003, 004, 007, 008 & 010	DTC/DRN	27	27	0.63	17
687-215-001 to -004	DTC/DRN	20	20	0.44	9
687-203-019 & -020	DTC/MXC	20	20	0.24	5
687-203-010 & -011	DTC/DRN	20	20	0.34	7
687-196-001 to -006	DTC/MXC	27	27	0.67	18
680-260-025	RH/R-3	20	20	0.89	17
680-260-031	RH/R-3	20	20	3.58	71
680-260-032	RH/R-3	20	20	3.58	71
677-050-17	RH/MF-2	20	20	18.1	362
677-050-18	RH/MF-2	20	20	14.6	292
Subtotals – Other lower-income sites					**975**
Moderate-Income Sites					
City-owned duplex lots	RM/R-2	10		Varies	10
680-190-035	RM/R-2	10	10	7.43	74
677-410-009	RM/R-2	10	10	7.5	75
677-420-016*	RM/R-2	10	28	10.5	294
687-040-057	RM/R-2	10	10	16.72	167
677-173-039**	RM/R-3	10	22.1	6.73	149
Subtotals – Moderate-income sites					**769**
Above-Moderate-Income Sites					
681-310-031	RR/RR	6.5	6.8	2.35	16
681-310-011	RR/RR	6.5	7.2	2.5	17
681-310-014	RR/RR	6.5	7	5	35
681-210-016	RR/RR	6.5	7.2	2.5	17
City Owned SF Lots	RL/R-1	4.5		Varies	52
Subtotals Above-moderate-income sites					**137**
Total Units					**2,467**

City Owned Duplex Lots

The Housing Successor Agency owns five parcels zoned for duplex development, which it plans to sell for the development of income-restricted duplexes. These parcels are: AP Nos. 675-271-036, 675-271-037, 675-271-040, 675-271-041, and 675-271-042.

City Owned Single Family Lots

The Successor Agency also owns individual lots in the R-1 zone, which it plans to develop as infill affordable housing. These parcels include oversized lots which are currently being subdivided, and have an estimated capacity of 52 affordable homes, however these parcels have been tabulated in the above-moderate category in Table 15 due to the low density of these potential units.

Single Family Residential Potential

In addition to the parcels listed in Table H-15, there are an additional 800.62 acres of R-1 zoned vacant lands in the City which can accommodate single family residential development for the Above Moderate land use category during the planning period. At the maximum allowable density for the R-1 zone, this could yield approximately 4,804 units.

North City Specific Plan

In 2007, Cathedral City annexed over 1,300 acres into the City's limits north of Interstate 10. A specific plan, known as the North City Specific Plan, was adopted in 2009. The specific plan includes not only the lands recently annexed, but lands which have been in the City's corporate limits, and totals 5,000 acres. The Plan estimates the maximum residential buildout potential to be approximately 16,000 dwelling units.

As proposed, the North City Specific Plan will provide for a wide range of residential opportunities, such as a diversity of residential densities, including but not limited to residential estates (RE) at 2 units to the acre and Mixed Use - Urban (MU-U), which allows up to 45 units to the acre.

It should be noted that development is currently constrained by the limited availability of infrastructure in this area. The City is working to extend and expand the availability and capacity of service systems to facilitate development of this important new area. It can be expected that the North City Specific Plan area will begin to develop in this planning period, but that its greatest development activity will occur toward the end of this time frame. As demonstrated in Table H-15, above, however, the City has adequate development sites available for affordable housing in the existing core of the City, and the North City area will not be required to meet its housing needs.

Table H-16 below summarizes the City's residential land inventory compared to the Regional Housing Needs Assessment for the 2014-2021 period. The realistic capacity of vacant parcels exceeds the RHNA allocation for all income categories.

Table H-16
Residential Land Inventory Summary

	Income Category		
	Lower	**Mod**	**Above Mod**
Vacant parcels	1,561	769	137
RHNA 2014-2021	236	110	254
Adequate Sites?	**Yes**	**Yes**	**Yes***

Source: City of Cathedral City, 2013
*Reflects surplus of moderate-income sites

Age and Condition of Housing Stock

The age of housing is an important characteristic of the housing stock, indicating the relative condition of housing units. Most homes have a useful life of approximately twenty to thirty years. After that time, the need for maintenance and rehabilitation becomes critical if the dwelling unit is to remain safe and sanitary.

According to recent Census data, about 26% of the houses in Cathedral City were built prior to 1980, as demonstrated in the Table below.

Table H-16
Age of Housing Units

	Cathedral City		Riverside County	
Year Built	**Units**	**%**	**Units**	**%**
Built 2005 or later	896	4%	21,184	2%
Built 2000 to 2004	3,969	18%	63,957	6%
Built 1990 to 1999	3,987	18%	120,798	12%
Built 1980 to 1989	7,332	34%	167,031	16%

Table H-16
Age of Housing Units

Year Built	Cathedral City		Riverside County	
	Units	%	Units	%
Built 1970 to 1979	2,757	13%	262,455	25%
Built 1960 to 1969	1,757	8%	215,213	21%
Built 1950 to 1959	863	4%	138,061	13%
Built 1940 to 1949	120	1%	26,745	3%
Built 1939 or earlier	144	1%	26,810	3%
Total units	21,825	100%	1,042,254	100%

Source: Census 2006-2010 ACS, Table DP-4

Generally, the oldest homes, built before 1940, were built in the Downtown area. Homes built between 1940 and 1949 occur in the Cove. Homes built from 1950 to 1959 occur in the Downtown, Cove and Outpost neighborhoods; and homes built from 1960 to 1969 occur in the Dream Homes, Outpost, and Cove neighborhoods. From 1970 to the present, the distribution of construction has been more widespread throughout the City, and represents both the construction of in-fill lots in existing subdivisions, as well as new tracts constructed north of Ramon Road.

The City's Code Compliance Division responds to complaints and issues orders for property abatement. Property owners are referred to City staff for information regarding programs that provide rehabilitation assistance, particularly for lower-income owners. Prior to the statewide elimination of redevelopment agencies, the Agency provided assistance to lower-income homeowners in carrying out needed repairs, but this source of funding is no longer available. According to knowledgeable Code Compliance and Building Department staff, it is estimated that of those housing units built prior to 1980 approximately 15% (850 units) of are in need of rehabilitation and of those, less than 2% (20 units) are so deteriorated that replacement is needed.

RESTRICTED HOUSING PROJECTS[3]

The City of Cathedral City has a number of affordable housing options within its boundaries. These include the following:

Built Prior to 1998

Mountain View Apartments
This 280 unit project is located at 68-680 Dinah Shore Drive. The project was completed in three phases completely financed with a FmHA 515 loan. The project was built in 1982, and refinanced in 1997. The complex is restricted to seniors 62 years of age or older, unless disabled or handicapped. Rent is restricted to 30% of the renter's income, and water and trash services are included in the price of rent. The units are restricted to very low and low income households.

Corregidor Apartments
This 14 unit project restricted to very low income families was built in 1985 using LPRH housing funds. This project site is owned by the Riverside County Housing Authority and is located at 34-355 Corregidor Drive.

[3] "City of Cathedral City: Affordable Housing Locations for the Coachella Valley 2006," assistance programs for the Coachella Valley, September 2008.

Cathedral Palms Apartments
This 231 unit project is located at 31750 Landau Boulevard. The project was originally constructed in 1968 and substantially rehabilitated in 1997, using bonds and RDA set aside funds. The project offers 191 studios and 40 two-bedroom apartments to low-income seniors (over 55). Utilities are provided, including water, gas, cable, and domestic trash services.

Terracina Apartments
This project provides 80 units to low- and moderate-income families consisting of 1 one-bedroom unit, 47 two-bedroom units, 30 three-bedroom units, and 2 four-bedroom units. It is located at 69-175 Converse Road and was built in 1994. This project was at risk of conversion to market-rate and the Redevelopment Agency provided assistance to ensure continued affordability for an additional 55 years.

CVHC Duplex Conversion Project
In 1997-1999 the Redevelopment Agency cooperated with the Coachella Valley Housing Coalition to acquire 16 bank-owned duplexes (originally constructed in the 1980's) and convert the units into 32 affordable, single-family, owner-occupied homes through a self-help program, with the families rehabilitating and converting the homes as part of the down-payment at an affordable purchase price.

Built During the 1998-2005 Planning Period

Casa Victoria
Casa Victoria is a 50 unit project opened in 1999 using HUD 202 funds. This project provides housing for low-income seniors over 62 years of age. Rent is restricted to 30% of their income, and utility allowances are offered. The apartment complex is located at 34-445 Corregidor Drive.

Heritage Park
Contains 153 units within a two-story complex, including 144 one-bedroom units and 7 two-bedroom units and two management units. This project provides housing for low-income seniors over 55 years of age. Water and trash services are included. The project is located at 69-100 McCallum Way.

Creekside Apartments
Consists of 185 units within a one and two-story complex. There are 41 two-bedroom units, 104 three-bedroom units, and 40 four-bedroom units. This project provides housing for low and very low income families. Water and trash services are included. The project is located at 68-200 33rd Avenue.

Ocotillo Place
Provides 135 apartments, of which 108 units are for moderate to high income tenants, and 27 units are for very low income tenants. The low income units were acquired using bond financing from CSCDA. The project is located at 69155 Dinah Shore Drive, and was acquired and substantially rehabilitated using a bond issue in 1998. One and two-bedroom units are offered, and tenants pay a small portion of the water and gas bill.

Park David Apartments
This 240 unit apartment project for low income seniors (over 55) is located at 27-700 Landau Boulevard. The project contains 120 one-bedroom units and 120 two-bedroom units, and does not supplement any utilities for residents. The complex offers 20% of the units to very low income seniors and 80% to low income seniors, became operational in 2000.

Canyon Vista Apartments
This family project offers 90 units, including 9 unrestricted, 37 moderate income, 37 low income, and 9 very low income units. It is located at 68-605 Corral Road.

Casa San Miguel de Allende
This two-story 39 unit project is located in multiple buildings on and around Melrose Drive in the Cove neighborhood, south of East Palm Canyon Drive. The project is restricted to very low income disabled persons. It was opened in 1998, using HOME, RDA, HOPWA, and CDBG funds.

Built During the 2006-2013 Planning Period

Tierra del Sol
This project was under construction in 2007 and operational in July of 2008. It provides 75 one-bedroom units to very low income senior households over the age of 62. It was primarily funded with local and HUD 202 funding and rents are 30% of the tenants' income. Tierra del Sol provides gas for hot water. It is located at 37101 W. Buddy Rogers Avenue.

Cathedral Town Villas
Located at 36-700 Pickfair Street, this 61 unit apartment complex offers non-age restricted housing to moderate income families. The project was completed in 2006 and occupied in 2007.

AFFORDABLE HOUSING PROGRAMS

Self-Help Housing
The Coachella Valley Housing Coalition, Building Horizons, private developers, and Habitat for Humanity have completed 60 new single-family homes for very-low- and low-income buyers in the City of Cathedral City. The down-payment is for these homes was earned through "sweat equity," which is defined as the recipients' participation in the construction of the home. Loans that are below the market interest rates are available for such buyers.

Mobile Home Parks
The Department of Finance estimates that there were 2,476 mobile homes, RV's, or trailers in the City as of January 1, 2013. According to the 2013 operating permits for Mobile Home Parks, there are 2,120 mobile home spaces and 286 resort vehicle spaces, for a total of 2,406 mobile home and RV spaces. Traditionally, mobile home parks have provided affordable housing opportunities, particularly for senior citizens. In Cathedral City, 770 spaces within the existing mobile home parks are under the potential purview of the City's rent control ordinance.

Per state law, the City allows mobile homes and manufactured housing in parks or subdivisions, and also on residential lots in the R-1 and R-2 zones, subject to Building Code requirements.

City Programs
The following City programs provide housing assistance to eligible residents.

Sewer Hook-Up Assistance Redevelopment Program
This program is available to pay up to $3,000 of the hook-up fees for low or moderate-income households whose septic system fails. The City's current maximum is $4,210 in the Cove neighborhood. The program can also pay up to 100% of the cost of labor and materials for abandoning the septic and connecting to sewer. Repayment at the time of a future sale is without interest.

County Programs
As a participating city, Cathedral City's Office of Housing Assistance cooperates with numerous County programs to provide rental assistance and to encourage the construction of new affordable housing. The programs discussed below are available to qualified Cathedral City residents.

Section 8 Housing Assistance
Housing assistance is offered to low-income families who wish to live in privately owned multi-family developments that have been rehabilitated or upgraded. Once eligibility is confirmed, the family is given a choice of available sites from which to choose. They are expected to pay between 30% and 40% of their income.

The Riverside County Housing Authority provides HUD Section 8 rental assistance to lower income renters within the City. Since Section 8 vouchers are "portable" the number of households using vouchers in the City fluctuates over time.

EDA Senior Home Repair Program

Lower-income homeowners or mobile home owners of 62 years of age or older can qualify for grants of up to $6,000 to improve or repair their property. Funds can be used for minor repairs and/or one time major repairs. To be eligible for this program, recipients must own their own home and meet the requirement of the low-income category.

Fair Housing Programs

The City has an agreement with the County of Riverside to provide anti-discrimination, landlord-tenant mediation, fair housing training and technical assistance, enforcement of housing rights, administrative hearings, home buyer workshops, lead-based paint programs, and other housing related services for Cathedral City residents. Services are designed to implement fair housing policies and procedures and to provide information concerning fair housing rights and minority rights under existing fair housing laws, which include providing housing opportunities for all persons regardless of race, color, national origin, religion, sex, familial status, disability, ancestry, marital status, or any other arbitrary factors.

Home Rehabilitation Program

The County program allows loans of up to $20,000 for home improvements for qualifying lower income home owners.

First Time Homebuyer Program

This program offers qualified first-time home buyers financial assistance for a down payment and closing costs on a newly purchased home. Assistance is provided to lower-income persons. The amount of assistance offered depends on the buyer's qualifications and the price of the home. Generally, assistance for a down payment is less than 20% of the cost of the home, and assistance for closing costs is up to 6% of the purchase price, or $10,000. Currently (March 2008), the County does not have funds to support this program, but additional fund were made available from federal NSP-funded programs and from Mortgage Credit Certificates in 2009.

FUTURE HOUSING NEEDS - RHNA

Each city is required to analyze existing and projected housing needs and develop an implementation program to describe how the City will attain its housing goals. In addition, the projected housing need must include a locality's fair share of regional housing needs. In 2012, the Southern California Association of Governments (SCAG) approved the Regional Housing Needs Assessment (RHNA) for the 2014-2021 period. The City of Cathedral City's allocation under the RHNA is depicted below.

Table H-19
Cathedral City RHNA Allocation 2014-2021

Income Category	Number of Units
Above Moderate	254
Moderate	110
Low	95
Very Low	70
Extremely Low*	71
Total	**600**

Source: SCAG 2012
*50% of the Very Low income category pursuant to state law.

Carryover of Unaccommodated Need from the Previous Planning Period

The prior Housing Element, adopted in 2009, included Program 1.A.7 to rezone either Assessor's Parcel 677-050-017, which consists of 14.69 acres or Assessor's Parcel 677-050-018, which consists of 18.12 acres, to create additional capacity for lower-income housing. Since this program was not completed, this program must be carried over into the new planning period. Pursuant to Government Code Section 65583.2(h), the rezoned site will allow rental and owner multifamily uses by right and require a minimum density of 20 units per acre.

Quantified Objectives

As mentioned above, a number of housing units in the City are of older construction, and require either rehabilitation or conservation in order to be maintained as viable dwelling units. As such, the City had implemented programs funded by its former Redevelopment Agency to provide funding and assistance in the rehabilitation of housing units. Areas of particular concern continue to include the areas on the edge of the Downtown, the Whitewater neighborhood, the neighborhood north of Dinah Shore Drive and west of Date Palm Drive, and the Dream Homes neighborhood. However, these programs are no longer available due to the statewide dissolution of redevelopment agencies.

Table H-20
Quantified Objectives (2013-2021)

Category	Extremely Low	Very Low	Low	Moderate	Above Moderate	Total
New Construction	71	70	95	110	254	**600**
Rehabilitation	60	60	120	120		**360**
Conservation	15	15	50			**80**

Affordable Units at Risk

Tables H-21 and H-22 identify affordable housing units within the City. The tables indicate that 280 rental units in the Mountain View Apartment complex could be released from their restricted status before 2015. In 1994 financing for this project was changed from the FmHA loan (515) to a USDA Rural Development Loan which allows for affordability controls through 2034. However, after 2014 the loan could be pre-paid, which could remove the affordability control.

Should the project elect to pre-pay its loan, a number of organizations, including the Coachella Valley Housing Coalition, the Riverside County Housing Authority, or several private sector developers who currently operate affordable housing projects in the City, would be contacted and encouraged to participate in the project's preservation as affordable housing. Based on the City's most recently obtained pro-formas for affordable housing projects, construction costs for replacement of these units would be between $240,000 and $325,000 per unit. Purchasing existing affordable units in the area currently is approximately $100,000 to $130,000 per unit. Therefore, the preservation of these units is important to the City's affordable housing inventory. Program 2.A.3 describes actions the City will take to facilitate the preservation of affordability covenants for this project.

Table H-21
Restricted Affordable Rental Housing

Rental Housing Project	Units	Affordable to:	Earliest Release	Primary Subsidy Type
Mountain View Apts 68-680 Dinah Shore Dr.	280 1-bedroom	Very low income seniors	2014	USDA Rural Development Loan
Corregidor Apartments 34-355 Corregidor Dr.	14 2 bedroom	Very low income families	None	Owned by County Housing Authority
Terracina Apartments 69-175 Converse Road	80 2,4-bedrooms	Low income families	2052	Tax Credits & HOME
Cathedral Palms	231 Studio &	Very low income	2052	AHP, HOME, &

Table H-21
Restricted Affordable Rental Housing

Rental Housing Project	Units	Affordable to:	Earliest Release	Primary Subsidy Type
31750 Landau Blvd	1-bedrooms	seniors		RDA set-aside
Ocotillo Place 69155 Dinah Shore Dr.	135 1,2-bedrooms	Low, moderate income	2027	RDA restricted & Tax Credits
Casa Victoria Apts. 34475 Corregidor Dr.	49 1-bedroom + manager	Very low income seniors	2052	HUD 202 & RDA restrictions
Casas San Miguel de Allende 37155 Palo Verde, 68375 Tahquitz Drive, and 37095 Melrose	36 Studios & 2 1-bedrooms	Special needs and disabled	2053	HOPWA, HOME, Tax Credits, Supportive Housing Program, CDBG & RDA set-aside
Heritage Park 69-100 McCallum Way	144 1-bedroom 8 2-bedroom	Low income seniors	2059	Tax Credits, HOME, & RDA set-aside
Creekside Apartments 68-200 33rd Avenue	41 2-bedroom 104 3-bedroom 40 4-bedroom	Lower income families	2059	Tax Credits, HOME, AHP, & RDA set-aside
Park David Apts. 27-700 Landau Blvd	120 1-bedroom 120 2-bedrooms	Lower income seniors	2055	Tax Credits & RDA set-aside
Canyon Vista Apts. 68605 Corral Road	81 units	Moderate and lower income	2056	Tax Credits & RDA set-aside
Cathedral Towne Villas 36-700 Pickfair St.	61 1, 2-bedrooms	Moderate Income families	2061	RDA set-aside
Tierra del Sol 37101 W Buddy Rogers Ave.	75 1-bedroom	Lower income families and seniors	2063	HUD 202, HOME & RDA set-aside

Source: Cathedral City Office of Housing Assistance, 2013

Table H-22
Restricted Affordable Owner-Occupied Units

Owner-Occupied Housing	Units	Income Category	Earliest Release	Type of Subsidy
30 to 45 year Covenant with resale restrictions	450	Very low to moderate income	2025 or at pay-off	RDA – CHIP loans/grants
30 year Habitat for Humanity Housing	7	Very low income	2025	RDA Habitat grants
30 year Covenant with resale restrictions CVHC conversion	32	Very low to low income	2025	Home Grant & RDA silent second
30 year Covenant on self-help homes	13	Very low income	2025	RDA/Silent Second
30 year Covenant on 1st Time Homebuyer grant	29	Very low and low income	2027	RDA Grant

Source: Cathedral City Office of Housing Assistance,2013

POTENTIAL CONSTRAINTS TO THE DEVELOPMENT OF HOUSING

Governmental Constraints

This section of the Housing Element examines the potential governmental constraints imposed by the City in the form of zoning, fees, and other restrictions, and determines whether these are constraints to the provision of housing.

Allowable Residential Uses

Housing Element law specifies that jurisdictions must identify adequate sites to be made available through appropriate zoning and development standards to encourage the development of a variety of types of housing for all income levels and for persons with special needs, including single- and multi-family units, mobile homes, care facilities, senior housing, emergency shelters, and transitional and supportive housing. Table H-23a summarizes the various housing types that are permitted within Cathedral City's residential zone districts.

Table H-23a
Allowable Residential Uses by Zoning District

Housing Type	RE	R1	R2	RM	R3	RH	RR	DRN
Single Family Dwelling	P	P	P	P	-	-	C	-
Two Family Dwelling	-	-	P	P	-	-	C	-
Multi-Family Dwelling	-	-	P	P	P	P	C	P
Mobilehome Park	-	-	C	C	-	-	-	-
Boarding House	-	-	C	C	C	C	-	-
Small Residential Care Facility (up to 6)	P	P	P	P	P	P	C	P
Large Residential Care Facility (7+)	-	-	C	C	C	C	-	-

Source: City of Cathedral City Zoning Ordinance, 2013. P= Permitted, C=Conditionally Permitted, --= Not Permitted

Development Standards

The City's Zoning Ordinance regulates a wide range of development standards, including building height, lot size, and setbacks. The requirements of the City's Zoning Ordinance are listed in the Table below.

Table H-23b
Residential Standards

Standard	**R-1**	**R-2**	**RM**	**R-3**	**RH**	**RR**	DRN**	MXC**
Units/Acre	4.5	10	10	20	20	6.5	**20-36**	**20-36**
Lot Area	7,200 s.f.	8,000 s.f.	20,000 s.f.	30,000 s.f.	40,000 s.f.	2.5 ac.	**N/A**	**N/A**
Building Lot Coverage	40%	50%	60%	60%	65%	40%	**N/A**	**N/A**
Setbacks: Front Side Rear	 20 5/10 15	 15 5/10 15	 15 10/15 10	 15 15 15	 15 15 15	 10 N/A N/A	 **10** **0** **N/A**	 **10** **0** **N/A**
Private Outdoor Living Space	N/A	80 s.f./unit	400 s.f./unit	300 s.f./unit	300 s.f./unit	Varies	**Varies**	**Varies**
Building Height	26 ft.	26 ft.	26 ft.	35 ft.	35 ft.	Varies	**Varies**	**Varies**
Parking*	2	2	1.5	1.5	1.5	1.5	**1-2**	**1-2**

Source: Cathedral City Zoning Ordinance, 2013
*Parking represents total parking requirement. The City has no requirement for additional guest parking.
**Density in the DRN and MXC zones is based on parcel size. For lots of 10,000 to 20,999 square feet, a density of 20 units/acre is permitted; for lots of 21,000 to 41,999 square feet, a density of 27 units/acre is allowed; and for lots of more than 42,000 square feet, a density of 36 units/acre is allowed.

The standards described above are consistent with, or more liberal than, many other Coachella Valley cities and do not pose a constraint to the development of housing.

Fees

The City's Planning and Building Division fee schedules have been established as enterprise funds, to recapture the City's cost of processing the applications. The time spent on each application is tracked, and deposits returned to the developer if the time is not spent on the application. As such, fees imposed by the City are reasonable and do not represent a significant impact on the cost of construction. Fees for plan check and building permits are based upon the valuation of the structure, as is consistent in most communities in California. City development fees are listed in Table H-24a, and represent a total cost of about $8,000 for a typical single-family housing and about $4,100 for a typical apartment unit. The City's impact fees are considerably less than surrounding jurisdictions and do not represent a constraint to development.

Table H-24a
Estimated Development Fees

Fee Type	Single Family[1]	Multi-Family[2]
Plan check	$675	$136
Building Permit	$1,038	$220
Police/Fire	$600	$100
General Plan	$108	$45
Utility undergrounding	$311	$99
Electrical	$115	$50
Mechanical	$51	$40
Plumbing	$128	$40
School Fees	$7,121	$2,264
Development impact fee	$1,850	$1,850
T.U.M.F	$1,837	$1,277
Transit development	--	$13
M.S.H.C.P.	$1,278	$230
Total (per unit)	$15,112	$6,364

Per-unit cost based on:
1. 2,076 square-foot single-family house
2. Based on a 75-unit apartment project with 660-sq.ft avg. unit size

Source: Cathedral City Building Department, 2013

Permit Processing

The City requires Design Review approval for all multi-family projects, which can be processed concurrently with any other permit which might be required. Projects with five or fewer units are approved administratively by staff with no public hearing, while larger projects are approved by the Planning Commission. In the Mixed Use Commercial Zone, multi-family residential projects require a conditional use permit, which includes a design review component.

Site plans are circulated to the Fire Department, Police Department, Engineering Department and others for comment on the technical requirements of the proposal. The Police Department reviews all multi-family projects in accordance with Crime-Free Housing principles. The provision of adequate security assures a livable community by employing neighborhood watch, clear sight distances and similar techniques to assure a safe environment. The requirements do not represent a constraint on the construction of affordable housing as they do not have a financial impact on projects.

In the prior planning cycle the City simplified the review process by eliminating the Architectural Review Committee, which previously reviewed Design Review applications and made recommendations to the Planning Commission. In its place, the Planning Commission established an Architectural Review Subcommittee comprised of three members of the Planning Commission, which reviews the design of projects as part of the Planning Commission review process. The Architectural Review Subcommittee only reviews projects that require Planning Commission action, and the Subcommittee typically conducts its review on the same day as the item is agendized for action by the Planning Commission so as not to extend the review timeline.

Design Review is a simple analysis which assures that the project's design meets the requirements of the zone in which it occurs. The review focuses on the physical characteristics of the proposed development and not the appropriateness of the use itself. If public notice is required, advertising and mailings are made 10 days prior to a public hearing. The average processing time for a typical application requiring design review is 3 to 4 months, which is generally less than many Valley cities, and does not represent a constraint to the cost or supply of housing. Per state law, subdivisions require City Council approval, which typically adds one or two months to the approval process. Individual single-family homes and other minor requests do not require design review approval, and are checked by the Planning Division as part of the usual building plan checking process. Processing time for these ministerial approvals is typically one month. Table H-24b summarizes the land use decision-making authority in Cathedral City.

Table H-24b
Land Use Decision-Making Authority

Approval Type	Decision-Maker				Estimated Processing Time
	Staff	Architectural Review Subcommittee	Planning Commission	City Council	
Single-family detached	D				1 month
Single-family subdivision	R		R	D	5-6 months
Multi-family (5 or fewer units)	D				1 month
Multi-family (6+ units)	R	R	D		3-4 months
Mixed Use	R	R	D		3-4 months

R – Recommendation D – Decision
Processing time assumes project is consistent with General Plan and zoning

Code Compliance
The City's Code Compliance efforts are operated through its Police Department. A land owner is generally warned three times of a violation prior to the initiation of a citation and associated court action. The City's Code Compliance Division makes every effort to give as much time as possible to a violator to correct the problem. Depending on the severity of the offense, a warning will be accompanied with a deadline of 10 to 30 days for rectification. The Code Compliance Division also actively participates in assisting low-income households in improving their properties through the CHIP and DHRP programs.

Non-Governmental Constraints

This section addresses the potential constraints not generated by governmental entities, including land costs, construction costs, financing costs, speculation, availability of infrastructure, and physical constraints.

Construction Costs
Construction costs have decreased in recent years due to the effects of the recession, and competitive bidding has forced a retrenching of cost estimates. The City has traditionally been somewhat lower in the cost of new home construction when compared to other Valley cities. In recent years, homes have cost between $150 and $250 per square foot to construct, depending on amenities and finishes.

Building costs do not appear to be unduly increased through local building codes. However, state regulations with respect to energy conservation, though perhaps cost effective in the long run, may add to initial construction costs. Building codes regulate new construction and substantial rehabilitation. They are designed to ensure that adequate standards are met to protect against fire, collapse, unsanitary conditions, and safety hazards. The City has adopted the 2010 edition of the California Building Code, which is typical of all local jurisdictions in California.

Land Costs

Land costs include the costs of raw land, site improvements, and all costs associated with obtaining government approvals. Fully-developed, ready-to-build single-family lots are currently available at prices ranging from $70,000 to $90,000, depending on the size and location. The 2012 median sales price for existing homes as reported by DataQuick was $159,000 for single-family detached houses and $100,000 for condominiums.

Financing Costs

Financing costs impact both the purchase price of the unit and the home buyer's ability to purchase. Interest rates fluctuate in response to national factors. Although mortgage interest rates are at historic lows, the economic conditions have resulted in lending restrictions, making it difficult for some people to obtain the necessary credit in order to qualify for loans. Financing costs in Cathedral City are equivalent to those in other communities throughout California.

Foreclosures

The "Great Recession" has caused significant foreclosures throughout the Valley. This condition has the potential to affect neighborhoods as foreclosed properties are not generally maintained, and can affect surrounding property values. Conversely, they can present an opportunity for stable households, insofar as foreclosures are often priced below market rates, and can represent an affordable alternative for a moderate income household. As the economy has begun to improve, foreclosure rates have dropped.

Infrastructure

The City's development patterns have resulted in the construction of major arterials and infrastructure throughout the City. The exception is the newly annexed North City area that will require extension and expansion of infrastructure to facilitate development.

The City requires, as do all communities in California, that a developer be responsible for all on-site improvements, and meet the standards established in the City's Zoning Ordinance. Off-site improvements, should they be required, are also the responsibility of the developer. If a public street is required, the developer will be responsible for a half width improvement, including curb, gutter and sidewalk, as is typical in most communities. Minimum street right-of-way (total) is normally 60 feet and minimum curb-to-curb pavement width is typically 36 feet. Since most of the city's major streets have been improved to their ultimate right-of-way, development of residential projects will generally only require the improvement of local or collector streets.

Pursuant to SB 1087, the Desert Water Agency and the Coachella Valley Water District shall be provided the adopted Housing Element, and will be required to establish specific procedures to grant priority service to affordable projects. As most water and sewer services are installed in most neighborhoods in the City, including newly installed sanitary sewer systems in the Cove, 35th Avenue, and Dream Homes neighborhoods, the City's water and sewer providers will not be constrained in providing services in most areas of the City. Portions of the developed Whitewater, Pomegranate and Papaya neighborhoods are the only areas of the developed City not currently served by the sewer system, but do operate on septic tanks. Both Desert Water Agency and the Coachella Valley Water District have approved Urban Water Management Plans, which were developed based on the City's General Plan build out, and state that both water providers have sufficient supplies available to meet the City's build out demands.

Physical Constraints

Most of the area south of I-10 poses few physical constraints to development. The land is flat, urbanized, and the soils are suitable for urban uses. Areas north of the freeway are subject to physical constraints such as steep slopes, lack of infrastructure and flooding. High wind conditions in the northern portion of the City make it difficult to

maintain wood fences and the cost of block walls increases the cost of housing. Environmental constraints and physical constraints to development are further addressed in the Environmental Resources and the Environmental Hazards Element of the General Plan.

Energy Conservation

Title 24 of the California Building Code requires energy efficiency in all new construction of housing though design features, insulation, and active solar devices. The City applies the requirements of Title 24 to new housing developments, as is typical of most communities in California. The City also encourages the implementation of energy conservation measures through design, including shade structures for eastern and western exposures, and the provision for shade trees and reduction in asphalt areas to protect against solar heating during summer months.

The City has taken proactive measures to reduce energy consumption. The City is also working on green building programs for affordable housing projects, although no established protocols have yet been developed. The City requires that all affordable housing proposals requesting assistance include green construction techniques and materials in their development plans.

The City will continue to balance the cost associated with green building with the long-term savings to the residents to assure that green construction is employed wherever possible. Pressures in the marketplace from renters and buyers will also control the market for this type of residential product in the future.

Water Conservation

Cathedral City is served by two water agencies: the Coachella Valley Water District (CVWD) and Desert Water Agency (DWA). Both offer incentives for the conservation of water. Landscaping in the desert environment, especially turf, can demand a large quantity of water. In order to regulate unnecessary water consumption, the City and the water agencies have established water-efficient guidelines, incentives, and landscaping ordinances. Reducing water use on landscaping can be accomplished through the use of xeriscape landscaping, which utilizes drought-resistant plant species, and features that require no irrigation. Reduced water consumption can also be accomplished through the use of water-efficient appliances, faucets, and irrigation systems. Although certain water-efficient appliances and technologies may result in slightly higher initial costs, they are not expected to represent a significant constraint to affordable housing. In fact, many water-efficient appliances and watering techniques may actually reduce monthly bills since less water is used.

SPECIAL HOUSING NEEDS

This Section addresses those households or segments of the population that may have identifiable special housing needs because of occupation, income, health, or physical challenges.

Farm Workers

According to recent Census data[4], 129 Cathedral City residents were employed in the category of agriculture, forestry, fishing, hunting and mining industry.

Although the farm worker population in Cathedral City is minimal, landscape personnel, gardeners, golf course maintenance, and tourist industry service workers represent a segment of the population that may require special housing needs.

Farm worker households generally fall into low- and very-low-income categories. However, as with all special needs, the City provides the opportunity for farm worker households to obtain rental subsidies, and also provides incentives for developers to maintain affordable units which are available to all segments of the community.

[4] U.S. Census, 2007-2011 ACS, Table DP03

Homeless Persons

The number of homeless persons is difficult to quantify since they are mobile and transient, often crossing from one city or county into another. The mild winter climate in the Coachella Valley may attract the homeless. Hot summer temperatures encourage the homeless to seek daytime shelter in air conditioned places such as libraries, malls, and other buildings open to the public.

Primary reasons for homelessness in the Coachella Valley include sudden job loss, illness and lack of medical insurance, family break-ups such as divorce, and seasonal job layoffs or reduction in hours.

The 2013 County of Riverside Point-in-Time Homeless Count[5] reported a total of 83 homeless persons in Cathedral City at the time of the survey, of which 65 were unsheltered and 18 were living in a shelter.

There are a number of programs and opportunities directed at providing housing and services for homeless persons. These assistance programs offer a range of social services from counseling, assistance with utilities, emergency food, rent and mortgage assistance for the first month, and the distribution of bus passes. Catholic Charities, a non-profit organization, is the primary provider of services to the homeless in the Coachella Valley. Jewish Family Services provides assistance to homeless families by helping them find housing and employment opportunities. The Coachella Valley Services and Overnight Shelter (SOS) provides food and housing to 16 homeless persons per night.

Catholic Charities work with homeless shelters and affordable residential units in the Coachella Valley to place low-income homeless or transient persons in permanent affordable housing. Catholic Charities and the Housing Authority of the County of Riverside operate Nightingale Manor, a 14-unit emergency shelter for homeless families. The shelter is located in Palm Springs, but serves families from the entire Coachella Valley region. In addition, Shelter from the Storm, a women's shelter, provides temporary housing throughout the Valley for abused women and their children, including a facility in Cathedral City.

Episcopal Community Services (ECS) offers programs and housing for homeless persons in the Coachella Valley. In 1999 the Cathedral City Redevelopment Agency transferred two 3-bedroom units to ECS for use through the Navajo Trails programs. Navajo Trails serves 31 homeless adults diagnosed with HIV/AIDS. The program offers long-term transitional housing for up to 2 years, and provides residents with access to supportive services including counseling. In 2008, the program changed to provide longer-term housing and services through the Desert Vista Program.

Other groups of homeless individuals, which may not be served by the above-mentioned facilities include the mentally ill, those with chemical dependencies, and those who voluntarily choose a transient lifestyle. These individuals may be served by the Coachella Valley Rescue Mission in Indio, or by the Emergency Cold Weather Shelter, located at the National Guard Armory in Indio. However, these facilities provide only emergency shelter and do not deal with the causes of homelessness.

The Desert AIDS Project (DAP) and 38 units within the City's Casa San Miguel serve disabled persons and persons who are at risk of homelessness.

SB2 Requirements and CVAG Solution to Homelessness

Senate Bill 2 (SB2) acknowledges homelessness as a statewide problem with damaging social and economic consequences. SB2 requires jurisdictions to plan for services to address the special needs and circumstances of homeless persons. Homelessness affects people of both genders and all races and ages, with some of the main causes being mental illness, substance abuse, prison release, and lack of affordable housing.

[5] http://www.riversidehomelesscounts.com/

In accordance with SB2, and as a result of Riverside County's 10 Year Plan to End Homelessness, the Coachella Valley Association of Governments (CVAG) has proposed the development of a Multi-Service Center. The Homelessness Committee of CVAG and the city of Cathedral City are working in partnership to address homelessness in Cathedral City.

Under the broader recommendations developed as part of the County of Riverside's 10-Year Strategy to End Homelessness, the Homelessness Committee has prepared a Strategic Plan to End Homelessness. The Plan focuses on the development of a Multi Service Centre (MSC) at McClain Road in north Palm Springs. The facility is intended to meet the needs of homeless people in the western portion of the Coachella Valley. The objective of the MSC is to provide comprehensive support services to promote progress towards permanent housing and self-sufficiency. The MSC will be designed to provide one-stop access to resources for individuals and families experiencing homelessness or at-risk of becoming homeless. In addition to providing 125 beds, a wide array of supportive services will also be available, including basic amenities such as showering/personal care and laundry, transportation, childcare, medical care, mental health services, integrated case management, and social services. The shelter is not structured to assign beds to each participating jurisdiction.

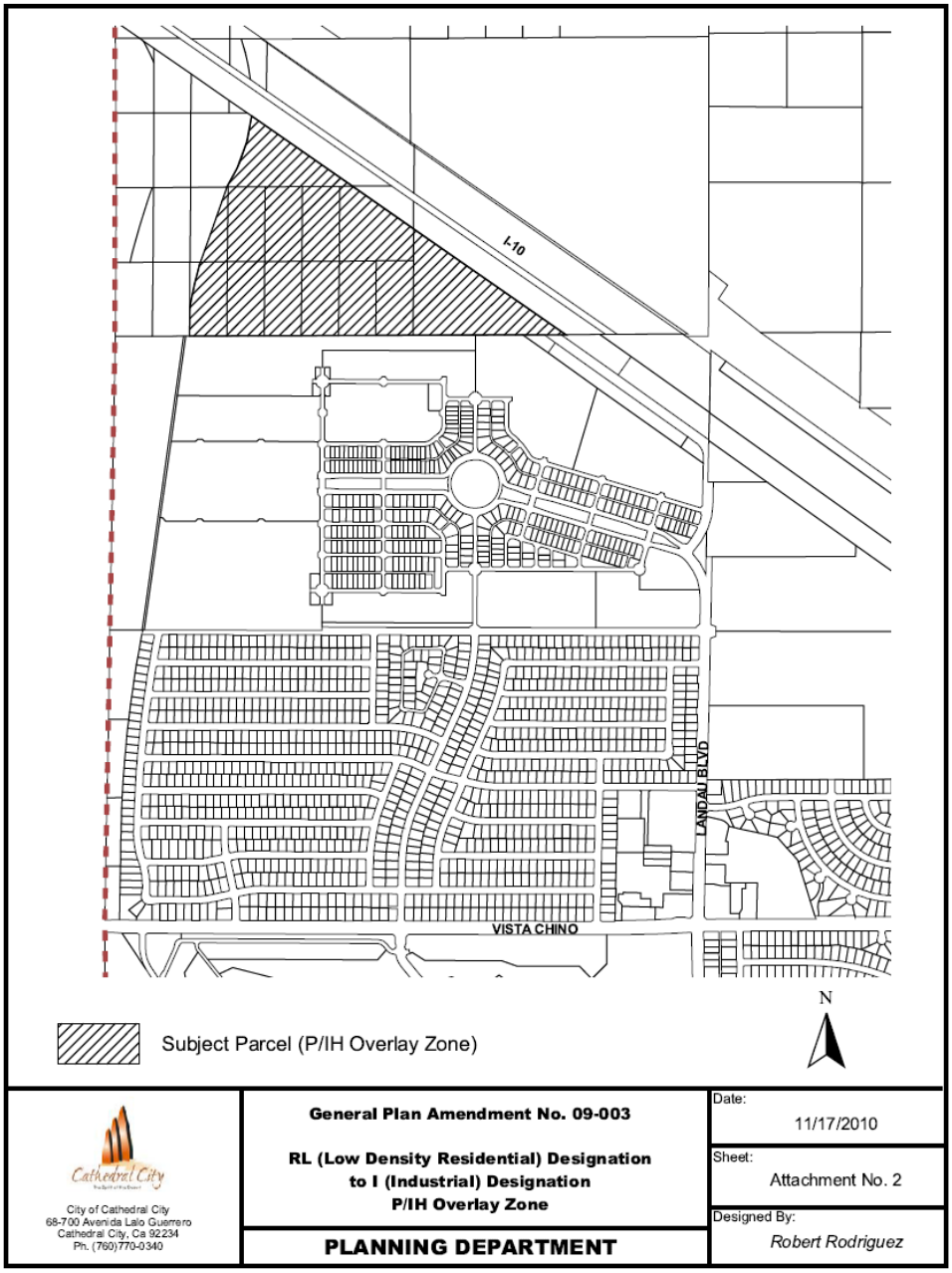
Pursuant to SB2, the Zoning Code was amended in 2011 to allow emergency homeless shelters by-right in the Institutional Housing Overlay (P/IH) district (Exhibit H-7b) subject only to site plan review. Site plan review is a technical review of site plan and building conformance with the Zoning Ordinance, and does not involve a discretionary permit. The P/IH district is located south of the I-10 freeway, north of Vista Chino, west of Landau Boulevard, and east of western City boundary. There is approximately 77 acres of vacant land in the P/IH district, which could accommodate emergency shelters. Parcels within this district range in size from 2.5 to 14 acres and have more capacity than is needed to accommodate the City's estimate homeless shelter need of approximately 65 persons. The P/IH district is accessible to transportation facilities and commercial services.

Requirements for emergency shelters in this district include an aggregate maximum number of beds not exceeding the total number of homeless persons in the city as determined by the county of Riverside at any given time; hours of operation, on-site management, maximum length of stay of 180 consecutive days or 240 total days within any 12-month period, and a written agreement between the operator and the City describing operational rules and security procedures.

Development standards for emergency shelters include all standards applicable to the I-1 district; any additional requirements imposed by the State Department of Housing and Community Development through its oversight; a minimum of 125 square feet of floor area per client; off-street parking of one space for every six clients and one space for every employee, manager, and/or supporting staff member on site at the same time; an interior intake waiting area of at least 10 square feet per bed; an exterior intake waiting area screened from public and/or private view by a six-foot block wall and landscaping; a storage area provided at a rate of five square feet for each bed; at least one toilet and one shower for each 15 beds; minimum separation of 300 feet from another emergency homeless shelter; minimum separation of 500 feet from property zoned for residential use; minimum separation of one-quarter mile of a soup kitchen or other similar congregate meal facility; and interior and exterior lighting.

Program 1.B.6 includes a commitment to process a Zoning Code amendment to review and revise emergency shelter standards to encourage and facilitate such uses consistent with SB 2 within one year of Housing Element adoption.

Exhibit H-7b
P/IH Overlay Zone



The Zoning Code also allows transitional and supportive housing as a residential use subject only to the same standards and procedures as apply to other residential uses of the same type in the same zone, in conformance with state law.

Elderly Persons

As noted in Table H-4 in the Demographic Background, the 2010 Census showed that about 15% of Cathedral City's population was age 65 or older. This is slightly greater than for the County as a whole, which reported about 12% of the population in the senior age group. The slightly higher proportion of elderly residents in Cathedral City is likely to continue given the Coachella Valley's reputation as a retirement area and the City's relatively low housing costs.

Recent Census estimates (Table 25) indicated that there are about 3,325 elderly owner households and about 1,196 elderly renter households in the city.

Table H-25
Elderly Households by Tenure

Householder Age	Owner		Renter	
	Households	%	Households	%
Under 65 years	7,927	70%	4,971	81%
65 to 74 years	1,699	15%	730	12%
75 to 84 years	1,282	11%	370	6%
85 years and over	344	3%	96	2%
Total Households	11,252	100%	6,167	100%

Source: U.S. Census 2006-2010 ACS, Table B25007

Affordability can be an issue of special concern to the elderly, who are often on fixed retirement incomes. In addition, the elderly may require assistance with housekeeping, maintenance, and repairs. Special design features that may be needed include elimination of barriers such as steps and the provision of appropriate recreational, social, and transportation services and amenities.

As the elderly become less independent and require more care, a continuum of housing options becomes important, ranging from independent unassisted living, to congregate or board care facilities which provide meals, maid service, and social opportunities, to nursing care facilities which provide complete medical care.

The City has a number of projects and programs available for the senior population. A total of 1,028 units of rental housing are currently restricted to low- and very-low-income senior households. All but one of the City's mobile home parks are restricted to ages 55 or older. Also available to seniors and disabled persons are free smoke alarms and fire inspections provided courtesy of the Fire Department and the Office of Housing Assistance.

Persons with Disabilities

According to recent Census data, approximately 12% of Cathedral City's population have some sort of disability, and 36% of seniors have at least one form of disability (Table H-25).

Table H-25
Disabilities by Age

Disability by Age	Persons	Percent
Under Age 5 - total persons	3,768	--
With a hearing difficulty	48	1.3%
With a vision difficulty	48	1.3%
Age 5 to 17 - total persons	10,748	--
With a hearing difficulty	259	2.4%
With a vision difficulty	68	0.6%
With a cognitive difficulty	450	4.2%
With an ambulatory difficulty	297	2.8%
With a self-care difficulty	189	1.8%

Table H-25
Disabilities by Age

Disability by Age	Persons	Percent
Age 18 to 64 - total persons	30,004	--
With a hearing difficulty	721	2.4%
With a vision difficulty	467	1.6%
With a cognitive difficulty	1181	3.9%
With an ambulatory difficulty	1476	4.9%
With a self-care difficulty	408	1.4%
With an independent living difficulty	1,029	3.4%
Age 65 and over* - total persons	7,008	--
With a hearing difficulty	1034	14.8%
With a vision difficulty	511	7.3%
With a cognitive difficulty	606	8.6%
With an ambulatory difficulty	1461	20.8%
With a self-care difficulty	548	7.8%
With an independent living difficulty	1118	16.0%

Source: U.S. Census, 2009-2011 ACS Table S1810

Note: Totals may exceed 100% due to multiple disabilities per person

The City has affordable housing units that are specifically designed for disabled persons. These are located at the Casa San Miguel complex, Tierra Del Sol, and Mountain View Apartments, which accept both senior and disabled residents. Casa San Miguel offers 27 units of Housing for Persons With AIDS (HOPWA), and Tierra Del Sol includes 7 units that are designed for sight, hearing, or mobility impaired persons. In addition, all 75 units at the Tierra Del Sol complex are designed to be adaptable for all types of physical disabilities. The Desert AIDS Project and Working Wonders also provide counseling and assistance to persons with AIDS.

The City adheres to State guidelines regarding disabled access, and promotes the use of principals of architectural design which aid the disabled. The Americans with Disabilities Act (ADA) requires all new multi-family construction to include a percentage of units be accessible to disabled persons. The City of Cathedral City monitors and requires compliance with these standards as part of the building permit review, issuance, and inspection process.

The City imposes no special requirements or prohibitions on the development of housing for disabled persons beyond the requirements of the Americans with Disabilities Act. There is no concentration restriction for residential care homes. State and federal law does not permit the City to regulate group homes of 6 or fewer residents. Group homes of 7 or more residents are permitted with approval of a conditional use permit in the R-2, R-3, R-M and R-H zones. The City has also adopted procedures for providing reasonable accommodation for persons with disabilities.

Developmental Disabilities

Section 4512 of the California Welfare and Institutions Code defines a "Developmental disability" as a disability that originates before an individual attains age 18 years, continues, or can be expected to continue, indefinitely, and constitutes a substantial disability for that individual which includes mental retardation, cerebral palsy, epilepsy, and autism. This term also includes disabling conditions found to be closely related to mental retardation or to require treatment similar to that required for individuals with mental retardation, but shall not include other handicapping conditions that are solely physical in nature.

Many developmentally disabled persons can live and work independently within a conventional housing environment. More severely disabled individuals require a group living environment where supervision is provided. The most severely affected individuals may require an institutional environment where medical attention and physical therapy are provided. Because developmental disabilities exist before adulthood, the first issue in supportive housing for the developmentally disabled is the transition from the person's living situation as a child to an appropriate level of independence as an adult. The State Department of Developmental Services (DDS) currently provides community-based services to approximately 243,000 persons with developmental disabilities and their families through a statewide system of 21 regional centers, four developmental centers, and two community-based facilities. The Inland Regional Center is one of 21 regional centers in the State of California that provides point of entry to services for people with developmental disabilities. The center is a private, non-profit community agency that contracts with local businesses to offer a wide range of services to individuals with developmental disabilities and their families.

Currently, nearly 600 Inland Regional Center staff members provide services to more than 25,000 people with developmental disabilities and their families in San Bernardino and Riverside counties, including 205 persons in Cathedral City of which 103 are under age 18. Once a consumer is found eligible, he/she is paired with a Consumer Services Coordinator (CSC) who becomes their primary contact at the center. They will meet on an ongoing basis to develop an annual Individual Program Plan (IPP) that lists specific, agreed upon goals and objectives that will enhance opportunities to live more closely in line with the core values of the agency. To better meet the needs of consumers, Inland Regional Center designed programs according to age, specialization, and geographic location. Categories include Early Start/Prevention 0-3; School Age 3-15; Transition 16-22; Adult 23-59; and Senior 60+.

Single-Parent Families and Female-Headed Households

Single-parent families and female-headed households generally have lower incomes, higher rates of poverty, and are more likely to live in overcrowded conditions. Typically, this special needs group has lower home ownership rates and spends a larger portion of its income on housing. The head of household is generally younger than the median age for head of household, except for seniors on Social Security.

Table H-26
Household Type by Tenure

Household Type	Owner		Renter	
	Households	%	Households	%
Married couple family	5,793	51%	2,233	36%
Male householder, no wife present	492	4%	370	6%
Female householder, no husband present	1,034	9%	1,411	23%
Non-family households	3,933	35%	2,153	35%
Total Households	11,252	100%	6,167	100%

Source: U.S. Census 2006-2010 ACS, Table B11012

Recent Census data indicates that about 13% of owner households and 29% of renter households are single-parent families (Table H-26).

Primary housing needs for these single-parent households include affordability and units of appropriate size for the age and gender mix of children. Proximity to schools and to other services and amenities is also important for this special needs group.

Large Families

Large families are those with 5 or more persons. Recent Census data indicates that 14% of owner households and 18% of renter households in Cathedral City have five or more members (Table H-27). Some of these households result from the consolidation of multiple families that share housing to reduce housing costs. If consolidated families could obtain affordable housing, fewer large family units would be needed.

Table H-27
Household Size by Tenure

Householder Age	Owner		Renter	
	Households	%	Households	%
1 person	2,762	25%	1,609	26%
2 persons	3,903	35%	1,318	21%
3 persons	1,707	15%	1,010	16%
4 persons	1,276	11%	1,129	18%
5 persons	**908**	**8%**	**532**	**9%**
6 persons	**393**	**3%**	**254**	**4%**
7 persons or more	**303**	**3%**	**315**	**5%**
Total Households	11,252	100%	6,167	100%

Source: U.S. Census 2006-2010 ACS, Table B25009

Large families have a special need for three, four, or more bedroom units. Units of this size, affordable to low- and moderate-income households, are limited.

Organizations such as the Coachella Valley Housing Coalition, which actively constructs affordable housing projects throughout the Valley, have found that units with 4 bedrooms are less in demand than they have been in the past. They attribute this change, in part, to the "Americanization" of Latino and Asian households, which had in the past tended toward multi-generational housing opportunities. As these families' cultural basis changes, the need for a larger unit in which two or three generations resides appears to be diminishing.

Public Participation

As part of the preparation of this Housing Element, the City conducted a City Council study session, public workshops, and Planning Commission and City Council hearings to review the goals, policies and programs included in this element.

All meetings were fully advertised, and special flyers were distributed to stakeholders in the City and the Valley as a whole. Over 40 interested persons and organizations were contacted as part of the outreach program. Public comments from the various meetings are reflected in the City's housing policies and programs for the 2013-2021 planning period.

The mailing list for public meetings, information flyer, and a summary of comments are provided in Appendix C.

GOALS POLICIES AND PROGRAMS

GOAL 1: A broad range of housing types located in all the City's neighborhoods, which meet the needs of all existing and future households.

Policy 1.A: Ensure that sufficient residentially designated lands and appropriate zoning exist to meet the City's future housing needs.

Program 1.A.1: Maintain the list of affordable housing sites as shown in Table H-15, Inventory of Available Vacant Lands, and update the list annually to include lands in the North City Specific Plan area as infrastructure is extended to this area.
Responsible Agency: Community Development Department,
Schedule: Annually through 2021

Program 1.A.2: Maintain land use and zoning designations in the General Plan and zoning maps that allow for diversity of housing types and densities.
Responsible Agency: Community Development Department
Schedule: On-going throughout the planning period

Program 1.A.3: Maintain a Planned Unit Development (PUD) permit ordinance that allows flexibility in development standards to encourage housing construction while preserving natural resources.
Responsible Agency: Community Development Department
Schedule: On-going

Program 1.A.4: Negotiate the inclusion of affordable housing, including units targeted for extremely-low-income households when feasible, in Specific Plans, PUDs, and Tentative Tract Maps with each developer as application is made. The negotiation may include the provision of financial incentives, if available, accelerated review process, or development standard concessions in exchange for deed restricted affordable units within each project with priority for projects that include extremely-low-income units.
Responsible Agency: Community Development Department
Schedule: On-going with each development application

Program 1.A.5: The City will provide technical assistance to property owners and developers in support of lot consolidation, including identifying opportunities for potential consolidation and incentives to encourage consolidation of parcels, as appropriate.
Responsible Agency: Community Development Department, Housing Successor Agency
Schedule: On-going as part of the development application process

Program 1.A.6: Promote development of mixed use projects in the Downtown area which combine high-density residential with local commercial services. Post a list of vacant or underutilized residential sites on the City web site as part of a page dedicated to development opportunities in the Downtown area.
Responsible Agency: Housing Successor Agency, Economic Development
Schedule: On-going as part of the development application process; annual updates to the list of vacant and underutilized sites

Program 1.A.7: The City shall rezone either Assessor's Parcel 677-050-017, which consists of 14.69 acres and could generate 294 units; or Assessor's Parcel 677-050-018, which consists of 18.12 acres, and could generate 362 units to address the unaccommodated need from the prior planning period. Pursuant to Government Code Section 65583.2(h), the rezoned site will allow rental and owner multifamily uses by right and require a minimum density of 20 units per acre.
Responsible Agency: Community Development Department
Schedule: 2014

Policy 1.B: Provide a sufficient variety of housing types to meet the housing needs of all residents, regardless of race, religion, sex, marital status, ancestry, sexual orientation, nationality, or color.

Program 1.B.1: In order to reduce infrastructure cost, the City will encourage infill development and the remodeling or addition to existing homes wherever possible through the use of expedited processing and financial incentives, if available.
Responsible Department: Community Development Department, Housing Successor Agency
Schedule: On-going as part of the development application process

Program 1.B.2: Encourage in-fill development in areas that are already serviced with adequate infrastructure, including streets and water and sewer lines, to support build-out of the neighborhood. The City shall consider fee waivers, reductions in development standards, or financial assistance if feasible.
Responsible Department: Community Development Department
Schedule: On-going as part of the development application process

Program 1.B.3: Work with private organizations -- including the Coachella Valley Housing Coalition, Shelter from the Storm, the Senior Center, Desert AIDS Project, Foundation for the Retarded or Braille Institute -- in assisting whenever possible in the housing of disabled residents or those with special housing needs in the City. The City shall consider fee waivers, reductions in development standards, or financial assistance if feasible.
Responsible Agency: Housing Successor Agency
Schedule: On-going as part of the development application process; annual outreach

Program 1.B.4: Continue to enforce the provisions of the Federal Fair Housing Act. All complaints regarding discrimination in housing will be referred to the Riverside County Office of Fair Housing. Information on the Fair Housing Act, as well as methods of responding to complaints shall be made available at City Hall and at the Library.
Responsible Agency: Housing Successor Agency
Schedule: On-going; annual coordination with the Riverside County Office of Fair Housing

Program 1.B.5: Continue to work with the Coachella Valley Association of Governments toward a regional solution for homelessness through support of the Multi Service Center in North Palm Springs, and other efforts as they are developed.
Responsible Agency: City Manager's office, Housing Successor Agency
Schedule: On-going coordination with CVAG

Program 1.B.6: Process a Zoning Code amendment to revise standards for emergency shelters consistent with SB 2.
Responsible Agency: Community Development Department
Schedule: Within one year of Housing Element adoption

Program 1.B.7: Work with the Coachella Valley Association of Governments to determine the need for affordable "Workforce Housing" and promote development of such.
Responsible Agency: City Manager's office, CVAG Workforce Housing Planning Committee
Schedule: On-going coordination with CVAG

Policy 1.C: The City shall ensure that new and rehabilitated housing is efficient in its use of energy and natural resources.

Program 1.C.1 New development and rehabilitation efforts will be required to incorporate energy efficiency through architectural and landscape design and the use of renewable resources and conservation of resources. If available, housing assistance funds shall be considered for projects which provide high levels of energy conservation for affordable housing. Expand the City's support for green building and LEED certified projects to encourage private development participation in these programs as part of future housing projects for all income levels through the pre-application and application review process.
Responsible Agency: Community Development Department, Environmental Conservation Division
Schedule: On-going as part of the development application process

Program 1.C.2: A list of known incentives for energy and water conservation measures shall be maintained by the Community Development Department and made available for developers and property owners at the City's reception desk.
Responsible Agency: Community Development Department, Environmental Conservation Division
Schedule: Annual review and update of energy and water conservation measures

Policy 1.D: Encourage the development of appropriate unit sizes in affordable multi-family rental projects and second units on single family lots.

Program 1.D.1: Work closely with housing advocates and stakeholders to identify needs in the community based on household size, and develop and support projects that meet those needs. This should include the full range of potential units, from single-room-occupancy units to 4- and 5-bedroom units, depending on the need foreseen in the City during the planning period, through bond financing for affordable housing via the County Housing Authority or other appropriate means.
Responsible Department: Community Development Department; Housing Successor Agency
Schedule: Annual outreach to stakeholders as part of the Housing Element review process

Policy 1.E: High-density, affordable and senior projects shall be located with convenient access to shopping, public transit, schools, parks, and public facilities such as streets and sidewalks.

Program 1.E.1: Require developers of affordable and senior housing projects to confer with SunLine Transit regarding the provision of service to the project.
Responsible Agency: Community Development Department
Schedule: On-going as part of the development application process

Policy 1.F: Ensure that affordable housing projects are available for hotel and service industry employees.

Program 1.F.1: Continue to work with CVAG and the Agua Caliente Band of Cahuilla Indians toward development of workforce housing, including Tribal parcels in the City which may be appropriate for affordable housing.
Responsible Agency: Community Development Department
Schedule: On-going coordination with CVAG and Tribal government

GOAL 2: Facilitate the development of affordable housing for extremely-low-, very-low-, low- and moderate-income households.

Policy 2.A: In order to leverage local investment, promote and facilitate the use of State and federal monies for the development and rehabilitation of affordable housing in the community.

Program 2.A.1: The City shall encourage and assist self-help housing funded by non-profit organizations for single family, infill development.
Responsible Agency: Housing Successor Agency
Schedule: On-going coordination as part of the development application process and annual Housing Element review

Program 2.A.2: Continue to distribute the City's information for developers and low income households which detail the programs available to both parties for assistance in the development and rehabilitation of low income housing at City Hall, the Senior Center, and the Desert Valleys Builders Association (DVBA) offices.
Responsible Agency: Housing Successor Agency
Schedule: On-going posting of information

Program 2.A.3: Should the City be notified of intent to sell or convert any at-risk affordable housing developments, all possible funding sources, including CDBG funds and appropriate grant funds, if available, will be considered to facilitate purchase of such a project. All non-profit organizations that have expressed an interest in purchasing such projects, including the Riverside County Economic Development Agency Housing Authority and other non-profit groups will be notified immediately of any such properties for sale or at risk of losing affordability restrictions. This will be done in accordance with AB 987. The City will communicate with the property owner at least one year prior to the earliest release date of affordability restrictions.
Responsible Agency: Housing Successor Agency
Schedule: On-going monitoring; coordination with owners of properties proposed for conversion and non-profit organizations one year prior to the earliest release date.

Program 2.A.4: Maintain and update the database of infill lots throughout the community that would be appropriate for the development of affordable housing for extremely low, very low and low-income households, including self-help ownership housing. Promote these parcels in the development community, through brochures, potential streamlined processing incentives, and other means.
Responsible Agency: Community Development Department
Schedule: On-going notification as part of the annual Housing Element review process

Program 2.A.5: Review requests for density bonuses in affordable housing projects on the basis of its requirements.
Responsible Agency: Community Development Department
Schedule: On-going as part of the development application process

Program 2.B.1: In older neighborhoods where extremely-low, low- and very-low-income households are a significant portion of the residents, consider the assignment of bond proceeds for the improvement of streets, water, sewer, and flood control improvements to bring these facilities into compliance with current standards.
Responsible Agency: Community Development Department
Schedule: On-going as part of the annual budget process

Program 2.B.2: Maintain the City's database of affordable housing projects and units, and the Housing Replacement Plan, and develop action plans should these units be converted or destroyed per AB 987.
Responsible Agency: Housing Successor Agency
Schedule: On-going as required by AB 987

Program 2.C.2: The Planning Division shall seek to identify innovative housing solutions for extremely-low-, very-low-, low-income households and the elderly.
Responsible Department: Community Development Department
Schedule: On-going as part of the annual Housing Element review process

Policy 2.D: Promote and preserve mobile home parks for their value as extremely-low-, very-low, low- and moderate-income housing opportunities.

Program 2.D.1: Any conversion of existing mobile home parks to permanent housing will continue to be regulated by ordinance to ensure that an appropriate relocation plan for park residents is developed and implemented. In addition, the City will seek to ensure that existing mobile home parks are meet current standards until such time that they are converted to permanent housing.
Responsible Agency: Community Development Department, Housing Successor Agency, Code Compliance
Schedule: On-going as part of the review of any proposal to convert a mobile home park

Program 2.D.2: Maintain a mobile home rent control ordinance which protects all mobile home residents who do not have long-term lease agreements.
Responsible Agency: Housing Successor Agency
Schedule: On-going per City ordinance

Policy 2.E: Continue to redevelop the Downtown with higher density housing and encourage mixed use development where residential units are above commercial businesses.

Program 2.E.1: Continue to pursue prototype higher-density housing in the Downtown area to further the concepts of mixed use in the urban core.
Responsible Agency: Community Development Department, City Manager's office
Schedule: On-going as part of the development review process and the annual Housing Element review

Program 2.E.2: Maintain provisions in the Zoning Ordinance that allow for residential uses in the second story of commercial centers in the Downtown area.
Responsible Agency: Community Development Department
Schedule: On-going per City ordinance

Policy 2.F: The City shall encourage crime-free housing programs for all projects constructed in the City.

Program 2.F.1: All projects shall be reviewed by the Police and Fire Departments to ensure that adequate security and 'defensible space' is provided.
Responsible Agency: Community Development Department, Police Department, Fire Department
Schedule: On-going as part of the development review process

Program 2.F.2: All assisted affordable housing projects will comply with the precepts for Crime-Free Housing.
Responsible Agency: Housing Successor Agency, Community Development Department, Police Department
Schedule: On-going as part of the development review process

GOAL 3: The maintenance and rehabilitation of the City's residential neighborhoods.

Policy 3.A: Ensure that the quality of dwelling units in existing neighborhoods is improved, conserved, rehabilitated and maintained.

Program 3.A.1: Maintain the Sewer Hook-up Assistance Redevelopment Program (SHARP), allowing grants and loan assistance programs for qualifying extremely-low-, very-low-, low-, and moderate-income households in order to encourage the rehabilitation of existing housing units as funding permits.
Responsible Agency: Housing Successor Agency, Community Development Department
Schedule: Annual budget allocations as funding permits

Program 3.A.2: All City codes, including the California Building Code, will be enforced in the City's Building Division and Code Compliance Division, so that existing units are maintained in good repair.
Responsible Agency: Community Development Department; Police Department/Code Compliance Division
Schedule: Ongoing enforcement

Program 3.A.3: Develop a rehabilitation and neighborhood revitalization plan for that area north of Dinah Shore Drive, generally west of Date Palm Drive, known as the Whitewater neighborhood, which targets short-, medium-, and long-range plans for the rehabilitation of existing duplexes, and the development of quality single-family housing.
Responsible Agency: Community Development Department
Schedule: 2014-2016

Program 3.A.4 : Maintain an inventory that lists existing neighborhoods with substandard infrastructure, including partially paved roads, substandard water lines, flooding problems, absence of sewer service and lack of street lighting, quantify the need for improvements and identify funding sources.
Responsible Agency: Community Development Department, Public Works Division
Schedule: Once every 5 years, to be completed prior to 2016

Program 3.A.5: Analyze the development potential for the area northeast of East Palm Canyon and Golf Club Drive, and consider programming infrastructure improvements, including roadway improvements, signalization of Cree Road and East Palm Canyon Drive, and provision of sewer and water improvements to encourage development of affordable housing in the area.
Responsible Agency: Community Development Department, Public Works Division
Schedule: 2014-2016

Program 3.A.6: The Code Compliance Division of the Police Department shall continue to maintain and upgrade living conditions in those neighborhoods with serious endemic problems to ensure safe, sanitary, and healthy living condition throughout all neighborhoods of the City through existing and future programs such as the Graffiti Elimination Program.
Responsible Agency: Graffiti Task Force, Police Department/Code Compliance Division
Schedule: Ongoing

Program 3.A.7: Bring to City Council the option of incorporating the Uniform Housing Code into the City's Municipal Code as a tool for Code Compliance to encourage proper maintenance of owner-occupied and rental properties.
Responsible Agency: Police Department/Code Compliance Division, Community Development Department
Schedule: 2014-2015

Parks and Recreation Element

PURPOSE

Abundant parkland and recreational space and facilities are important components of the high quality of life enjoyed by City residents. They not only provide opportunities to invigorate the physical, mental, and spiritual health of the community, they also serve as focal points and social gathering spaces for neighborhoods and help define the City's character and image. The purpose of the Parks and Recreation Element is to recognize the importance of parks and recreational areas and facilities, and to guide their expansion and improvement throughout the City. This element also addresses bikeways and trails, and references accessible open space and conservation lands as essential components of the park and recreation system. The goals, policies, and programs set forth in this element help ensure sufficient parkland and recreational spaces that reflect and are responsive to the needs of the community well into the future.

"Parks and playgrounds are the soul of a city."

– Marty Rubin

BACKGROUND

The Parks and Recreation Element is directly related to the Land Use and Open Space and Conservation Elements in the designation and preservation of recreational areas. It is also related to the Community Design Element as parks provide opportunities to define and highlight cultural resources, community aesthetics and artistic themes, and social spaces. Parks and recreational facilities play an important role in creating community cohesion and attracting new residents and tourists, a key to economic growth and vitality. Therefore, this element is directly linked to the Economic and Fiscal Health Element. It is also related to the Circulation and Mobility Element, given that trails, bike paths, and park access must be integrated and coordinated with circulation plans. The Parks and Recreation Element is also closely related to the Environmental Justice and Healthy and Sustainable Community Elements that strive to ensure equitable access and opportunities for improved health and well-being for all segments of the population.

Government Code Section 65560 requires that the General Plan include discussion of areas particularly suited for parks and recreational purposes, including areas with links between major recreation and open spaces, trails, and scenic highways. Section 65561 states that the preservation of park land is necessary not only for the maintenance of the economy of the State, but also for the assurance of the continued availability of land for the enjoyment of scenic beauty and recreation. Government Code Sections 66477 and 66479 enable local governments to require park site dedications, or fees in lieu of dedication, as conditions of subdivision and parcel map approval, if the recreational facilities are consistent with the General Plan. Trail designations are also required as part of Section 5076 of the Public Resources Code.

PARKS

Parks are public spaces that serve a variety of functions in a community. While generally provided for recreational opportunities, parklands can transcend recreational or health uses and refresh or "recreate" our minds and souls. Parks and open space lands provide a pleasing contrast to an urban environment by breaking up the monotony of high-density office, commercial and residential areas. They offer a place for social and cultural activities, providing venues for public art, and enriching and promoting the community's culture and sense of place. Parks provide for the physical and mental development of Cathedral City's youth, through the organization of team sports and competitions. Parks also apply special landscaping designs, which help to improve the community's physical attributes.

Park design should incorporate and accommodate diverse activities and uses, multi-modal access and linkage, comfort and image/character, and sociability. A park with a wide range of amenities and activities will attract a broader range of people and make a more dynamic and interesting setting. While recreational amenities are a key component, it is important to also provide for other uses, including, but not limited to cultural and social events and activities. A park should also be easy to see and easy to get to. If a park is easily accessible and linked to main areas within a community, then it will be used more frequently. Comfort and image are also important elements of park design. The details within the park should welcome people and include design amenities that offer shade and water fountains, comfortable places to sit, and a pleasant and attractive environment. Lastly, a park should be a sociable place where people can go to observe the passing scene, meet friends and have fun with a wide range of people. Above all, parks function as people places that bring residents together creating greater community cohesion and coherence.

Service Providers

Parks and recreation services within the City of Cathedral City are provided by the City. Although schools are not recreation service providers per se, they help by providing important exercise and recreation space and facilities. Where provided for, joint-use facilities enable the public to utilize a school's existing space and equipment for passive and active recreation. School facilities are a valuable and important resource that help to meet the recreational demands of the community, and joint use agreements should be pursued in more school locations throughout the City.

PARK CLASSIFICATIONS

For thousands of years, public parks and open space have been an integral part of the urban landscape, providing natural spaces for passive enjoyment and ballfields and courts for a variety of games and recreation. The following summarizes the range of typical park types, sizes and facilities.

Table PR-1
Standards for Recreational Areas

Type of Park Area	Acres/1,000 Population	Ideal Site Size/Min.	Radius of Area Served
Community Parks	5.0	50 ac/20 ac	4.0 miles
Neighborhood Parks	1.0	15+ac/15 ac	0.5 miles
Playgrounds	1.0	15+ac/15 ac	0.5 miles
Playfields	1.0	15 ac/15 ac	1.5 miles
Mini Parks	0.25	1 ac/0.5 ac	0.25 miles

Sources: "Standards for Outdoor Recreational Areas" Planning Advisory Service, American Planning Association. 1965.

Mini Parks, Pocket Parks, and Plazas: less than 3 acres in size; typically for limited, isolated, or unique purposes; may be in office, business, or commercial centers and utilized for rest, relaxation, socializing, and display of public art and/or landscape elements.

Neighborhood Parks: are typically 5 to 10 acres, serving an area within a 1.5-mile radius; primarily devoted to serving the recreational and social needs of a particular neighborhood; designed for active and passive recreation; generally located within walking and cycling distance of residences.

Community Parks: usually 20 acres or larger and designed to serve an area within a 5-mile radius; may include facilities for low-intensity or passive recreational opportunities, such as lighted fields, tennis and sports courts, swimming pools, and areas or buildings for community festivals and civic events, as well as organized athletic competitions.

School Parks: adjacent to, but separate from, educational facilities that may serve either a neighborhood or larger area; may include playgrounds and sports fields; joint-use agreements with school districts can help the City meet its demand for parklands.

Regional Parks: Regional parks are usually at least 50 acres in size and serve the entire City or region. While regional parks can provide for varying intensities of recreational activity, a portion of the park is generally maintained in a natural setting for passive recreation use or preservation of the environment. Facilities within regional parks are similar to those in community parks, often on a larger scale, or including active or organized recreational activities which would not fit in a community park.

Existing Park Facilities

There are currently (2019) 11 parks within the City. The following table lists each park, its classification and acreage.

Table PR-2
City of Cathedral City Parks Inventory

Park Facility	Parkland Classification	Acreage
Dream Homes Park	Neighborhood Park	7.85
Cathedral City Dog Park	Mini Park	1.29
Century Park	Neighborhood Park	7.02
Dennis Keat Soccer Park	Community Park	19.25
Festival Lawn	Mini Park	2.04
Memorial Park	Mini Park	0.2
Ocotillo Park	Neighborhood Park	7.04
Panorama Park	Neighborhood Park	12.57
Patriot Park	Neighborhood Park	7.0
Second Street Park	Neighborhood Park	4.41
Town Square	Mini Park	2.06
Community Amphitheater	Performance and Event Venue	2.50
	Total Park Acreage	**73.23**

Cathedral City Dog Park is located on private lands in Downtown Cathedral City adjacent to Second Street at 68798 Buddy Rogers Avenue. The park is a collaboration between the City Council and the Cathedral City Evening Rotary Club, which provides for the park's maintenance. There are two sections within the park, one for larger dogs and the other for smaller dogs. A small shade structure and benches provide amenities for residents. The park has easy walking access to the downtown shopping and entertainment district.

Century Park provides a ball field, tennis court, and tot lot, as well as restrooms and wi-fi provided by Spectrum. Picnic amenities are provided in the form of shade structures with tables and BBQ facilities. It is along the eastern edge of Cathedral City at the intersection of Century Park Drive and Da Vall Drive, approximately one mile north of Ramon Road.

Dennis Keat Soccer Park is located at 69400 30th Avenue and includes a large ball field for field sports. Other park amenities include restrooms, wi-fi, shade structures, public art and walking paths.

Festival Lawn is adjacent a part of the City Civic Center, at 68600 Avenida Lalo Guerrero. The Festival Lawn hosts three signature events: "Taste of Jalisco Festival," "Cathedral City LGBT Days," and "Cathedral City Hot Air Balloon Festival" on more than one acre of lawn space. A wide variety of other community events are also held at this venue. Parking is provided at the nearby public parking structure.

Memorial Park was constructed to honor the service of Officer David Vasquez, a Cathedral City police officer who was killed in the line of duty in 1988. This public park is in intended as an area for personal reflection and relaxation. There is a memorial bench located among trees and floral displays. The park's location is 68600 Officer David Vasquez Road, also named to honor the fallen officer.

Park and Amphitheater

The City's new 2.5 acre Community Amphitheater at the corner of Cathedral Canyon Drive and Avenida Lalo Guerrero will be used as a music and theater venue, and for other cultural, entertainment, and recreational uses.

Ocotillo Park is located at 33300 Moreno Road and provides ballfields, basketball courts, tennis courts, a skateboard park, tot lot, BBQ grills and tables, wi-fi and a skate park, mixed use ball field, and tot lot.

Panorama Park is located at 28905 Avenida Maravilla and is one of the city's oldest parks. It was set aside as a public park in 1960 and dedicated June 4, 1989 after undergoing a dramatic transformation adding numerous activities and sporting areas.

Patriot Park is located at 33998 Date Palm Drive. The park provides residents with shade structures, and public restrooms, as well as public art.

Second Street Park is a small neighborhood park in Cathedral City's downtown area. Located at 68752 Buddy Rogers Avenue, Second Street Park is one of Cathedral City's oldest parks.

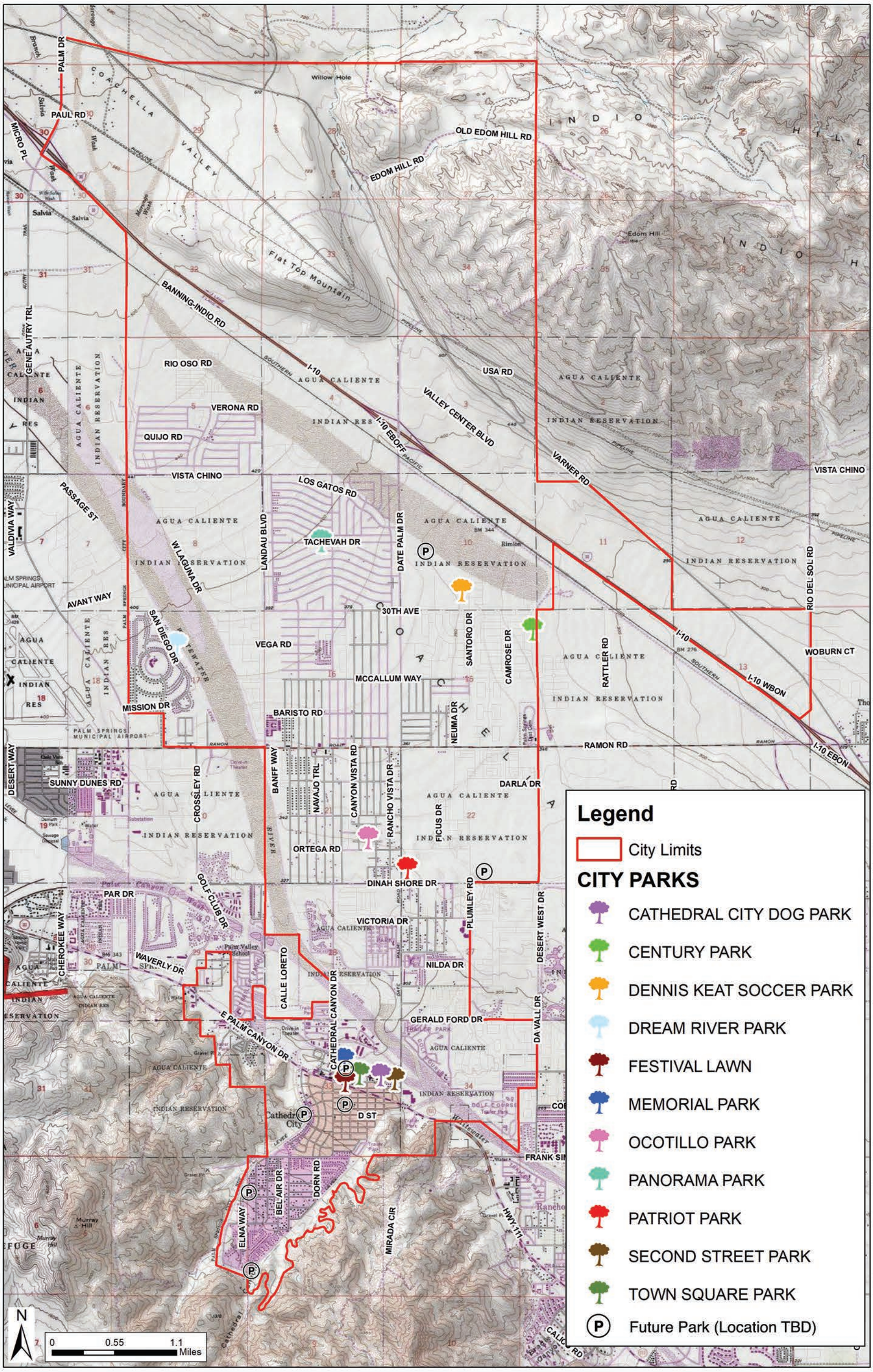
Town Square is in front of City Hall and the Fountain of Life at 68701 Avenida Lalo Guerrero. Amenities include benches and seating, public art pieces, and a rose garden and lush landscaping.

Acquired and Undeveloped Park Land

The City has continued to acquire parkland to further expand park and recreational services. Table PR-3 identifies acquired parkland that will be developed as public parks in the future, and includes the Dream River Park lands also listed in Table PR-2, above. The City is actively exploring partnerships with such entities as the Desert Health District and others. Such collaboration can extend the value and usefulness of City parks lands now and in the future.

Table PR-3
City of Cathedral Undeveloped Park Land (2019)

LOCATION	ACREAGE
Next to James Workman Middle School	17.19 acres
Next to the Salvation Army building on Landau	12.49 acres
In the Whitewater neighborhood	5.05 acres
Railroad track area north end of town	19.31 acres
Adjacent to Rancho Mirage	26.44 acres
Future Dream Homes Park	7.85 acres
Western part of Cove	65.93 acres
Total	**154.26 acres**



04.08.19 Source: Esri; City of Cathedral City, 2018

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Exhibit PR-1 - Community Parks Map
Cathedral City General Plan - Imagine 2040

Cathedral City

RECREATIONAL FACILITIES

Although private recreational facilities should not be relied upon to meet the City's recreational needs, they do make up a significant portion of recreational opportunities throughout the Valley.

Cathedral City Boys and Girls Club
The Cathedral City Boys and Girls Club is privately operated by the Boys and Girls Club of the Coachella Valley and located at 32141 Whispering Palms Trail. The program primarily focuses on after-school programs, but summer and off-school day camps are also offered. Core program elements include character and leadership skills, health and lifetime skills, sports, fitness and recreation, education, and career programs, arts, and specialized programs such as a digital skills and a culinary program.

Cathedral City Senior Center
The Cathedral City Senior Center is a 501c(3) non-profit organization that derives its funding principally from individuals, foundations and corporations, and from special events and offers a number of activities and support services for the senior population. The facility is located on 37171 West Buddy Rogers Avenue. Programs include meals, tables games, dance, and health-related programs, among others.

Boomers
The Boomers Amusement Park provides the city with an assortment of go-karts, two 18-hole miniature golf courses, batting cages, bumper boats, a 32-foot rock wall climb, and an arcade with over 100 state-of-the-art video games. Boomers is also available for birthday parties and other organized events.

Big League Dreams Sports Park
The Big League Dreams Sport is a 20,000 sq. ft. indoor soccer pavilion, with flag football fields, batting cages, and a Stadium Club restaurant. The facility provides a space for adult softball and indoor soccer leagues, tournaments (baseball, fastpitch and softball), and special events.

Desert Ice Castle
Located on Perez Road, Desert Ice Castle has been providing a venue for recreational and competitive ice skating in the City and across the valley. Activities include free-style and public skating sessions, figure skating and hockey schools with world-class teachers, hockey league play, skating under the lights and other activities.

Future Opportunities
The City is exploring other opportunities to expand parks, recreational lands and facilities, and bikeways and other active transportation. The expansion of CV Link and its connectors will enhance multi-modal access to City parks and recreation lands. The City is also coordinating with local hiking organizations and others to enhance access to the unique open space activities in the City and the Coachella Valley.

Golf Courses

Golf courses also contribute significantly to the recreational opportunities of the Valley. While the majority of golf courses are associated with resort residential development in the City, they are used frequently by residents and visitors throughout the Valley. The City is home to the Cimarron, Cathedral Canyon Country Club, Date Palm Country Club and Desert Princess golf courses, which all are accessible to the public. It is also important to note that golf courses are an integral part of the City's and region's economy. Five public/private golf courses are open and available for public play. They include:

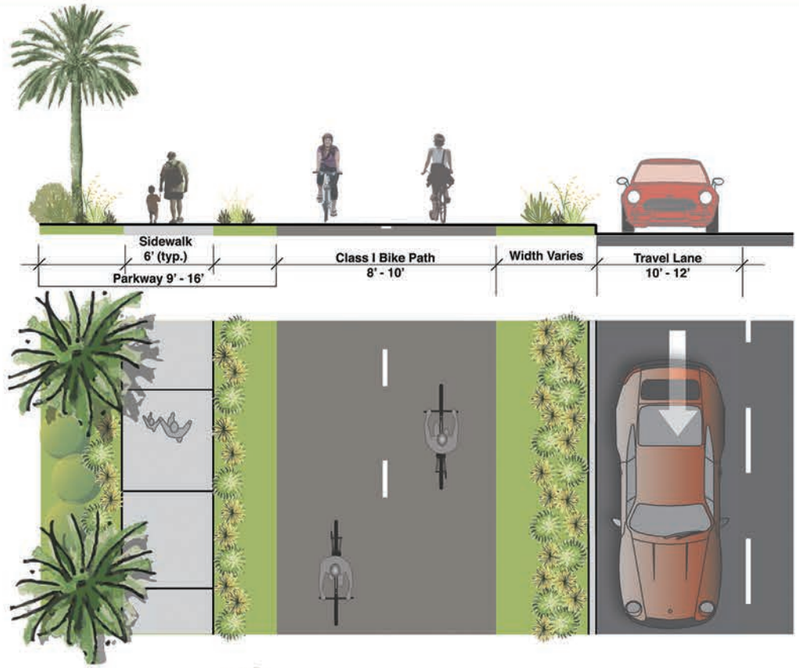
- Cimarron Golf Course
- Date Palm Country Club
- Desert Princess Country Club
- Cathedral Canyon Country Club
- Outdoor Resorts Executive Golf Course

TRAILS, BIKEWAYS, AND WALKING PATHS

Bikeways, trails, and pathways are valuable recreational and community resources. A complete network of bikeways and pedestrian pathways within an urban environment helps reduce reliance on automobiles and contributes to a healthier city. Biking and pedestrian amenities help promote a sense of community by encouraging people to interact, increasing opportunities for physical fitness, and enhancing access to various land uses in the city, including shopping and employment centers. Hiking allows people to take pleasure in, and gain appreciation for, an area's natural resources and open spaces. Bicycle facilities are identified in I, II or III classifications (see Exhibit PR-2, below).

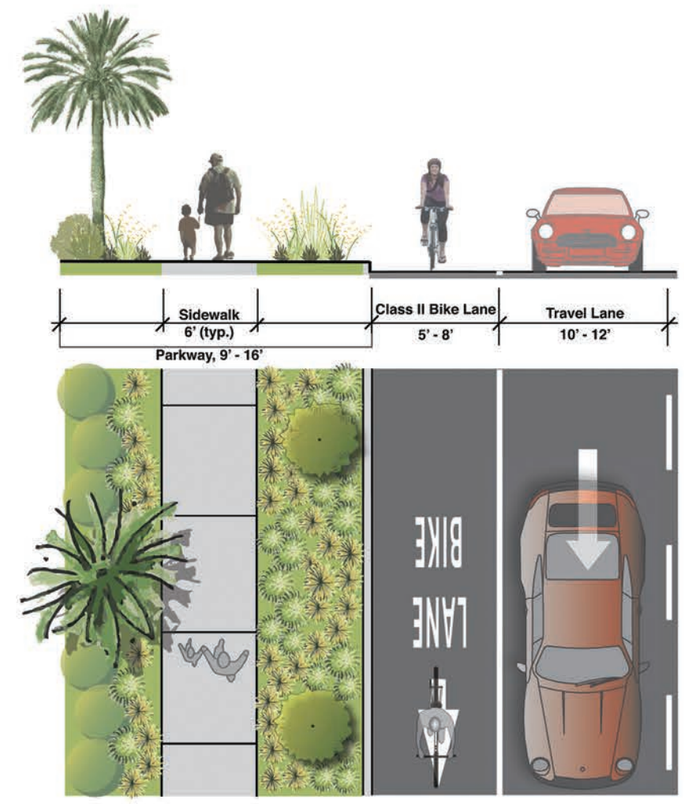
CLASS I BIKEWAY

The Class I bikeway is a bicycle path that is completely separated from a roadway or highway and is often in the form of a combined pedestrian and bicycle pathway. Class I facilities support both recreational and commuting opportunities. Common applications include CV Link and other facilities along stormwater channels, utility rights-of-way, railroad rights-of-way, within school campuses, or within and between parks.



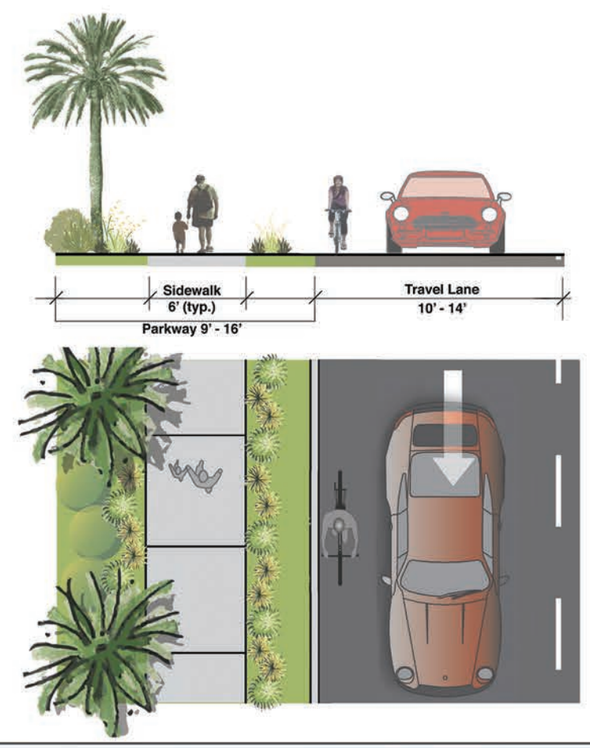
CLASS II BIKEWAY

Class II bikeways are signed and striped bicycle lanes within the paved section of the street. They provide a restricted right-of-way, with through travel by motorists or pedestrians prohibited, but with crossflows of pedestrian and motor traffic permitted. These bike lanes are typically established along streets and are defined by pavement striping and signage to delineate the portion of the roadway for bicycle travel. Bike lanes are one-way facilities, typically striped adjacent to motor traffic travelling in the same direction. Contraflow bike lanes can be provided on one-way streets for bicycists travelling in the opposite direction.



CLASS III BIKEWAY

Class III bikeways are designated but unmarked bike routes that are located on the street amidst vehicular traffic. These bikeways, or bike routes, designate a preferred route for bicyclists on streets shared with motor traffic not served by dedicated bikeways to provide continuity to the bikeway network. Class III bike routes are generally not appropriate for roadways with higher motor traffic speeds or volumes. Bike routes are established by placing bike route signs and optional shared roadway markings (sharrow) along roadways.



Source: CVAG, Urban Crossroads, 2019

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Exhibit PR-2 - Bike Path Classifications
Cathedral City General Plan Update - Imagine 2040

Cathedral City

As shown below in Table PR-4, in 2018 the City has five Class I (bike path) and nine Class II (bike lane) bikeways, totaling 29.3 miles in length.

Table PR-4
City of Cathedral Existing Bikeways

Street/Path	From	To	Class	Length (mi.)
Whitewater River (south Bank)	Cathedral Canyon Drive	East of Date Palm Drive	Class I (Bike path)	0.7
Vista Chino Road	Cathedral City Western city limit	Date Palm Drive	Class II (Bike lanes)	2
30th Avenue	Landau Boulevard	Santoro Drive	Class II (Bike lanes)	1.5
Landau Boulevard	Vista Chino Road	Ramon Road	Class II (Bike lanes)	2.3
Cathedral Canyon Drive	Ramon Road	Hwy 111	Class II (Bike lanes)	2.4
Victoria Drive	Date Palm Drive	Plumley Road	Class II (Bike lanes)	0.5
Palm Drive	Desert Hot Springs City Limit (Camino Aventura)	I-10	Class II (Bike lanes)	2.1
Da Vall Drive	30th Avenue	Frank Sinatra Drive	Class I (Bike path)	4
Da Vall Drive	30th Avenue	Frank Sinatra Drive	Class II (Bike lanes)	4
Gerald Ford Drive	Plumley Road	Monterey Avenue	Class II (Bike lanes)	3.5
Gerald Ford Drive	Plumley Road	Monterey Avenue	Class I (Bike path)	3.5
Plumley Road	Dinah Shore Drive	Converse Road	Class I (Bike path)	0.8
Ramon Road	Da Vall Drive	Los Alamos Drive	Class II (Bike lanes)	1
Ramon Road	Da Vall Drive	Los Alamos	Class I (Bike path)	1
			Total Current Length =	**29.3**

In the future, the City plans to add approximately 40 miles of new bikeways. Table PR-5 demonstrates that the city would more than double its current facilities by approximately 132%.

Table PR-5
Cathedral City Bikeways & Multi-Modal Facilities

Street Name	Segment	Classification	Length (Miles)	Notes
Off Street (CV Link)	Date Palm Dr to Palm Springs Motors/Motel 6	Class I Future	0.68	
Ramon Rd	Landau Blvd to DaVall	Class I Future	2.01	(Adjusted to remove lengths outside city limits, rounded)
Valley Center Bl	Palm Drive to Varner/Bob Hope	Class I Future	7.33	
Varner Rd	Palm Drive to Bob Hope Drive	Class I Future	7.67	
Bob Hope Dr/Rio Del Sol	30th Ave to I-10	Class I Future	0.84	
		Total Class I Future:	**18.53**	
Dinah Shore	Paseo De La Palma to DaVall	Class I Off Road Shared	1.89	(Adjusted to remove lengths outside city limits, rounded)
		Total Class I Off Road Shared:	**1.89**	
E Palm Cyn Dr	Golf Club to Buddy Rogers Ave	Class II Future	2.23	(Adjusted to remove lengths outside city limits, rounded)
Date Palm Dr	Varner Rd to E. Palm Canyon Dr	Class II Future	5.80	
Perez Rd	E. Palm Canyon to Kyle Road (east)	Class II Future	0.33	
Gerald Ford Dr	Date Palm to Da Vall	Class II Future	0.99	
Da Vall Dr	Varner Rd to Dinah Shore Dr	Class II Future	3.24	
Santoro Dr	McCallum Way to Ramon Rd	Class II Future	0.50	
Tachevah Dr	Santoro to Vista Chino	Class II Future	0.23	
Vista Chino	Date Palm to Da Vall	Class II Future	1.20	
Palm Dr	Varner Rd to I-10	Class II Future	0.91	
Landau Bl	Valley Center Blvd to Vista Chino	Class II Future	1.22	
		Total Class II Future:	**16.64**	
Cathedral Cyn Dr	Ramon Rd to E. Palm Canyon	Class II On Street Bike Lane	2.45	
Victoria Drive	Date Palm to Plumley Rd	Class II On Street Bike Lane	0.50	
Landau Blvd	Vista Chino to Ramon Road	Class II On Street Bike Lanes	2.00	
Vista Chino	Ave Maravilla to Date Palm	Class II On Street Bike Lanes	0.49	
Vista Chino	Wash/City Limits to Ave Quintana	Class II On Street Bike Lanes	0.50	
		Total Class II On Street Bike Lanes:	**5.94**	

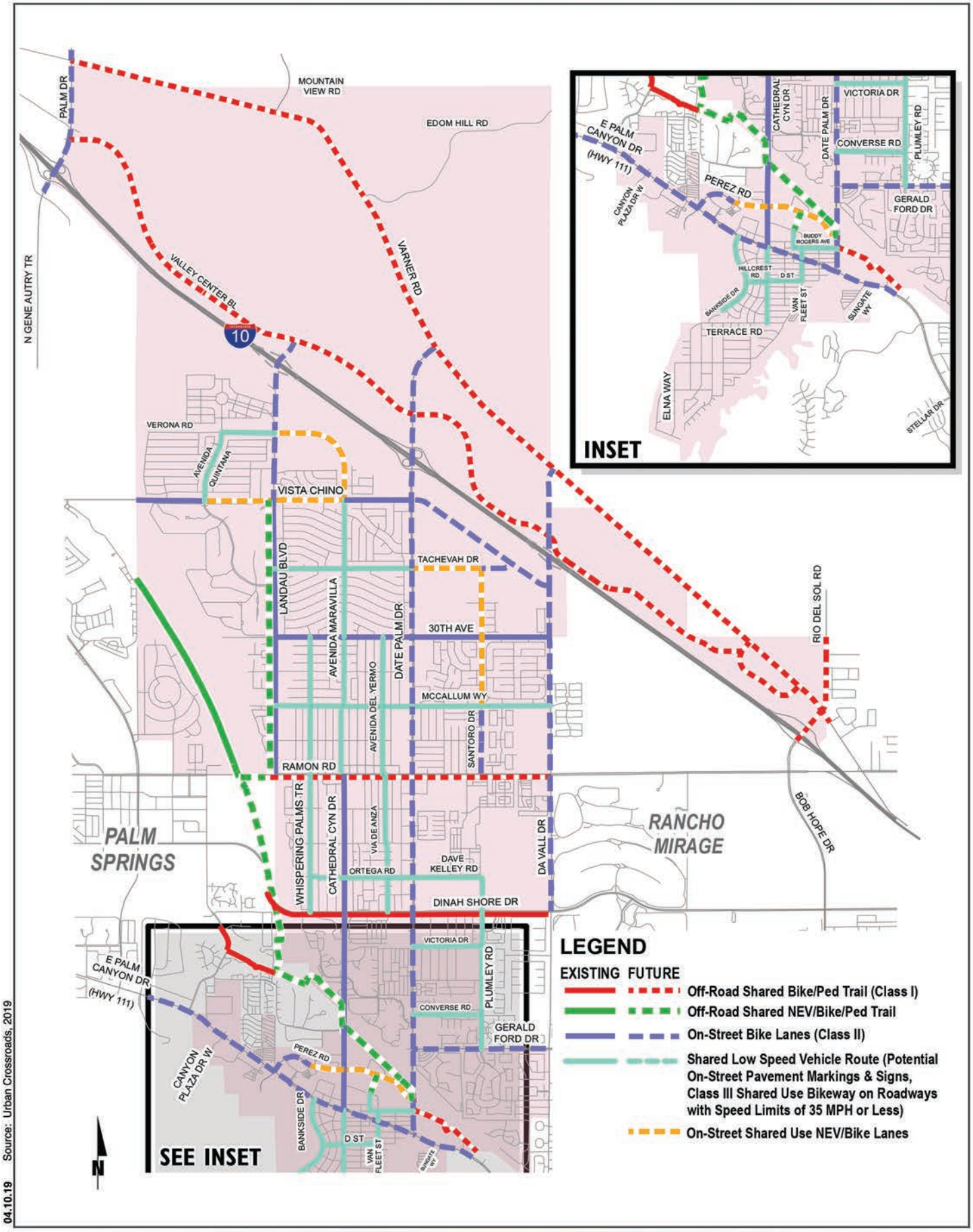
Table PR-5
Cathedral City Bikeways & Multi-Modal Facilities

Street Name	Segment	Classification	Length (Miles)	Notes
Bankside Drive	E. Palm Cyn to Farrell Ln	Class III On Street Shared	0.63	
Hillcrest Rd	Bankside Drive to Cathedral Canyon Dr	Class III On Street Shared	0.15	
Cathedral Cyn Dr	Palm Canyon to Terrace Rd	Class III On Street Shared	0.55	
D St	Cathedral Canyon to Van Fleet Ave	Class III On Street Shared	0.25	
Van Fleet	D St to Buddy Rogers	Class III On Street Shared	0.24	
Buddy Rogers Dr	Civic Center to Date Palm	Class III On Street Shared	0.32	
Civic Center E	Civic Center N to Buddy Rogers	Class III On Street Shared	0.13	
Plumley Rd	Dinah Shore to Gerald Ford	Class III On Street Shared	1.00	
Converse Rd	Date Palm to Plumley Rd	Class III On Street Shared	0.51	
Whispering Palms Tr	30th Ave to Dinah Shore	Class III On Street Shared	2.01	
Ortega Rd/Plumley Rd	Whispering Palms to Plumley Rd to Dinah Shore	Class III On Street Shared	1.50	
Via De Anza	33rd Ave to Dinah Shore	Class III On Street Shared	0.50	
Desert Vista	Ramon Rd to 33rd Ave	Class III On Street Shared	0.51	
Avenida Maravilla	Vista Chino to Ramon Rd	Class III On Street Shared	2.01	
Ave Del Yermo	30th to Ramon	Class III On Street Shared	1.00	
Tachevah Dr	Landau to Date Palm	Class III On Street Shared	1.00	
Avenida Quintana	Verona Rd to Vista Chino	Class III On Street Shared	0.53	
Verona Rd	Ave Quintana to Landau Blvd	Class III On Street Shared	0.39	
McCallum Way	Landau Blvd to DaVall	Class III On Street Shared	2.00	
30th Ave	Landau Blvd to DaVall	Class III On Street Shared	2.00	
		Total Class III On Street Shared:	**17.21**	
Off Road	Perez Rd to Civic Center N	Off Road Shared NEV/Bike Future	0.15	
Off Street (CV Link)	Wash/Cat Cyn Golf Club to Date Palm Drive	Off Road Shared NEV/Bike Future	1.30	(Adjusted to remove lengths outside city limits, rounded)
Off Road (CV Link?)	Dinah Shore to Cat Cyn Golf Club	Off Road Shared NEV/Bike Future	0.51	(Adjusted to remove lengths outside city limits, rounded)
Landau Blvd	Vista Chino to 30th Ave	Off Road Shared NEV/Bike Future	2.00	
		Total Off Road Shared NEV/Bike Future:	**3.95**	
Off Street (Cv Link)	Bernardi Ln to Ramon Rd	Off Road Shared NEV/Bike	1.62	
		Total Off Road Shared NEV/Bike:	**1.62**	**miles**

Table PR-5
Cathedral City Bikeways & Multi-Modal Facilities

Street Name	Segment	Classification	Length (Miles)	Notes
Perez Rd	Kyle Rd (east) to Date Palm	Shared NEV/ Bike Lanes Future	0.82	
Santoro Dr	Tachevah Dr to McCallum Way	Shared NEV/ Bike Lanes Future	1.00	
Tachevah Dr	Date Palm To Santoro	Shared NEV/ Bike Lanes Future	0.50	
Vista Chino	Ave Quintana to Ave Maravilla	Shared NEV/ Bike Lanes Future	1.02	
Verona Rd	Landau Blvd to Vista Chino	Shared NEV/ Bike Lanes Future	0.89	
		Total Shared NEV/ Bike Lanes Future:	**4.23**	
		TOTAL ALL CLASSES:	**70.00**	

Source: Cathedral City Active Transportation Plan, Public Works Department and Urban Crossroads, Inc. 2019



04.10.19 Source: Urban Crossroads, 2019

TERRA NOVA® PLANNING & RESEARCH, INC.

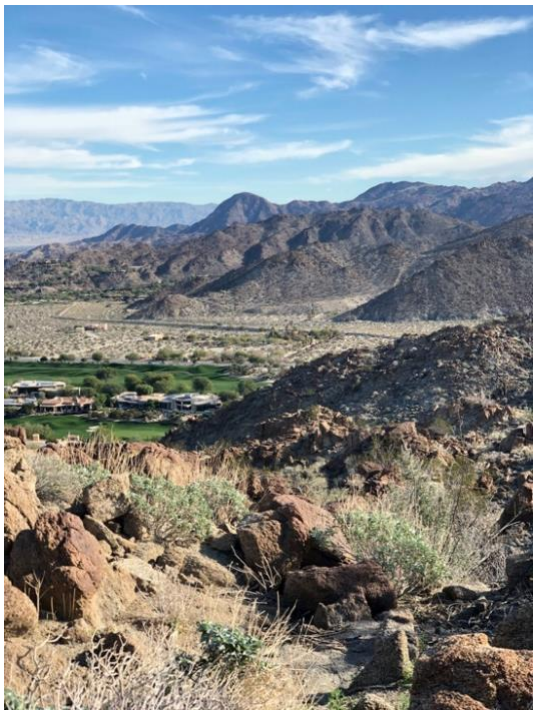
Exhibit PR-3 - Bikeways and LSEV Routes
Cathedral City General Plan - Imagine 2040

Cathedral City

Multi-Modal Facilities

CV Link is an approved ±49-mile non-motorized, multi-modal transportation path that passes through some of the most developed and populated portions of the Coachella Valley, providing access and connectivity between residential, commercial, recreational, institutional, and other land uses throughout the region, and providing recreational opportunities for pathway users. Cathedral City has led the way with the implementation of CV Link, building the first segment atop the levee of the Whitewater River Stormwater Channel between Vista Chino and Ramon Road in Cathedral City; it became operational in February 2018.

Hiking Trails



The Coachella Valley is surrounded by a complex regional trail system which occurs primarily in the San Jacinto and Santa Rosa Mountains. Trails beginning on the valley floor connect to mountain trails which can lead hikers to Idyllwild, the top of the Palm Springs Aerial Tramway, and beyond. The discussion below includes trails located in and around the City.

The **Art Smith Trail** is a 16-mile long trail that extends through the Santa Rosa Mountains from Palm Canyon in Palm Springs to Palm Desert. This is a strenuous hike with a 1,200-foot elevation gain. The trail traverses the entire ridgeline of the Santa Rosa Mountains, which exhibits abundant plant and animal life. The Art Smith Trail accommodates hiking, mountain biking, and equestrian use.

The **Murray Hill Trail** is located in the eastern portion of Palm Springs and accessed behind the 1905 Elks Lodge on Elks Trail. The10-mile trail climbs 2,100 feet to the top of Murray Hill. It also offers links to other trails around Murray Hill, including the Clara Burgess and Wildhorse Trails, and access to the Eagle Canyon Oasis. The peak of Murray Hill offers views of Palm Springs, Cathedral City, Palm Canyon, and the San Jacinto Mountains.

The **Araby Trail**, also called the "trail to the stars," climbs above the Bob Hope Estate and the home of the late Steve McQueen. The trail is accessed off of Rimcrest/Southridge Road in Palm Springs. It is a moderate, 6-mile hike, with an 800-foot elevation gain. It connects with the Berns/Garstin/Henderson Trails and other smaller trails in the foothills.

The **Earl Henderson Trail** and **Shannon Trail Loop** are located on the ridges and plateaus surrounding Murray Hill, east of Palm Canyon. They offer scenic views of south Palm Springs and the San Jacinto Mountains. The Earl Henderson Trail is 4 miles, with an elevation gain of 400 feet. The Shannon Trail Loop is 7 miles and gains 1,000 feet in elevation. Both trails can be accessed from Araby Drive in Palm Springs.

Eagle Canyon Trail is a 2-mile hiking and equestrian trail in the Santa Rosa Mountain foothills abutting the City, which can be accessed from the Garstin, Shannon, or Araby trails west of Cathedral City. It provides spectacular views of the surrounding mountains, Palm Canyon and the valley floor.

On the north side of the City, trail opportunities are more limited. The **Long Canyon Trail** is accessed from a trailhead north of the city limits and Long Canyon Road. It extends into Joshua Tree National Park, and although strenuous, can serve as access to facilities and trails within the park.

The 5.6-mile **Kim Nicol Trail** is located immediately north of the city limits and winds through the north end of the Indio Hills along faults and sensitive wildlife habitat with dramatic views in all directions. The trail is also accessible to cyclists and equestrians.

PARK PLANNING

Cathedral City Parks and Recreation Master Plan (2005)
In 2005, the City adopted the Cathedral City Parks and Recreation Master Plan – Year 2005 in order to provide specific recommendations to serve as guidance to the city's parks and recreational resources management. The Plan also includes a priority listing of the suggested actions and possible funding options for the recommendations. Data that was used as basis for the recommendations is included in the Plan, these data consists of population analysis, existing park and recreational resources inventory and usage, population and distance to recreational resources formulas based on nationally and locally established parks and recreation standards, and an analysis of public input.

Quimby Act
The Quimby Act (Government Code Section 66477), a section within the Subdivision Map Act, allows local governments to adopt an ordinance to require the dedication of land or payment of fees for park and recreational purposes. However, before such a condition can be validly attached to the approval of a map, the following criteria must be met:

- The ordinance must be in effect for a period of thirty days before filing tentative or parcel map
- The ordinance must include definitive standards for determining the proportion of the subdivision to be dedicated or the amount of the fee to be paid. The dedication or payment shall not exceed a proportionate amount necessary to provide three acres of park per 1,000 subdivision residents.
- The land or fees are to be used only for the purpose of developing new or rehabilitating existing park or recreational facilities to serve the subdivision.
- The city must have a general plan or specific plan containing policies and standards for park and recreational facilities in accordance with definite principles and standards.
- The city shall develop a schedule specifying how, when and where it will use the land or fees to develop park and recreational facilities.
- Only the payment of fees may be required for subdivisions containing fifty parcels or fewer.

Based on the City's current population of 54,791 persons (CA Department of Finance, 2018) and the Quimby Act recommendation of three acres per thousand population, the City needs 164.37 acres of parkland to serve its current population; it currently has only 28 acres. With a maximum potential General Plan buildout population of 159,998, the City could need approximately 472.59 acres of parkland to meet this standard in the future. This number is very conservative in light of the substantial number of second homes in the City. The long-term permanent population at City buildout will be closer to 140,000 and require approximately 420 acres of parkland.
Other Park Development Standards

The 2005 Parks and Recreation Master Plan and the General Plan establish parkland standard, which are also sometimes modified in project Specific Plans and individual development agreements, serving as general and project-specific guidance projects. Please see Table PR-1, above.

PARK AND RECREATION FUNDING SOURCES

In 2003, the Parks and Recreation Department was removed from City financial support due to budget constraints. The City continues to maintain a five-member citizen-based Parks and Community Events Commission to assess the community's recreational services and facilities, and to advise the City Council regarding funding, recreational programming, parks facilities and usage, and related issues.

To assist with the operations and maintenance of the existing parks, several Landscaping and Lighting Maintenance Districts (LLD's) were formed to provide electrical power to street lights, landscape irrigation, and maintenance of parkways. Currently, there are eleven LLD's; assessments range from $11.29 to $275.18 per household annually. The City provides financial assistance for programs at the Cathedral City Senior Center and Boys and Girls Club.

Although assuring adequate funding for the acquisition of parkland can be challenging for many cities, there are statewide programs to help, as described below.

- *Park In-Lieu Fees* - stem from the Quimby Act. They provide for dedication of land for parks, or where a subdivision is small, a fee in-lieu of dedicating land. The limitations of this type of financing are that infill projects are exempt, and the fee applies primarily to parkland and land improvements in new neighborhoods.
- *Development Impact Fees* - apply only to new development and may only be assessed for new capital costs related to the new development where a defined beneficiary relationship to cost can be established. Within these limitations, park facility fees may be established for all land uses under the premise that residents, workers, shoppers, and tourists use City parks.
- *Development Agreements* - are contracts between the City and a developer that outline in detail the responsibilities of each party, resulting in a commitment to the developer of vested rights to subdivide and develop. With development agreements, the developer is assured the right to develop in exchange for negotiated exactions, which can include parks or park fees.
    - Mello Roos Districts
    - Benefit Assessment Districts
    - General Obligation Bonds

FUTURE DIRECTIONS

Currently, Cathedral City's parkland acreage lacks approximately 69 acres to meet the recommended Quimby Act standard of three acres per 1,000 residents. The City will strive to adopt park acreage standards, identify appropriate locations for future parks and related open space, evaluate funding options, and continue to develop parks and recreational facilities that best meet the needs of the community. It will continue to develop a complete network of bikeways and pedestrian pathways. The network should be linked to important activity nodes within the community to decrease the dependence on vehicles and promote physical activity.

GOALS, POLICIES, AND PROGRAMS

Goal 1: A City-wide system of parks, open space and other recreational amenities and programs that at a minimum satisfy Quimby Act standards.

Goal 2: An active transportation system that accommodates pedestrians, bicyclists and others and connects them to City and regional parks, recreation opportunities and open space.

Goal 3: A wide offering of facilities and programs supporting and encouraging physical activity, social interaction, and enhanced social cohesion in the community parks, recreation and open space areas.

Policy 1.1: Ensure that the city has a diverse and equitably distributed system of parks, playgrounds, and open space that adequately serve current and future needs of residents. Ensure that parks, playgrounds, and open spaces are well maintained and safe for families, children, and seniors, and maximize the use of existing resources to serve current and future needs of residents.

Program 1.1.1: Maintain and, where appropriate, upgrade existing facilities and diversify activities programming.
Responsible Parties: City Council, City Engineer/Public Works, Community Development
Schedule: Immediate; Ongoing

Program 1.1.2: Periodically conduct a needs assessment for recreation programs and services with local residents.
Responsible Parties: City Engineer/Public Works, Community Development
Schedule: Immediate; Every five years

Program 1.1.3: Maintain and where possible expand use of joint-use agreements with the Palm Springs Unified School District to use school properties for public use during non-school hours.
Responsible Parties: City Council, City Engineer/Public Works, Community Development
Schedule: Immediate; Ongoing

Program 1.1.4: Update the 2005 Cathedral City Parks and Recreation Master Plan to include an updated facilities and program analysis, and five to ten-year master plan for future park and open space lands and recreation programs.
Responsible Parties: City Council, City Engineer/Public Works, Community Development
Schedule: Immediate; Every ten years

Program 1.1.5: Concurrent with the update to the Parks and Recreation Master Plan, evaluate the distribution of existing and planned park and recreation lands, and the distribution of under-served or otherwise disadvantaged neighborhoods, and ensure that the need of all sectors of the community are well served.
Responsible Parties: City Council, City Engineer/Public Works, Community Development
Schedule: Immediate; Every ten years

Program 1.1.6: Upon completion of the Parks and Recreation Master Plan update the City shall adopt population-based parkland acreage standards for all sizes and types of parks and recreation areas.
Responsible Parties: City Council, City Engineer/Public Works, Community Development, City Council.
Schedule: Immediate; Ongoing

Program 1.1.7: Investigate the broad range of sources of purchase financing and operating revenue, including Development Impact Fees, Mello Roos special districts, public/private ventures, state and federal grant opportunities, developer fees and inter-agency joint use agreements to supplement revenues collected for parks and recreation projects.
Responsible Agency: Parks and Recreation Division; City Council; Planning Commission
Schedule: Immediate; Continuous

Policy 1.2: Promote the City's Active Transportation Plan (ATP) as an integral part of the Parks and Recreation Master Plan, supporting the expansion of pedestrian, bicycle, and public transit access to City parks, recreation areas and open space lands.

Program 1.2.1: Improve and expand pedestrian and bicycle access and connections to regional parks and open space by implementing the City ATP, including the striping and/or construction of new and improved sidewalks and multi-class bikeways.
Responsible Parties: City Council, City Engineer/Public Works, Community Development
Schedule: Immediate; Ongoing

Program 1.2.2: Implement the General Plan Circulation and Mobility Element, the ATP and other components of the City's transportation plan that address safe pedestrian, bicycle and ADA access to transit connections and facilities, especially those located between residential neighborhoods and parks and open space.
Responsible Parties: City Council, City Engineer/Public Works, Community Development
Schedule: Immediate; Ongoing

Program 1.2.3: Develop and explore programs that encourage bicycle commuting or testing innovative facility designs to accommodate bicycles, scooters and LSEVs.
Responsible Parties: City Council, Community Development, Public Works
Schedule: Immediate; Ongoing

Program 1.2.4: Enhance accessibility throughout the planning of park areas and facilities, in accordance with the Americans with Disabilities Act (ADA), and include increased wheelchair accessibility and other requirements needed for the elderly and disabled.
Responsible Agency: Community Development, Public Works Department
Schedule: Ongoing

Policy 1.3: Improve the quality of the built and natural environment in the city to support a thriving community and to enhance human and environmental health, especially for low-income and disadvantaged populations and all members of the community.

Program 1.3.1: Adopt design and planning guidelines that enhance safety in parks, playgrounds, streets, and public places.
Responsible Parties: City Council, Community Development
Schedule: Immediate; Ongoing

Program 1.3.2: Require new development, redevelopment, and public works projects to incorporate these guidelines when developing streets, parks, playgrounds, and other public places.
Responsible Parties: City Council, Community Development
Schedule: Immediate; Ongoing

Program 1.3.3: Encourage or require the provision of recreation space in private development.

Responsible Parties: City Council, Community Development**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 1.3.4: Recreation space and amenities should be required and provided in large developments, especially in areas of high population and building density.
Responsible Parties: City Council, Community Development
Schedule: Immediate; Ongoing

Policy 1.4: Promote bicycle, pedestrian, and public transportation rider safety.

Program 1.4.1: Regularly review and, as necessary, update the Active Transportation Plan to ensure a comprehensive and convenient bicycle and pedestrian transportation network.
Responsible Parties: City Council, City Engineer/Public Works, Community Development
Schedule: Immediate; Ongoing

Program 1.4.2: Identify and program physical improvements, such as crosswalks, sidewalk improvements, signs, and traffic signalization, that would make bicycle and pedestrian travel safer to parks and recreational facilities
Responsible Parties: City Council, City Engineer/Public Works, Community Development**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 1.4.3: Provide children with safe and appealing opportunities for walking and bicycling to school in order to decrease rush hour traffic and fossil fuel consumption, encourage exercise and healthy living habits, and reduce the risk of injury.
Responsible Parties: City Council, Community Development**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 1.4.4: Collaborate with CVAG, Coachella Valley jurisdictions, and other relevant agencies to support the completion of all planned CV Link segments and expansion of community connector links, particularly those in Cathedral City and neighboring communities.
Responsible Parties: City Council, Community Development**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Community Design Element

PURPOSE

The Community Design Element establishes general design principles and mechanisms that help define and guide patterns of development in Cathedral City. The goals, policies, and programs set forth in this element also help to assure that new and revitalized development is consistent with and complements the existing built and natural environments. The design of the community and its physical development should reflect the essential values of the residents and represent the character and diversity of the community. For Cathedral City residents, these values include the preservation of valuable natural resources and the desert environment, vital and sustainable business districts, and the preservation of the City's affordable residential character.

BACKGROUND

The Community Design Element is directly related to the Land Use, Circulation and Mobility, Housing, Economic and Fiscal Health, Open Space, and just about every other element in the General Plan. Attitudes toward land use, traffic systems, community safety, and environmental resources shape the physical development of the community and help define its character. With major local, state, and interstate roadways passing through the City, and the associated dependence on various modes of travel, sustaining Cathedral City's identity and quality of life depends on maintaining continuity, uniqueness, and a "sense of place." Building and site designs that reflect the natural and historic features of the City and the Coachella Valley provide continuity of design throughout the valley.

Legislative Basis

California law clearly recognizes the need for and appropriateness of community design standards and development criteria within the community. Most relevant is Government Code Section 65302, which states that "*the General Plan shall consist of a statement of development polices and shall include a diagram or diagrams and text setting forth objectives, principles, standards and plan proposals,*" Government Code section 65302(a) addresses standards that affect population density and building intensity. Also applicable are Government Code Sections 66477 and 66470, which set forth local empowerment for preservation of open space lands.

Other legislation reinforces the adoption of community design standards, including the 1990 California Legislature enactment of Assemble Bill 325, the Water Conservation In Landscaping Act, which recognizes the state's responsibility in mitigating the effects of urbanization on its finite water resources, and the potential savings from water conserving landscape practices. In accordance with the act, the City has adopted a water conservation-oriented landscape ordinance, which meets conservation targets and addresses Community Image and Urban Design Element concerns.

> ***"The concept of the public welfare is broad and inclusive. The values it represents are spiritual as well as physical, aesthetic as well as monetary. It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, well-balanced as well as carefully patrolled."***
>
> -U.S. Supreme Court, 1954 Berman vs. Parker, 348 US 26, 75 Supreme Court 98, Ed. 27 (1954).

The health and appearance of the community, environmentally and aesthetically, is essential to preserving and enhancing the diverse economic and neighborhood-based character of Cathedral City. The Community Design Element reflects the changes in scale and scope of the City's land use patterns, diversification and refinements to the transportation plan, and the appearance of and access to open desert, mountains, floodplains, and all open space and conservation lands. The Community Design Element responds to and complements the human (built) and natural environment, and reflects the City's long-term community character as a diversifying resort residential community.

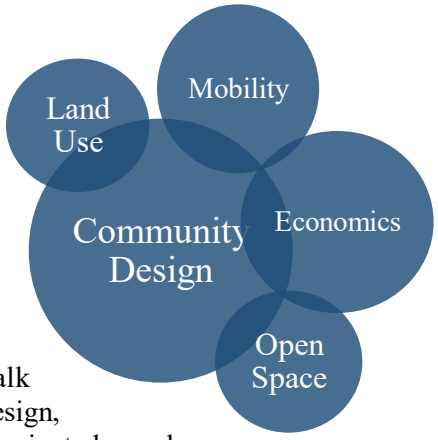
Cathedral City: A Sense of Place

The concept of "placemaking" is discussed in detail elsewhere in this element (see Placemaking and Urban Design, below). The creation of a sense of place begins with embracing our unique (and sometimes demanding) desert environment and the human history of the region. The City Downtown has become a central focus and an internationally recognized model of City placemaking, anchored by the Civic Center, the interactive Fountain of Life plaza, Mary Pickford Theatre and Experience, CV Repertory Theater, the new Community Amphitheater, the events green, dining and shopping venues, and 1,100-space parking structure/solar power plant.

Future Downtown projects will include additional entertainment retail, gaming, more multi-family housing, restaurants, shops, plazas and other public gathering places, all of which will enhance the city center and contribute to a renewed and expanded sense of place. Other new and revitalized developments, including commercial and other non-residential development, can also provide an important basis for "placemaking" in the city.

New Urbanism Principles

Cathedral City has taken bold and decisive steps to enhance the City as a livable, vibrant and sustainable community with the adoption of the *Ahwahnee Principles,* those of *New Urbanism,* and the *Smart Growth* movement. These principles focus on vision and strategy for economic development and a life-enriching community. Visioning, planning and implementation efforts continually involve all sectors of the community, including the voluntary civic sector and those traditionally uninvolved in the public planning process. These principles are summarized as follows:



Multi-Modal Access: Design to locate most daily needs within a 10-minute walk or bike ride of home. Ensure pedestrian and cyclist-safe and friendly street design, including placing some buildings close to the street, homes with street-oriented porches, enhanced transparency with windows and doors, shade trees and structures, on-street parking, screened parking lots, garages away from streets, and traffic-calming design elements.

Connectivity: Interconnected urban design implies a street grid network that efficiently disperses traffic and eases walking, biking and LSEV access. It also provides a hierarchy of narrow streets, boulevards, and alleys and service roads. The goal is a high-quality multi-modal network and public realm that makes walking, biking and all forms of travel pleasurable.

Mixed-Use & Land Use Diversity: This principle should be practiced at all levels, including retail commercial, offices and professional services, and integrated multi-family housing. In principle, it is desirable to have a mix of uses within neighborhoods, within blocks, and even within large buildings. In summary, responsive urban design will provide complete and integrated communities containing housing, shops, work places, schools, parks and civic facilities essential to the daily life of the residents.

Demographic Diversity: Social diversity generally provides social strength and cohesion when our differences are appreciated and celebrated. Diversity includes ethnic backgrounds, age, income levels, employment status, personal and social cultures, and religion. While the City population in 2018 is approximately 78.8% white, 59.4% of the community is also identified as "Hispanic or Latino. Asians comprise 5.9% and African Americans 3.9% of the community, while "Other Races" comprise 12.4%, further diversifying the City ethnic makeup.

Mixed and Diverse Housing: The integrated design of New Urbanism assumes that communities will provide housing for all socio-economic sectors, including an appropriate range of ownership and rental housing offering a variety of sizes, and prices or rental rates. If not an integral part of a planned community or neighborhood, housing should otherwise be located in proximity to schools, parks and commercial services.

Quality Architecture & Urban Design: Consideration must be given to beauty or aesthetics, human comfort, and creating a sense of place. Special placement of civic uses and sites within the community, as has been achieved in the City Downtown, should also be considered. Beautiful human-scale architecture and attractive surroundings nourish the human spirit and engender an attachment to and love for the community.

Traditional Neighborhood Structures: While fashions even in community design change, the basic needs of households and communities do not. The value of home and neighborhood is essential. Therefore, neighborhoods should have an identifiable center (park, retail village and plaza, etc.) comprised of "public space" or the "public realm". These neighborhood centers should be within a 10-minute walking distance.

Density By Design: As an essential part of a town center or urban village, increased development densities at these locations means more buildings, multi-family residences, retail shops and restaurants, and services that are close together and easily and enjoyably accessible by walking or bike.

Smart Transportation: The concepts found in "smart transportation" include those set forth in the *Complete Streets* program (see Circulation and Mobility Element) but also include infrastructure intelligence and technology that synchronizes traffic signals and makes way for autonomous vehicles and other coming advances. In the near-term, as described in the City's *Active Transportation Plan,* it involves diversifying the City's network to encourage walking, biking, LSEVs and transit.

Quality of Life: Taken together, all of the above design principles add up to designing and building a community that enhances the quality of life at all levels for all residents. The overarching goal is to create a cohesive and coherent community that enriches, uplifts, and inspires the human spirit.

Planning the Urban Cross-Sections

Sometimes referred to as "transect planning", the applied principles include placing the highest densities at town center with progressively lower density toward the community edges. The transect is an analytical system that conceptualizes mutually reinforcing elements, creating a gradient of specific human and natural habitats, and associated urban and open space settings.

The transect integrates habitat assessment with zoning for community design. The artificial boundary between the natural and man-made disappears, enabling urbanists and environmentalists to assess the design of the human habitat and the planners to support the viability of nature. This urban-to-rural transect hierarchy has appropriate building and street types for each area along the gradient, as graphically presented below.

Sustainable Community Design

The idea of sustainability is now integral to all community design and development. The primary goal of sustainability is design and development with an enduring, long-term perspective that values the environment and the various materials, energy and services it provides. Therefore, in the context of community design, guiding principles include minimal initial and long-term environmental impacts, use of eco-friendly technologies, and use of renewable materials, energy sources and energy efficiency.

Social equity and environmental justice are also essential aspects of sustainable community design. The very term "sustainable" is a community that reflects and supports these values. No community, regardless of scale, can sustain itself if there is no equity and justice. These are inherent in the principles of *New Urbanism* and sustainable design. Our communities must work for everyone and be level playing fields where residents and economic interests have real opportunity to pursue happiness and thrive. Also see the *Environmental Justice Element.*

Designing With Nature

We know that urban development and population growth result in substantial environmental effects, that can be best addressed through a thoughtful integration of the natural systems with those of the built environmental. Developing and projecting a holistic picture of the mature city with a sensitivity to site-specific design and development provides the basis for innovative application of old and new approaches. Flood control channels, for example, are viewed not only as storm drains but also as opportunities for development of wildlife corridors and as improved open space for hikers, equestrians and bicycle enthusiasts. The City shall partner with local flood control agencies to maximize access to and use of levees and service roads for hiking and other recreational uses.

FOUNDATIONS OF COMMUNITY DESIGN

The technical and philosophical basis for community design affects how the city will look and function as it builds out and is renovated and revitalized. Over the past two decades, there has been a revolution in land planning and community design that is being driven by the high costs of low-density development and supporting infrastructure. Moreover, the City has come to realize that the cost of quality design is no greater than, and in the long run can be less costly than poorly conceived and insensitive design. The near and long-term benefits to the community from well-envisioned design and quality development are significant. The following categorical discussion summarizes key considerations of quality community design.

Cohesiveness: Functional and Visual

Cohesive and coherent design is achieved by thoughtful connections of the built environment to the natural and historic features of the City and the Coachella Valley, and maintained by the recognition and continuation of characteristics that have been handed down to us over time. The City's integration of *New Urbanism* and *Ahwahnee Principles* into its design and development, along with attention to creating a pleasing balance between the natural and built environments, are the guidelines by which a sense of community will be enhanced.

Cohesiveness in design can be achieved through adherence to the essentials of scale and proportion, site and setting, and materials and color. The integration of the natural desert environment into the urban fabric enhances cohesiveness in design of the community. Within these essential principles, a variety of architectural styles can be supported, ranging from mid-century modern to mission style.

The desert provides an inspiring and pliable palette for design. It also presents clear constraints and opportunities for living in a dry and sunny climate. The use of native and other drought tolerant landscaping also extends the continuity of the desert into the built environment. The use of gravels, rocks, and boulders further promotes the continuity of the built and natural environments, emulates our surroundings and conserves resources.

Coherent Character and Identity

Cathedral City's natural setting, its mountains, foothills and desert washes are highly recognizable features that define the City's character and identity. A distinctive attribute of the City is the remarkable mountain views. The character of the community and its setting should be preserved and enhanced through thoughtful grading, revegetation and the use of building and landscape materials indigenous to the area. With spectacular natural and built environs that attract families, vacationing visitors, and second home residents from all walks of life, artists, professionals and others that value Cathedral City's environment, the City has unique and valuable resources.

Encouraging the re-integration of native desert landscaping materials also preserves and enhances the City's uniqueness. A wide variety of native and introduced plants make up the local landscape palette: ocotillo, barrel cactus, encilia, agave, date palms, California fan palms are essential symbols of the community and provide endless design opportunities. The emulation of the natural landscape and the protection of open space further the unique and marketable qualities of the community.

Placemaking and Urban Design

The City is committed to the creation of a diverse, livable and sustainable community made up of residential, commercial and mixed-use neighborhoods that enhance the quality of life for all residents and visitors. An essential part of creating a desirable community is a local and City-wide sense of place unique to Cathedral City. Over the past several decades, the City Downtown has evolved from a highway-fronting stretch of disjointed commercial development, to civic-centered entertainment retail-oriented urban village with national and international recognition. It has also evolved to include a variety of residential areas that range from high-density planned communities to low-density single-family neighborhoods. It also includes golf course-oriented destination resort developments that are iconic parts of the Coachella Valley.

The Public Realm

One of the most important concepts of integrated design is that of the "public realm", where social interaction takes place and where the sense of neighborhood and community is forged. The public realm is the shared space or community commons created at an intimate scale and enhanced to provide a pleasant and comfortable environment for sitting, talking and dining. It is this public realm that creates the coherent and cohesive nature of successful community design. Examples of the public realm include sidewalks, squares, pedestrian marketplaces, plazas and piazzas. The City's downtown event lawn and Fountain of Life area are an excellent example of the public realm.

Downtown: The Cathedral City Piazza

The Cathedral City Downtown has become a celebrated center of community life and the core of arts, entertainment and cultural activity, that attracts attention locally, regionally and nationally. The City's downtown design is recognized as a notable example of the urban village that mixes business, government, entertainment and culture, and hospitality and residential. The downtown emphasizes quality planning, design, materials and craftsmanship creating a built environment of which the City is rightfully proud.

Cathedral City addresses placemaking and urban design through the Community Design Element and other elements, including Land Use, Circulation and Mobility, and Open Space and Conservation. They describe the relationship between land use, family and broader social interactions, and the image and character of the built environment with the ultimate goal of attaining a strong sense of place, and social interaction and cohesion. Public open space is the critical component and staging area for diverse building types, transition space, sidewalks, landscaping, and other components that support and enhance the social environment.

Nodes and Corridors: Network Components for Moving and Living

The transportation network is inextricably tied to and makes the connections between the places we live and work and play and shop. Nodes are the parts of the network where we come together, whether it is by car, bike or walking, and where are lives intersect. Nodes are places of the highest density and greatest mix of uses. Ideally, they are places where we can leave our cars, bikes and LSEVs and walk between and among the various mix of uses. They are places for convenient living and working, and where there is immediate access to shopping, services, entertainment and socializing.

Network corridors are integrated with *Complete Streets* where we can safely drive, catch a bus, bike or walk to the neighborhood and community nodes. They provide for both higher speed travel and for the more relaxed and safe travel along attractive parkways and interesting adjoining development. Traditional suburban commercial and office development along corridors also serves to buffer and insulate residential neighborhoods from the noise and busyness of the corridor. Corridors are also where we can best see and appreciate the scenic vistas of our dramatic desert and mountain landscape.

Gateways and Focal Points

Cathedral City has a variety of important entry and focus points that provide opportunities to reinforce the City's identity and showcase scenic viewsheds. Entry monuments and iconic streetscape and landscape treatments reflect the community's unique character. Focal points can be located anywhere along major routes, including important street corners, within parks and other public open space, civic buildings, schools and historic areas. They should provide a welcoming experience to motorists, bicyclists and pedestrians as they enter and travel through the City.

Neighborhood parks are among the city's most valued scenic places, as they provide an enhanced sense of community and a visual sense of relief, calm and well-being. The layout of parcels within a residential subdivision can influence the economic impact, traffic safety, and livability of a neighborhood. Placing parks in the center of the neighborhood, for example, serves to provide a community with its own meeting point, a place for family activities, and a central neighborhood gathering place. Compatibility will be achieved through thoughtful planning and design.

COMMUNITY DESIGN: THE BUILT ENVIRONMENT

Community design does not occur in a vacuum or on a blank canvas. It involves the design, layout and construction of buildings, other structures and landscapes that are a visual layer that intervenes between the viewer and the natural desert and mountain environment. It is a three-dimensional construct that changes as we move past and through the built environment. Adhering to height limits, the use of natural materials, and complementary colors and tones for building surfaces, and the liberal integration of open space into community design concepts are the central character of the City. The following briefly describes the major components of the built environment and how they blend with the natural environment to create our urban habitat.

Harmony and Disharmony

The City's character is reflected both in the degree of harmony between the built and natural environment, and among and between the built elements. Does the building (or buildings) harmonize with the landscape and with surrounding buildings? Does the mix of buildings and architectural styles result in a harmonious whole? Does the plan harmonize with surrounding buildings and avoid excessive disruption, or does it overtly compete with and dominate the setting?

Diversity of design can and should avoid being abrasive and should result in elegant and dynamic integration with the existing and planned environment. At the same time, it is equally important to allow thoughtful and tasteful collections of styles, not homogenize the design elements or result in a boring repetition of elevations, roof lines and building materials and colors. Design diversity is healthy design.

Site Analysis and Development Planning

Site analysis is the first and most important opportunity to understand the limitations and possibilities of the site. Development proposals on highly exposed sites with valued scenic resources may conflict with the scenic, open space, and/or other design goals of the community. An adherence to the goals, policies and programs set forth in this element will focus the design process and the intent of this element. Site analysis and efficient development staging can help limit the amount and cost of grading, can optimize lot and building orientation, and provide a site and structure that fully exploits the opportunities and minimizes the constraints of the development site. Applicants should be encouraged to meet and confer with City staff early in or before initiating site planning and design. Major design components that should be reviewed include the following.

Building Proportions, Height and Setbacks

New structures should be similar in height to, and compatible with, other buildings in the vicinity, with the goals of preserving and enhancing design qualities of the built environment and preserving viewsheds. Setbacks should be compatible with those of surrounding structures and scenic resources, providing building presence without allowing the structure to dominate other buildings, the streetscape or the scenic viewshed.

Building proportions will also affect their compatibility with site and surrounding conditions. Establishing a relationship between existing and planned development may set a standard that is meant to rejuvenate a neighborhood, giving it greater influence in establishing future design criteria for and unique to the neighborhood. Generally, height and width of building elevations should not be significantly out of character with existing neighborhood development or natural scenic viewsheds.

Pattern and Rhythm

Nature makes, and human communities strive to adopt, natural and instinctively pleasing patterns and rhythms of motifs and massing. How well these elements are handled in community design can range from harmonious to dissident or clashing relationships. The recurrent alteration of peaks and slopes of the hills and the mountains can be emulated and complemented in the design of roof lines, and between the space and solids of buildings. At close quarters, pedestrians should be provided with a varied integration of structure and landscaping to soften and tie the structural elements to the natural ones.

Roof Types and Materials

The rhythmic patterns in new buildings and landscaping should complement and integrate with the established structures and surrounding natural environment. Roof types and materials can play a critical role in either complementing or degrading the scenic viewshed. Roof types, from flat to multiple arrays of hipped roofs, provide a range of possibilities for contrasting or imitative treatment. Excessive building heights are frequently related to roof design, and the roof should be balanced with the building elevation it helps to create. Scale, pattern and rhythm are also applicable to roof design and materials.

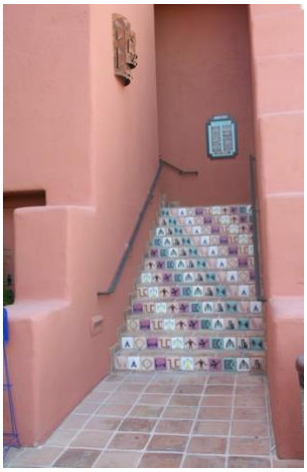
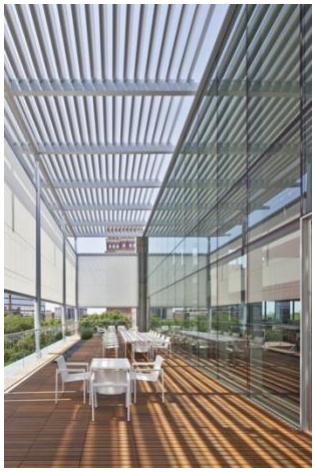
Surface Texture and Color

Prevailing sunny conditions and the predominantly light color of the surrounding desert make the selection of surface texture and color especially important. Surfaces that emulate the coarse, warm tones of the surrounding valley and hills are highly desirable, while slick and shiny finishes, if not properly applied, can produce glaring surfaces that detract from the viewshed and are not pleasing to the eye. However, the emergence of post-modern and other hybrid architectural styles, with their juxtaposition of architectural motifs and the use of contrasting, unusual colors and building materials, are examples of how contrast can be made compatible within broader standards.

Surface texture differs from patterns and rhythm in that texture is generally applied on a substantially reduced scale. It is seldom as strong a design element as architectural pattern or massing. Although styles change with time, and while the use of strong color may play a dominant role in the design, color is easier to change once development has occurred. The use of texture ranges from smooth adobe-type stucco or plaster to fluted, split-face concrete aggregate block. New materials and manufacturing are also yielding sculptural, highly articulated surfaces now found in many contemporary buildings. As with other elements of design, texture must be used carefully to complement the overall design while being compatible with surrounding materials.

Building Projections and Architectural Details

In many cases, a building's design is expressed in the detail and projections that grow out of the building envelope. Building projections and other architectural details play important functional and aesthetic roles in a building's efficiency as shelter and in its appearance, providing shade, privacy and screening from the elements, projections and architectural detail that also affect surrounding development. The use of porches and verandas can further enhance residential living space and provide protection from sun and wind. Whether simple or ornate, architectural details represent legitimate design elements; however, care must be taken so that buildings don't overtly clash or contrast with surrounding development, and suffer from the comparison. The appropriateness of a particular building design must be viewed within the context of the building's natural setting and man-made environment.

Site Planning and Design Review

The distribution of buildings and other structures, parking, driveways and landscape areas are the first and most critical aspects of project design, establishing relationships to the street and surrounding lands. The influences and effects of site planning are not always easy to visualize or assess without a detailed site plan. Even then, the complexity or importance of a development site may warrant the preparation of perspective renderings of the plan and structures. Care must be taken to not allow artistic applications of color, landscaping and graphic "eye wash" to obscure or misrepresent the design or how it will appear once built. Together with architecture, site planning is a critical process determining the compatibility of proposed development with the existing and planned development and the character of the community.

Signage, Viewsheds and the Public Realm

The East Palm Canyon Drive commercial corridor, Date Palm Drive and Ramon Road are the most frequently traveled, and are most impacted by signage of businesses attempting to make their presence and location known. Commercial signage should provide effective business identification while preserving the viewshed along existing and planned commercial corridors.

Transportation and Community Design

The transportation network is a critical component of community design and has a profound effect on the appearance of the City. Important components include street width and median and parkway design and landscaping. Other important components include gateway monument signage, street signage, commercial signage, street lighting levels and fixtures, and bus turnouts and shelters. Curb and pavement treatments, bike lanes and other on-road graphics, and utility structures and facilities also influence the appearance of the roadway. Adjoining development should buffer large expanses of parking with landscaping and pedestrian paths, locating some buildings at the street and parking at the sides or rear of the buildings. This design approach also serves to provide the streets with a sense of vitality and community that activates this important part of the public realm.

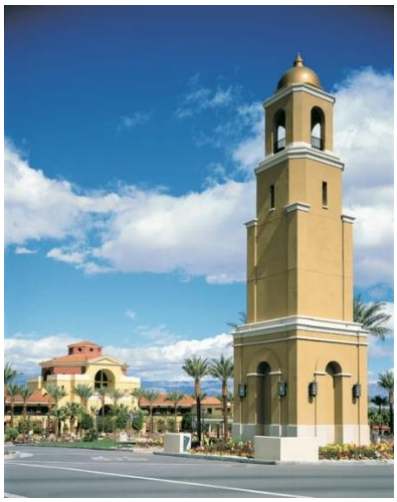
Perimeter Wall/Fence Treatment

Walls are used throughout the community and serve multiple purposes, from defining the parkway edge of commercial, residential and other developments, to screening trash enclosures and outdoor storage areas. Designs and materials include stucco-coated and precision concrete or split-face block, plain and painted slump stone with brick-capping or tile accents, and intermittent columns or pilasters. Fences range from decorative wrought iron to utilitarian chain-link (not generally endorsed by this element). Interspersing solid walls with wrought iron fencing provides views into development open space areas and relieves the closed-in feeling that walls can create. Wall breaks and fenestration along public rights-of-way help to integrate private community open space and viewsheds that can still be enjoyed by the traveling public. The City should encourage the continued use of this type of viewshed window to reduce the tunnel effect and preserve scenic vistas along roadways.

Parkway Landscaping

One of the most prominent and visible exterior features of neighborhoods and private communities is parkway landscaping. Design can range from the formal to the "natural" or combinations of both approaches. Formal design may include ordered rows of date palms or other distinctive tree, regularly interspersed with equally ordered shrubs and beds for annuals plantings. More informal designs seek to imitate nature by interspersing native and non-native desert plantings with gravel, cobble and boulders in a free-form or random pattern. Groupings of major elements, and the use of lawn areas may also be integrated into both more and less formal designs.

Community Design in Public Facilities



Community Design encompasses the entire City and includes public buildings, utilities, and street traffic control and safety devises that have the potential to detract from the appearance of the community. The City must consistently make quality appearance one of its prime priorities. Current efforts include the development of unique and distinctive desert landscape treatments on major roadways. Desert colors and tones can also be integrated into street signs, traffic signals and lighting standards to soften their impact on the surrounding viewshed.

Bus shelter design should also be a high priority, making these facilities functionally superior and aesthetically pleasing. These structures can utilize architectural styles that complement the streetscape treatment and elevate the appearance of these utilitarian structures. Utility cabinets located along the street, including traffic signal and telephone switching facilities, are frequently painfully obvious. To the greatest extent possible, these features should be installed in underground vaults, or enhanced graphically to enliven the public realm. Overhead utility lines also present visual obstructions to the natural setting and may pose safety hazards that should be minimized by a program of utility undergrounding.

BUILDING AND SITE REPURPOSING

As the face of retailing changes, some "brick and mortar" retailing has moved to the internet, while previously successful sites and buildings have fallen out of favor and some have remained in a state of disuse for years at a time. Through a process sometimes called "adaptive reuse" or re-purposing, old buildings are being renovated and updated to meet the new commercial, professional and even residential needs of the community.

Even if these sites and buildings are well-maintained, which is not always the case, their vacancy still causes a sort of blight on the neighborhoods where they are located. Vacant commercial buildings send the message to the retail industry that this location or area, or the surrounding neighborhood, will not support more retail or other development.

The rediscovery of mixed-use development and the synergies of assembling diverse land uses on one site can be a guiding principle for at least some of the City's building repurposing opportunities. For instance, the accompanying photos include a vacated Sam's Club building that has been repurposed for mixed use development.

Larger buildings of this sort, with large expanses of clear space, have been successfully redesigned to accommodate a mix of uses, including multi-family residential. While the opportunities will differ based on building type, location and surrounding development, a new and fully activated development can be realized with creative design and marketing.

These include the vacant K-Mart/Burlington building immediately south of the old Sam's Club. Both of these buildings are located on a pleasant stretch of Date Palm Drive with good access to major roadways and surrounding development and uses that would complement mixed-use development, including residential components.

One of the keys to successful building re-purposing on this scale is making it a destination rather than just a shopping center that meets daily needs. It should be a place where people want to be, not where they have to be. Therefore, as with the City Downtown, such re-purposed centers need to be active and dynamic with retail, dining and entertainment that makes it a one-stop "experience". Uses being successfully integrated in this type of large-scale re-purposing include eating and drinking establishments, arts and cultural venues, clubby bookstores with cafes, day spas like *Spa Envy*, and fitness centers.

There is always a need for multi-family housing and the inclusion of residential in these mixed-use projects extends their activation and time-of-day use, enhancing their economic viability and also making them excellent candidates for transit-orient service. In essence, this type and scale of building repurposing can create attractive and appealing *live/work/play* venues that diversify Cathedral City and make it a trending place to live and do business.

PRINCIPALS OF MIXED-USE AND TRANSIT-ORIENTED DEVELOPMENT

Integral to *New Urbanism* and mixed-use planning and development is the integration of multi-modal and transit mobility. The purpose of transit-oriented development (TOD) is to bring a critical mass of people and activities close to well-served multi-modal and transit stops so people who want or need an efficient alternative to the private car can walk, bike or use the bus. Several fundamental conditions are necessary for successful mixed-use and TOD projects:

- **Connectivity** – you can get from "here" to "there" easily; home, work, shop and social are connected by a network of sidewalks, bike and LSEV paths, lanes, and streets; you can drive, take the bus, bike or walk.
- **Density** – lots of people live close by; the housing choices fit the needs and desires of a variety of people in the community.
- **Intensity** – most needs can be met close by; everyday shopping and services are right there, and residents are on-site and a part of the action.
- **Design** – the place looks and feels comfortable, solid and soft (like home) at the same time; the transit, the sidewalks, the trees, the buildings all contribute to a whole that is hip and dynamic.

The "transit" part also has requirements:
- It must be safe, convenient, pleasant, efficient, and reliable
- It goes where those who live nearby want to go
- It is viewed as a viable alternative to the car

Land Use and Design

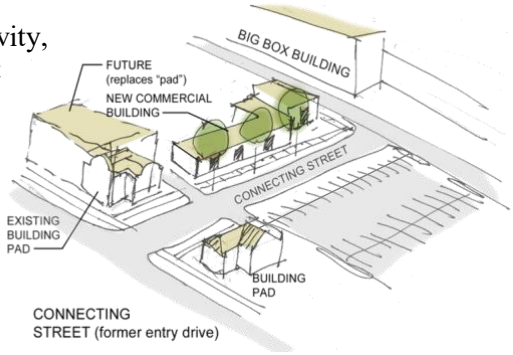
Transit-oriented and mixed-use developments are based upon land use policies that promote diverse uses and higher densities combined with high design standards applied to the public realm and the "community commons". More people and more diverse uses in close proximity are essential for successful mixed-use and TOD development.

- **Land use:** The immediate area around a transit hub supports the activities needed by people who use multi-modal transportation (coffee shops, incidental shopping, food, retail and entertainment, as well as parking). A synergy of uses in a fine-grain, walkable neighborhood of stores, services, and workplaces.
- **Land use:** The allowable density and floor area ratio should be increased compared to other areas within the community. This brings more density and intensity, and is an economic incentive for developers to undertake the costlier buildings typical of TOD. Less parking should be required in these mixed-use areas.
- **Design:** The public realm should be beautiful and rewarding to the pedestrian; a place where one is glad to spend time.
- **Design:** The buildings should be "active" at the ground level and the walls more or less transparent. This enhances safety (eyes on the street), it evokes pedestrian/building interaction, and it offers service/food businesses a window to prospective customers.
- **Design:** The ground floor of buildings should be adaptable to changes in use over time so the framework of the neighborhood remains, but the businesses can adapt and evolve.

Design Principle No. 1
Entry/Connecting Streets and Internal streets

In suburban patterns of development of the recent past, the entry is flanked by isolated pads separated from the main stores by 250 to 400 feet. There is no connection between the main street and the stores, and even when lined by trees, the driveway is a riskier place for a pedestrian or biker. In TOD and mixed use projects, the entry must be a street with sidewalks and that is lined with stores to animate the environment for both cars and people.

Similarly, to create the pedestrian environment necessary for connectivity, internal streets should not be simply driveways that connect adjacent developments or buildings within a development. They should be designed as streets that function equally well for pedestrians, bikes, LSEVs as well as cars. In this way they help reduce local traffic, and they create the fine-grain network of connectivity.



Internal streets can and should be narrower, with much slower speeds and buffers to allow adjacent uses but creating a sense and real safety.

Connectivity and Parking

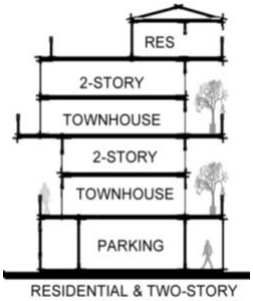
Another part of adapting to compact, mixed-use or transit-oriented development, is adjusting parking requirements. As workplaces and shops become more integrated with where people live, the 300-to-400 square feet of land devoted to parking car will become more valuable. Shared parking, or park-once-and-walk, frees up land for more revenue-producing use. But simply bringing uses together is not enough, the pedestrian realm must be enhanced so once out of the car, one can get around in the environment with continuity of storefronts, access to workplaces and home tied together by a safe, convenient and beautiful integrated network of paths. Also see the discussion of *Parking for Commercial Uses* below.

Simply creating a beautifully landscaped walkway between "pad buildings," however, is not connectivity; it will not by itself entice someone out of their car. Pedestrians are fickle, and the public realm devoted to them must also serve real needs – social and commercial.

It is common in TOD and other mixed-use development to park cars toward the center with buildings lining streets – internal and external. This helps create continuity, a defined slow-speed realm, and recreates the "street life" that has been sacrificed in recent development patterns. As this pattern is implemented, the major intersections will express the street life and activity that accompanies density and intensity. Two levels of connectivity emerge; one oriented to the public street and one that is an "internal" network of connectivity.

Design Principle No. 2: Density

The term "density" generally means more dwelling units or more commercial floor area per acre; but it ultimately means more people. This idea, also called "intensification", is often resisted by communities in the early stages of developing a full spectrum of connectivity and housing choices. The City leaders, staff and community must be comfortable with the positive contributions that mixed-use development, including TOD, make to the community, which can be summarized as follows:

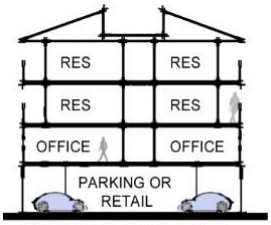


RESIDENTIAL & TWO-STORY TOWNHOUSE OVER PARKING

Transit-oriented and mixed-use development in general is not for everyone. But for some, and perhaps for many of us at certain stages in our lives, being near "the action" is desirable; this is important to old and young alike. Diversity of housing alternatives reflects the diversity of our society.

More Housing Choices

3-STORY WOOD FRAME TOWNHOUSE W/OFFICE



RESIDENTIAL OVER OFFICE & PARKING OR RETAIL

The detached single-family residential (SFR) remains the dominant housing type built today, even as household make-up has diversified, morphed and splintered. Besides the well-documented growth of "millennials" and "boomers" there are other trends that indicate that denser housing choices are desirable as part of a strong, diverse community. Responding to these demographic changes, along with transit alternatives, will generate more multi-modal users, bus ridership and acceptance of connectivity, density and diversity within the community.

Building types that mix uses vertically increase both density and diversity and help shape the pedestrian realm. More people, including and especially millennials and retirees, want to live where they don't need a car to do shopping, grab a coffee or dine out, or go to a movie or other form of entertainment. As noted, housing that offers live/work opportunities have ancient roots and are also making a comeback in the new and revitalized urban village.

Design Principle No. 3: Diversity of Uses

Compact mixed-use and transit-oriented developments are based on the idea of bringing together the parts that make up the life of the community – home, work, shopping and social. The scale of these developments and the integration of uses is best characterized as "urban villages", as discussed above. The density and intensity of uses reverses the pattern of isolated, single-purpose buildings and designs toward an integrated and synergistic mix of activities. This principle includes mixed and related uses that are a destination in itself and connected by sidewalks and nonintrusive parking.

Land Use: To accommodate diverse and intense activity, land use regulations should be more permissive in terms of uses, and more selective in terms of requiring conditional use permits.

Flexible and Diverse Commerce: To make more dense development desirable to residents, the immediate area around multi-modal and transit facilities should be developed for a fine-grain mixture of housing types (studios, one- and two-bedroom units) and commercial space that can serve a coffee shop, a small office, specialty retail stores, nail and hair salons, dry-cleaners, a green grocer, specialty wine/beer store, and personal business services that are not even in existence yet.

Instead of zoning for specific isolated uses, compact development permits the overlapping of functions; it can be challenging at times, but it is more convenient and offers more opportunity for interaction.

Enrichment of the Social Experience: Compact and diverse development that was common in small downtowns two generations ago still serves as a model for urban villages with the integration of commerce and social exchange. This pattern is especially relevant today when time has shrunk and space has expanded leaving only small islands of social experience in our towns and cities (Starbucks thrives on the need for social encounters more than on the need for caffeine). The public realm in mixed-use and TOD development is the stage setting for a rich public social life.

Buildings: The design and composition of buildings also must adapt and provide flexibility to accommodate the needs of diverse uses within the mixed-use/TOD environment, where buildings should:

- Create ground floor volume with ground-to- 2nd floor heights of 14'.
- Increase variety at the ground level by designing the storefront module as multiples of 6' (12', 18', 24' and 30').
- Encourage retail and food as the primary uses along a sidewalk.
- Require continuity of storefronts to enrich visual communication between inside and outside. Limit blank walls to 24'.
- Compose and animate the facades of multi-use buildings to tell the story of what goes on inside.
- Allow/encourage home-offices and live/work developments.
- Allow regulated signage in second floor home office windows.

Connectivity, Density, Diversity and the Public Realm

The following design principles are intended to help shape the development at nodes and along corridors in ways that support multi-modal and transit systems. Integrated design and development makes alternatives to the car efficient, convenient and pleasant, and contribute to economic strength, sustainability and social cohesion.

In general, the design principles are in line with what is called "compact development" or "mixed-use development." Both terms describe an approach to development that emphasizes connectivity, density of population, and diversity of uses within new and in-fill projects along travel paths with access to alternative modes of travel and a rich, safe and beautiful public realm.

It is important to recognize that the people who are drawn to the compact urban village include demographic groups that are large and have significant economic clout. Recent trends show that seniors who are downsizing may want to be less dependent on the car and enjoy the activity in a pedestrian-friendly mixed-use neighborhood. For "millennials" the appeal is similar – being able to integrate the social, work and shopping aspects of their lives, and not have to own, store or insure car. As the principles of density and diversity shape new developments, design becomes increasingly important. Not necessarily because things should simply be "pretty" but because the public realm increasingly influences the lives of people in these compact mixed-use centers.

THE PEDESTRIAN

For both multi-modal systems and transit-oriented developments, success hinges on the pedestrian. We are all pedestrians at some point during the day. Whether simply walking from our parked car or on our daily route, mobility must be designed for the pedestrian experience. When we walk, we are part of the public realm, but for many decades the public realm has been designed primarily for the driver.

Enhance the Public Realm

We are social animals and the "public realm" is the space where we share our lives in public. The public realm is not just the public rights-of-way – streets, alleys, sidewalks and parkways, it also includes the facades of buildings, plazas, parking areas, "open space". The General Plan and Zoning Ordinance already extend the influence of the City onto private property; they recognize the shared impact private development has on surrounding lands and the public space. The purpose of the design principles in this element is to create a shared public realm that is functional, legible (understandable), coherent, attractive and expressive of the values of Cathedral City. The public realm complements the density and diversity necessary for successful mixed-use and multi-modal mobility by creating an environment that rewards being part of the community.

The Community Design Element design principles start where those of the *Circulation and Mobility Element* and SunLine leave off. The SunLine Design Manual makes a modest effort toward bus stops pleasant, convenient and reliable; they fall short of what is needed to fully integrate these facilities into the urban village. For transit to be successful, more integral design principles must apply to the public and private realms surrounding the stops. The goal is to create a pleasant experience for the rider from home-to-bus-to-work. The diversity of the transit-oriented urban village will help assure loyal ridership.

The Pedestrian Experience

For both multi-modal and transit-oriented design, the pedestrian experience must be the starting point. The overall experience for the pedestrian must be a travel path that is safe, pleasant, convenient, connected and interesting. For every pedestrian –resident, visitor, bus rider, worker, shopper – the experience of the public realm is an essential element of a successful community. It is as a pedestrian that we are most aware of the impact of the public realm on our well-being. Future decision made by traffic and civil engineers, architects and landscape architects will enhance or detract from the pedestrian experience. Following this element's design principles can influence the incremental as well as broad, full-sweep of changes at an activity node and along the corridor.

Designing at Different Scales

There are essentially three scales at which these design principles apply, the eye-level sidewalk scale, the street scale, and the highway scale. Because so much depends on the pedestrian experience and how it relates to the success of alternative modes of travel, we first address the area immediately adjacent to a the multi-modal (including bus) "stop".

Pedestrian Stop and Go: Among the many elements and issues related to a good mobility stop, the following stand out:

- Transit and other modes must operate efficiently and reliably
- The stop must protect the pedestrian from traffic
- The stop must be identifiable for pedestrian, biker and driver
- The stop must create an environment that is interesting and facilitating

Protecting Pedestrians and Bikers: Pedestrians and bicyclists are vulnerable near traffic; to be a safe setting at multi-modal stops, the following elements should be included:

- Street lights, monuments and bollards arranged at the stops to contribute to pedestrian safety.
- Where possible, large "urban" street trees that have stout trunks and large shade canopies should be placed as part of the overall stop design. Specific species that are distinctive and majestic, such as date palms, are a symbol of sustainability within the urban fabric, and reinforce the continuity of the rich pedestrian realm. The trees must be setback from the curb so they do not interfere with travelers regardless of mode.

Making An Identifiable Place: Along East Palm Canyon Drive the City has already implemented a pattern of street trees, enhanced paving, lighting and monuments that clearly show a community that cares about its image, and have improved the experience for bicyclists and pedestrians. At multi-modal stops, these elements should be concentrated and accentuated.

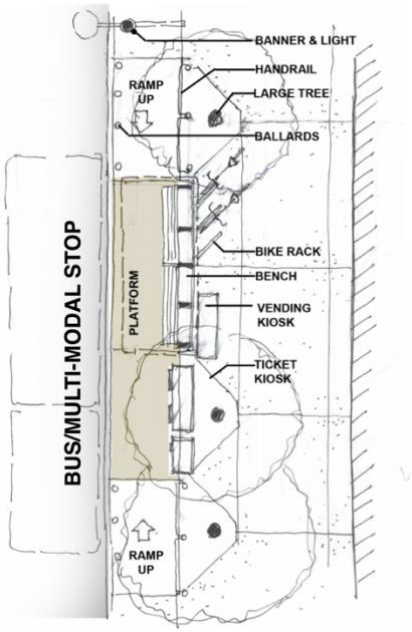
- street light with banners, active route and time display, bollards that identify the actual door locations, and site-specific paving or monument when designed together will convey the importance of the stop along the roadway.
- Supportive and informative graphics and in-stop lighting.
- A specific species of urban canopy trees – for shade, protection and identity.

Identifiable Places

- Big trees
- Banners
- Bollards
- Benches
- Bike park
- Paving
- Shade

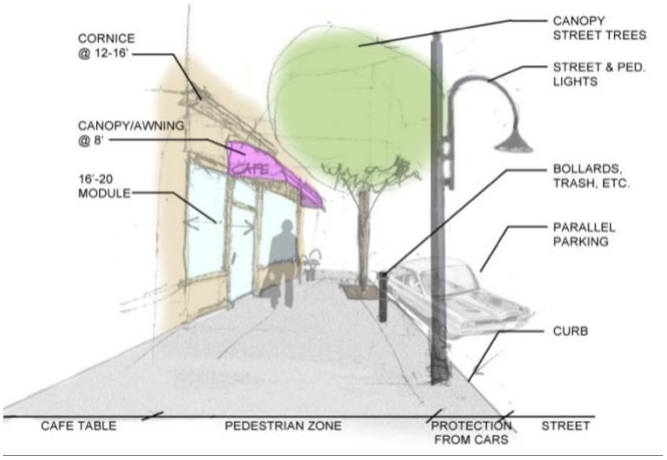
Multi-Modal Stop at the Sidewalk Scale: The multi-modal stop is one of the elements of connectivity throughout the community, and each stop is the gateway into the local fabric of the street and neighborhood. The sidewalk is the next link in the overall network of connectivity. So, in addition to street trees and pedestrian protection, sidewalks leading to the mobility stops should follow these principles:

- Link the mobility stops with plazas, buildings, and parking
- Define the public realm by connected buildings - no large gaps
- Be adjacent to accessible stores with significant transparency and interest – no long blank walls



Building to Sidewalk Experience: Buildings, their placement, scale and design are the essential elements that define the public realm and create the pleasant and interesting pedestrian experience. Buildings within mixed-use and transit-oriented developments should follow these principles:

- Place buildings at the back edge of sidewalks ("build-to" the sidewalk as opposed to "setback" from the sidewalk)
- Have a regular rhythm of storefront piers (multiples of 6' work well; 12', 18', 24', and 30' are all workable store widths in creating a dense and diverse pedestrian commercial area)
- Have a horizontal element at between 12 – 14 feet above the sidewalk to suggest the "pedestrian scale." A "belt cornice" is the traditional means of creating vertical scale. Also, to provide adequate volume for ground level retail, the second floor should be at about 14' so the cornice lends legibility to the façade.
- Extend over the sidewalk with awnings, canopies or arcades.
- The store windows themselves can contribute to the pedestrian scale. With a bulkhead at about two feet, and a header at about eight feet, the human eye is right in the middle of the glass panel.

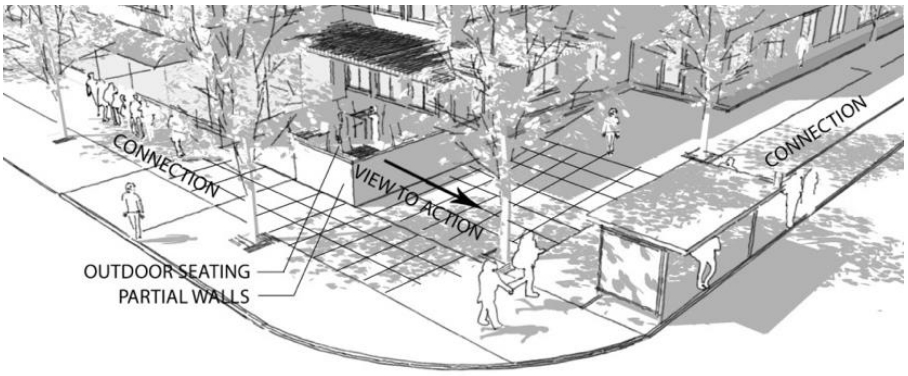


These elements together create a legible framework for the façade. Of course, styles and tenants change over time, but a building or set of buildings that will endure should have legible structure, rhythm and proportions.

The Pedestrian Experience – Open Space: Another important element of the successful sidewalk scale and pedestrian realm is properly-sized open space. Plazas, piazettas, and outdoor rooms require the sidewalk and buildings to make accommodations to the "build-to" line. The successful outdoor pedestrian space should provide the following:

- protection from cars
- shade from trees, awnings, and arbors
- partial enclosure by walls and overhead elements
- a view of street activity; plazas are part of the street scene, not isolated from "the action"
- connection to stores, parking and the sidewalk

Sense of Place – The Plaza, Piazza and Piazzetta: Generally bigger is not better for creating a lively "place." We, as individuals, are the measure of "placeness"; it is the human scale that matters. It is the individual who feels safe, connected, welcomed, so bigger may undermine the sense that an outdoor area seems to "fit". A too-big plaza conveys a feeling not unlike peering into a large empty restaurant. Too many people is better than too much space. The "places" created suggest that one can linger; outdoor places provide for the social interaction that is essential to a lively and diverse "street life".

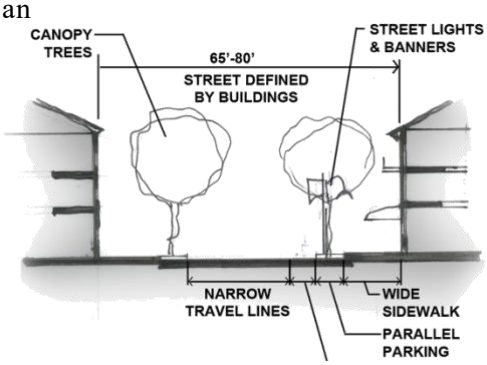


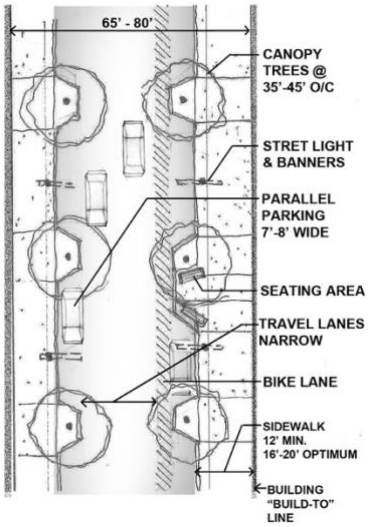
These places may simply be a bulge in the sidewalk where one can step out of the way of other walkers/shoppers, or it may be a line of outdoor tables where one can stop and have a coffee or sandwich, or it may be a semi-formal piazza with benches, an arbor, perhaps a fountain – all of which suggest that "open space" is intended as a *public place* and available for a longer "break". These "outdoor rooms" may be along streets, in alleys or lanes, or slipped in between buildings entries. In every case, they are meant to be part of the network that is the fine-grain pedestrian life in the public realm.

Street-Scale Design Principles: These design principles are also intended to influence the street. To link mobility stops to the greater neighborhood, and to accommodate a range of mobility choices, the street should be viewed as a linear space that is enlivened and defined by flanking buildings, parkway landscaping, sidewalks, trees, lights and signs. The street section (from building to building) is critical to creating the scale that gives pedestrians, bikes and LSEVs the same consideration and respect as motor vehicles. Current standard engineering practice in street design emphasizes efficiency and safety based upon the needs of vehicles, and are often "driven" by perceived needs of fire and trash trucks. The unintended consequence is that the street becomes intimidating to the pedestrian, and bicycle and LSEV users. The recent movement toward "Complete Streets" (see *Circulation and Mobility Element*) is a mandate to define the public realm to include a desirable experience for pedestrians, bikers and LSEV users.

Complete Street driven design should follow these principles:

- be as narrow as possible. This is a traffic calming strategy as well as an aesthetic consideration
- provide parallel parking. The parked cars protect pedestrians from traffic and provide dispersed parking.
- accommodate bicycles and LSEVs
- be framed by vertical elements - street trees, lights, banners
- sidewalks wide enough for protection, movement and seating
- be lined by buildings with storefronts
- provide enhanced pedestrian street-crossing to encourage flowing movement and enliven both sides of a street
- animate facades to express life and variety within
- shape the building to create plazas or other "people places" at transit stops and corners. These outdoor rooms are both functional and symbolic - they convey "importance" and people-oriented activity at the various street scales





One of the most challenging aspects of making the multi-modal stop system successful is finding the balance between too much and not enough parking. It is generally agreed among planners and traffic engineers that the historical pattern of commercial development does not take into consideration joint-use or shared parking. Land use synergies and reciprocal parking plans should be given more attention so that the emphasis is on the dynamic and activated parts of the development and less on the parking. Residential multi-family and commercial parking demand is further discussed below.

PARKING: THE NEW PARADIGM

Multi-Family Residential Parking Demand[1] [2]

In California, valuable research has been conducted on the travel behavior of those living near transit-oriented development, which is a useful proxy for mixed-use developments and those sharing a multi-modal stop such as transit. Analyses of mixed-use-serving transit use within one-quarter mile of transit services looked at 20 to 60 acre multi-family developments and found that most residents were young professionals, singles, retirees, childless households, and immigrants. These residents also needed less dwelling space compared to other households, and were drawn to residences in mixed-use developments by convenience and finances. Also relevant and important for mixed-use and transit-oriented development success is that most residents worked "downtown" and in other locations with convenient transit and multi-modal service.

An analysis of twelve housing projects near transit stations in denser areas found that occupancy rates averaged 1.66 people with 1.26 vehicles per household. These results were compared with an analysis of the overall average household size and vehicle ownership in the same census tract and found that household occupancy averaged 2.4 people and 1.64 vehicles. While 48 percent of all households had fewer than two vehicles, about 70 percent of mixed-use and TOD residents had fewer than two vehicles.

Several years' analysis, including extensive study of transit use and TOD development in California, clearly indicate the potential to reduce parking by 23 percent in multi-family developments within or in proximity to a transit stops. These efficiencies are best realized in mixed-use and TOD development by providing a variety of household types, as mentioned above. It is also apparent that with changing economics and demographics, more and more residents are choosing to live within mixed-use developments and near transit services.

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1 "Statewide Transit-Oriented Development Special Study Parking and TOD: Challenges and Opportunities", California Department of Transportation, 2002.

2 "Vehicle Trip Reduction Impacts of Transit-Oriented Housing", Robert Cervero, University of California, Berkeley, G.A. Arrington, PB Placemaking. 2008.

Parking for Commercial Uses

There has generally been a lack of systematic analysis of the parking demand effects of incorporating office and retail commercial in mixed-use and especially transit-oriented development. More research has been conducted on the common problem of providing too much parking for both office and retail commercial within such developments. It must be realized, however, that numerous factors affect commercial parking demand, including residential densities, employee demographics, retail sales volumes, employee densities, and types of adjacent land use. Some of the mixed-use/TOD-style developments that have been analysed indicate that convenient access to multi-modal/transit can substantially reduce office and retail parking demand.

Table CD-1
Commercial Parking Reductions at Selected TODs

TOD	Land Use	Parking Reduction
Pacific Court (Long Beach, CA)	Retail	60%
Uptown District (San Diego, CA)	Commercial	12%
Rio Vista West (San Diego, CA)	Retail/Commercial	15%
Pleasant Hill (CA)	Office	34%
Pleasant Hill (CA)	Retail	20%
Dadeland South (Miami, FLA)	Office	38%
City of Arlington (VA)	Office	48%-57%
Lindbergh City Center (Atlanta, GA)	Speculative Office	19%
Lindbergh City Center (Atlanta, GA)	Retail	26%
Portland (OR) Suburbs*	General Office	17%
Portland (OR) Suburbs*	Retail/Commercial	18%

* Based on maximums specified in Metro's Title 2 Regional Parking Ratios.

Mixed Land Uses and Shared Parking

The mix of residential, office and commercial uses can be optimally integrated in a manner that makes shared or reciprocal parking possible and adequate, and can reduce overall parking demand for such developments. This sharing of parking by different land uses is possible because peak activity and parking demand periods can differ between land uses. This integrated land use and parking approach generates parking demand that is substantially less than that typically called for each of the individual land uses. This frees up valuable land for other on-site uses.

As implied above, there are important issues of land use management that must be addressed to make shared parking effective and adequate to serve all users. First, it is critical that the various mix of land uses have differing peak activity periods and associated parking demand. Such complementary land uses might include offices (a daytime use) adjacent to a dinner house or movie theater (evening uses) which share parking but during different times of the day.

Another characteristic of an effective mix of land uses are those that provide retail and personal commercial service that may have a typical daytime peak activity period, but which can tap into a substantial pedestrian market of nearby residents and office and other employees that take advantage of these commercial services before, during or at the end of the work day. This type of land use mix can realize market synergies that draw from a wider geographic area without a commensurate increase in parking demand.

The bottom line is that thoughtfully matched and integrated land uses in mixed-use developments can significantly reduce the total parking demand for these uses, including residential. Examples show that an overall reduction in parking demand can be realized through thoughtful mixed-use/TOD planning and use management. A conservative rate of reduction of about 25 percent could significantly affect the quality, appeal and amenities of these projects.

LEGEND

- **A** Internal Parking
- **B** Corner Prominence
- **C** Highway-scale building
- **D** Retail & plaza at corners
- **E** Access to parking
- **F** Residential over parking
- **G** Residential over medical
- **H** Residential over retail
- **I** Buildings at sidewalks
- **J** Bus/Multi-Modal Stop
- **K** Arterial streetscape

COMMUNITY DESIGN AND SUSTAINABILITY

Cathedral City has taken a very pro-active stance in promoting and realizing sustainable development in every aspect of community design. These efforts are described in detail in the *Healthy and Sustainable Community Element*, and in the City's *Sustainability Plan* and its *Green for Life Program.* Sustainability is a foundation principle of community design and its implementation is found in site planning and building orientation, solar access, construction materials and design, energy and water needs, access to multi-modal transportation, and other design considerations. It sets an example by thinking globally and acting locally.

Under the California Energy Efficiency Strategic Plan, the state has established ambitious goals for the development of zero net energy (ZNE) buildings. These include:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030
- 50% of commercial buildings will be retrofit to ZNE by 2030
- 50% of new major renovations of state buildings will be ZNE by 2025, and 100% by 2035

Net-Zero buildings will include solar arrays ranging from 6 kilowatts to 8 kilowatts in size, and linked systems. The US Department of Energy's Energy Star program suggests that a *Green Home* might include the following systems: photovoltaic array with batteries, compact and ultra-efficient appliances, super-insulated walls, basement, and ceiling, low-energy lighting, optimized HVAC mini-split systems, triple-glazed windows, skylights with summer shades, recycled building materials, and low water use toilets and dishwashers, and xeriscape landscaping.

LIGHTING AND PROTECTION OF THE NIGHT SKY

It is a well-known principle of human values that you cannot love what you do not know or cannot see. There are few wonders of the world that are free to all than being able to see the moon and stars on a clear night. And yet, modern society and the built environment have done more to destroy our view of the night sky, this wonderous gift that has helped propel humanity forward.

Light pollution has been associated with an increase in sleep disruption and human disease, and has a profound impact on wildlife. Controlling and managing artificial light in our built environments can be done, while still achieving the basic goals of lighting. The International Dark Sky Association (IDA) provides a wide variety of educational and technical data and information that can help the community to meet its lighting needs while preserving the night sky. IDA also provides model lighting ordinances. Preserving and restoring our views of the night sky must be an essential goal of community design.

"A starry sky is something that touches your soul. Our civilization's religion, philosophy, science, art and literature all have roots with our views of the heavens, and we are now losing this with consequences we cannot fully know. What happens when we cannot be inspired by the night sky?"
— Alisha Sevigny, Summer Constellations

FUTURE DIRECTIONS

The future of the community and its design would have been unpredictable half a century ago. And the urban sprawl example of the Levittown model of residential neighborhoods is less and less sustainable or even desirable. Physical, environmental and financial resources are not infinite, and substantially greater efficiencies and sustainable use of resources are now the rule. New technologies in communications, energy and transportation are also changing the community design paradigm. So, the question becomes what sort of future should we plan?

The Community Design Element attempts to preserve the best of Cathedral City, evolve residential neighborhoods and downtown areas, and plan for more integrated mix of uses that increase community cohesiveness, reduce material needs and increase social and economic equity. Trends that are in our futures include expansion of shared and automated transportation systems, expansion of education and culture as essential quality of life matters, improved health and wellness, and renewed efforts to improve the human ecosystem and preserve the natural ones.

Community design considerations, including preservation and enhancement of scenic highways, can subtly and profoundly shape the image of the community. Establishing basic criteria to promote good and conscientious design that enhances community cohesiveness will allow Cathedral City to emerge as a thriving community. Community design considerations are directly related to issues associated with land use, traffic, arts and culture, health and safety, economic development and environmental systems.

The Community Design Element can be implemented by several mechanisms, which include the thoughtful application of the other elements of the General Plan, robust Specific Plans, the City Zoning Ordinance, and development plans for individual project areas. The most effective instrument will be the Zoning Ordinance, which set forth specific standards and establishes design parameters and guidelines for site planning and building design. The following goals, policies and programs will help to guide the design of the community and all of its various parts well into the future.

GOALS, POLICIES AND PROGRAMS

Goal 1: A high quality of life through careful, meticulous planning, and sustainable community design and development that balances aesthetic, economic, social and environmental needs and goals, while ensuring a highly livable urban and natural environment for future generations.

Policy 1.1: The City recognizes the importance of quality planning and design and shall develop and update standards and guidelines that address all areas of community design.

Policy 1.2: The City shall apply the design standards and associated Municipal Code to the processing of all development proposals within the City's designated Downtown district as set forth in the Downtown Design Guidelines.

> **Program 1.2.1:** The City shall initiate a review of the 2002 Downtown Design Guidelines and shall update this document in a manner that builds from and extends the aesthetic, functionality and values reflected in the Community Design Element and the other General Plan elements.
> **Responsible Agency**: Planning, Architectural Review Committee, Public Works, Planning Commission, City Council
> **Schedule**: 2020; Every five years
>
> **Program 1.2.2**: The City-Wide Design Guidelines and Zoning Ordinance shall be periodically reviewed and, as appropriate, revised and updated to reflect the changing urban pattern and needs of the community.
> **Responsible Agency**: Planning
> **Schedule**: 2021; Every five years

Policy 1.3: The City shall continue to take bold and decisive steps to realize a livable, vibrant and sustainable community based on the principles of *New Urbanism*, *Smart Growth* and social equity, and focused on a vision and strategy of economic development and life-enrichment for all of its members.

Policy 1.4: The City shall confer and consult with Riverside County Flood Control and CVWD to expand the use of stormwater channels, levees and service roads for hiking and other appropriate recreational uses.

> **Program 1.4.1:** Consistent with multi-use agreements with flood control agencies to use stormwater channels, levees and service roads for portions of CV Link, the City shall seek to expand the use of channel levees and service road for hiking and other appropriate recreational uses.
> **Responsible Agency**: Planning, Public Works
> **Schedule**: 2020; Ongoing

Goal 2: A community that is beautiful as well as healthy, spacious, clean and well-balanced.

Policy 2.1: Neighborhoods shall establish a well-defined edge or boundary, consisting of landscaping, green belts, open space, and/or entry monumentation, in appropriate locations to help create a unique community image and sense of place.

> **Program 2.1.1** : The City shall require the incorporation of parks and open space into new development projects, and shall ensure that new parks and open space are developed in the early phases of development projects.
> **Responsible Agency**: Planning; Planning Commission; City Council
> **Schedule**: On-going

Policy 2.2: Community design, architecture, and landscaping standards and guidelines shall be compatible with and enhance the City's desert setting and natural scenic resources.

Policy 2.3: The City shall pro-actively work to preserve and restore the community's night sky by updating and revising the Lighting Ordinance based on the guidelines set forth by the International Dark Sky Association.

Program 2.3.1: To preserve and restore the community's night sky, the City shall review and, as appropriate, update the Lighting Ordinance to require outdoor lighting to be shielded, limit in height, number, and intensity of fixtures to the minimum needed to provide sufficient security and identification on residential, commercial, and other development.
Responsible Agency: Planning, Public Works, Engineering, Planning Commission, City Council
Schedule: 2020; Ongoing

Goal 3: A community where principles of sustainability and environmental stewardship are an inherent and fully integrated part of the design and development of the entire city.

Policy 3.1: The City shall apply the principles of sustainability in all aspects of community design, development and regulation on both a public and private sector level.

Program 3.1.1: The City design review process, whether for public or private development projects, shall include a thorough assessment of how and to what extent projects are sustainable, and a sustainability check list derived from the City Sustainability Plan, this element and other regulatory and policy documents, shall be developed and used to assess all project's sustainability.
Responsible Agency: Planning, Public Works, Planning Commission, City Council
Schedule: 2020; Ongoing

Policy 3.2: Native desert landscape materials and site-sensitive architectural designs shall be incorporated into all public and private building projects to complement and enhance the functional and aesthetic relationships between the natural and built environments.

Policy 3.3: The City shall actively pursue joint land use agreements with the Agua Caliente Band of Cahuilla Indians and individual landowners to retire billboards located within the City limits.

Policy 3.4: The City shall maintain and enforce a general Sign Ordinance and the Auto Center Sign Ordinance, which define permitted sign locations, sizes, maintenance, and other related requirements.

Policy 3.5: Overhead utility lines shall be undergrounded to the greatest extent practical through the establishment of an undergrounding program and guidelines.

Goal 4: A communitywide development pattern of multi-level functional design that supports and promotes social equity and environmental justice.

Policy 4.1: To the greatest extent practicable, promote residential development that provides a variety of housing types and affordability within a single neighborhood, instead of separating people by income level, age or family situation.

Goal 5: A community-wide multi-modal transportation system that addresses the City's desire to facilitate all modes of travel and reduce dependency on the use of motor vehicles, while helping to meet the City's other community design goals.

Policy 5.1: As many services and activity areas as possible, including commercial, professional and health services, should be located with convenient multi-modal access, including within easy walking or biking distance of transit stops.

Program 5.1.1: The full range of community design principles shall be applied to all public and private development proposals to ensure that streets, pedestrian paths and bike paths contribute to a system of fully-connected, interesting routes to all destinations.
Responsible Agency: Planning, Public Works, Engineering
Schedule: On-going

Program 5.1.2: The City shall implement its *Active Transportation Plan* and *Complete Streets* principles in a manner that encourages pedestrian and bicycle use and shall be spatially defined by buildings, trees and lighting, and discourages high speed traffic
Responsible Agency: Public Works, Planning
Schedule: On-going

Program 5.1.3: The City shall review proposed and existing commercial development for opportunities to enhance pedestrian and other multi-modal circulation, safe and convenient ingress and egress, screening of outdoor storage/loading and other unsightly areas, lighting, signage, and the planting of mature landscaping.
Responsible Agency: Planning, Public Works, Engineering
Schedule: On-going

Policy 5.2: The City shall strive for population densities around prospective transit and other multi-modal stops to provide the critical mass of people and activities in these areas needed to make transit and other alternative modes of travel practicable and economically viable.

Program 5.2.1: Public and private sector development proposals shall be subject to citywide design guidelines and standards that reflect principles of *New Urbanism*, *Smart Growth,* and which are intended to promote economic development and justice, protect the community's natural resources, provide community cohesion, and enhance the image of the City.
Responsible Agency: Planning, Public Works
Schedule: On-going

Program 5.2.2: To ensure that development proposals are initiated consistent with the City's community design principles and values, the City shall maintain comprehensive development application packages that provide detailed information on and direct applicants to City design guideline documents, ordinances and other requirements, standards and guidelines.
Responsible Agency: Planning
Schedule: On-going

Program 5.2.3 : Promote development plans that are based on the principles and values set forth in the Community Design and other General Plan Elements that define and support positive and unique qualities of existing and planned neighborhoods.
Responsible Agency: Planning; Planning Commission; City Council
Schedule: On-going

Program 5.2.4: New residential development proposals shall be reviewed by City staff to assure compliance with applicable design standards and guidelines, and promote design features, such as entry statements, recreational facilities, neighborhood parks and schools, and landscaping along public rights-of-way.
Responsible Agency: Planning; Planning Commission; City Council
Schedule: On-going

Program 5.2.5: The City shall continue to implement its program of City entry monumentation that reflects the community's character and dedication to quality design.

Responsible Agency: Planning; Public Works
Schedule: On-going

Program 5.2.6: Require the submittal of detailed landscape, architectural, and special signage designs for project entries and other design features in or adjacent to the public realm to assure compliance with community design standards and guidelines, and compatibility with the natural and built environments.
Responsible Agency: Planning
Schedule: On-going

Policy 5.3: Community and Neighborhood Activity Centers, including squares, plazas and piazzas, shall be established at appropriate locations to encourage public social interaction and a sense of public space.

Program 5.3.1: Actively pursue joint use agreements with the Palm Springs Unified School District to promote public school grounds as integral parts of neighborhood activity areas.
Responsible Agency: Planning; School District
Schedule: On-going

Policy 5.4: The City shall support and conduct a high level of Code Enforcement to encourage neighborhood beautification and to maintain property values and quality of life.

Program 5.4.1: The City shall develop and adopt a program of Code compliance standards for existing and future neighborhoods, and enforce the program through regular Code Compliance inspections.
Responsible Agency: Code Compliance, City Council
Schedule: 2020; Ongoing

Policy 5.5: The City shall support the development of an ordinance and management plan that maximizes the use of NEVs and other LSEVs throughout the community.

Program 5.5.1: To the greatest extent practicable, the City shall support the development of an expanded NEV/LSEV network through the adoption of an ordinance that allows greater use of NEV and other LSEVs on City streets and wherever else feasible in the City.
Responsible Agency: Planning, Public Works, Planning Commission, City Council
Schedule: 2022; Ongoing

Arts & Culture Element

PURPOSE

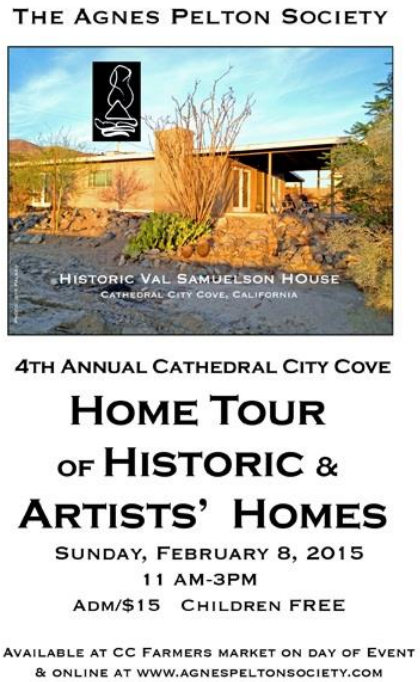
The Arts & Culture Element describes the community's cultural fabric, including the venues, events, and features that contribute to Cathedral City's artistic and cultural identity. The Element acknowledges the City's appreciation for its cultural environment, enhances the City's diverse cultural identity, and broadens its economic base by sponsoring and supporting activities that help create a vibrant and culturally rich community. It also serves to guide public/private partnerships in the arts and culture sector of the economy. This Element helps to strengthen, diversify and celebrate the City's character and sense of place, encouraging community engagement and involvement in arts and cultural events. The policies and programs established herein affirm the City's continued commitment to supporting and enhancing the cultural life of the community.

BACKGROUND

The Arts & Culture Element is directly related to the Community Design Element and the Cultural Resources Sub-Elements. These define and preserve aesthetic themes and traditions, design aesthetics, and historical and archaeological resources that contribute to the City's cultural history and visual identity. This element is also related to the Parks & Recreation, Open Space & Conservation, Biological Resources, and Public Buildings & Facilities Elements, which play essential roles in providing venues for activities and contemplation, recreational activities, and community events, and preserving the habitat and wildlife that are highly valued throughout the region. Finally, Arts & Culture is related to the Economic & Fiscal Health Element; flourishing artistic and cultural venues and events attract additional residents and visitors and directly impact the City's economic vitality.

COMMUNITY CHARACTER

The City's artistic and cultural character has strong and intimate ties to its desert environment, which is characterized by dramatic mountainous terrain and desert expanses, unique landscapes and wildlife, and a warm climate. Cathedral City's character is also deeply rooted in the history and traditions of the Cahuilla people whose artistry is expressed in rock art, pottery, basketry, and song. Native American trails are today's community highways, and non-native settlements of the 19th and 20th centuries have also left their physical and cultural mark on the community. Today's community values this common history but also celebrates its cultural diversity in local architectural themes, cultural venues, festivals, and art installations.



Leadership in artistic and cultural development includes local artists, musicians and architects, teachers, historians, folklorists, librarians, anthropologists, planners, and other community leaders. They play an essential role in preserving and expanding the cultural fabric of the community, increasing community cohesion, and encouraging respect for our diverse cultural landscape. By understanding, preserving, and elaborating on the community's history and heritage, the stage is set for ongoing cultural enrichment and advancement. By preserving meaningful places and spaces, buildings, open space, and other assets that document our Native American and modern stories, the community's contemporary cultural practices will emerge.

PLACEMAKING

In the context of community arts and culture, "places" include performance spaces, museums, galleries, artist studios, arts-related retail shops, music or media production studios, arts education venues, and/or green space. They also include the "public realm" where buildings and spaces create the stage for the human social drama. Placemaking can extend to cultural or arts districts with mixed-use developments providing residences, commercial and professional services, and multi-modal access. To attract residents, businesses, artists, other members of the creative economies—and indeed, visitors—cultural districts often utilize green space, architecture, and other assets to establish a distinctive appearance or authentic "sense of place" (also see *Community Design Element*).

> *"Culture makes people understand each other better. And if they understand each other better in their soul, it is easier to overcome economic and political barriers. But first they have to understand that their neighbor is, in the end, just like them, with the same problems, the same questions."*
>
> Paulo Coelho

The goal is a community with a unique character and sense of place, enjoyable to live in for residents and visitors. Contributors to this sense of place include streetscapes and the "public realm," public viewsheds, architecture, public spaces and neighborhoods, accessibility, functionality, and community involvement. Artistic, cultural, and creative planning and design help to establish a sense of place.

The General Plan sets forth various means to further the role and meaning of artistic and cultural life in Cathedral City, including inventories of artistic and cultural assets, community visioning processes, design guidelines, and arts and culture programming. Over the past several decades, the City has made important public financial investments in urban design and placemaking to further the role and meaning of the arts and cultural life in the community.

CATHEDRAL CITY ARCHITECTURAL HERITAGE

The architectural heritage of Cathedral City begins with the desert-adapted homes built in the cove area. Other iconic structures include St. Louis church in the cove, with its distinctive steeple and the impressive neo-classical façade of the City's Civic Center. The City has a growing architectural showcase this distinctive desert-adapted structure, as well as mid-century modern and other styles of international note. Many of these buildings are visited on regular architectural tours of the City.

LOCAL FACILITIES

Downtown/Civic Center

Over the past two decades, downtown Cathedral City has been transformed into a unique shopping, dining, and entertainment district that also contains municipal offices, the City's primary cultural and entertainment district, and popular community gathering places. It is anchored by City Hall and also includes the Police Department, Fountain of Life, Mary Pickford Theatre, and the City Community Theater (previous I-Max) home to the CV Repertory Theater company, a festival lawn, restaurants, and a parking structure. Additional projects are at various stages of planning and development.

Fountain of Life

The Fountain of Life is an iconic interactive water feature and community gathering place located in front of City Hall and the Mary Pickford Theater. It was carved from adoquin stone in Jalisco, Mexico and adorned with hand-cut mosaic tiles and glass. It features three central stone columns and numerous sculptures of iconic desert wildlife, including bighorn sheep and tortoises. A Cahuilla basket representing Cahuilla heritage and a rooster and hen representing Anglo and Latin cultures are also included. It includes 32 separate water features and an adjustable lighting system, which make it a popular play feature for children and families.

Mary Pickford Theater

The Mary Pickford Theater, adjacent to City Hall, opened in 2001. It is named for the silent film actress Mary Pickford and includes a museum about her life and career. The 14-screen, first-run movie house was recently refurbished and includes state-of-the-art auditoriums, stadium seating, and a cinema café. It also serves as a screening venue for the Palm Springs International Film Festival. The Pickford Theater also hosts a variety of other cultural programs, including film lectures, faith and fellowship, opera and ballet performances, kid's summer shows, and other programs.

Festival Lawn

The Festival Lawn is adjacent to the City Hall and accommodates community festivals and events throughout the year, including *Movies in the Park* and the City's three signature events: Taste of Jalisco Festival, Cathedral City *LGBT Days*, and Cathedral City *Hot Air Balloon Festival*. The 3.5-acre site includes 2 acres of lawn area.

Park and Amphitheater

The City has dedicated 2.5 acres of vacant land at the corner of Cathedral Canyon Drive and Avenida Lalo Guerrero for the future Commons Heritage Park and Amphitheater. The amphitheater will be used for cultural, entertainment, and recreational uses and may be used concurrently with the Festival Lawn for community events. A grant from the California State Parks Land and Water Conservation Fund covered the costs of design, construction and project administration.

CV Repertory Theatre

The Coachella Valley Repertory Theatre (CVRep) moved from Rancho Mirage to Cathedral City in 2018 and occupies the Cathedral City Community Theater building, which has been renamed the Carol Channing Playhouse. CVRep is a non-profit professional theatre company that offers dramatic, musical, and educational productions, as well as classes, lectures, and youth outreach programs. The CVRep stage will provide an intimate theatrical experience, presenting cabaret, jazz, classical, dance and other types of performing arts. CVRep is also planning to expand its outreach into the local school districts by accommodating more students to experience age-appropriate, culturally relevant, and topically sensitive live theater free of charge through CVRep's Youth Outreach program that mentors to local schools, including the Cathedral City High School theater program (see below).

Cathedral City High School

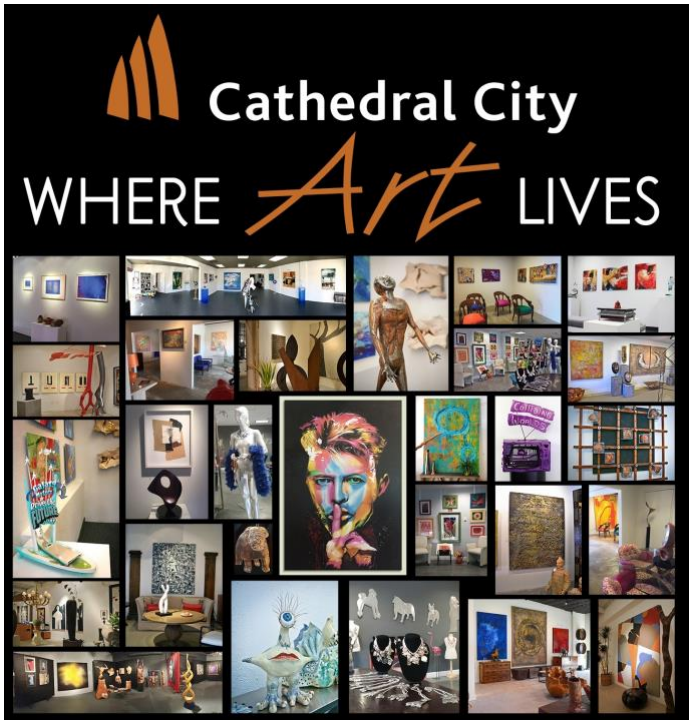
The Cathedral City High School Theater for the Performing Arts and the Dramatic Arts program has been entertaining valley audiences for almost three decades. This distinguished program has enriched the lives of students who have gone on to be successful at the collegiate and professional levels. The theater program offers courses in Theater I, Theater II, Theater III, and Play Production. Courses also include Stagecraft I and Stagecraft II giving students hands-on experience in conceptualizing, designing, and building production-quality sets. CCHS Theater is part of the International Baccalaureate Program and offers a course in IB Theater as part of the regular Theater program. The High School also includes vocal ensembles, including the Concert Choir, the Lion's Pride Chamber Singers and select mixed choirs.

Agua Caliente Casino and Business District (Future)

The Agua Caliente Band of Cahuilla Indians plans to build a new casino and entertainment facility on 12.5 acres at the northwest corner of East Palm Canyon Drive and Date Palm Drive. In addition to the casino, the Tribe's venture will include a performance venue, retail and mixed-use space, restaurants, and Tribal government offices. This development will be the first tribal gaming facility constructed by the Tribe's on off-reservation lands.

Perez Road Art & Design District

The Perez Road business district on Perez Road, between Cathedral Canyon Drive and Date Palm Drive, includes an eclectic enclave of home décor and design shops and art galleries. Participating galleries invite the public to view their art exhibits and displays and sponsor public events called "2nd Saturday Art Walks" that also market the galleries and shops. An "Art for Children and Elders" program also takes place on Perez Road. The City is planning new sidewalks and streetlights to enhance walkability and multi-modal access in the district.



REGIONAL FACILITIES

Cathedral City is a unique contributor to the art and cultural life of the Coachella Valley. City residents and visitors are also attracted to our many regional cultural assets, which are a rapidly growing component of our destination economy. A variety of museums, theaters, and other cultural and artistic venues are located in nearby Coachella Valley communities that are easily accessible to Cathedral City residents and visitors. Although the following resources are outside the boundaries of Cathedral City, they play an important role in the promotion and development of arts and culture valley-wide, and warrant mention within the context of this element.

The Coachella Valley's regional cultural assets include but are by no means limited to those described in Table AC-1, below. In addition to the traditional elements of visual arts, music, theater and architecture, cultural assets are those that "connect us to the land" as say the valley's *Friends of the Desert Mountains* and include natural resources, Tribal histories and traditions, museums and educational institutions, and performing arts centers. Food and fashion, and a wide array of design disciplines and products also make up the cultural fabric of our lives and of the community.

Table AC-1
Regional Cultural Facilities

The Living Desert	Palm Desert	1,000± acre zoo, botanical garden, and nature preserve specializing in desert habitats, conservation, preservation, and education
Coachella Valley History Museum	Indio	Museum campus that preserves the Coachella Valley's pioneer history in buildings, structures, gardens and date groves, artwork, festivals, and educational programs
Agua Caliente Cultural Museum	Palm Springs	Museum that celebrates the history and culture of the Agua Caliente Band of Cahuilla Indians through exhibitions, events, education, and outreach
McCallum Theater	Palm Desert	1,127-seat performing arts theatre and concert venue. Offers theatre and aesthetic educational programs, field trips, and choreography and other festivals
Children's Discovery Museum of the Desert	Rancho Mirage	Museum featuring more than 80 hands-on educational exhibits for children, as well as camps, school tours, dances, and seasonal celebrations
Desert Symphony	Palm Desert	Professional symphony orchestra that performs a wide range of concert series, hosts special events, and partners with local children's and civic groups to inspire and entertain through orchestral music
College of the Desert Marks Center for the Arts	Palm Desert	Cultural and educational facility dedicated to various art media, including sculpture, painting, theatrical, film/tv/web, literary, and musical arts.
Palm Springs Art Museum	Palm Springs	Art museum featuring collections of modern and contemporary art, glass, photography, and Native American and Western art, as well as special exhibitions, gallery tours, workshops, lectures, and educational programs. Includes the 430-seat Annenberg Theater for visual and performing arts. The 13,000 square foot Architecture and Design Center features exhibitions dedicated to architecture and design.
Palm Springs Art Museum in Palm Desert	Palm Desert	Art museum presenting rotating and permanent exhibits in a LEED certified/Silver-rated 8,400 square foot building. Includes a sculpture garden, educational programs, family events, and artist demonstrations.
Palm Springs Air Museum	Palm Springs	Museum featuring more than 59 vintage aircraft from World War II, Cold War, Korean War, and Vietnam War. Includes a youth exploration center and aviation science center.
Cabot's Pueblo Museum	Desert Hot Springs	Hopi-inspired pueblo home of Cabot Yerxa, an early homesteader who advocated for the rights of Native Americans. Offers cultural events, artisan presentations, and tours. Listed on the National Register of Historic Places.
Indio Performing Arts Center	Indio	23,000 square foot facility featuring 3 theaters for music, motion picture, theater, and other artistic media.

College of the Desert

As a State Community College, College of the Desert (COD) is a major contributor to the arts and cultural life of the Coachella Valley. Performing arts include plays, concerts, and operas staged at its Pollock Theatre and Hilb Center, with two yearly performances at the McCallum Theatre. COD's visual art contributions to public art include shows at the college's Hilb Center and Walter N. Marks Center, sculptures on the campus grounds, and art shows on the Inez Bragdon Garrow Gallery Wall in the multi-agency library.

The arts curriculum at College of the Desert includes course offerings that provide a general overview of the discipline, as well as an emphasis in art history, ceramics, drawing, graphic design, painting, photography, printmaking, three-dimensional design, and two-dimensional design. The College also provides arts education and performance classes open to all members of the community; these include several musical performance groups, both vocal and instrumental, in addition to theatre productions and visual arts courses. The COD West Valley Campus will provide instruction in film, television multi-media, and a connection to the Palm Springs Film Festivals.

College of the Desert

The Walter N. Marks Center for the Arts is also housed at COD and supports arts education and enriches the cultural life of students, faculty and the community. A nonprofit cultural and educational facility, the Marks Center provides a venue for artistic exploration, experimentation, and research. Painting, drawing, sculpture ceramics, photography, printmaking, and other traditional art forms are complemented by contemporary applications in papermaking, book arts, performance, and installation arts.

The architectural design of the Marks Art Center, with its three galleries, courtyard and sculpture garden, allows for poetry readings, musical events, and theatrical performances. Guest speakers and professors in art, digital design, poetry, theatre and literature now have a dedicated facility in which to collaborate on thematic approaches to art practice and instruction.

CITY FESTIVALS AND EVENTS

Cathedral City hosts numerous community festivals throughout the year to celebrate cultural diversity and to enhance opportunities for social interaction. Some recurring festivals include:

- Taste of Jalisco Festival celebrates the relationship between Cathedral City and its sister city, Tequila, Jalisco (Mexico)
- Lesbian, Gay, Bisexual, and Transgender (LGBT) Days - celebrates the history and lives of the LGBT community
- Hot Air Balloon Festival
- Easter Kidapolooza
- Halloween Spooktacular
- Snow Fest - captures the holiday spirit through arts and crafts, food, and a lights parade
- Annual Tree-Lighting Event

ART IN PUBLIC PLACES

Cathedral City is home to a growing collection of public art. Public art provides opportunities to enhance community aesthetics and showcase local and regional artists. Art pieces are typically displayed outdoors at public facilities and within public rights-of-way. Twenty-eight such pieces and their locations are listed on the City's website and a smart phone app created by the Cathedral City Public Arts Commission. The purchase, acquisition, and installation of public art is funded by developer fees and private donations.

Public art also includes several large-scale murals painted on exterior building walls. Among these are the "Old Firehouse" mural on Cathedral Canyon Drive, the Villa Bakery mural, and two murals in the Cathedral Cove neighborhood.

Developers also have the option of placing a piece of art in the City of a value equivalent to what the fee would have been, subject to the approval of the Arts Commission. Historically, most developers have chosen to pay the fee instead of purchasing an art piece themselves. Some examples of educational programs provided to the community by the Arts Commission include the following:

- The DATA Photo and Video Competition for Cathedral City High School students
- The Mary Pickford Theatre Film Series – Youth Film Program
- The Cathedral City High School Stardust Arts Expo
- The Sioux Wars Indian Photo Exhibit in the Community Art Gallery at City Hall
- The Latino Cultural Arts Show in the Community Art Gallery at City Hall
- The Chalk Arts Festival – Youth Art Program

- The Coachella Valley Repertory drama class for CCHS students
- The Tour Buddy art app allows the public to locate and learn about the entire City art collection
- Dia de Los Muertos - Youth Art Program

Most of the programs were developed for the youth in the community. Additionally, the two exhibits at the art gallery were open to the entire community and the art app is free for everyone.

CITY PARTICIPATION

Cathedral City Historical Society

The Cathedral City Historical Society gathers and maintains a collection of historical photos, stories and articles, and memorabilia about the history of Cathedral City. It presents various city-wide exhibits, maintains a website, and shares information about upcoming cultural events in the community. The Historical Society also provides links to a variety of resources and highlights the history of the Cahuilla Indians in Cathedral City and the Coachella valley.

Cathedral City Public Arts Commission

The Cathedral City Public Arts Commission advances visual and performing arts in the community and enhances the image of Cathedral City as a magnet for the arts. It supports and helps produce live art performances, sponsors programs, cooperates in ventures with local and regional art organizations, and makes recommendations to the City Council on public art selection and installation. The Commission consists of five commissioners who meet on a monthly basis at City Hall. It recently launched an app for digital devices called "Cathedral City Where ART Lives" that locates art galleries and 28 public art pieces in the City, including a downtown walking tour and city-wide driving tour.

ARTS, CULTURE AND THE ECONOMY

The arts may be one of the oldest bases for economic exchange among primitive peoples and is gaining strength as a sector of the Coachella Valley economy. Arts and culture are essential to the quality of life and livability of the community. Nationally, the nonprofit arts industry[1] generated $166.3 billion of economic activity in 2015, with $63.8 billion in spending by arts and cultural organizations, and an additional $102.5 billion in event-related expenditures by their audiences. This activity supported 4.6 million jobs and generated $27.5 billion in revenue to local, state, and federal governments (a yield well beyond their collective $5 billion in arts allocations). Government support for the arts generates an average return on investment of more than $7 in tax revenues for every $1 that the government appropriates.

Beyond the event, patrons attending an arts event may go out to dinner at a restaurant, enjoy dessert after the show, and return home to pay the babysitter. The typical cultural event attendee spends $31.47 per person per event beyond the cost of admission. More than one-third of attendees (34 percent) are not from the area in which the arts event took place. Their event-related spending is more than twice that of their local counterparts ($47.57 versus $23.44). What brought those visitors to town? Two-thirds (69 percent) indicate that the primary purpose for their visit is to attend the arts event. The bottom line: a vibrant arts community not only keeps residents and their discretionary spending close to home, it also attracts visitors who spend money and help local businesses thrive.

[1] "Arts & Economic Prosperity 5: The Economic Impact of Nonprofit Arts and Cultural Organizations & Their Audiences", Americans do the Arts, 2015

Artists, Performers, Makers

Recent years have seen the emergence of a "*maker economy*" that has growth with new technologies, including high-power, low cost computing, 3-D printing, and revolutions in materials science. Makers now make up part of what is termed the *Creative Economy*, a new economic industry cluster of creative enterprises based on the businesses and people who produce intellectually protected goods and services generated from aesthetic or cultural content. Participants in the creative economy hold *Creative Occupations* producing/distributing a creative good or service in a wide variety of creative businesses.

As an industry, arts and culture generates jobs and supports the local economy. Art programs and facilities are often acknowledged by chambers of commerce as a community asset and an attractive component when encouraging businesses to relocate or expand within the community. The arts and cultural events and assets of the community are a catalyst for community enrichment and tourism, encouraging growth and development of the creative economy in fine and performance arts, communication, entertainment, and technology.

Arts and Culture and the Tourist Economy

Cultural tourists are defined as visitors who explore a community's arts, culture, heritage, environment, and history. According to the National Assembly of State Arts Agencies (NASAA), two significant travel trends are expected to dominate the tourism market in the coming years. Travel is being tailored to the interests of the individual consumer through a one-to-one marketing strategy.

A growing number of visitors are becoming special interest travelers who rank the arts, heritage, and/or other cultural activities as one of the top five reasons for traveling. The combination of these two trends is being fueled by technology through the proliferation of online services and tools, making it easier for the traveler to choose destinations and customize their itineraries based on their interests. Among the emerging trends that contribute to cultural tourism are an increased interest in the sustainability of communities and the natural environment, and a search for meaning that many visitors find in nature, heritage, and culture.

FUTURE DIRECTIONS

The City has a strong foundation of public artwork and festivals that demonstrate its commitment to and appreciation of creativity, social interaction, and cultural diversity. The ongoing expansion and enhancement of the downtown area will provide numerous new opportunities for theatrical performances, entertainment, and community events. It will attract additional residents and visitors, strengthen the City's regional position as an entertainment hub, and contribute to long-term economic growth. The City must maintain its relationships with local artists and historical and cultural organizations to continue offering and promoting interesting, relevant community events and facilities.

GOALS, POLICIES, AND PROGRAMS

Goal 1: Artistic and cultural facilities, services and events that enhance the quality of life for residents and visitors, promote cultural awareness and expression, and are relevant to the City's diverse population.

> **Policy 1.1**: Recognize and promote the arts, history, and community identity as valuable cultural and economic resources of the community.
>
> > **Program 1.1.1:** Pursue and maintain public-private partnerships with artists, historical societies, cultural and civic groups, the Agua Caliente Tribe, schools, and private enterprises to offer community programs and events that appeal to all segments of the population.
> > **Responsible Agency:** AIPP Commission, Civic Arts Committee, Planning, Planning Commission, City Council
> > **Schedule:** Immediate, Continuous

Program 1.1.2: Promote programs and events through a range of media, including the City website, newsletters, news outlets, community outreach, and marketing endeavors.
Responsible Agency: AIPP Commission, Civic Arts Committee, Planning
Schedule: Immediate, Continuous

Program 1.1.3: Continue to encourage and sponsor arts and cultural awareness and education programs at local schools, colleges and universities, as well as community centers, and private facilities.
Responsible Agency: AIPP Commission, Civic Arts Committee, Planning, Parks and Recreation Department, Planning Commission, City Council
Schedule: Immediate, Continuous

Program 1.1.4: Increase participation in regional partnerships and alliances that promote and market Cathedral City and Coachella Valley cultural tourism to broader audiences, including western Riverside County and southern California.
Responsible Agency: AIPP Commission, Civic Arts Committee, Planning, Planning Commission, City Council
Schedule: Immediate, Continuous

Program 1.1.5: Explore marketing approaches that showcase community arts programs, events, and resources as a means for expanding tourism.
Responsible Agency: AIPP Commission, Civic Arts Committee
Schedule: Immediate, Continuous

Policy 1.2:
Facilitate the development of new, and enhancement of existing, arts and cultural features and venues that contribute to community identity and economic vitality.

Program 1.2.1: Continue to promote the downtown/civic center area as the City's primary arts and entertainment district and extend and connect to the Perez Road arts district.
Responsible Agency: AIPP Commission, Civic Arts Committee, Planning, Planning Commission, City Council
Schedule: Immediate, Continuous

Program 1.2.2: When reviewing development proposals, consider the inclusion of plazas, squares, parks, and other community gathering spaces that benefit residents and visitors. Considerations should include accessibility, parking, street furniture, lighting, landscaping, and other design elements that enhance the use and enjoyment of the space.
Responsible Agency: AIPP Commission, Civic Arts Committee, Planning, Parks and Recreation Department, Planning Commission, City Council
Schedule: Immediate, Continuous

Program 1.2.3: Where feasible, incorporate public art into public spaces.
Responsible Agency: AIPP Commission, Civic Arts Committee, Community Development Department, Planning Commission, City Council
Schedule: Immediate, Continuous

Program 1.2.4: Strengthen the identity of the Perez Road corridor between Cathedral Canyon Drive and Date Palm Drive as a vibrant, cohesive art district. Potential improvements may include enhanced signage, street furniture, pedestrian walkways, street lights, and/or landscaping treatments.

Responsible Agency: AIPP Commission, Civic Arts Committee, Community Development Department, Planning Commission, City Council
Schedule: Immediate, Continuous

Program 1.2.5: Consider the installation of signage, monuments, and/or other design features at key intersections and roadway corridors to increase awareness and recognition of Cathedral City as an arts and culture community.
Responsible Agency: AIPP Commission, Civic Arts Committee, Community Development Department, Planning Commission, City Council
Schedule: Immediate, Continuous

Program 1.2.6: Continue to develop multi-modal circulation plans that maximize access to the downtown area and its arts and cultural venues, including the Festival Lawn and new amphitheater.
Responsible Agency: AIPP Commission, Civic Arts Committee, Community Development Department, Planning Commission, City Council
Schedule: Immediate, Continuous

Economic and Fiscal Health Element

PURPOSE

The Economic & Fiscal Health Element presents a broad range of demographic, economic and fiscal information to provide a multi-dimensional view of the Cathedral City economy. It examines the relationships between City government and the economy, and explores potential economic opportunities and constraints. The element also describes the economic foundations, characteristics and trends of the City and evaluates the City's position in the regional economy. The element explores the relationship between economic policies, urban development, and land use patterns, and their impact on the financial well-being of the City. The element describes the major components that comprise the City's economic base. Fiscal issues, the balance between revenues and services that are important to the City's ability to maintain and enhance the quality of the physical, social, cultural, and economic environment enjoyed by Cathedral City residents, businesses, and visitors, are also discussed. Past conditions, which have contributed to the City's economic and fiscal positions, must be continually reevaluated for their relevance in a growing and changing economy. This element establishes goals, policies, and programs aimed at creating and maintaining a viable, well-balanced economy for current and future residents.

BACKGROUND

Economic and fiscal considerations are integral to all elements of the General Plan. Providing a high quality of life, as measured by the level of public and commercial services, utilities, cultural amenities, employment and housing opportunities, and the protection of City residents from flooding, seismic, and other hazards, are directly related to the local economy and the community's fiscal health. This element has an especially strong and direct relationship with the Land Use Element. Government Code Section 65030.2 provides the statutory reference for this relationship and states that "land use decisions shall be made with full knowledge of their economic and fiscal implications and their relationship to long-term environmental impacts, as well as long-term costs and benefits." The element also examines issues set forth in Government Code Section 65863.6 and 66412.3, which require cities and counties to balance the available fiscal and environmental resources against local housing and public service needs.

The economy of the community is a product of complex interrelationships between the physical environment, regional and local private and governmental economic activity, municipal policy and leadership, workforce opportunities, cultural and educational experiences, public safety, and other factors affecting the community. The Economic & Fiscal Health Element, therefore, is related to some degree to all other General Plan elements. In addition to the Land Use, the Circulation and its effect on the physical development and accessibility within the City also affects economic goals and fiscal health. It is also closely related to the Open Space & Conservation Element, including biological, cultural and open space resources, and is relevant to the Arts & Culture Element, which seek to preserve natural and cultural resources that define and strengthen community identity. Long-term economic and fiscal health is also tied to the management of environmental threats and hazards as discussed in the Safety Element, including earthquakes, floods, hazardous material releases.

REGIONAL ECONOMY

Cathedral City is located in the western portion of the Coachella Valley and has the second highest year-round population in the region. As such, its economy is closely tied to the regional economy of the Coachella Valley. Over the past several decades, the valley has enjoyed a reputation as a world-class tourist destination founded on a strong leisure and hospitality sector, including hotels, resorts, spas, restaurants, and vacation rentals.

Each year, it attracts thousands of visitors for championship golf and tennis tournaments, film festivals, and large-scale music and entertainment events. It is characterized by seasonal population surges and employment trends, as the mild winter climate attract visitors and the extreme summer heat deters them. The regional economy is also largely characterized by strong retail and service sectors which support the tourism industry. The Coachella Valley is poised to become a stage for innovations in renewable energy, medical services, and water management. Focused pursuit of these and other technology-related fields would provide the permanent population, ranging from youth to retirees, better access to higher incomes, more challenging professional opportunities, enhanced quality of life and ultimately improved economic mobility.

"Without continual growth and progress, such words as improvement, achievement, and success have no meaning."

-Benjamin Franklin

The Coachella Valley includes unincorporated land and nine incorporated cities: Desert Hot Springs, Palm Springs, Cathedral City, Rancho Mirage, Palm Desert, Indian Wells, La Quinta, Indio, and Coachella. Between 2000 and 2016, the population of Coachella Valley cities increased by approximately 45%, from 255,790 to 371,217 residents.[1]

The Coachella Valley is known for its economic strength and rapid growth. In the past, the valley's economy was largely reliant on agriculture, particularly in the eastern valley, and this industry remains a regional mainstay. Riverside County ranked fourteenth among California counties for total value of agricultural production in 2016, with agricultural production valued at nearly $1.27 billion.[2] The Coachella Valley's share of the agricultural crop value in 2016 was $639.6 million, approximately 64% of the County's total.[3]

The resort and tourism industry began to emerge throughout the valley in the 1920s. For many decades, the region has been considered a world-class resort destination, and tourism is a fundamental component of the regional economy, providing local jobs and investment dollars in hotels, golf courses, dining and shopping establishments, and timeshare and seasonal home developments.

1 2000 US Census; 2016 American Community Survey 5-Year Estimates.
2 "Riverside County Agricultural Production Report, 2016," Riverside County Agricultural Commission.
3 Ibid.

Despite the Coachella Valley's historically strong economy, it was adversely impacted by the economic recession beginning in 2008. Hotel and timeshare occupancy slowed, and home construction significantly slowed as home values declined. The regional economy has begun to rebound in recent years, and economic indicators like job gains, assessed valuation and home prices have shown some growth.

Assessed property value per capita, which measures the ability of property taxes to support city services for each resident, increased in 2017 in five Coachella Valley cities. However, home sales continue to lag; between 2016 and 2017, home deed recordings in the valley decreased 31% for new homes and 2% for existing homes.[4]

The following table shows employment data, by industry, for the Coachella Valley in 2013. The data indicate that the predominant regional employment sectors are: 1) Retail, 2) Hotel and Amusement, and 3) Health. The picture in 2016 was much the same, with job recovery in most but not all sectors, with financial services, professional and business services, and education and health services leading the way in the City. Employment is further discussed below.

Table EF-1
Employment Distribution by Sector
Coachella Valley, 2013

Industry	No. of Residents	% of Total
Retail	31,670	24.1
Hotel/Amusement	19,712	15.0
Health	13,667	10.4
Agriculture	12,090	9.2
Other Services	11,696	8.9
Small Sectors	9,856	7.5
Education	9,462	7.2
Construction	6,702	5.1
Distribution	6,702	5.1
Finance/Insurance/Real Estate	5,257	4.0
Business Services	4,599	3.5
Total:	131,413	100%

Source: California Employment Development Department

Finally, it should be noted that being located in California means that Cathedral City is embedded in the fifth largest economy in the world (2018) with a gross domestic product of more than $2.7 trillion in 2017. With nearly 40 million people, a broad range of thriving industries, and as the technological and agricultural centers of the nation, California continues to lead the world. While significant headwinds, including the need for a better educated workforce and higher density housing options, need to be addressed, it is the desirability of the state and our region that will fuel continued growth.

[4] "Inland Empire Quarterly Economic Report," Inland Empire Economic Partnership, October 2017.

CITY CHARACTERISTCS

The corporate limits of Cathedral City in 2018 extend from the Santa Rosa Mountain foothills on the south to Edom Hill and the Indio Hills to the north, straddling a state highway (East Palm Canyon Drive/Hwy 111) on the south and US Interstate-10 on the north, which shares a major transportation corridor with the Union Pacific Railroad. The City's corporate limits encompasses approximately 22.3 square miles.

Cathedral City was incorporated in 1981 and has become a popular location for commercial businesses, light industry, and professional services in the Coachella Valley. The City has also established itself as a family-friendly community, with a wide range of affordable housing products, outdoor and amusement opportunities, public art, and high-quality education and library facilities.

Like its neighbors, the predominant land use in Cathedral City is residential, with a variety of housing types, including single- and multi-family residences for a largely permanent but also sizeable seasonal population. The City balances residential development with neighborhood and community commercial, destination and golf resorts, auto dealerships, service and light industrial, and institutional uses.

Cathedral City boasts the greatest amount of family friendly recreational activities in the Coachella Valley, including the Desert Ice Castle (the only ice skating rink in the Coachella Valley) where Olympic athletes have trained; Boomers (miniature golf, bumper cars & batting cage); a 17-acre soccer park, where State championships have been held; Big League Dreams Sports Park, which hosts NCAA Women's softball; and three top-notch golf courses.

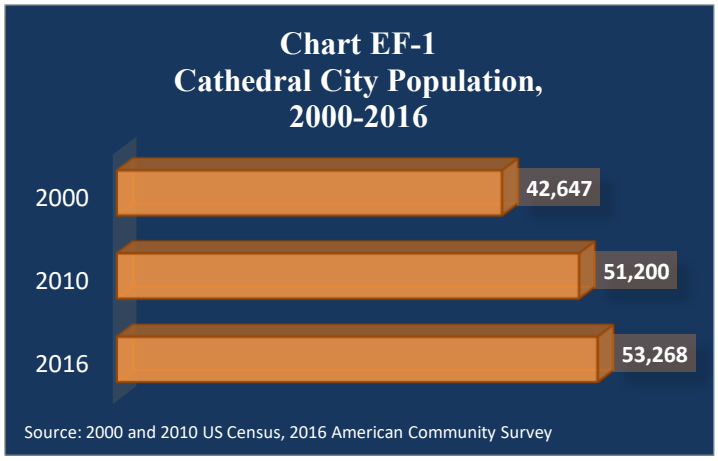
Commercial lands are clustered along East Palm Canyon Drive and major roadways, such as Ramon Road and Date Palm Drive. The City's downtown core is located along the East Palm Canyon Drive corridor. It includes a mix of conventional and entertainment retail commercial, restaurants and theaters, as well as multi-family senior and other residential development. Light industrial and service commercial uses are located south of the Whitewater River along Perez Road, and north of East Palm Canyon Drive between Cathedral Canyon Drive and the West Cathedral Canyon Stormwater Evacuation Channel. There are also future commercial and industrial uses planned along I-10 in the northern portion of the City. Open spaces and schools are integrated throughout the community.

Cathedral City Demographics

The following demographic data provide an overview of changes in the City's population, housing, employment, and other characteristics since year 2000.

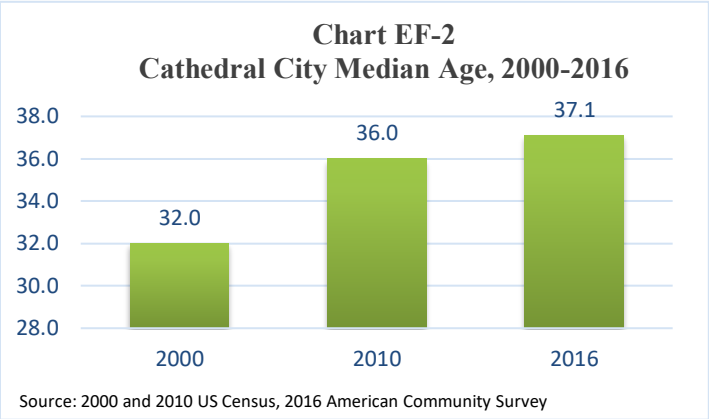
Population

City population growth is shown in Chart EF-1. The population increased 25%, from 42,467 to 53,268, between 2000 and 2016. The population of the City was estimated to have reached 52,769 as of January of 2018 and is projected to reach 68,100 by 2040.[5] Today, City residents age 1 to 19 comprise about 35% of permanent residents, while those age 65 and older comprise about 13.5%.



[5] Appendix Table 11, "Regional Transportation Plan/Sustainable Communities Strategy," Southern California Association of Governments, December 2015.

The most recent City population estimate in July 2017 was 54,596 residents[6], an increase of 2.5% over the 2016 figure. The population is projected to reach 68,100 by 2040.[7] The majority of residents are white, with Hispanics or Latinos (of any race) comprising 60.5% of the population in 2016, up from 50% in 2000 (see Ethnicity, below).

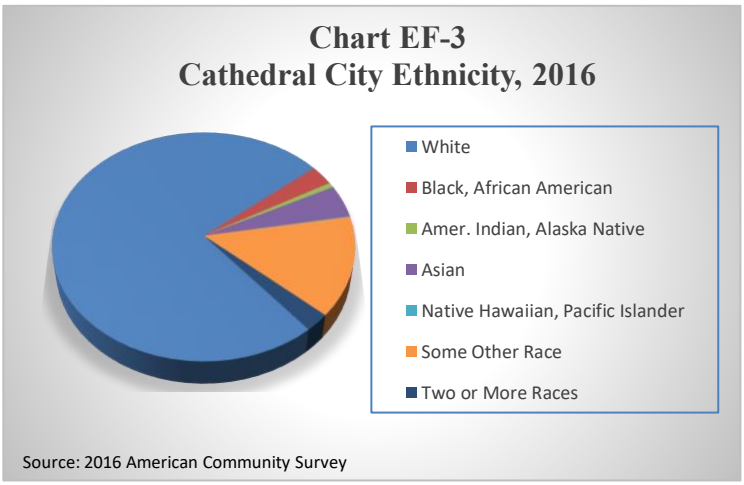


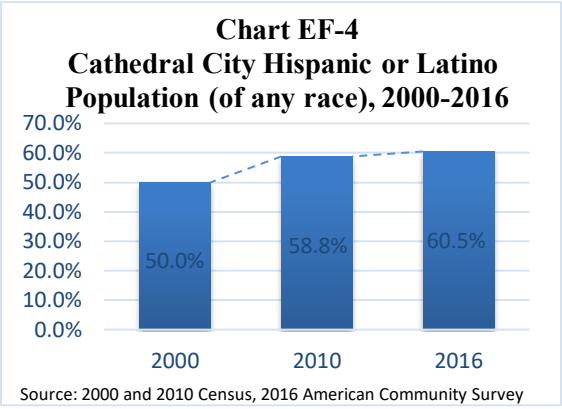
Median Age

The median age increased from 32.0 years in 2000 to 37.1 years in 2016. Today, City residents ages 1 to 19 comprise about 35% of permanent residents, while those aged 65 and older comprise about 13.5%.

Ethnicity

The majority of City residents are white, with Hispanics or Latinos (of any race) comprising 60.5% of the population in 2016, up from 50% in 2000.





Housing

There are approximately 21,816 housing units in Cathedral City; 81% are occupied, and 19% are vacant.[8] The majority (66.1%) consists of single-family attached and detached homes, 24.3% are multi-family units, 9.6% are mobile homes, and 0.1% are other types (boat, RV, van, etc.). The average household size is 3.04 persons per household.[9] The median value of dwelling units was $203,900 in 2016.

The City's broad mix of housing types and values and its geographic location have made it a preferred residential address in the Coachella Valley. Its housing affordability is second only to Desert Hot Springs. At the same time, the City has the lowest percentage of owner-occupied housing, which may relate to levels of discretionary spending by City residents. Housing prices, availability, affordability, and future needs are analyzed in the *Housing Element*.

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6 US Census Quick Facts, Cathedral City, California. June 15, 2018.

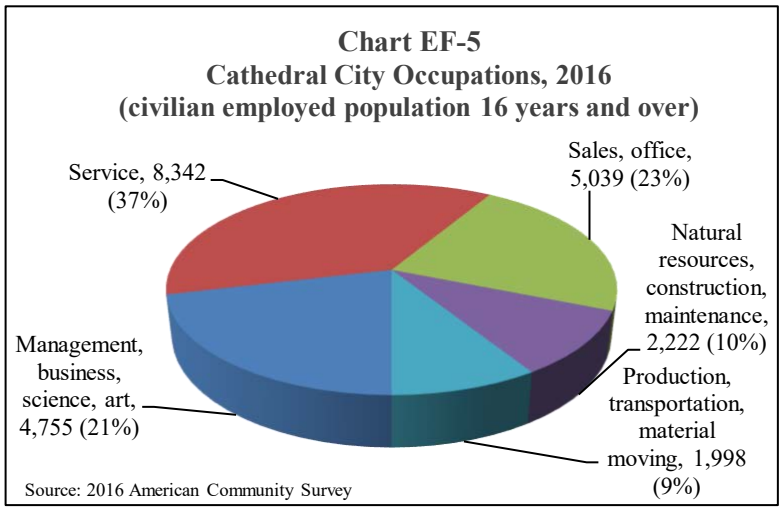
7 Table 11, Demographics and Growth Forecast Appendix, 2016-2040 "Regional Transportation Plan/Sustainable Communities Strategy", Southern California Association of Governments, adopted April 2016.

8 2016 American Community Survey.

9 Ibid, average of owner-occupied unit household size (2.82) and renter-occupied unit (3.25).

Employment and Income

Employment data for Cathedral City are shown in Chart EF-5. The data show that the highest percentages of Cathedral City residents are employed in Service (37%), Sales and Office (23%), and Management, Business, Science, and Arts (21%) occupations.



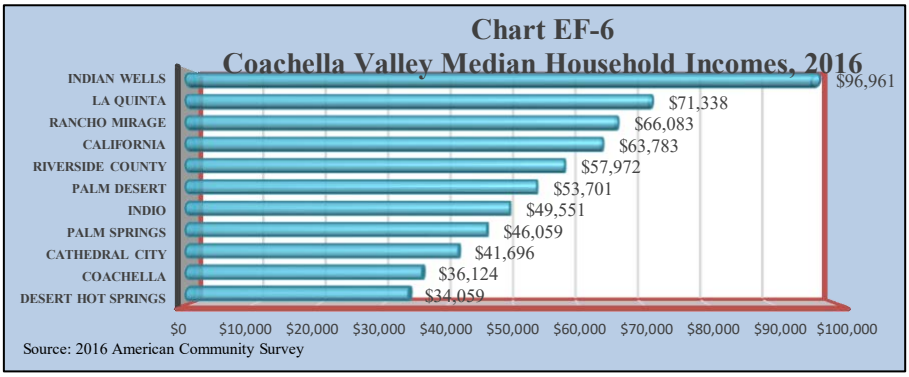
Among the principal employers in Cathedral City are auto sales and service centers, schools, supermarkets and specialty retail outlets, big-box retail outlets, government, and hotels/resorts. The growth of the cannabis industry and the continued growth of retail and the hospitality industry in the City will be an important source of new jobs in the coming years.

Where Cathedral City residents work is also very instructive and points to a need for the development of employment opportunities in the City. Of the estimated 11,561 City residents actively employed in 2015, a full 35% were employed in Palm Springs, 17% in Palm Desert and 16.5% in Rancho Mirage. Only about 15.6% of employed City residents worked in Cathedral City in 2015.[10] There are many advantages to employing City residents in the City, including a greater expenditure of discretionary and non-discretionary spending in the community instead of elsewhere. Maximizing local spending also has a multiplier effect on the local economy, inducing greater local economic activity and thereby stimulating job growth.

Principal Employers in Cathedral City

Addus Healthcare
Doubletree Golf Resort
Cathedral City High School
City of Cathedral City
Honda of the Desert
Jessup Auto Plaza
Nellie N. Coffman Middle School
Palm Springs Motors
Stater Bros. Markets (Ramon)
Toyota of the Desert
Target
Palm Springs Lincoln-Mercury
Acura of the Desert
Ford Rent-a-Car Express
Palm Springs Unified School District

Source: 2017 Cathedral City Comprehensive Annual Financial Report



Gaming is also to become an important contributor to local employment in the City downtown, where a new casino by the Agua Caliente Tribe will be combined with new retail development at the corner of Date Palm Drive and East Palm Canyon Drive. The arts and culture industries are also gaining importance and the City Perez Road arts district will help to expand both business and employment opportunities in this growing sector of the economy.

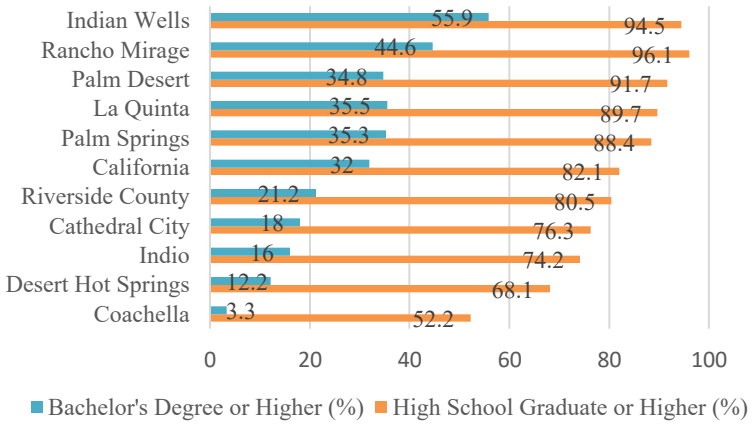
10 Coachella Valley Economic Partnership Economic Report, prepared by Manfred W. Keil, Ph.D. 2017.

Chart EF-6 compares the median household incomes of Cathedral City, other Coachella Valley cities, Riverside County, and California. The City's median household income in 2016 was $41,696, the third lowest among Coachella Valley cities (behind Desert Hot Springs and Coachella). It is 39% lower than the Riverside County median household income, and 53% lower than that of California. In 2018, the estimated median household income has risen approximately 3.7% to $43, 251.

Education

Beyond its intrinsic value, educational attainment is a key economic indicator that helps project future employment and earnings potential. The graph below compares educational attainment in Cathedral City with other Coachella Valley cities, Riverside County and the State. Among Coachella Valley cities, Cathedral City has the fourth lowest percentage of "high school graduates or higher," and the third lowest percentage of "Bachelor's Degree or higher." Both are below the Riverside County and State attainment levels.

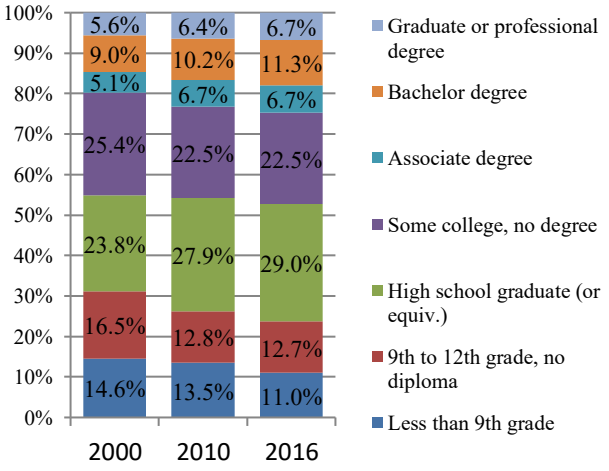
Chart EF-7
Coachella Valley Education Level by Jurisdiction (population 25 years of age or older)



Source: 2012-2016 American Community Survey 5-Year Estimates

Educational characteristics of Cathedral City residents are shown in Charts EF-7 & 8. The data show that the percentage of residents achieving higher educational levels increased between 2000 and 2016. In 2016, the largest percentage of residents (29.0%) obtained high school (or equivalent) degrees, followed by those with some college but no degree (22.5%). Also see the *Public Services and Facilities Element* for additional information and goals, policies, and programs regarding community schools and education.

Chart EF-8
Cathedral City Education Levels (population 25 years of age or older)



Source: 2000 and 2010 US Census, 2016 American Community Survey

FISCAL HEALTH

Like many communities across the country, Cathedral City felt the impacts of the Great Recession of 2007-2013, some of which includes stalled construction and increased personal debt, home foreclosures, and unemployment. However, the regional and local economies have rebounded, and today the City enjoys strong fiscal health. Its net position (assets minus liabilities) totaled $53.4 million at the end of Fiscal Year 2016/17.[11]

Revenues

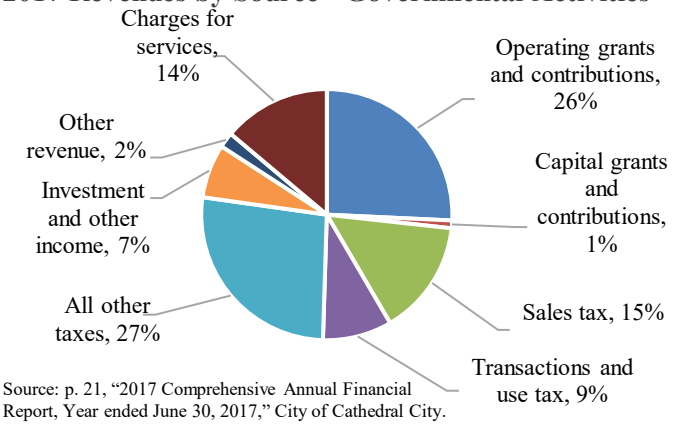
Having incorporated in 1981, Cathedral City is considered a post-Proposition 13 city. Since the City did not have a separate property tax rate prior to the voter enactment of Proposition 13, the City cannot impose one without a vote of the citizens.

[11] "2017 Comprehensive Annual Financial Report, Year ended June 30, 2017," City of Cathedral City.

Therefore, additional property tax revenues generated by development projects within the city, but not within the boundaries of the former redevelopment agency, are not remitted to the City's General Fund. Instead, the taxes are remitted to other taxing agencies such as Riverside County, school districts, and special districts. As a result, the City's General Fund generally receives less than 7% of its total revenue from property tax on an annual basis.

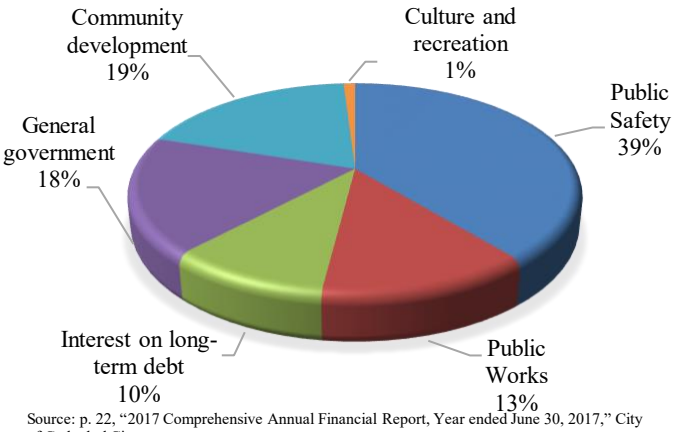
After operating grants and contributions, sales tax is the single largest source of municipal revenue. In calendar year 2016, the City's top taxable sales tax generators included "auto dealers and supplies" which generated 50.0% of all City sales tax income, followed by "all other outlets" (16.9%), "eating and drinking establishments" (7.7%), and "service stations" (7.5%).[12] Additional revenue is generated by charges for services, capital grants and contributions, special assessments, development fees, investments, and interest.

Chart EF-9
2017 Revenues by Source - Governmental Activities



Source: p. 21, "2017 Comprehensive Annual Financial Report, Year ended June 30, 2017," City of Cathedral City.

Chart EF-10
2017 Expenses by Function - Governmental Activities



Source: p. 22, "2017 Comprehensive Annual Financial Report, Year ended June 30, 2017," City of Cathedral City.

Expenditures

Municipal expenditures cover the costs of public safety, general government, community development, public works, interest on long-term debt, and culture and recreation. The largest percentage of expenses (39%) is for public safety, which is comprised of law enforcement and fire protection and will continue to be a major cost category for the City. Chart EF-10 summarizes City expenditures for the 2016-2017 fiscal year.

ECONOMIC GROWTH

New Cannabis Industry

Proposition 64, approved by voters in November 2016, legalized adult recreational marijuana use in California. Since then, the cannabis industry has emerged as a new business sector comprised of cultivators, manufacturers, and dispensaries. The City introduced new ordinances and started accepting development applications for cannabis facilities on April 1, 2016. During Fiscal Year 2016/17, eleven dispensaries and two cultivation sites opened and generated nearly $450,000 in tax revenue.[13] A 500,000± square foot medical marijuana cultivation and testing facility located on Ramon Road is expected to employ 150 to 200 people. When operating at maximum capacity, this facility alone is anticipated to generate several million dollars a year in tax revenue. The market for cannabis cultivation, related manufacturing infusion, and distribution is steadily growing and is posed to be a major component of City economic activity in the coming

"California's land is an exhaustible resource, not just a commodity, and is essential to the economy, environment and general well-being of the people of California. It is the policy of the state … to protect California's land resource, to insure its preservation and use in ways which are economically and socially desirable in an attempt to improve the quality of life in California."
(Gov. Code 65030).

[12] P. 171, "2017 Comprehensive Annual Financial Report, Year ended June 30, 2017," City of Cathedral City.
[13] City of Cathedral City 2017 Comprehensive Annual Financial Report, Year ended June 30, 2017

years. However, in 2018 this industry is still in its infancy, the relationship of state and federal cannabis law and regulations is still evolving, and how cannabis enterprises will evolve in the mid- to long-term remains an open question. Presently, cannabis represents a major new opportunity for the City's economy.

Recent and Current Growth

In 2017, more than 300 new business licenses were activated in Cathedral City. Among these were restaurants, hotels, auto dealership relocations and expansions, health care facilities, a cinema, a fitness center, and multiple cannabis facilities. The City's housing market continued to grow, with 61 building permits issued for new residential units, which can be expected to contribute to job growth and increased sales tax and property tax revenues. The City periodically reviews its policies and codes pertaining to short-term vacation rentals to assure positive experiences for visitors and permanent residents, and to assure transient occupancy tax revenues are captured.

In February 2018, the first segment of CV Link was built and became operational along the Whitewater River Stormwater Channel between Vista Chino and Ramon Road. Additional segments are planned that will connect residents and visitors to key destinations throughout the City and Coachella Valley. CV Link and the City Active Transportation/Neighborhood Electric Vehicle Plan (ATP) are also opening new avenues for economic development by enhancing active recreational opportunities, and increasing multi-modal access to commercial services and employment centers.

Over the past few years, more than $100,000,000 has been invested in public infrastructure projects in Cathedral City. Among these are reconstruction of major arterials, resurfacing of neighborhood roads, sidewalk improvements, and the $20.5 million widening and seismic retrofitting of the Date Palm Drive bridge over the Whitewater River Stormwater Channel. Upcoming capital improvement projects include a new $22.7 million Cathedral Canyon Drive bridge over the channel to begin in 2019, and the $26 million Ramon Road bridge project over the channel that will include bridge widening, new sidewalk construction, and connection to CV Link.

Numerous new development projects are either approved or underway in the Downtown area, including two hotels, a commercial project, a casino and mixed-use facility by the Agua Caliente Band of Cahuilla Indians, and a 2.5-acre amphitheater park. The Coachella Valley Repertory Theater has purchased and renovated the Desert Cinemas theater for use as a 208-seat performing arts venue. Since opening, the CV Rep has hosted sold-out performances. New downtown pedestrian directory signs and new City entry signs were recently installed, and solar photovoltaic systems were installed that will provide nearly 75% of the annual energy needs of the Civic Center complex. Elsewhere in the City in 2018, the Doubletree Hotel and Resort completed a $17 million renovation, and a new $12 million Staybridge Hotel has been built adjacent to Cimarron Golf Course.

Directly and indirectly, City government operations and the financial resources they rely upon are intimately tied to the health and success of the local economy. In addition to addressing basics like community safety, City government has created and maintains an environment which supports and promotes new development and the expansion of current businesses. City Staff assists developers and business owners in understanding and navigating development standards, guidelines, codes and other regulations. This assistance allows entrepreneurs to efficiently obtain the necessary approvals so they may focus on executing their business plans. All levels of the City, from Council to front line staff positions, are transparent, straightforward and accessible. The City recognizes its role to promote and support innovation and development, and in turn receives additional revenues which are reinvested in City services.

NEW REVENUE RESOURCES

Approximately half the City's revenues come from taxes (sales, TOT, transfer, etc.). In 2018, when new revenues began to flow to the City as a consequence of cannabis business development, City revenues were enhanced by a new $0.12 per gallon state gasoline tax, facilitated by Senate Bill 1, implemented on November 1, 2017. Gas tax revenues are being used to fund roadway improvement projects in the City. State and federal revenue sharing has and will continue to be an important source of funding for City projects and improvements. The City also has excellent access to and exposure along the US Interstate-10 corridor. The General Plan provides excellent opportunities for freeway-oriented commercial businesses on the hundreds of acres that make up Cathedral City's North City Specific Plan and North City Extended Specific Plan. Major freeway interchanges offer an abundance of retail, hotel, and residential development opportunities with immediate access to a large drive-by market. Other opportunities include development of office and industrial space, and/or distribution facilities.

There are also important opportunities for the City to build upon progress in the downtown and elsewhere in the City and to expand its participation in the hospitality market and collection of TOT, including new hotel development serving a variety of market segments. Other hospitality businesses that should thrive in the future include restaurants catering to the permanent and seasonal populations, as well as the tourist visitor. The City's market for restaurants extends well beyond its corporate limits, and the valley's seasonal residents and tourists are an important market the City will continue to cultivate.

Arts and culture, and entertainment retail have been important commercial trends emerging as a function of the consumer's growing interest in quality of life experiences. The City Downtown Arts and Entertainment District incorporates elements of entertainment retail and arts and culture commercial activities anchored by the Mary Pickford Theater and the CV Rep theater. The Amphitheater Park is another downtown venue that further synergizes the mix of civic and commercial activity that has made the Downtown a focus of robust community activity.

The healthcare industry is the single largest component of the US economy, totaling more than $3 trillion in 2014, and reaching $3.65 trillion in 2018[14]. This sector of the economy is a major employer, generating more than 14,000 local jobs in 2017, with three major hospitals, a variety clinic and outer outpatient facilities, and a host of in-home services. Health care inclusive of the social assistance sector is projected to grow at an annual rate of 2.6 percent, adding 5.0 million jobs between 2012 and 2022. This accounts for nearly one-third of the total projected increase in US jobs. The growth reflects, in part, the demand for healthcare workers to address the needs of an aging population.[15]

SUSTAINABILITY AND SMART GROWTH

The concept of sustainability permeates the Cathedral City General Plan and is an ethos by which it has been developed and updated. The outgrowth of sustainability is a response to economic and environmental pressures that have become progressively more evident the longer they have been neglected. Regions that do not wisely manage land and water resources, transportation and other infrastructure, schools, and other key components of a healthy community will not thrive.

14 Plunkett Research, Ltd. 2014; Axios 2019.
15 US Bureau of Labor Statistics, Employment Projections: 2012-2022. December 19, 2013.

Sustainable communities are not risk-takers, rather they assure the long-term viability of their communities. In the long-term, investments in sustainability positively impact property values, the City's fiscal balance, private sector profitability, and enhanced quality of life and security. Future local and regional economic performance and prosperity will require a highly skilled and well- educated work force, and are strongly influenced by community form and character. Sustainability policies that promote a high quality of life will enjoy enhanced economic performance and improved overall economic prosperity.

FUTURE DIRECTIONS

There is no substitute for a diverse local economy. It provides resilience against the periods of inevitable change the City will see in the coming years. Continued growth in areas of comparative advantage and in new areas of economic activity, more local and better paying jobs, expanded educational opportunities, and a broadened tax base will all be measures and providers of economic prosperity in the future.
The City is poised to grow its economic base, and while there has been valuable progress in many areas, including the cannabis and hospitality industries, there are headwinds that the City must also fight. These include the assault on "brick and mortar" businesses by on-line retailers, underutilized commercial assets at less than optimal locations, and the changing and evolving retail and food and beverage markets.

Excepting agri-business, the Coachella Valley has few examples of industrial development beyond certain niches that can do well within the geographic and demographic constraints and limitations of the area. Until recently, the region has not had the kind of stimulus and opportunities for synergies typically associated with nearby colleges and universities. With the expansion of College of the Desert and the growing California State University-San Bernardino/Palm Desert Campus on Cook Street near Interstate-10 and the City's Sphere-of-Influence, new business opportunities and a trained workforce will also enhance future economic growth.

Industrial development in the City is largely limited to light industrial businesses supporting real estate development, public infrastructure, and the automotive industry. A wide range of service-oriented businesses (industrial and commercial) are located on City industrial lands. Existing businesses and residences, in the City and beyond, generate a significant ongoing demand for capital improvements and services. Since the last General Plan update, less light industry and more business park development has occurred within the City's "industrial" areas. Customers for industrial space are also changing. For instance, Perez Road is emerging as a venue for an ad hoc arts district within a multi-tenant industrial park.

With the development of the California State University campus and its planned six schools of focus, Cathedral City and the region may benefit from opportunities for growth of research and development (R & D) industries typified by clean or non-polluting operations conducted within enclosed buildings, and employing highly trained and well-paid specialists in research and technology. An R & D industrial park in the immediate vicinity of the university can provide important opportunities for development of business incubators that are fed by academic and research activities at the campus. These synergies have been key to the diversifying of economies in many communities, and the Coachella Valley provides many natural advantages for R & D development. The type of industrial development envisioned generates limited demand for public services and facilities, including low traffic generation and limited impacts on other public and environmental resources.

The City must keep in tune with global, national, regional and local trends and have a kit of economic development tools that allow the City to be nimble and innovative in exploiting these emerging markets. The City will continue to facilitate new development opportunities and community events that make it an appealing place for residents and visitors to live, gather, and conduct business.

Cathedral City has been awarded as one of the "Most Livable" cities in America, offering residents and visitors authentic Southern California lifestyle, and diverse neighborhoods, shopping, employment and recreation. The City and region offer exemplary and distinguished public schools, wonderful parks including the Fountain of Life, Dennis Keats Soccer Fields, Big League Dream Sports Park, and its very own "Bark Park." With a variety of shopping opportunities from large national retailers to charming boutique stores, and tremendous opportunities for dynamic mixed-use neighborhoods, destination and entertainment retail should thrive in the coming years.

The City holds a solid position in the retail car and truck market, with dealerships representing more than 20 luxury and competitive brands. The City's economy will continue to capitalize on its access to some of the greatest hiking in the desert southwest, unique desert plants and animals, scenic golf courses, and annual art, music and food festivals. The City's exceptional public safety services and health care providers will also continue to provide a sound foundation for continued economic growth.

GOALS, POLICIES, AND PROGRAMS

Goal 1: A balanced, broad-based economy that provides a range of employment opportunities, high standards of development, and environmental protection.

Policy 1.1: The General Plan land use map and designations shall facilitate a range of residential, commercial, industrial, institutional, and mixed-use development opportunities that are dispersed throughout the planning area.

Policy 1.2: The City shall promote business development and retention, workforce training, and professional development.

Program 1.2.1: Maintain a list of "shovel-ready" sites for interested developers and businesses.
Responsible Agency: Economic Development
Schedule: Immediate; Ongoing

Program 1.2.2: Continue to streamline and expedite the development review process without compromising development quality through concurrent application processing and efficient design review.
Responsible Agency: Economic Development
Schedule: Immediate; Ongoing

Program 1.2.3: Establish and maintain partnerships with educational institutions, business groups, and private and non-profit organizations to offer relevant, high-quality workshops, classes, and other programs that support a range of educational and employment interests.
Responsible Agency: Economic Development
Schedule: Immediate; Ongoing

Program 1.2.4: Maximize use of the City's website, newsletters, news media, and other outlets to disseminate information about current and future community projects and programs, workforce training and employment opportunities, and information for developers and businesses.
Responsible Agency: Economic Development
Schedule: Immediate; Ongoing

Program 1.2.5: Provide incentives to existing small and startup businesses, including minority- and women-owned businesses, to facilitate their expansion and job creation.
Responsible Agency: Economic Development
Schedule: Immediate; Ongoing

Policy 1.3: The City shall continue to encourage higher density infill development and that which uses existing utilities, infrastructure, and services.

Policy 1.4: The City shall facilitate development of a variety of housing products that are affordable to all segments of the workforce.

Policy 1.5: The City shall continue to cultivate a cooperative relationship with the Agua Caliente Band of Cahuilla Indians and Bureau of Indian Affairs, particularly regarding development of Indian lands within the City and sphere-of-influence.

Policy 1.6: The City shall explore and target opportunities to attract new businesses and industries with well-paying occupations that match or can enhance the skill base and training capacity of local residents. Industries that may be particularly well-suited to the community include sustainable technologies, allied health services, hospitality industries, cannabis cultivation and distribution, arts and culture related ventures, and other economic development opportunities where Cathedral City may have a comparative advantage.

Program 1.6.1: Assure that appropriate development standards, applications, and review processes are in place to address the needs of new industries.
Responsible Agency: Planning, Economic Development
Schedule: Immediate; Ongoing

Goal 2: Adequate roads, multi-modal infrastructure, utilities, and other improvements that support economic activity and growth.

Policy 2.1: The circulation plan shall support multi-modal transportation choices that provide logical, efficient connections between residential, employment, shopping, and other land uses to minimize commute times.

Policy 2.2: The City shall support completion of all segments of CV Link, particularly those within its boundaries.

Policy 2.3: The City shall strive to reduce economic disruption from natural disasters and extreme weather events, such as flooding, earthquakes, and blowsand.

Program 2.3.1: Regularly review, evaluate, and revise, as needed, the City's Emergency Preparedness Plan.
Responsible Agency: Fire Department, Economic Development
Schedule: Immediate; Ongoing

Policy 2.4: All developers shall be responsible for their fair share of on-site and off-site improvements required to support their development proposals including, but not limited to, street construction and signalization, utility extensions, drainage facilities, and parks.

Goal 3: A rich cultural identity that attracts visitors and residents, supports City businesses, and contributes to long-term economic vitality.

Policy 3.1: The City shall continue to promote special events and activities that support and celebrate its history and diverse population.

Program 3.1.1: Explore marketing approaches that showcase community arts programs, events, and resources as a means for expanding tourism and employment opportunities.
Responsible Agency: Economic Development
Schedule: Immediate; Ongoing

Program 3.1.2: Continue to enhance the walkability and identity of Perez Road between Cathedral Canyon Drive and Date Palm Drive, and promote it as a vibrant and cohesive community arts district.
Responsible Agency: Public Works, Planning, Economic Development
Schedule: Immediate; Ongoing

Policy 3.2: The Downtown area shall continue to be promoted and recognized as the City's premier entertainment district.

Goal 4: A City Sphere-of-Influence that provides logical and economically beneficial opportunities for continued, long-term community development.

Policy 4.1: The City shall continue to monitor all proposed development proposal, flood control, infrastructure and other development facilitated by Riverside County within the City's Sphere and provide guidance regarding such proposals and activities.

Program 4.1.1: The City shall maintain a close and ongoing relationship with LAFCO and various Riverside County Department to ensure the City is apprised of public and private development activities in the Sphere. City staff shall provide timely input to County regarding proposed changes in land use in the Sphere.
Responsible Agency: Planning, Economic Development, Public Works
Schedule: Immediate; Ongoing

Environmental Justice Element

PURPOSE

The primary purpose of the Environmental Justice Element is to strive for the fair and equitable treatment of all people with respect to community engagement, access to important resources and amenities, land use siting compatibility and a healthy environment. The intent of the element is to ensure that all people are able to live in a safe and healthy environment, and to minimize the effects of environmental hazards among all individuals regardless of race, ethnicity, or income level. The element analyzes issues associated with environmental justice in Cathedral City and addresses long-term community equity by establishing policies and programs that increase participation in the public decision-making process, reduce exposure to environmental hazards, and enhance access to healthy food, affordable housing, and fitness and recreational resources. The Environmental Justice Element will be used by the Cathedral City Council and Planning Commission, commissions and agencies, developers, and the general public to plan for the physical development of the City.

"When we try to pick out anything by itself, we find it hitched to everything else in the universe."

—John Muir

BACKGROUND

Issues of environmental justice can arise from geographic and procedural inequities. Geographic inequities occur when areas with high percentages of low-income residents, minority residents, and/or immigrant communities are exposed to poor environmental hazards and related health problems. Procedural inequities occur when the same communities are faced with obstacles to meaningful input during the decision-making process for projects that directly affect their neighborhoods. Geographic and procedural inequities can be caused by development patterns that concentrate undesirable or unhealthy land uses in proximity to low-income or minority neighborhoods, the placement of desirable public amenities outside of disadvantaged communities and limited or non-existent political influence among certain demographic groups.

The Environmental Justice movement existed for several decades at the local, state, and federal levels and gained additional recognition in 1994 with President Clinton's Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations." California Government Code Section 65040.12(e) defines environmental justice as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies." The California Environmental Protection Agency has established State environmental justice policies and standards, and the Governor's Office of Planning and Research (OPR) coordinates environmental justice programs statewide.

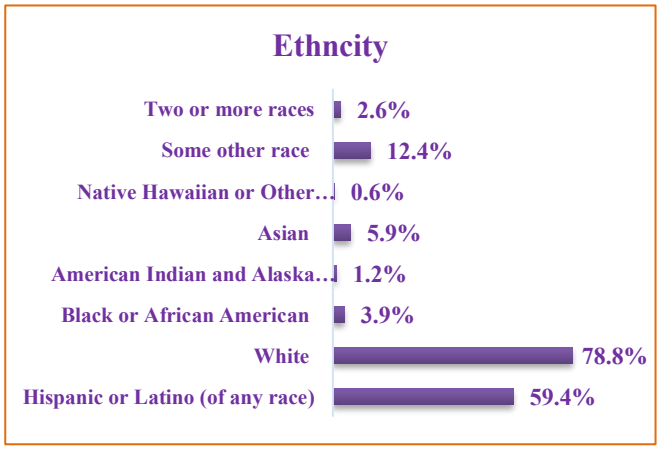
Government Code Section 65302(h) requires that General Plans include an environmental justice element, or related goals, policies, and objectives integrated in other elements, that identifies disadvantaged communities in the general plan area if the city has a disadvantaged community, as defined by the statute. Senate Bill 1000 (2016) also requires a General Plan Environmental Justice Element if the city has a disadvantaged community. Both require the Element to include policies and objectives that reduce the health risks of disadvantaged communities, promote civil engagement in the public decision-making process, and prioritize programs that address the needs of disadvantaged communities.

The Environmental Justice Element is related to many other General Plan elements, particularly Land Use, Circulation and Mobility, Housing, Air Quality and Climate Stability, Public Services and Facilities, Parks and Recreation, Safety, and Healthy and Sustainable Community. Decisions made related to the types of land uses, location, density and intensity of land uses, transportation systems, and street designs all contribute to public health and environmental justice. The goals, policies, and programs identified in these and other related elements provide additional opportunities to further implement Environmental Justice principles. Environmental Justice can permeate many aspects of community life. Therefore, this element should be read and considered in the context of other General Plan elements. Although this element includes discussions pertaining to those elements, its themes are particularly focused on public health equity for disadvantaged communities.

DEMOGRAPHICS

Population, Race and Ethnicity

The population of Cathedral City increased approximately 25% between 2000 and 2016.[1] Currently (2018), the city's population is approximately 53,733. The population consists of 52.4% males and 47.6% females, and the median age is 37.3 years.



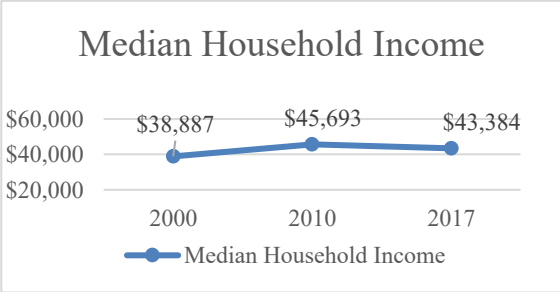
The majority of Cathedral City residents are white (78.8%), with Black or African Americans comprising 3.9%, American Indians and Alaska Natives 1.2%, Asians 4.8%, Native Hawaiians and other Pacific Islanders %, "some other race" 11.6%, and two or more races 2.6%. Hispanic or Latino (of any race) residents make up 59.4% of the City's population. Within the Hispanic or Latino race, approximately 54.8% identify as Mexican.

Language

As stated in the Healthy and Sustainable Community Element, more than half (54.1% or 26,920 residents) of the Cathedral City population speaks a language other than English at home, and one-fifth (21.9% or 10,870 residents) speak English "less than very well." Given that 60.5% of the City population is Hispanic or Latino, it is reasonable to conclude that Spanish is the most common secondary language spoken. The City strives to assure that health and safety resources and services are accessible to all populations, including those challenged by language barriers. The City website and newsletters, PSUSD adult educational programs, business development programs tracked on the City Economic Development website, and other community resources are offered in both English and Spanish (see Education, below).

Household Income

According to the U.S. Department of Health and Human Services, the 2018 federal poverty level is a household income of $25,100 or less for a family of four. As stated in the Healthy and Sustainable Community Element, approximately 29.5% of children, 20.7% of adults ages 18 to 64, and 13% of adults over age 65 are living in poverty in Cathedral City.[2] The 2017 median household income in the City was $43,384 as compared to the County's median household income ($60,807) and state of California ($67,169).[3]

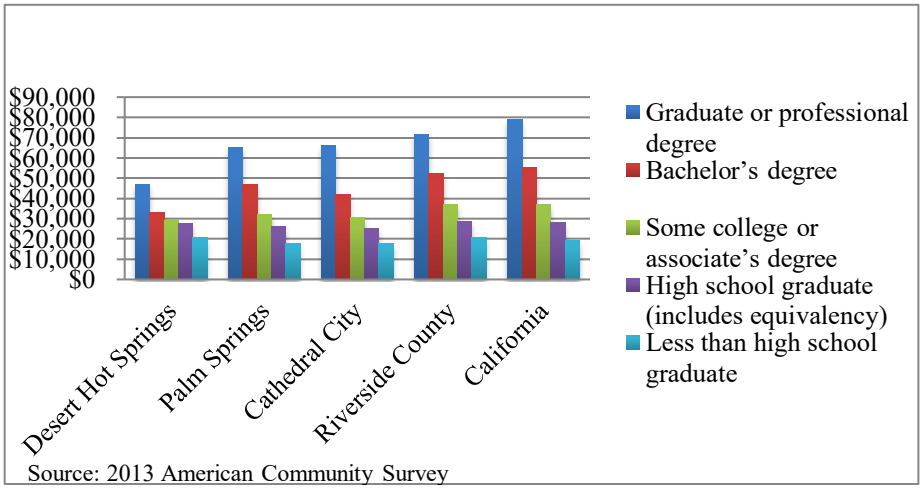


1 U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates - Demographics and Housing Estimates https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF

2 U.S. Census – Povert Status in the Past 12 Months - 2013-2017 American Community Survey 5-Year Estimates https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF

Education

Education is an important indicator of equity and social and economic mobility. In 2015, the earnings potential for a person with no high school diploma in the western Coachella Valley ranges from approximately $17,765 to $20,596, which is comparable to the earnings potential for those without a high school diploma in Riverside County and the State.



Source: 2013 American Community Survey

Median earnings for a person with some college or an Associate's degree range from $29,169 to $32,112 in in the west valley, compared to $37,095 in the County and $36,901 in California. Median earnings for a person with a Bachelor's degree in the west valley range from $32,882 to $47,126. This is more than double the earnings of the population without a high school diploma and demonstrates the significance effect of advanced education on earnings potential. The percentage of Cathedral City residents attaining higher educational levels increased between 2000 and 2017. In 2017, the greatest number of residents (29.0%) were high school (or equivalent) graduates, followed by those with some college but no degree (22.5%).

ENVIRONMENTAL INEQUITIES

Environmental injustice can be indicated by disproportionate levels of exposure to health hazards, such as air pollutants or toxins, affecting lower income, minority, or other vulnerable communities. Such populations may be less able to afford nutritious, pesticide-free food, or have limited access to it due to lack of transportation or limited availability in their neighborhoods. Children may be more susceptible to exposure to lead-based paint in older or lower quality housing.

"Cities have the capability of providing something for everybody, only because and only when, they are created by everybody."

- Jane Jacobs

Community members may not participate in local decision-making processes, such as elections, community workshops, or council memberships due to language or cultural barriers or lack of outreach efforts on the part of community organizers. Historically, disadvantaged members of the community have not had a meaningful voice in decisions that affect their environment. The causes may be a combination of cultural and/or language barriers, lack of information, inadequate training, lack of exposure to the decision-making process, and officials who aren't informed about issues of concern for those members of the community.

VULNERABLE COMMUNITIES IN CATHEDRAL CITY

In order to ensure that all residents of Cathedral City receive fair and equitable treatment with regard to the provision of public services and amenities, community decision-making processes, and environmental health, it is necessary to identify areas of the city that qualify as "disadvantaged communities" or "low-income areas." This ensures that city programs and measures can be targeted appropriately toward the most impacted communities.

[3] Ibid.

Disadvantaged Communities

SB 1000 defines "disadvantaged communities" as areas identified by the California Environmental Protection Agency (CalEPA) pursuant to Section 39711 of the Health and Safety Code, or an area that is a "low-income area" (defined below) that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.
SB 1000 further defines "low-income areas" as areas with household incomes at or below 80 percent of the statewide median income or with household incomes at or below the threshold designated as low income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093.

CalEnviroScreen 3.0 is a science-based tool created by CalEPA and the Office of Environmental Health (OEHHA) to identify communities in California that are most affected by sources of pollution, and that are often especially vulnerable to pollution's effects. It uses environmental, health, and socioeconomic data to generate a numerical score for each census tract in the state. Higher scores indicate higher pollution burden and population vulnerability. Census tracts with scores of 75% or higher are designated as disadvantaged communities by CalEPA.

The most recent CalEnviroScreen update (June 2018) shows that there are no disadvantaged communities within the City of Cathedral City. Nearly all of the City's census tracts have scores ranging between 15% and 35%. The census tracts with the highest scores (45-50%) are located: 1) in the Cove, and 2) north of Ramon Road and west of the Whitewater River. These census tracts are also identified as areas of concern in the Public Health Alliance of Southern California's (PHASoCal) Healthy Places Index (HPI) mapping database described in the Healthy and Sustainable Community Element. Still, none of the census tracts in Cathedral City are designated as disadvantaged communities by CalEPA.

COMMUNITY EQUITY IN CATHEDRAL CITY

State Government Code Section 65302 (h) requires the Environmental Justice Element to address, at a minimum, the following topics affecting disadvantaged communities: 1) promotion of physical activity, 2) promotion of sanitary housing, 3) promotion of food access, 4) reducing pollution exposure, 5) promotion of public facilities, and 6) promotion of civil engagement in the public decision-making process. Although no disadvantaged communities or low-income areas, as defined by SB 1000, are located in Cathedral City, it is important to evaluate the current local community health environment so that potential negative environmental health effects or exposures can be reduced or avoided in the future.

Physical Activity

Mobility is a critical issue in bringing vulnerable communities access to necessary resources, such as health care and healthy food outlets. More likely than other communities to rely on public transportation, they often live in areas with limited transit service. Increased mobility options provide critical links and opportunities. The design of physical environment can either facilitate or serve as a barrier to mobility. Physical inactivity is one of the key contributors to chronic disease. The built environment can promote physical activity by creating spaces and places that encourage walking, biking, and other forms of recreation.

In Cathedral City, there are currently (2018) nine public parks (Exhibit PR-1), as well as various bikeways (Exhibit PR-3), golf courses, sports facilities, and trails that offer residents opportunities to participate in walking, biking, and other outdoor activities.

Safe and Sanitary Housing

A key consideration of environmental justice is ensuring a healthy home. It is estimated that Americans spend approximately 70% of their time in their homes, according to the National Human Activity Pattern Survey. Low-income and minority populations can be disproportionately affected by home health hazards as their limited incomes reduce housing choices and opportunities for maintenance and repairs. Housing-related environmental hazards include exposure to indoor air pollution, lead-based paint, asbestos, mold, and mildew. These toxins can cause developmental delays, asthma and allergies, and other health risks. Ensuring that all residents have access to healthy homes is an important way to achieve environmental justice.

In Cathedral City, approximately 69% of residences are single-family homes, approximately 19% are multi-family homes, and approximately 12% are mobile homes (CA Department of Finance, 2018). The Housing Element provides additional details about local housing conditions, including availability, quality, and affordability. Most of the vacant residential lands in the city offer higher density residential opportunities, which may best serve lower income families. Urban development that is compact with more opportunity for greater residential density integrated with mixed-use, neighborhood-serving commercial, and other services can create a greater variety of attractive and affordable housing options within the City.

Food Access

Access to safe and nutritious food is considered a basic individual right by the World Health Organization and the United Nations. However, many residents in low-income neighborhoods have limited access to fresh produce and other healthful foods. Food deserts (geographic areas marked by limited healthy food options) and swamps (geographic areas marked by high densities of unhealthy food options) are indicators of failure in food access.

Non-governmental organizations work to alleviate food insecurity and provide healthful access to food. One of these organizations is FIND Food Bank, a food pantry with distribution sites throughout the area. FIND partners with local and regional growers, grocers, corporate entities, and the U.S. Department of Agriculture to collect and distribute throughout the Coachella Valley.

Within the City of Cathedral City, distribution sites include the Cathedral City Senior Center, the Salvation Army, and Calvary Christian Center. Hidden Harvest is a local produce recovery program that employs local farm workers to gather produce that is left after harvest and distributes it to those in need in the Coachella Valley. Two of its distribution locations are in the city, the Senior Center and Mountain View Apartments. The Cathedral City Senior Center also operates a food pantry that partners with FIND Food Bank, local grocers, Hidden Harvest, the City and Agua Caliente Band of Cahuilla Indians to provide food to low-income senior residents.

In addition, the CalFresh Program, also known as the Supplemental Nutrition Assistance Program (SNAP), provides resources for families in need to buy more healthy, nutritious food. Food access is not simply a health issue but also a community and equity issue. As such, access to healthy, affordable, and culturally appropriate food is a key part of not only in a healthy, sustainable local food system but also a healthy sustainable community.

Pollution Exposure

Pollution exposure occurs when people come into contact with contaminants in air, food, water or soil. Disadvantaged communities are often disproportionately burdened by pollution exposure. Even though there are a relatively small number of Cathedral City businesses that emit hazardous materials, most city residents and businesses use gasoline and plastics. These typically used products are known to cause health consequences on the areas where are used and disposed of, resulting in the export of environmental hazards to other, often less affluent communities which tend to suffer disproportionately from toxic pollution.

Noise Pollution

An undesirable sound can be considered noise. Noise pollution is unpleasant noise created by people or machines that can be distracting, intrusive, and/or physically painful. Chronic noise pollution is accompanied by health side effects that result in annoyance, stress, cardiovascular disease, tinnitus, and sleep deprivation. These health hazards are prominent in residential locations that are dominated by vehicular traffic. The Centers for Disease Control and Prevention classify noise pollution as increasing public health problem that can lead to adverse health effects. The World Health Organization and U.S. Environmental Protection Agency recognize the harmful impacts to health due to noise pollution.

Since 1981, when Congress stopped funding the Noise Control Act of 1972, the U.S. government has left the state and local governments to assume responsibility. The most successful U.S. noise reduction efforts have centered on aviation noise. This is due to the introduction of newer, more efficient and quieter engines and promoted by the Airport Noise and Capacity Act of 1990. Nationally, the number of people affected by aviation noise declined by 95 percent between 1975 and 2000. The Palm Springs Airport is located on the western boundary of the City and approximately 300 feet to the nearest Cathedral City residence. Aviation noise can be felt most prominently by the nearby residential community which is largely composed of Hispanic residents. Moving forward the city can further the noise pollution by continuing to enforce polices and standards that works to lessen the impact felt by sensitive receptors.

Air Pollution

Numerous local and regional policies and programs are in place that reduce air pollutant emissions and restrict sources of pollution adjacent to sensitive receptors (also refer to the Air Quality and Climate Stability Element and the Safety Element). The General Plan 2040 also updates designations on several vacant residential lots that bordered a potential pollutant source or other hazard. The Land Use Element includes policies that support infill development and development of bike and pedestrian infrastructure as a means of reducing vehicle miles traveled and associated air pollutants.

Public Facilities

An adequate supply of public facilities is a critical component to the current and future prosperity of a community. Under SB 1000, “public facilities” is an umbrella term that includes but is not limited to “public improvements, public services, and community amenities.” This covers a wide spectrum of publicly provided uses and services, including infrastructure, school facilities, parks, and transportation and emergency services. These facilities and services improve the health, safety, and wellness of the community by either enhancing the public sphere or providing services that are available to residents.

Significant impacts to health and quality of life can result from insufficient public facilities. For instance, communities that lack basic infrastructure such as sidewalks and streetlights present safety hazards for people using public spaces. The Public Facilities Element includes in-depth discussion and specific goals and policies for a range of public facilities in the City.

Civic Engagement

Disadvantaged communities often do not have a meaningful voice or effective ways to engage with their community. The reasons behind this are multi-layered and may include cultural and language barriers, a lack of information, or lack of transportation or access to public meetings and workshops. Enhanced civic engagement is an important community goal; it ensures that a wide range of issues affecting various segments of the population are addressed. Cultivating effective civil engagement to all residents not only provides the city with an opportunity to strengthen the city's participation.

The Environmental Protection Agency (EPA) identifies community capacity building as a way to engage disadvantaged populations and help them better identify and meet their needs. This concept includes building on existing skills, providing education on issues and processes, and helping disadvantaged populations to communicate effectively in the public realm.

FUTURE DIRECTIONS

A key point of environmental justice is to address systemic discrimination and injustice in the risks and harms certain groups of people face related to the burdens of natural resource extraction, pollution, the siting of waste, transportation, workplace hazards, expropriation of land, etc. In addition, it is imperative to prevent future inequities by promoting the development and enforcement of appropriate laws and policies.

"Full and effective participation by all citizens in state government requires, therefore, that each citizen have an equally effective voice in the election of members of his legislature."

-Chief Justice Earl Warren

The Goals, Polices, and Programs below set forth guidelines for each of the four key areas of environmental justice and aid the City in addressing related issues. Although these policies and programs will help the City meet certain goals, effective environmental justice cannot be achieved by simply adopting a series of generalized policies and goals. The approach required is an ongoing commitment to identifying existing and potential issues, and then finding and enacting solutions to further lessen injustices to vulnerable communities. The City shall strive to achieve fairness and equity in all aspects of physical development and civic engagement.

From the time of its incorporation, the City has elected its Councilmembers "at-large"; that is, all candidates running city-wide. It has been argued by many that at-large elections have the potential to result in discriminatory dilution of minority voting power. This is particularly the case where communities include concentrations of socio-economic, ethnic or racial groups. In 2018, the City adopted and implemented district-based elections for City Council. It is hoped that this approach to electing official will more fairly empower all sectors of the community.

GOALS, POLICIES, AND PROGRAMS

Goal 1: Community environmental justice that effectively addresses issues of health, land use economic opportunity and access to regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location.

Physical Activity

Goal 2: Effective individual and community health through prevention, screening, education, and treatment strategies regarding nutrition and physical activity related health issues.

Goal 3: Improved health, safety, and mental well-being of residents by creating convenient and safe opportunities for physical activity.

Policy 3.1: Pursue partnerships for the construction and maintenance of parks and recreation facilities, through joint use agreements, private corporations, outside funding, and community volunteers.

Program 3.1.1: Maintain a joint use agreement with Palm Springs Unified School District and look for additional opportunities to partner in expanding resident access to shared facilities.
Responsible Parties: City Council, Palm Springs Unified School District
Schedule: Immediate; Ongoing

Program 3.1.2: Pursue support from federal, state, and private funding sources to assist with acquisition, design, and construction of parks and recreation facilities.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Safe and Sanitary Housing

Goal 4: A range of safe and sanitary housing opportunities for all segments of the community, including and especially the socio-economically disadvantaged.

Policy 4.1: Promote an equitable distribution of housing types for all income groups throughout the city and promote mixed-income neighborhoods.

Policy 4.2: Encourage new projects to include a range of housing types that serve a broad socio-economic spectrum, and include single-family residences, townhomes, condominiums and rental units.

Policy 4.3: Increase, preserve, and improve the community's affordable housing stock.

Program 4.3.1: Pursue and maximize the use of all appropriate state, federal, local, and private funding for development, preservation, and rehabilitation of housing affordable for extremely low, very low, low, and moderate-income households, while maintaining economic competitiveness in the region.
Responsible Parties: City Council, Planning
Schedule: Immediate; Ongoing

Program 4.3.2: Assist in and otherwise support the repair, rehabilitation, and improvement of residential structures; demolish and replace structures which are dilapidated and beyond repair.
Responsible Parties: City Council, Planning
Schedule: Immediate; Ongoing

Program 4.3.3: Allow and encourage non-traditional housing types that can provide affordable housing, such as accessory dwelling units.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 4.3.4: Encourage and facilitate the development of senior housing and assisted living facilities, especially near transit, recreational facilities, medical centers and hospitals, pedestrian facilities, and access to healthy foods.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Food Access

Goal 5: Access to a wide variety of healthy foods sources in all neighborhoods of the community.

Policy 5.1: Promote development of green grocers, organic markets and produce, and other sources of healthy foods.

Policy 5.2: Promote nutrition education and access to healthy foods.

Program 5.2.1: Increase access to healthy foods/beverages. Support neighborhood-oriented, specific sources of healthful foods, such as farmers' markets and local outlets.
Responsible Parties: City Council, Public Works, Community Development
Schedule: Immediate; Ongoing

Program 5.2.2: Support food banks, pantries, and other sources that help provide federal food assistance to low-income resident so that all families, seniors, schools, and community-based organizations are able to access, purchase, and increase intake of fresh fruits, vegetables, and other nutritious foods.
Responsible Parties: City Council, Economic Development
Schedule: Immediate; Ongoing

Pollution Reduction

Goal 6: Integrated air quality, land use, and transportation planning, policy and infrastructure that reduces emission of criteria pollutants and greenhouse gases from mobile and stationary sources.

Policy 6.1: Improve or maintain air quality for the promotion of population and environmental health.

Program 6.1.1: To the greatest extent practicable, require that development be located and designed to reduce vehicular trips (and associated air pollution) by utilizing compact development patterns while maintaining community character.
Responsible Parties: City Council, Planning
Schedule: Immediate; Ongoing

Program 6.1.2: The city shall require new development with sensitive uses located adjacent to pollution sources be designed with consideration of site and building orientation, location of trees, and incorporation of ventilation and filtration to lessen and minimize any potential health risks.
Responsible Parties: City Council, Planning, Environmental Conservation Manager
Schedule: Immediate; Ongoing

Civic Engagement

Goal 7: A fully engaged and involved cross section of residents, businesses, and organizations in all aspects of the community planning process.

Policy 7.1: Educate decision makers and the general public on the principles of environmental justice.

Program 7.1.1: Ensure that low-income and minority populations understand the potential for adverse pollution, noise, odor, vibrations, lighting and glare when new commercial and industrial developments are proposed.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 7.1.2: Ensure that affected residents have the opportunity to participate in decisions that impact their health.
Responsible Parties: City Council
Schedule: Immediate; Ongoing

Program 7.1.3: Ensure that low-income and minority populations have equal access and influence in the land use decision-making process through such methods as bilingual notices, posting bilingual notices at development sites, conducting information meetings with interpreters, etc.
Responsible Parties: City Council, Planning
Schedule: Immediate; Ongoing

Program 7.1.4: Provide staff and City officials training on the principles and methods of comprehensive public participation with an emphasis on empowering disadvantaged populations.
Responsible Parties: City Council, Administrative Services
Schedule: Immediate; Ongoing

Healthy and Sustainable Community Element

PURPOSE

Community health and sustainability refers to the overall physical, mental, and social well-being of City residents and the maintenance of a healthy and thriving environment that sustains community health, now and in the long-term. Among the challenges facing communities is the need to incorporate healthy choices into the everyday lives of citizens and in the natural and human-made systems that sustain us. The Healthy and Sustainable Community Element provides a framework for addressing factors affecting community health, including educational and employment opportunities, access to healthy food, a clean and sustainable environment, and opportunities for physical activity. It identifies health disparities in the community, such as limited access to health services. Its goals, policies, and programs are focused on improving health outcomes, achieving health equity, and assuring that future changes to the built environment have a positive impact on the community's well-being.

BACKGROUND

Community health is a top priority in Cathedral City, and health and sustainability considerations are integrated throughout the General Plan. The Healthy and Sustainable Community Element is closely related to the Land Use, Circulation, and Housing Elements that directly shape physical development, access, and livability in the City. It is also closely related to the Public Services and Facilities, Environmental Justice, and Economic and Fiscal Health Elements that identify and evaluate health care services, as well as economic and social disparities and opportunities. It is also closely related to the Air Quality and Climate Stability, and Open Space and Conservation Elements that address environmental quality and climate change.

"Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselves. All things are bound together. All things connect. – Chief Seattle

Senate Bill (SB) 1000, the Planning for Healthy Communities Act, requires jurisdictions with disadvantaged communities to address certain health considerations in their General Plans. These topics are directly addressed in the Environmental Justice Element but are also integrated into this Element. So, too, are the requirements of Senate Bill 375, the Sustainable Communities and Climate Protection Act, which directs the City to coordinate land use and transportation planning. The provisions of SB 375 are primarily addressed in the *Land Use Element* and the *Circulation and Mobility Element*.

COMMUNITY HEALTH

"Community health" refers to the physical, mental, social, and economic well-being of Cathedral City residents. While access to healthcare facilities and services are important components of community health, so too are a strong economy, recreational amenities and open space, an efficient transportation system, a clean and safe environment, and supportive social structures. These and other factors can directly and indirectly impact a resident's physical and mental health.

"Health Equity" means that every person has an equal opportunity to achieve his/her optimal health regardless of their ethnicity, gender, disability, level of education, occupation, place of residence, socio-economic circumstances or other defining characteristic. "Health disparities" are differences in health status among distinct segments of the population, including differences that occur by gender, age, race, gender, education, income, geographic location, or similar distinctions.

Community Health Indicators

Table HS-1 describes some of Cathedral City's physical, mental, and social health indicators. Several of the data (as indicated) are for Riverside County as a whole. This information helps identify and place in context the City's community health issues and can be used to guide City policy-making. The table is not meant to be exhaustive but does provide a wealth of data and insight. Additional data are provided in other General Plan Elements; housing data in the Housing Element, environmentally hazardous sites information in the Safety Element, health care facilities information in the Public Services and Facilities Element, and recreational and fitness opportunities in the Parks and Recreation and Open Space and Conservation Elements.

Table HS-1
Cathedral City Health Indicators

	Number	Percent
Population and Land Use		
Population[1]	53,268	---
Population density (persons/square mile)[7]	2,420	---
Average household size (persons/household)[1]	3.04	---
Median number of rooms in a house[1]	4.7	---
Transportation System		
Means of Transportation to Work (workers 16 years and over)[1]		
Car, truck, or van[1]	---	90.2%
Drove Alone[1]	---	79.1%
Carpooled[1]	---	11.1%
Public transportation, excluding taxicab[1]	---	2.5%
Walked[1]	---	1.3%
Bicycle[1]	---	0.5%
Taxicab, motorcycle, or other means[1]	---	2.1%
Worked at home[1]	---	3.4%
Mean travel time to work (minutes)[1]	20.7	---
Physical Health Profile		
Percent of population (18 years and over) diagnosed with obesity[5 6]	---	28.1%
Percent of population (18 years and over) diagnosed with asthma[6]	---	11.5%
Percent of population (18 years and over) diagnosed with diabetes[6]	---	8.1%
Percent of population (18 years and over) diagnosed with heart disease[6]	---	6.3%
Civilian noninstitutionalized population with a disability[1]	6,468	12.2%
Walk at least 150 minutes/week (18 years and over)[10]	---	29.5%
Teens with no physical activity in a typical week (Riverside County)[11]	---	12.6%
Children consuming fast food 3+ times/week (Riverside County)[11]	---	17.7%
Adults consuming fast food 3+ times/week (Riverside County)[11]	---	31.4%
Adults finding fresh fruits/vegetables in their neighborhoods "always" or "usually" (Riverside County)[11]	---	83.9%
Up-to-date immunization rates of children entering kindergarten, Palm Springs Unified School District[11]	---	95.9%
Mental Health Profile		
Adults with serious psychological distress in past year (Riv. Co.)[11]	---	6.5%
Adults who sought/needed mental health help but did not receive treatment (RivCo)[11]	---	40.6%
Teens needing help for emotional/mental health problems in past year (RivCo)[11]	---	30.8%
Social Vulnerabilities		
Unemployment rate[8]	890	3.4%

Table HS-1
Cathedral City Health Indicators

	Number	Percent
Children under 5 years old[1]	3,551	6.7%
Adults aged 65 years and older[1]	8,118	15.2%
Persons speaking language other than English at home[1]	26,920	54.1%
Persons speaking English less than "very well"[1]	10,870	21.9%
Population 25 years and over with no high school diploma[1]	8,313	23.7%
Civilian noninstitutionalized population with no health insurance coverage[1]	12,276	23.1%
Poverty		
All people under 18 years[1]	---	31.6%
All people 18 to 64 years[1]	---	19.6%
All people 65 years and over[1]	---	14.2%
Housing units with mortgage ≥ 35% of household income[1]	3,030	45.4%
Occupied units paying gross rent ≥ 35% of household income[1]	3,286	49.5%
Occupied housing units with no vehicle available[1]	---	6.4%
Food insecurity[10]	---	11.9%
Violent crimes per 1,000 residents[3]	23.2	---
Total population in group quarters[2]	295	0.6%
Institutionalized population[2]	32	0.1%
Non-institutionalized population[2]	263	0.5%
Unsheltered homeless individuals[11]	38	---
Births to teen mothers (under age 20) and percent of live births in City[11]	49	7.6%

Sources:
[1] 2012-2016 American Community Survey 5-Year Estimates
[2] 2010 U.S. Census
[3] 1,236 part one crimes (murder, rape, robbery, vehicle theft), Cathedral City Police Department, 2016.
[4] Table 1, "Deaths Due to All Causes, Ranked by Three-Year Average Age-Adjusted Death Rate, California Counties, 2013-2015," County Health Status Profiles, California Department of Public Health, 2017.
[5] Obesity is defined as a Body Mass Index (BMI) of 30 or higher.
[6] "Profile of the City of Cathedral City (Local Profiles Report)," Southern California Association of Governments, 2017. Data shown are from year 2014, as provided in California Health Interview Survey, 2016.
[7] www.statisticalatlas.com
[8] Monthly Labor Force Data for Cities and Census Designated Places (CDP), February 2018 – Preliminary. California Employment Development Department, March 23, 2018.
[9] Table 1, County Health Status Profiles 2017, California Department of Public Health.
[10] Healthy Cathedral City Community Profile, Riverside University Health System, March 31, 2016, based on 2011-12 California Health Interview Survey results.
[11] 2016 Eisenhower Medical Center Community Health Needs Assessment.

Language

As shown in Table HS-1, more than half (54.1% or 26,920 residents) of the Cathedral City population speaks a language other than English at home, and one-fifth (21.9% or10,870 residents) speak English "less than very well." Given that 60.5% of the City population is Hispanic or Latino, it is reasonable to conclude that Spanish is the most common secondary language spoken. The City strives to assure that health and safety resources and services are accessible to all populations, including those challenged by language barriers. The City website and newsletters, PSUSD adult educational programs, business development programs tracked on the City Economic Development website, and other community resources are offered in both English and Spanish (see Education, below).

Education

Nearly one-fourth (23.7% or 8,313 residents) of the City population age 25 years and older has no high school diploma. Approximately 7% have an Associate degree, and 18% have a Bachelor, graduate, or professional degree.[1] Education levels can be closely tied to earnings potential. The median household income in Cathedral City is $41,690, the third lowest of all valley cities, and lagging behind the median household incomes of Riverside County ($57,972) and state of California ($63,783).[2]

To attract and retain high-quality jobs and increase household incomes, additional efforts and resources should be placed on expanding and promoting educational opportunities for all residents. Existing resources include the Palm Springs Family Engagement Center (operated by Palm Springs Unified School District on Farrell Drive in Palm Springs), which offers GED and ESL adult education classes and other workshops, including bilingual services.

Higher education and professional training programs are offered at College of the Desert and regional campuses of UC Riverside, CSU San Bernardino, Brandman University, Kaplan College, Mayfield College, and Loma Linda University. The City's Economic Development website identifies free and low-cost professional development classes and opportunities, including bilingual programs, offered by local and regional business organizations.

Poverty

The 2018 federal poverty level is a household income of $25,100 or less for a family of four.[3] As shown in Table HS-1, approximately 32% of children, 20% of adults ages 18 to 64, and 14% of adults over age 65 are living in poverty in Cathedral City. Due to limited financial resources, these individuals could be more exposed to environmental hazards such as lead paint in substandard housing, limited access to fresh produce, insufficient means to purchase and maintain a vehicle, or other limitations that affect their overall well-being. Maintaining or expanding, as necessary, quality housing, a wide range of mobility options, neighborhood food markets, and similar measures that benefit those with limited incomes are a key consideration in developing City policies and programs.

Access to Health Care

Eisenhower Medical Center in Rancho Mirage prepared a Community Health Needs Assessment (CHNA) in 2016 that identified the top three most important health concerns of community stakeholders in its service area: mental health, alcohol/drugs/tobacco use, and access to care.[4] The greatest challenges or barriers related to access to care were lack of transportation and/or the need to drive long distances to receive services.[5] The study also found that access to primary care providers (personal physicians) is challenging.

Improving access to health care is also identified as a priority in the Riverside County Health Improvement Plan (2015). Recommended strategies to improve access included providing language interpretation, transportation, and other supportive services.[6] The study found that Riverside County is lacking in primary care providers and needs to add 9 providers per 100,000 people so that community members can increase visits to health care providers for routine checkups and preventive screenings.[7]

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1 2012-2016 American Community Survey 5-Year Estimates.
2 Ibid.
3 U.S. Department of Health and Human Services.
4 P. 18, Eisenhower Medical Center Community Health Needs Assessment, 2016. The Eisenhower Medical Center service area covers the entire Coachella Valley, from North Palm Springs on the west to Coachella on the east.
5 P. 37, Ibid.
6 P. 39, "Riverside County Health Improvement Plan, 2016-20," Strategic Health Alliance Pursuing Equity, Fall 2015.
7 P. 33, Ibid.

The Riverside CHNA (2013) found that the top health needs in the Coachella Valley are related to economic instability, which contributes to a lack of health insurance, oral health concerns, and diabetes. [8] It also found that, compared to cities in the Riverside service area and other Southern California counties, the Coachella Valley is lacking in non-profit agencies, resulting in greater access disparities, especially when coupled with transportation barriers. In addition, the Riverside service area, including the Coachella Valley, has about half as many primary care providers per capita as the state.

Health Disadvantage Rating

The Public Health Alliance of Southern California (PHASoCal) created the Healthy Places Index (HPI) mapping database to measure and display "health disadvantage" in California communities. PHASoCal defines health disadvantage as "the inability of people to fulfill basic human needs required for full social participation and optimal health and well-being. These disadvantages include but are not limited to the needs for economic security, food, shelter, safety, transportation, education, social connection and political participation."[9]

For each census tract in California, the HPI combines 25 community data categories from Census, CalEPA, and other sources about economics, education, healthcare access, housing, neighborhood conditions, environmental safety, social environment, and transportation. It also provides a racial breakdown for each census tract that is not incorporated into the index but can be used to further analyze health inequities.

The average HPI score for all census tracts in Cathedral City is 30.9 percentile, meaning the City's community conditions are healthier than 30.9% of all other California census tracts. The census tracts with the lowest scores are in the vicinity of Ramon Road and the Whitewater River Stormwater Channel. Each of those has a majority Latino population of 86% or higher. The scores are low due to a number of factors, most notably low educational enrollment and attainment, low rates of adult health insurance coverage, higher poverty rates, severe housing cost burdens for low-income homeowners, and low voter registration. The scores also indicate low tree canopy coverage and high ozone levels, not unique to these neighborhoods, but that do occur throughout the City and valley.

FOOD INSECURITY

Food insecurity refers to individuals who lack adequate nutritious and safe foods. Food insecurity often affects the unemployed, working poor, and elderly persons on fixed incomes. Causes may include limited income, limited availability of affordable healthy food options, or limited access to food, among others. An estimated one of six people in the Coachella Valley experiences food insecurity.[10] Table HS-1 indicates that nearly 12% of City residents surveyed experience food insecurity. The HPI mapping database (described above) shows that nearly all residents in the General Plan planning area live within ½-mile of a supermarket; supermarket access is lowest for the Cove neighborhood.

FIND Food Bank partners with local and regional growers, grocers, corporate entities, and the U.S. Department of Agriculture to collect food for distribution throughout the Coachella Valley. Its distribution network delivers food to an average of 90,000 individuals per month. Distribution sites in Cathedral City include Cathedral City Senior Center, the Salvation Army, and Calvary Bible Church. The church's Kids Summer Club provides food and snacks to more than 6,000 children and their families during a 10-week period when school is out of session.

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8 P.5, 44, 130, "Community Health Needs Assessment, Kaiser Foundation Hospital – Riverside ," Kaiser Permanente.

9 Healthy Places Index (HPI 2.0) Technical Report, Public Health Alliance of Southern California and Center on Society and Health at Virginia Commonwealth University, February 20, 2018.

10 FIND Food Bank website, www.findfoodbank.org/about-us/faqs/, accessed April 2018.

Hidden Harvest is a local produce recovery program that employs low-income farm workers to gather produce left in fields and orchards after harvest; the produce is offered to those in need throughout the Coachella Valley.[11] Hidden Harvest serves nearly 50,000 people each month. Twice per month, it operates eight Senior Markets in the Coachella Valley, including the Senior Center and Mountain View Apartments in Cathedral City. It also provides Health Fairs at schools with high percentages of students that qualify for free and reduced cost lunches; produce is offered for free in a farmers' market setting.

The Cathedral City Senior Center operates a food pantry that partners with FIND Food Bank, local grocers, Hidden Harvest, the City and Agua Caliente Band of Cahuilla Indians to provide food to low-income senior residents.

The CalFresh Program, also known as the Supplemental Nutrition Assistance Program, provides resources for families in need to buy more healthy, nutritious food.

CLIMATE CHANGE AND COMMUNITY RESILIENCE

Climate change can result in extreme weather events, such as flooding, drought, fire, windstorms, and extreme heat, which can directly and indirectly impact human health. Climate change is analyzed in the *Air Quality and Climate Stability Element*, and the potential for environmental hazards to occur in the General Plan planning area is also addressed in the Safety Element. The Emergency Preparedness Sub-Element describes the City's efforts to effectively respond to such events.

Climate Projections

The California Natural Resources Agency's Climate Adaption Planning Guide categorizes the state into climate impact regions. All of Riverside County, including Cathedral City, is located in the Desert region which is expected to experience measurable temperature increases over the next century, depending on future levels of carbon emissions (see Table HS-2).

Table HS-2
Riverside County
Projected Changes in Annual Temperature

	Average Temperature	Change from Historical Average
Historical	63.5ºF	---
Projected, Year 2099		
Low Future Carbon Emissions Scenario	67.2ºF	+3.7 ºF
High Future Carbon Emissions Scenario	70.0ºF	+6.5ºF

Source: p. 6, "Climate Change and Health Profile Report, Riverside County," California Department of Public Health and University of California Davis, February 2017.

Public Health Impacts of Climate Change

Temperature increases and hydrologic extremes like drought and flooding can impact human health in a variety of ways, causing injuries and fatalities, heat-related illness and disease, temporary and permanent displacement of housing and businesses, loss of income, increased hospitalization, malnutrition and disease from food supply and water quality impacts, and stress, depression, and other mental health conditions.

[11] Hidden Harvest website, www.hiddenharvest.org/programs, accessed April 2018.

The populations most vulnerable to the health impacts of climate change include the very old and very young, those with chronic medical conditions and psychiatric illnesses, socially isolated individuals, those without means for evacuation, and people living in institutions.[12] Such impacts can be intensified by social and demographic factors and felt disproportionately by persons experiencing poverty, income inequality, low social support, racial segregation, and low education levels.[13]

Community Resilience

Community resilience refers to actions taken to avoid or overcome and promptly recover from climate-related threats and other highly disruptive events, including major earthquakes and floods. Resilience includes addressing community equity, more effectively treating physical and mental illnesses, maintaining and enhancing emergency response plans, and other approaches.

The City implements numerous policies and programs designed to minimize the impacts of climate change and environmental hazards. It supports energy-efficient building design, drought-tolerant landscaping requirements, water re-use and conservation measures, and air pollution reduction measures, among others.

The City's *Climate Action Plan*, *Energy Action Plan*, *Greenhouse Gas (GHG) Inventory*, *Green for Life Program*, *Sustainability Plan*, and *Local Hazard Mitigation Plan* are among its efforts to increase community resilience. Construction and widening of bridges over the Whitewater River Stormwater Channel minimize disruptions to the movement of emergency vehicles, goods and people during flood events.

CV Link is a multimodal regional pathway that passes through the heart of the City and encourages non-motorized vehicle travel. CV Link and the City *Active Transportation NEV Plan* reduce petroleum fuels use and emissions of air pollutants and GHGs.

The City's award-winning "*Community Garden and Composting Program*" has resulted in the installation of community gardens at the Cathedral City Boys and Girls Club, six local schools, and several senior communities. The program connects residents and especially children to the food web through cultivation of fruits and vegetables, promotes waste reduction and composting, and reduces reliance on commercial supermarkets.

The City will continuously evaluate these projects, policies, and programs to assure they contribute to the improved health and safety of all population segments of the City , including those most vulnerable to the health impacts of climate change.

12 Appendix 2. "Climate Change and Health Profile Report, Riverside County," California Department of Public Health and University of California Davis, February 2017.

13 p. 13, ibid.

SOCIAL AND CIVIC CONNECTIONS

Community health and well-being can also be impacted by social connections and civic engagement. The City encourages and supports the inclusion of public gathering spaces in urban design; this is particularly evident in the downtown area which offers numerous spaces for festivals, parades, concerts, and cultural events that attract residents and visitors of all ages, ethnicities, and abilities.

Additional opportunities for social interaction are available at local parks, schools, and community centers, and CV Link and other trails and recreational sites. The Senior Center provides more than 48 healthy aging programs for seniors, including those that enhance physical fitness and cognitive skills, as well as social events and mental health services.

The City promotes civic engagement by encouraging participation in municipal commissions and committees. The City's weekly newsletter and seasonal mailer, social media outreach, and programs like the "State of the City Address" and "City Hall at Your Corner," invite citizens to meet monthly and discuss community events with city councilmembers. Voting is also an indicator of social participation and cohesion.

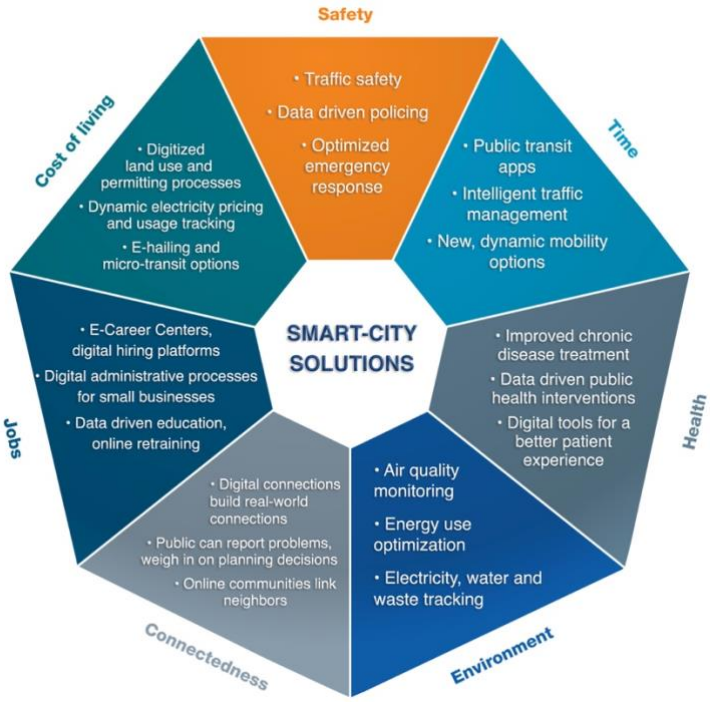
COMMUNITY SAFETY

The physical safety of the community is of paramount importance. It includes protection from criminal activity, safe streets that minimize avoidable traffic collisions, sufficient signage and lighting, and a host of other safety measures. The Police Department, Fire Department, Building Department, Engineering Department/Traffic Division and others work closely with residents, businesses, developers, and surrounding jurisdictions to maximize safety for the entire community.

SMART GROWTH

"Smart growth" is a comprehensive community planning approach that supports land preservation and natural resource conservation, reduced energy consumption, walkable and bikeable neighborhoods, a thoughtful mix and distribution of housing, retail, and employment opportunities and locations, and other development strategies that enhance connectivity and reduce environmental impacts.

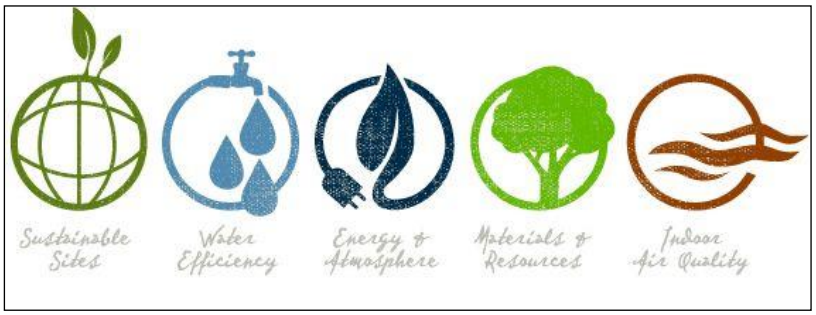
"Green building" refers to the use of materials and techniques to build energy-efficient buildings and infrastructure. It is an important component of smart growth that can conserve natural resources, provide healthy indoor air quality, improve energy and water efficiency, and reduce utility and maintenance costs.



Sustainable Design

The "*Leadership in Energy and Environmental Design" (LEED)* program, administered by the U.S. Green Building Council, is a measurement tool for green building in the U.S. Its rating system evaluates the design, construction, operation, and maintenance of buildings and homes, and certifies those that meet rigorous environmental design standards.

LEED-ND applies the green certification process to entire neighborhoods and parts of neighborhoods.[14] It rewards developments located on redevelopment or infill sites and those that protect natural areas, provide good onsite connectivity and access to the surrounding community, and are oriented to alternative modes of transportation. LEED-ND encourages high-quality public spaces, mixed use development, walkable streets, and universally accessible features for residents of all ages and abilities, as well as green building techniques, pollution reduction, and reuse and recycling.



Cathedral City supports the overarching goals of smart growth and green building and has established a range of such policies in this General Plan, as well as its Sustainability Plan, Climate Action Plan, and other plans and programs, including those described below.

Cathedral City Sustainability Plan

The Cathedral City Sustainability Plan, adopted in 2017, identifies the City's vision as a leader in three E-pillars of sustainability - *Environment*, *Economy*, and *Equity*. It establishes policies and action items to help the City achieve long-term sustainability goals in eight categories: 1) Built Environment, 2) Energy Systems, 3) Water Resources, 4) Waste Diversion and Recycling, 5) Economic Equity, 6) Climate Adaptation and Urban Resilience, 7) Mobility, and 8) Health. The Sustainability Plan policies and programs support and are consistent with those contained in this Element and other elements of the City General Plan.

HEAL Cities Campaign

In 2009, Cathedral City adopted a resolution supporting the Healthy Eating Active Living (HEAL) Cities Campaign. The program is a partnership of the League of California Cities and the Public Health Advocates that encourages cities to adopt policies promoting healthier lifestyles through complete parks systems, multi-modal access plans, mixed-use land use policies, healthy food options in underserved neighborhoods, and worksite wellness. HEAL provides participating cities with informational resources and policy assistance, as well as promotional benefits that demonstrate the City's commitment to promoting healthier lifestyles.

Some of the City's wellness achievements include a weight loss challenge for municipal employees, construction of a walking track around a soccer park, and wellness and nutrition education programs for school children.

FUTURE DIRECTIONS

The well-being of Cathedral City residents is a vital part of the City's future as a vibrant and enjoyable place to live and work. The City has made substantial strides and commitments to increased physical activity and social interaction, an integrated land use plan, multi-modal connections, reduced emissions, and a healthy, sustainable environment. Additional efforts should be focused on improving access to health care, expanding educational and training opportunities, and expanding opportunities for low-income housing.

[14] "A Citizen's Guide to LEED for Neighborhood Development: How to Tell if Development is Smart and Green," U.S. Green Building Council, Natural Resources Defense Council, and the Congress for the New Urbanism.

GOALS, POLICIES, AND PROGRAMS

Goal 1: A sustainable community that supports the health and well-being of its citizens.

Policy 1.1: The City's land use and circulation plans shall maximize connections between neighborhoods, retail and employment centers, community facilities, and recreational sites to reduce reliance on motor vehicles, increase opportunities for physical activity, and enhance access between various land uses.

Program 1.1.1: Support the completion of CV Link and other multimodal transportation facilities, including bike lanes, complete sidewalk networks and NEV paths.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 1.1.2: Work with Sunline Transit Agency to ensure transit access is provided to health care facilities, supermarkets, senior centers, child daycare centers, recreational sites, major employment and commercial centers, and educational institutions.
Responsible Parties: City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 1.1.3: Participate in regional transportation planning efforts with other jurisdictions, Sunline Transit Agency, and other appropriate organizations to enhance regional circulation, mobility and interconnections.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Policy 1.2: The City shall encourage and support increased physical activity in the daily routines of its citizens.

Program 1.2.1: Consult and coordinate with community groups to initiate and continue sports leagues, fitness programs, and walking, cycling, and recreational clubs that meet the health and recreation needs of all segments of the population.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 1.2.2: To the greatest extent practicable, require the planning and development of parks, trails, and open space resources as part of community development projects.
Responsible Parties: City Council, City Engineer/Public Works, Community Development
Schedule: Immediate; Ongoing

Program 1.2.3: Maintain joint-use agreements with school districts to use school properties for public use during non-school hours.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 1.2.4: Consider locations where new parks can be located near neighborhoods and community facilities, such as schools, senior centers, and recreation centers.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 1.2.5: Encourage pedestrian-scale activity and social interaction in the downtown and other public gathering areas through the use of carefully designed open spaces areas with public art, shade features, fountains, landscape elements, and street furniture.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 1.2.6: Provide wellness programs for City employees and promote similar programs at other public and private workplaces. Activities may include workday seminars about health topics, improved food quality in vending machines, and physical fitness programs, among others.
Responsible Parties: City Council, City Manager, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Policy 1.3: The City shall support health equity for all segments of the population.

Program 1.3.1: Work with health care professionals and community and advocacy groups to expand opportunities for health services that reduce the need for driving, such as mobile health care and dental clinics, one-stop health care centers, and improved transit access to health clinics and hospitals.
Responsible Parties: City Council, Community Development
Schedule: Immediate; Ongoing

Program 1.3.2: Work with local health care providers to provide culturally sensitive and linguistically appropriate health care literature, notifications, and other materials for the diverse communities of Cathedral City.
Responsible Parties: City Council, Planning
Schedule: Immediate; Ongoing

Program 1.3.3: Work with health care providers, community groups, and educational speakers to increase public awareness about available health facilities and wellness programs, good nutrition, healthy lifestyles, preventive care, and health screenings. Particular focus should include outreach to the most vulnerable populations.
Responsible Parties: City Council, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 1.3.4: Ensure a full range of mental health services, from outpatient to acute care, by fostering collaborative partnerships between medical professionals, community-based agencies, schools, service providers, law enforcement, and funding agencies.
Responsible Parties: City Council, Planning
Schedule: Immediate; Ongoing

Program 1.3.5: Assure the City Zoning Code supports development of assisted living facilities, low-income independent senior housing, adult day health care, "age-in-place" housing that includes universal design features such as wheelchair accessible entrances, and alcohol, drug, and mental health treatment facilities.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Policy 1.4: Increase access to nutritious foods and locally grown foods.

Program 1.4.1: Assure the Zoning Code and land use plan adequately support urban agriculture in the form of community gardens, farmers' markets, and farm stands and other regular outlets that increase access to healthy and affordable fresh foods.
Responsible Parties: City Council, City Engineer/Public Works, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 1.4.2: Work with community groups to expand community garden opportunities throughout the City, including in public spaces, schools, and senior residential facilities.
Responsible Parties: City Council, City Engineer/Public Works, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 1.4.3: Encourage farmers markets to accept programs that benefit low-income families, such as WIC, CalFresh, and coupons.
Responsible Parties: City Council, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 1.4.4: Support the efforts of food banks, pantries, and other support facilities to provide food assistance to low-income and other disadvantaged residents.
Responsible Parties: City Council, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 1.4.5: Create strategies that encourage existing neighborhood grocers, convenience stores, and ethnic food markets to carry fresh produce, and attract new retailers that offer fresh produce and healthy staples. Coordinate strategies with appropriate City departments, and assure the program includes a marketing component.
Responsible Parties: City Council, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Goal 2: A safe and resilient city that maximizes sustainability and minimizes community health and safety risks.

Policy 2.1: The City shall assure a safe and diverse transportation network that minimizes traffic hazards and provides sustained accessibility during emergency events.

Program 2.1.1: Identify traffic safety issues associated with the City's Complete Streets program and implement, as needed, roadway and multimodal path design improvements, such as reduced speeds, enhanced roadway markings and signage, separated facilities and traffic calming mechanisms.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 2.1.2: Assure that development standards and plan reviews address adequate security lighting, defensible spaces, easily identified ingress and egress, and other features that maximize public safety.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Program 2.1.3: Continue to evaluate the need for, and implement as necessary, all-weather crossings over the Whitewater River Stormwater Channel to minimize the impacts of flooding on emergency response, human safety and the local economy.
Responsible Parties: City Council, City Engineer/Public Works, Planning
Schedule: Immediate; Ongoing

Policy 2.2
The City shall promote a sustainable future through reductions in greenhouse gas emissions, alternatives to gas-powered vehicles, implementation of green building standards, reduced waste, and conservation of energy and water.

Program 2.2.1: Implement and routinely update the City's Climate Action Plan, Green for Life program, Energy Action Plan, and Sustainability Plan to assure they adequately address existing conditions and anticipate the future needs of the community.
Responsible Parties: City Council, City Engineer/Public Works, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 2.2.2: Continue to work collaboratively with local utility providers and regulatory agencies to assure the City is implementing the most appropriate and effective energy and resource conservation strategies.
Responsible Parties: City Council, City Engineer/Public Works, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 2.2.3: Provide permitting-related and other incentives for energy- and water-efficient building projects, e.g. by giving green projects priority in plan review, processing, and field inspection services.
Responsible Parties: City Council, City Engineer/Public Works, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 2.2.4: Partner with community services agencies to fund energy-efficiency projects, including heating/ventilation/air conditioning (HVAC), lighting, water heating equipment, insulation, and weatherization projects, for low income residents.
Responsible Parties: City Council, City Engineer/Public Works, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Program 2.2.5: Target local funding, including utility programs and Community Development Block Grant resources, to assist affordable housing developers in incorporating energy efficient designs and features.
Responsible Parties: City Council, City Engineer/Public Works, Planning**,** Environmental Conservation Manager, Public Utilities
Schedule: Immediate; Ongoing

Program 2.2.6: Develop and make available to developers, designers, and other interested parties informational materials about green building strategies and programs, including LEED and LEED-ND rating systems and certification programs.
Responsible Parties: City Council, City Engineer/Public Works, Planning**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

Open Space and Conservation Element

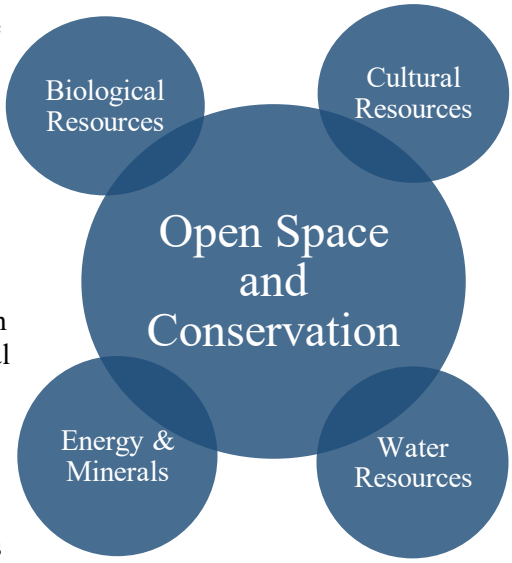
PURPOSE

The purpose of the Open Space and Conservation Element is to identify and assess open space lands and other natural resources that benefit the community, and to provide guidance for their comprehensive and long-term management and preservation p. Among these are water resources, wildlife habitat, minerals and energy resources, archaeological and cultural resources, and scenic resources.

Conservation of natural resources and the provision and preservation of open space lands are important and necessary to maintaining a healthy community. As urban growth continues in the City, it becomes increasingly important to balance development and conservation. One of the principal objectives of the General Plan is to preserve and enhance the community, and to ensure that long-term growth within the City does not adversely affect environmental resources. The policies and programs set forth in this Element are intended to help assure the preservation and long-term viability of valuable natural resources and prevent the premature and/or unnecessary conversion of open space land to urban uses. The Open Space and Conservation Element represents the City's commitment to environmental quality as a key component to land use planning.

BACKGROUND

Government Code Section 65302(d) requires that General Plans include elements which address the conservation, development, and utilization of natural resources, including water and its hydraulic force, forests, soils, rivers and other waters, harbors and fisheries, wildlife, minerals, and other natural resources. In this General Plan, hydrology is addressed in the Flooding and Hydrology Element, and soils are addressed in the Geotechnical Element.



Government Code 65560(b) defines “open-space land” as any parcel or area of land or water which is essentially unimproved and devoted to an open space use. They may provide value related to outdoor recreational uses, production of resources, biodiversity, health, economy, tribal resources, or other purposes.

Government Code Section 65566, also known as the Open Space Lands Act, requires that local governments prepare open space plans before adopting required open space related ordinances. The Act helps assure consistency between the open space plan and zoning regulations.

Government Code Section 65561(a) states that the preservation of open space land is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, the enjoyment of scenic beauty, and for recreation and use of natural resources. It also states that discouraging premature and unnecessary conversion of open-space land to urban uses is a matter of public interest, and cities should make plans for the preservation of open space resources.

The Open Space and Conservation Element informs and guides the policies of the Land Use Element by identifying important resource areas, assessing the need for their preservation, and balancing future development with environmental preservation. It is also closely related to the Parks and Recreation Element, Hydrology, and Geotechnical Elements that describe important open space resources in the planning area.

FORMAT OF THIS ELEMENT

The Open Space and Conservation Element addresses the importance and need for preservation of a full range of open-space lands and other natural resources in the City. Its goals, policies, and programs are intentionally broad to address open space in over-arching terms. Focused analysis and policy direction for specific types of open space is provided in four (4) sub-Elements:

- Biological Resources Sub-Element
- Cultural Resources Sub-Element
- Water Resources Sub-Element
- Energy and Mineral Resources Sub-Element

NATURAL RESOURCES IN THE COACHELLA VALLEY

Cathedral City is part of a larger desert environment that has been shaped over time by seismic, fluvial, aeolian, and other natural processes, resulting in geologic features like sand dunes, alluvial fans, and fan palm oases, and providing habitat for biological species that are specially adapted to the harsh climate. The region is characterized by extreme elevation variations and a unique arrangement of a low-lying desert floor surrounded by steep, rocky slopes that rise more than 11,000 above sea level. The terrain is visually dramatic, and scenic views are a highly valued community asset. The natural landscape and expansive viewsheds are an important part of the region's identity as a resort destination and an integral part of the economy that is largely based on tourism and outdoor recreation.

The regional population has grown steadily since the 1980s, and land has been increasingly impacted directly and indirectly by urban development and human influences, such as the conversion of open space to urban uses, human encroachment into and disturbance of sensitive habitat areas, and alteration of ecological processes, like shifting sands, from intervening buildings, roads, and other infrastructure. These and other urban-related impacts can be expected to continue as the community grows. Numerous policies, programs, and other safeguards have been implemented by the City, neighboring jurisdictions, and public agencies and partnerships to seek a balance between urban growth and conservation of valuable resources. The City must continue to identify and assess potential threats to these resources, particularly those that are finite and nonrenewable, and those that are critical to community health such as water, and develop appropriate measures to protect them. Although resource conservation is traditionally concerned with natural resources, it is also important for the City to assess the man-made cultural and historic resources it wishes to preserve for future residents.

Biological Resources

The Coachella Valley's unique desert climate and topographical features create an environment that supports a wide variety of wildlife species, habitats, and natural communities. The Sonoran Desert Creosote natural community generally dominates the valley floor and most of the planning area. It consists of shifting windblown sand, sand fields, and dunes with sparse vegetation and a number of uniquely adapted and special-status wildlife species. Other plant communities and wildlife habitats include Desert Fan Palm Oases, which are found in canyons and other places with naturally occurring water, alluvial plain habitats, and desert dry wash habitats. Hillside habitat is found in areas of transition where the arid valley floor gives way to desert mountains with dense shrubbery and trees.

Within these areas are a variety of sensitive plant and animal species, some of which have been listed as threatened or endangered by federal and state governments. Among these are the Peninsular bighorn sheep, Coachella Valley fringe-toed lizard, desert slender salamander, desert tortoise, California ditaxis, and Coachella Valley milk vetch. The area also supports more common species, such as the chuckwalla, zebra-tailed lizard, Golden eagle, Peregrine falcon, Western burrowing owl, coyote, and Palm Springs ground squirrel. Descriptions and analysis of biological resources in the City are provided in the Biological Resources Element and EIR.

Cultural Resources

The Coachella Valley contains abundant archaeological evidence of local prehistoric and historic human populations. Cultural resources found within the region include Native American settlements, as well as trails and other sites established prior to the arrival of European Americans. The Desert Cahuilla are the most prominent native culture to evolve in the Coachella Valley. Archaeologists believe that the Cahuilla traveled to the Coachella Valley from the north as early as 2,000 to 3,000 years ago.

Several Native American villages are known to have developed in the Coachella Valley around the year 1200; historic sites from this era include milling sites, quarries for making tools, and religious and artistic sites. The Cahuilla established a number of villages in the region, most of which were near the mountains and canyons and around ancient Lake Cahuilla. Today, the Cahuilla continue to inhabit the Coachella Valley. Portions of the reservation of the Agua Caliente Band of Cahuilla Indians are located within Cathedral City. Detailed descriptions of archaeological and historic resources in the City, and the need for their conservation, are provided in the Cultural Resources Element.

Water Resources

The majority of water resources in the region come from naturally occurring groundwater reserves. The Valley is underlain by groundwater basins that are divided into distinct subbasins and subareas within subbasins. The Whitewater River subbasin serves as the primary groundwater repository for Cathedral City. The subbasin encompasses a major portion of the valley floor, covering approximately 400 square miles. It is divided into four subareas: Palm Springs, Thermal, Thousand Palms and Oasis.

The Palm Springs subarea of the Whitewater River subbasin serves the planning area and is naturally recharged by infiltration of runoff from the San Jacinto and Santa Rosa Mountains, the Whitewater River, and subsurface inflows from the San Gorgonio Pass subbasin. The groundwater storage capacity of the subbasin is estimated at 4,600,000 acre-feet. The quality of water extracted from the regional water basins is generally good to excellent. However, groundwater levels in the region have declined steadily due to increasing urbanization in recent decades. As an essential resource, water needs to be conserved and used efficiently. The City's water resources, current conservation efforts, and future policy directions are described in the Water Resources Element.

Energy and Mineral Resources

Energy resources are an essential part of urban life, especially transportation and industrial processes. Currently, the majority of energy consumed in Cathedral City is derived from nonrenewable resources, although renewable sources are incrementally providing an increasing share of the community's energy needs. In addition, most community energy sources are not produced locally.

Energy conservation has become a major theme to energy usage in California. The basic concepts of energy conservation include using energy resources more efficiently through improved technology, the effective use of building design standards, reducing unnecessary use and dependence on nonrenewable sources, and conserving energy-related resources. Development of renewable and alternative energy sources is also a key component of energy conservation.

Not only are renewable resources environmentally benign, they can be produced on a local or regional scale, and therefore, can be more dependable and efficient. Solar power and wind power are two significant renewable energy resources that are increasingly being utilized in the Coachella Valley. The further development and use of these renewable energy resources, in conjunction with energy conservation measures, will help the City continue to meet its future energy demands. Local energy and mineral resources and conservation strategies are described in detail in the Energy and Mineral Resources Element.

OPEN SPACE CATEGORIES

Open space lands serve a number of valuable functions for an urban community. Incorporation of open space within a land use plan offers relief from and contrast to high-density development, offering an attractive setting for urban activities, and contributing to a community's quality of life. Open space can be utilized to establish edges or boundaries to a community or neighborhood, serve as a buffer between incompatible land uses, or provide opportunities for recreational activities. Protection of sufficient open space land promotes environmental quality by safeguarding valuable resources and maintaining the integrity of natural systems. Access to open space areas, and preserving scenic landscapes, critical habitat, ecologically valuable land, and recreational areas are critical components of livable communities and healthy economies.

Government Code Section 65560(b) recognizes six broad categories of open-space land, as described below.

1. *Open Space for the Preservation of Natural Resources*
   Open space for the preservation of natural resources refers to areas required for the preservation of plant and animal species and habitat, as well as areas required for ecologic and other scientific purposes, such as rivers, lakeshores, and watersheds. Habitat conservation in the Coachella Valley has become increasingly important due to the number of sensitive species and prevalence of unique biological habitats in the region. Numerous areas within the Coachella Valley are dedicated to the preservation and protection of plant and wildlife species and habitat.

2. *Open Space for the Managed Production of Resources*
   Open space for the management of natural resources refers to those lands that are managed for the production of resources, such as agricultural lands and forests, areas containing major mineral deposits, areas of economic importance for the production of food or fiber, and areas required for recharging groundwater or for water storage. In the planning area, this open space designation includes the utility corridor north of Interstate-10, areas within the Indio Hills that are suitable for the generation of wind energy, as well as significant drainage areas that help to replenish the groundwater reservoir.

3. *Open Space for Outdoor Recreation*
   Open space for outdoor recreation includes areas of outstanding scenic, historic, and cultural value, areas suitable for park and recreational purposes, and areas that serve as links between major recreation and open space reservations, including utility easements, river banks, trails, and scenic highways corridors.

   Golf courses represent an important source of recreation in the Coachella Valley, and are also central to the region's economy. Public and private golf courses comprise a substantial portion of open space lands in the City and surrounding areas. Parklands are another important source of open space for recreation; City parks are described in the Parks and Recreation Element. In addition to the active recreational opportunities that the City's parks provide, there are also numerous trails and facilities throughout the Valley that support passive recreation on a regional scale, such as Joshua Tree National Park, the Living Desert, and the numerous mountain trails through the San Jacinto and Santa Rosa Mountains.

4. *Open Space for Public Health and Safety*
   Open space for public health and safety refers to those lands that require special management or regulation because of hazardous or special conditions, such as earthquake fault zones, floodplains, unstable soil areas, and high fire areas. Although these lands remain undeveloped due to hazardous conditions, they may have potential for open space uses. Flood control facilities may be usable for wildlife habitat and recreational purposes. Land located along fault lines can remain in its natural condition as a wildlife corridor.

In the planning area and immediate vicinity, this category of Open Space is associated with the flood control facilities for the Whitewater River and other drainages, areas within the Indio Hills that are in close proximity to the San Andreas Fault, and the former Edom Hill Landfill site. While these areas are unsuitable for development, they do provide viable open space lands.

5. *Open Space in Support of the Mission of Military Installations*
   This category includes areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities. There are no such open spaces in Cathedral City.

6. *Open Space for Tribal Resources*
   This category includes open spaces for the protection of places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code. They include Native American sanctified cemeteries, places of worship, religious or ceremonial sites, and sacred shrines; and Native American historic, cultural, and sacred sites that are listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1.

GENERAL PLAN DESIGNATED OPEN SPACE

The General Plan provides for approximately 3,912 acres of open space lands, or 26.9% of the total planning area, as shown on the General Plan Land Use Map (Exhibit LU-1). It includes four Open Space land use categories: Open Space-Private, Open Space-Public, Open Space-Watercourse, and Open Space-Other. The acreages of each are shown in the following table.

Table OS-1
Open Space Acreage

Land Use Designation	Acres	% of Total Open Space	% of Total Planning Area
Open Space-Public	2489.97	64.22%	18.17%
Open Space-Watercourse	828.27	21.36%	6.37%
Open Space-Other	558.82	14.41%	4.26%
TOTAL:	3877.07	100%	26.90%

Open Space-Private generally refers to private golf courses, which constitute about 27% of open space land in the planning area. Open Space-Public makes up approximately 62.15% of open space land and refers to public parks and undeveloped public lands. Open Space-Watercourse makes up the second largest portion of open space, representing 22.19% of open space land. This designation includes the Whitewater River and portions of the Cathedral Canyon channel. Open Space-Other represents the utility corridor for high-voltage transmission lines within the northern portion of the City and accounts for approximately 13.16% of the open space within the planning area.

Table OS-2 provides an open space inventory and identifies the General Plan Elements in which each area is described.

Table OS-2
Open Space Inventory

Resource Name	General Plan Element
Open Space for Natural Resources:	
MSHCP Whitewater Floodplain Conservation Area	Biological Resources
MSHCP SJSRM Conservation Area	Biological Resources
MSHCP Willow Hole Conservation Area	Biological Resources
MSHCP Edom Hill Conservation Area	Biological Resources
Open Space for Managed Production of Resources:	
Electricity Utility Corridor	Water, Sewer, and Utilities Element
Open Space for Outdoor Recreation:	
City Parks	Parks and Recreation Element
Golf Courses	Parks and Recreation Element
Open Space for Public Health and Safety:	
Whitewater River Stormwater Channel	Flooding and Hydrology, Water Resources
East & West Cathedral Canyon Channels	Flooding and Hydrology
Open Space for Military Support:	
None	n/a
Open Space for Tribal Resources:	
None	n/a

CONSERVATION LAND ACQUISITION

To facilitate the continued preservation of open space in California, a number of conservation programs and legislative measures have been enacted, including the following.

The Conservation Easement Act

The Conservation Easement Act (Civil Code Sections 815-816) was established to encourage the dedication of open space lands for ongoing conservation. A conservation easement is a voluntary agreement that allows a landowner to limit the type or amount of development on their property, while retaining private ownership of the land. The easement is binding to successive owners of the land. The purpose of a conservation easement is to retain land predominantly in its natural, scenic, historical, agricultural, forested, or open space condition. By granting conservation easements, a landowner can assure that the property will be protected forever, regardless of who owns it in the future.

Open Space Easement Act

The Open Space Easement Act of 1974 (Government Code Sections 51070-51097) provides another mechanism for preserving open space land. It gives local governments the authority to accept easements granted to them or non-profit organizations for the purpose of conserving open space and agricultural lands.

The Scenic Easement Deed Act

The Scenic Easement Deed Act (Government Code Sections 6950-6954) authorizes local governments to purchase fee or scenic easements, but there is no special mechanism for obtaining them. Land uses are regulated by the Act, and local governments are authorized to adopt an ordinance which establishes open space covenants with property owners.

Public Land Trusts

A public land conservation trust is another mechanism devoted to protecting open space, agricultural lands, wildlife habitats, and natural resource lands. Land trusts achieve their objectives primarily through acquiring and managing interests in land.

Land conservation trusts can help preserve open space and resource lands in a variety of ways. Trusts funds can be used to acquire fee simple interest in real estate to then manage or lease back holdings, or to purchase conservation easements that protect sensitive land from development. Since they are less restrained by formalities and regulations, private land trusts are usually able to respond more quickly than governmental entities to purchasing opportunities. They also have more experience helping public agencies with the technicalities of acquisition.

A public land trust helps preserve environmentally sensitive open space and conservation lands, pursue State and Federal financing with grants and loans, and other assistance methods for the preservation of open space. Several land trusts exist in the Coachella Valley, including the Coachella Valley Mountains Conservancy, Nature Conservancy, Living Desert, Wildlands Conservancy, Center for Natural Lands Management, and Friends of the Desert Mountains.

FUNDING MECHANISMS

Viable funding mechanisms are essential to financing the acquisition and management of open space lands. They may include State obligation bonds, grants, and tax increment financing. The State Legislature has helped organizations create grant and loan programs that can aid open space financing. These are available on a competitive basis for specific projects and include:

- Land and Water Conservation Fund/California Department of Parks and Recreation
- Habitat Conservation Program/ California Department of Parks and Recreation
- Simms Trail Bill/ Department of Parks and Recreation
- Public Access Program/ California Department of Fish and Wildlife
- California Wildlife Conservation Board Program/Department of Fish and Wildlife
- Urban Forestry Program/California Department of Forestry

FUTURE DIRECTIONS

The City of Cathedral City and its surrounding area are located within a unique desert environment with a variety of valuable natural resources and open space lands. The City should continually pursue the safeguarding and protection of these resources in planning and decision-making actions. Implementation of the General Plan, Zoning Ordinance, CEQA, and other regulatory mechanisms will help promote conservation and ensure that development will not interfere with or interrupt open space and conservation efforts in the future.

The City should continue to work with CVAG and surrounding cities to expand the existing network of open space and conservation lands within the valley. Regional coordination and continued participation in the Multiple Species Habitat Conservation Plan, CV Link and other regional plans and programs will be essential in helping to secure a regional system of conservation lands for long-term preservation and enjoyment.

GOALS, POLICIES, AND PROGRAMS

Goal 1: Preservation, conservation, and effective management of open space which provides for the protection of important natural resources, including sensitive plant and animal species and habitats, and water, cultural, energy and mineral, recreational, and scenic resources.

> **Policy 1**: Identify and assess lands in the City and its sphere-of-influence that are suitable for preservation as public or private, passive or active open space.
>
> > **Program 1.A**: With the assistance of CVCC and/or CVAG, develop and routinely update maps and other information about various open space land and facilities in the City and SOI.
> > **Responsible Agencies:** Planning, Parks and Recreation Department, CVCC/CVAG
> > **Schedule**: Ongoing

Program 1.B: Where appropriate, environmental hazard zones, including earthquake fault lines, floodways and floodplains, and steep or unstable slopes, shall be designated as open space on the General Plan land use map, project development plans and/or subdivision maps.
Responsible Agencies: Planning
Schedule: Ongoing

Policy 2: Hillsides with slopes in excess of 10% shall be permanently preserved as undeveloped open space.

Program 2.A: Where appropriate, the City shall seek passive recreational usage and/or ownership of desirable hillside lands currently owned by public agencies or private entities by negotiating public access provisions or establishing a transfer of development rights (TDR) program.
Responsible Agency: City Manager's Office; City Council
Schedule: Ongoing

Program 2.B: All but essential hillside modification on slopes steeper than 10% shall be prohibited.
Responsible Agency: City Engineer; Building Department
Schedule: Ongoing

Policy 3: Development on hillsides with slopes less than 10% shall be subject to special hillside development standards.

Program 3.A: Maintain and enforce a Hillside Preservation Regulations, which establish appropriate design standards that preserve the natural scenic value of hillsides.
Responsible Agencies: Community Development
Schedule: Ongoing

Program 3.B: Expand the existing Hillside Protection Ordinance to include Edom Hill, the Indio Hills and the Santa Rosa Mountains.
Responsible Agencies: Planning
Schedule: Ongoing

Policy 4: Expand and enhance an integrated network of open space to support recreation, natural resources, historic and tribal resources, habitat, water management, aesthetics, and other beneficial uses.

Policy 5: Create a network of regional parks and open space corridors that highlight unique resources and recreational opportunities for a variety of users.

Policy 6: The City shall provide for a comprehensive, interconnected recreational trails system.

Program 6.A: Coordinate with the Coachella Valley Water District, Riverside County Flood Control District, and utility purveyors to maximize use of flood control levees and watercourses and utility easements for inclusion in the City and regional multi-use trails systems.
Responsible Agencies: Public Works and Planning
Schedule: Ongoing

Policy 7: The City shall preserve all substantial watercourses and washes necessary for regional community flood control and drainage for open space and/or multi-purpose recreational purposes.

Program 7.A: Confer and coordinate with the Riverside County Flood Control, Coachella Valley Water District and other appropriate agencies to conduct optimum revegetation management in flood control channels and drains in order to retain wildlife habitat and as natural an appearance as possible without compromising functionality.
Responsible Agency: City Engineer; Public Works Department, CVWF, RCFCWCD
Schedule: Ongoing

Policy 8: The City shall participate in the preservation of significant areas of natural desert, watercourse, and hillside habitat, including migration corridors and wildlife preserves, in order to maintain and enhance the preservation of sensitive biological resources.

> **Program 8.A**: Support and cooperate with local and regional habitat conservation efforts, including the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP).
> **Responsible Agencies:** Planning, City Council
> **Schedule:** Continuous
>
> **Program 8.B**: Investigate the costs of additional land acquisition, maintenance, and other administrative functions, and encourage the transfer of public open space and conservation properties to existing land trusts for local property management, where feasible.
> **Responsible Agencies:** Public Works Department; City Manager's Office, CVCC
> **Schedule:** Ongoing
>
> **Program 8.C**: Cooperate with other agencies to assure the adequate maintenance of open space lands, including for purposes of blowsand control, vegetation management, removal of debris and trash, and access restrictions, where necessary.
> **Responsible Agencies:** Public Works Department; Building and Safety
> **Schedule:** Ongoing

Policy 9: Where feasible, the City shall preserve permanent open space edges or greenbelts which define the physical limits of the City and provide physical separation between adjoining neighborhoods.

> **Program 9.A**: The Land Use Map and Zoning Ordinance shall regulate development at the boundaries of the planning area to assure the preservation of a well-defined, functional, or visual edge.
> **Responsible Agencies:** Planning, City Council
> **Schedule:** Continuous

Policy 10: Where possible, new development shall integrate existing pipeline, utility corridors, and other easements into a functional open space network.

> **Program 10.A**: Develop open space assessments of associated utility corridors concurrent with initial development plans and tentative subdivision maps to plan and create continuous open space networks.
> **Responsible Agencies:** Planning, Utilities/Agencies
> **Schedule:** Continuous

Policy 11: Native landscaping materials and oasis-like design features shall be incorporated into parks, public rights-of-way, golf courses, and other open space lands, as appropriate, to enhance, retain and preserve the natural desert environment and enhance human and wildlife habitats.

> **Program 11.A**: The development and design review process shall assess the adequacy of proposed design features and landscaping materials.
> **Responsible Agencies:** Planning; Architectural Review Committee; Planning Commission, City Council
> **Schedule:** Ongoing

Policy 12: The City shall, to the greatest extent possible, regulate development in the vicinity of significant mineral resources located in the City and its sphere-of-influence.

Policy 13: Support and cooperate with the hillside and habitat conservation management programs of the Santa Rosa Mountains Conservancy.

Policy 14: The City shall provide a high-quality network of parks and recreational facilities that meet the needs of families, young adults, seniors, children, and disabled individuals.

> **Program 14.A** Work with the Palm Springs Unified School District to provide joint-use facilities in areas where park and recreation facility deficits exist. Mitigate issues associated with school open space, such as vandalism, wear and tear, maintenance, and school expansion.
> **Responsible Agencies:** Planning; Public Works
> **Schedule:** Ongoing

Policy 15: Develop, wherever possible, recreation facilities that have multi-use capabilities and high degrees of adaptability to more intensive uses as recreation demand changes and/or population density increases.

Policy 16: Locate new local parks and recreation facilities near other community-oriented public facilities, such as schools, libraries, and recreation centers, where feasible, so that they may function as the heart of the community.

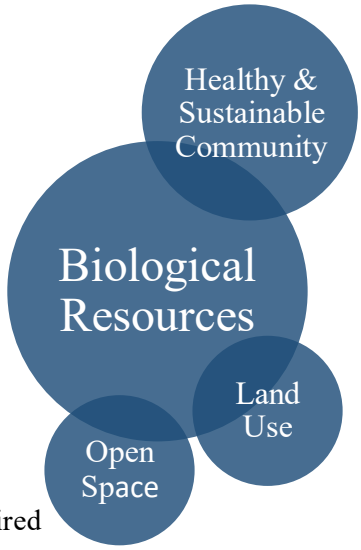
Policy 17: Design parks that reflect community character and identity, incorporate local natural and cultural landscapes and features, and consider surrounding land uses and urban form and cultural and historic resources.

Biological Resources Sub-Element

PURPOSE

The purpose of the Biological Resources Element is to preserve and protect the integrity of the natural environment and its many biological resources. For the purposes of this Element, biological resources represent the plants and wildlife species, as well as the ecosystems and habitats, which contribute to Cathedral City's natural setting. These resources not only enhance and contribute to the natural environment, they also add to the health, identity, and image of the built environment. This Element describes the natural environment and identifies the important and valuable biological resources occurring within Cathedral City and the surrounding area. It references information sources that guide decision makers in regulating land use, development, and protection of these critical resources. The goals, policies, and programs set forth in this Element are designed to ensure the long-term preservation of biological resources in a manner which benefits the entire community.

BACKGROUND



The Biological Resources Element is directly related to the Land Use and Open Space Elements in how lands are managed and preserved for the benefit of the residents and natural communities. It is also related to the Parks and Recreation Element, which addresses the community's enjoyment of and commitment to its natural resources.

The City is required by California Government Code Section 65302(d) to include a General Plan Element which provides for the preservation and conservation of wildlife resources. This section of the Code also requires that the City provide inventories of natural vegetation, fish and wildlife, and their habitat, including rare and endangered species, in the General Plan. This Element also includes, as required, goals, policies, and programs, as well as plans and maps showing important areas for the preservation of plant and animal life and areas required for ecological and scientific study.

Many state and federal regulations have been established to protect and preserve biological resources. Among these are the federal Endangered Species Act, California Endangered Species Act, Section 404 of the Clean Water Act, and the Natural Community Conservation Planning Act. Cathedral City has been an active participant in the development of the Coachella Valley Multiple Species Habitat Conservation Plan, which is a regional effort to conserve adequate, unfragmented habitat for a wide range of special-status plant and animal species.

In addition, portions of the City are included in the Santa Rosa Wildlife Area that has been established to protect sensitive Peninsular Bighorn habitat from potentially adverse development.

The General Plan study area is also home to the Willow Hole-Edom Hill Preserve, a unique blowsand/mesquite bosque preserve that provides critical habitat to the special-status Coachella Valley Fringe-toed Lizard. The Biological Resources Element influences and contributes to the effective implementation of conservation goals, policies, strategies and programs.

This Element describes the regulatory context in which the City's biological resources are assessed, managed, and protected.

REGIONAL ENVIRONMENT

The Coachella Valley's climate, topography, and geologic characteristics directly impact the types and prevalence of biological habitat, plant and animal species, and other resources in the planning area.

Topography and Geology

The Coachella Valley is characterized by extreme topographic variations, from the low-lying desert floor to the hillsides and mountain ranges that surround most of the region. The Salton Sea at the southeast end of the valley occurs at an elevation of about 228 feet below sea level and has no natural outlet. The northern, western, and southern edges of the valley are bordered by major mountain ranges. Summit elevations range from 9,600 feet to 11,502 feet above mean sea level. These topographic characteristics are primarily a result of historic seismic activity. Faults have uplifted, subsided, and shifted the ground surface, while erosion, weathering, and other secondary geological processes formed canyons and alluvial fans that extend onto and fill the valley floor with sediment and sand. This unique and varied topography has created a distinctive desert environment with a number of intricate habitats, wildlife, and plant communities that make the region a biologically rich area.

Climate

Regional climatic conditions are greatly influenced by the mountain ranges to the west, which block the valley from much of the cooler maritime conditions that occur in the Inland Empire. These mountain barriers isolate the valley and create a subtropical desert environment characterized by low rainfall, low relative humidity, and high levels of direct sunshine, with very hot summers and mild winters. Daytime temperatures during the summer months generally exceed 100˚ F, sometimes reaching more than 120˚ F. In the winter, daily temperatures range from 30˚F to 80˚F.

The surrounding mountains are cooler than the valley floor and have an approximate 5˚F decrease for every 1,000-foot increase in elevation. Mean annual rainfall ranges between four and six inches on the desert floor, and about fifteen inches in the nearby mountains. The majority of precipitation occurs during the winter months, but infrequent intense thunderstorms may occur during late summer and early fall. Most rainfall falls on surrounding mountain slopes, keeping the desert floor relatively dry throughout the year.

Wind also has a significant effect on the climate of the Coachella Valley. As the desert floor heats up, cool air from the west is drawn into the valley through the narrow San Gorgonio Pass. This generates strong winds, which pass over the most erosive portions of the valley floor, transporting large quantities of sand and dust throughout the region. This natural sand migration and transport process is responsible for creating desert sand dunes, which are an important habitat for native wildlife.

Regional Habitats and Natural Communities

The Coachella Valley is located in one of the hottest and driest parts of the country, making it a harsh and sometimes inhospitable place. It is also one of the most biologically unique and diverse regions in the country. Its habitats and natural communities are generally divided topographically and identified by physical differences in slope, substrate, and water supply.

HABITAT:
The place or set of environmental conditions in which plants and animals naturally live and grow

Valley Floor

Valley floor habitat lies within the central portion of the Coachella Valley. It is characterized by relatively flat and low-lying terrain with sparse vegetation and regions of blowing sands. These aeolian, or windblown, sand deposits originated from the erosion of adjacent hills, sand deposition in nearby ravines, and sandy soils transported by strong winds.

Active dunes are highly exposed to the elements and subject to intense heat and high wind conditions. "Active" means there are no windbreaks or other impediments to hinder the aeolian processes that cause sand accumulation and depletion in the sand fields. Because the dunes are continually shifting and accumulating sand, perennial plant cover is very low, and much of the surface is barren for most of the year. Vegetation is largely limited to primrose (*Oenothera*), desert dicoria (*Dicoria canescens*), and sand verbena (*Abronia villosa*). The planning area contains two active sand transport systems. Sand accumulations in the Willow Hole-Edom Hill Preserve north of Interstate-10 are dominated by extensive mesquite thickets that are supported by a high water table and blowing sand. The Willow Hole-Edom Hill Preserve provides critical blowsand habitat to the Coachella Valley Fringe-Toed Lizard and other sensitive species. Historically, the valley floor, particularly along the Whitewater River, has also functioned as an active sand transport corridor for aeolian deposits blowing from the northwest. However, urban development has restricted sand movement and resulted in a loss of this sensitive habitat.

Stabilized and partially stabilized sand fields are sand accumulations that lack the structure of sand dunes and are considered a Community of Highest Inventory Priority (CHIP) by the State. In these areas, vegetation grows more readily and consists primarily of scattered perennial herbs and shrubs. The most visible and abundant type of vegetation within this valley floor community is the creosote bush (*Larrea tridentate*), which is an evergreen shrub. Other perennials include sand verbena (*Abronia villosa*), dalea (*Dalea*) species, and burrobush (*Oenothera deltoides*). Plants that have been identified in sand fields near the Whitewater River floodplain include four-winged saltbush (*Atriplex canescens*), Indian ricegrass (*Achnatherum hymenoides*), sandpaper plant (*Petalonyx thurberi*), and Devil's lantern (*Oenothera deltoides*).

Most of the development within the planning area and the region has occurred along the valley floor. As a result, valley floor habitat is largely fragmented and disturbed. As development and growth continue, this habitat will continue to shrink, removing valuable plants and wildlife.

Sandy Washes

Desert wash habitat consists of channels and watercourses that drain the mountains surrounding the valley. As washes emerge from canyon mouths, they form deep channels that build and cut through the alluvial plain. Farther from the canyons, washes become shallower, broader, and less defined, and the physical differences between the washes and the alluvial plain diminish.

The Desert Dry Wash Woodland plant community typically occurs in gravelly washes, although it is known to occasionally integrate with the valley floor's creosote bush scrub community. The Dry Wash Woodland is dominated by palo verde (*Cercidium floridum*) and smoke tree (*Psorothmnus spinosus*), but also includes desert willow (*Chylopsis linearis*), desert lavender (*Hyptis emoryi*), and cheesebush (*Hymenoclea salsola*). This vegetation community occurs in East and West Cathedral Canyon Washes, at the Willow Hole-Edom Hill Preserve, as well as limited locations along the Whitewater River.

Desert wash habitat often serves as travel corridors for wildlife that are supported by both the wash and the alluvial plain habitats. Birds are generally abundant in desert washes. Typical species include verdin, phainopepla, and black-tailed gnatcatcher. The largest desert washes in the planning area include Whitewater River Wash, Morongo Wash, and Long Canyon Wash. Channelization and control structures have been constructed along the majority of the Whitewater River. However, Morongo Wash and Long Canyon Wash are located north of the freeway in predominantly undeveloped regions and still support adequate and viable sandy wash habitat.

Alluvial Plain

Lands south of East Palm Canyon Drive and at the foothills of the Santa Rosa Mountains can be characterized as alluvial plain (or fan) habitat. This habitat develops on flood-formed fans that extend from mountain canyons, such as Cathedral Canyon in the planning area. At its highest points near the mountain ridges, the alluvial plain consists of coarse rock and sand that has accumulated from a number of large floods that began shaping the plain during prehistoric times. This material becomes smoother and sandier as the fan continues downward toward the valley floor. The habitat and communities found on these plains transition with increasing distance from the canyon mouths, as the substrate is slowly altered from rocky to sandy deposits.

Sonoran mixed woody and succulent scrub is the dominant plant community of alluvial plain habitat. This community occurs along the lower slopes of the Santa Rosa Mountains and is widespread, forming the southern edge of the Coachella Valley. Sonoran mixed woody and succulent scrub is a variant of the creosote scrub community and is very typical of the Colorado Desert. Typical plant species found on the lower alluvial plain include creosote bush, indigobush (*Dalea schottii*), dyeweed (*D. emoryi*), catclaw acacia (*Acacia greggii*), smoketree (*Dalia spinosa*) and Palo verde (*Cercidium floridum*). Plant distribution and variety changes farther up the plain, and a variety of cacti including pencil cholla (*Opuntia ramosissima*) and barrel cactus (*Ferocactus acanthodes*), as well as chuparosa (*Belaperone californica*) and desert lavender become increasingly common.

Desert Fan Palm Oasis Woodland

Desert Fan Palm Oasis Woodland is a sensitive plant community considered to be a Community of the Highest Inventory Priority (CHIP) by the State of California. Its range extends from the Baja Peninsula to Death Valley National Monument, although occurrences are discrete and isolated. Oases develop along geologic fault lines where ground water rises near the surface and can support dense vegetation.

The California fan palm (*Washingtonia filifera*), the largest palm in North America, dominates this community. Mature individuals can grow to 25 meters in height and almost one meter in trunk diameter. Other members of this plant community include desert baccharis (*Baccharis sergiliodes*) and arrowweed (*Pleuchea sericea*). A natural fan palm oasis community is located in the Willow Hole-Edom Hill Preserve within the planning area north of Interstate-10. Fan palm oases are also found within canyons of the Santa Rosa and San Jacinto Mountains where natural streams flow from the snowmelt and runoff.

This habitat provides important cover and food to migrating and wintering birds, as well as birds of prey such as the golden eagle (*Aquilachrysaetos*) and the prairie falcon (*Falco mexicanus*). Other wildlife include the southern yellow bat, common kingsnake, desert slender salamander (*Batrachoseps aridus*), and giant palm-boring beetle (*Dianpate wrightii*). The Peninsular Bighorn sheep often visit the oases in the Santa Rosa Mountains to make use of the natural supply of water that flows through the woodland.

Rocky Slopes Habitat

The Santa Rosa Mountains, which extend from the edge of the alluvial plain at the southern end of the planning area, comprise the rocky slopes habitat. This habitat is characterized by steep slopes and continuous rock that is either weathered and fractured bedrock, or broken and displaced into loose debris of sand, pebbles, and stone. Because of the sharp slopes and extensive rock surfaces on the lower slopes, this habitat appears incapable of supporting vegetation.

However, the rocky slopes habitat supports numerous perennials and annual species. Plant density and size increase with elevation and associated increases in annual rainfall. Plants include creosote bush, brittlebush (*Encelia farinosa*), burrobush (*Ambrosia dumosa*), agave (*Agave deserti*), Ocotillo (*Fouquieria splendens*), spike moss (*Selaginella eremophila*), Parry's cloak fern (*Notholaena parryi*), arrowleaf (*Pleurocoronis plurisetaa*), pigmy cedar (*Peucephyllum schottii*), bedstraw (*Rubiceae*), and crossosoma (*Crossosoma bigelovii*).

Connectivity with the vast areas of wildlands in the Santa Rosa Mountains allows for the presence of wide-ranging animals, including Peninsular bighorn sheep, as well as predators such as prairie falcon, golden eagle, bobcat, and mountain lion.

SENSITIVE, RARE, AND ENDANGERED SPECIES

The General Plan planning area contains a wide range of significant biological resources, including a number of plants and animal species that are highly specialized and endemic to a single habitat. Due to the loss of viable habitat, some of these species have been listed as threatened or endangered by the federal and state governments. "Endangered" species refers to those with such limited numbers that they are considered in imminent danger of extinction; "threatened" species are those that are likely to become endangered, particularly on a local scale, within the foreseeable future. "Sensitive" species are those that are naturally rare and that have been locally depleted and put at risk by human activities.

Although the perpetuation of a sensitive species does not appear to be significantly threatened, they are considered vulnerable and are often candidates for future listing. The following tables list the endangered, threatened, and sensitive species within the planning area.

Table OS-3
Sensitive Species Occurring or Potentially Occurring in the Cathedral City Study Area

Species Name (Fed/State)	Scientific Name	Conservation Status
PLANT COMMUNITIES		
Desert Dry Wash Woodland	N/A	ND/CHIP
Sand Dunes and Fields	N/A	ND/CHIP
Desert Fan Palm Oasis Woodland	N/A	ND/CHIP
PLANTS		
California ditaxis	*(Ditaxis serrata)*	FSC/ND
Coachella Valley milkvetch	*(Astragalus lentiginosus var. coachellae)*	FE/ND
Flat-seeded spurge	*(Chamaesyce platysperma)*	FSC/ND
Payson's jewelflower	*(Caulanthus simulans)*	FSC/ND
INVERTEBRATES		
Coachella giant sand-treader cricket	*(Macrobaenetes valgum)*	FSC/ND
Coachella Valley Jerusalem cricket	*(Stenopelmatus cahuilaensis)*	FSC/ND
Coachella Valley grasshopper	*(Spaniacris deserticola)*	FSC/ND
Casey's June Beetle	*(Dinacoma caseyi)*	END/ND
AMPHIBIANS AND REPTILES		
Desert tortoise	*(Gopherus agassizi)*	FT/ST
Desert slender salamander	*(Batrachoseps aridus)*	FE/SE
Flat-tailed horned lizard	*(Phrynosoma mcallii)*	FTP/CSC
Coachella Valley fringe-toed lizard	*(Uma inornata)*	FE/SE
Common chuckwalla	*(Sauromalus obesus)*	FSC/ND
BIRDS		
Ferruginous hawk	*(Buteo regalis)*	FSC/CSC
Golden eagle	*(Aquilachrysaetos)*	ND/CSC
Merlin	*(Falco columbarius)*	ND/CSC
Prairie falcon	*(Falco mexicanus)*	ND/CSC
Peregrine falcon	*(Falco peregrinus)*	FE/SE
Burrowing owl	*(Athene cunicularia)*	FSC/CSC
Crissal thrasher	*(Toxostoma crissale)*	ND/CSC
LeConte's thrasher	*(Toxostoma lecontei)*	FSC/CSC
Southwestern yellow flycatcher	*(Empidonax trailii extimus)*	FPE/SE
Least Bell's vireo	*(Vireo bellii pusillus)*	FE/SE
Yellow warbler	*(Dendroica petechia brewsteri)*	ND/CSC
Yellow-breasted chat	*(Icteria virens)*	ND/CSC
Summer tanager	*(Piranga rubra)*	ND/CSC
Osprey	*(Pandion haliaetus)*	ND/CSC
Northern harrier	*(Circus cyaneus)*	ND/CSC
Sharp-shinned hawk	*(Accipiter striatus)*	ND/CSC
Cooper's hawk	*(Accipiter cooperii)*	ND/CSC
Long-eared owl	*(Asio otus)*	ND/CSC
Southwestern willow flycatcher	*(Empidonax traillii extimus)*	FPE/SE
Vermilion flycatcher	*(Pyrocephalys rubinus)*	ND/CSC
Bendire's thrasher	*(Toxostoma bendirei)*	ND/CSC
Loggerhead shrike	*(Lanius ludovicianus)*	ND/CSC

MAMMALS		
California leaf-nosed bat	*(Macrotis californicus)*	FSC/CSC
Spotted Bat	*(Euderma maculatum)*	FSC/CSC
California mastiff bat	*(Eumops perotis californicus)*	FSC/CSC
Yuma myotis	*(Myotis yumanensis)*	FSC/CSC
Western small-footed myotis	*(Myotis ciliolabrum)*	FSC/ND
Pale big-eared bat	*(Plecotus townsendii pallescens)*	FSC/CSC
Pallid bat	*(Antrozous pallidus)*	ND/CSC
Pocketed free-tail bat	*(Tadarida femorosacca)*	ND/CSC
Palm Springs ground squirrel	*(Spermophilus tereticaudus)*	FSC/CSC
Palm Springs little pocket mouse	*(Perognathus longimembris ssp. bangsi)*	FSC/CSC
Southern grasshopper mouse	*(Onychomys torridus ssp. ramona)*	FSC/ND
American badger	*(Taxidea taxus)*	ND/CSC
Peninsular bighorn sheep	*(Ovis canadensis cremnobates)*	FE/ST

Source: Coachella Valley Multiple Species Habitat Conservation Plan, 2007; Biological Resources Assessment for the Cathedral City General Plan Update , prepared by Terra Nova Planning and Research, Inc. 2001.

Federal Status Designations: (Federal Endangered Species Act, US Fish and Wildlife Service):
FE: Federally listed as "Endangered"
FT: Federally listed as "Threatened"
FPE: Federally proposed as "Endangered"
FSC: Federal Species of Concern
FC: Candidate for Federal Listing
ND: Not designated

State Status Designations: (California Endangered Species Act, California Department of Fish and Wildlife)
SE: State listed as "Endangered"
ST: Stage listed as "Threatened"
SSC: California Species of Special Concern
ND: Species not designated

Public Land Agencies and Ecosystem Management

In addition to regulations and legislation regarding biological resources, there are also several public land agencies and non-profit organizations that focus on ecosystem management and biological resource protection. While many of the lands that are owned and managed by these agencies and organizations provide for varying degrees of disturbance from recreational uses, the mandate for most is the safeguarding and conservation of cultural, scenic, and biological resources.

Within the City's corporate limits are lands owned and managed by the US Bureau of Land Management and include the Willow Hole Preserve and the west Edom Hill windfarm. Within the greater Coachella Valley, other agencies with ownership or management responsibilities include the National Park Service, U.S. Forest Service, Bureau of Land Management, California Department of Fish and Wildlife, and California Department of Parks and Recreation. Predominant non-profit organizations include the Coachella Valley Mountains Conservancy, the Friends of the Desert Mountains, the Center for Natural Lands Management, and the Nature Conservancy.

Federal Endangered Species Act

The federal Endangered Species Act (ESA) of 1973 provides much needed protection to biological resources and is a dominant force in biodiversity protection. Congress passed the ESA to "provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, and to provide a program for the conservation of these species." The Department of the Interior, acting through the U.S. Fish and Wildlife Service (USFWS), is responsible for the protection of most threatened and endangered species. The Department of Commerce, through the National Marine Fisheries Service, has responsibility for marine mammals and anadromous fish. The ESA provides for the listing of species, designation of critical habitat, recovery planning, and prohibitions.

Endangered and Threatened Species

An "endangered" species is any species of animal or plant that is in danger of extinction throughout all or a significant portion of its range; a "threatened" species is any species of animal or plant that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. A "candidate" species is a species for which substantial information is available to support a listing proposal, but for which a lack of funding and personnel preclude listing. The Secretary of the Interior publishes "notices of review" listing the status of candidate species that can be added to the list for the following reasons:

1. Current or threatened destruction of habitat;
2. Overuse of the species for commercial, recreational, scientific or educational purposes;
3. Disease or predation;
4. Ineffective regulatory mechanisms; and
5. Other natural or manmade factors affecting the species' chances of survival.

Critical Habitat

Critical habitat is defined as the geographic area containing physical or biological features essential to the conservation of a listed species, or an area that may require special management considerations or protection. Neither federal agencies nor private landowners may destroy or adversely modify critical habitat of any listed species. More than 80 percent of all listed species have no designated critical habitat. See Exhibit OS-1 and OS-2 for a mapping of conservation areas in and adjacent to the City.

Recovery Planning For Threatened and Endangered Species

The ESA requires the USFWS to develop and implement recovery plans for all threatened and endangered species in the United States. Recovery plans set forth what is needed for a species to "recover" to the point that it no longer needs the protections of the ESA. They must include specific management recommendations for the species and objective, measurable criteria which, when met, would signal the recovery of the species.

Prohibited Actions under the Endangered Species Act

The ESA establishes broad prohibitions against "taking" endangered or threatened species. On both public and private lands of the U.S., it is illegal "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect" threatened or endangered species. The USFWS has defined "harm" to include significant destruction of a species' habitat that results in actual death or injury.

Incidental Take Permits and HCPs

The ESA contains an exception to the strict prohibition against "take" in which the USFWS may permit a project to go forward and destroy threatened and endangered species and their habitats as long as the taking is "incidental" to, and not the purpose of, the project. It is commonly referred to as an "incidental take permit" (ITP). The USFWS cannot issue an ITP unless the permit applicant adheres to an approved "Habitat Conservation Plan" (HCP). HCPs must specify the proposed project's impact to the species and include mitigation measures which will reduce the project's impacts. The City is a participant in the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP) which is intended to protect a number of species and habitats (see below).

California Endangered Species Act

The California Endangered Species Act (CESA), administered by the California Department of Fish and Wildlife, largely parallels the federal law and provides similar requirements and mandates to those described above. CESA, however, goes further than the ESA in that it prohibits the taking of both endangered species and those petitioned for listing at the state level. CESA also includes plant species under its protection, whereas the federal ESA only

protects plants on federally owned lands or where there is a federal nexus. In Cathedral City and other Coachella Valley communities, local government is responsible for ensuring that all proposed projects conform to the standards and mandates of both the ESA and CESA. The Coachella Valley MSHCP conforms to the standards of both laws, in order to receive incidental take permits from both the federal and state governments.

Habitat Protection

While the ESA and CESA are powerful tools for biological resource protection, they generally focus on individual species rather than entire biological communities. Nevertheless, the driving force behind today's decline in species is the destruction, degradation, and fragmentation of critical and essential habitat due to increasing human population and conversion of valuable open space land to urban uses. Habitat fragmentation results in a decrease in the habitat type and the allotment of the remaining habitat into smaller, more isolated pieces. This can cause smaller populations due to smaller amounts of habitat, isolation of populations into fragmented parts with less genetic diversity, and potential increases in predators, competitors, and parasites. As a result, habitat fragmentation is one of the greatest threats to species and the ecosystems they rely upon for survival.

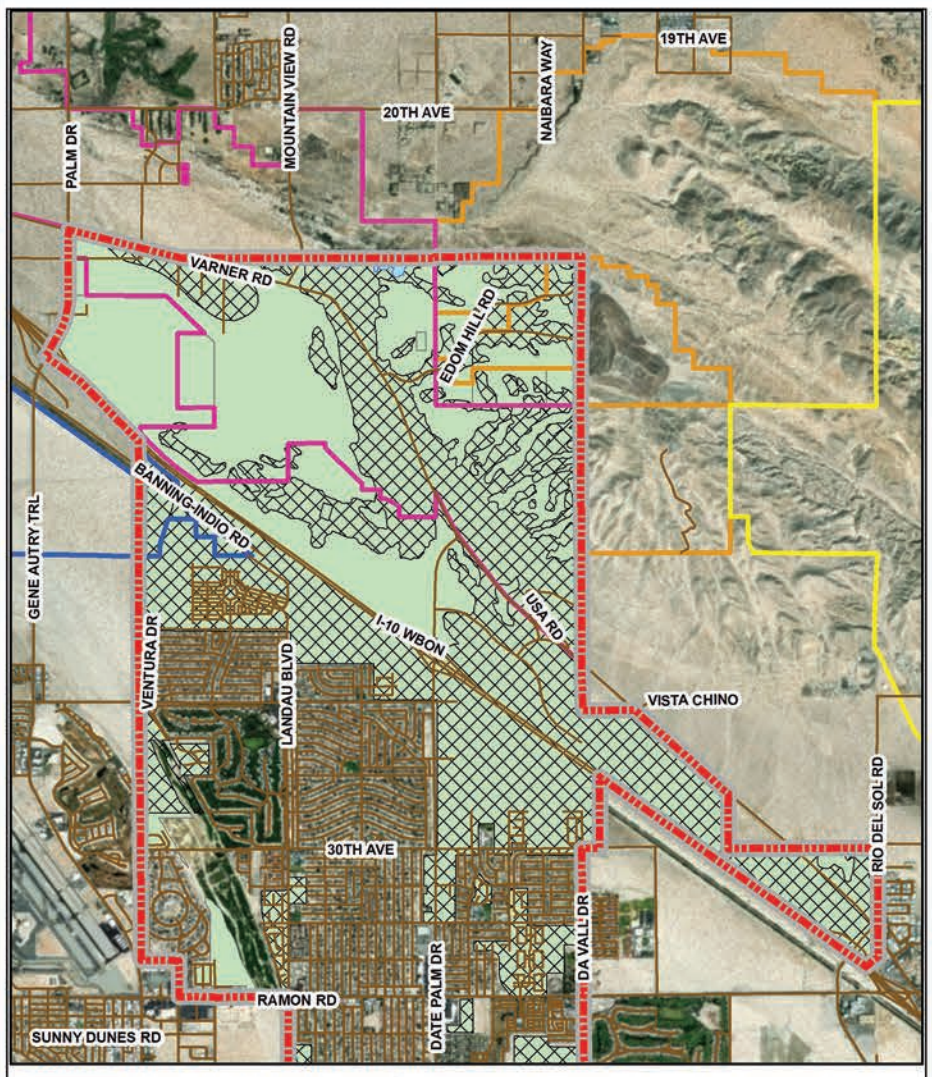
Habitat protection and the widespread preservation of ecosystems provide support for maximum biological diversity, with the goal of long-term protection of all species within the protected habitat. The Coachella Valley MSHCP seeks to protect various regional ecosystems and provide long-term viability for the species included in the Plan.

Coachella Valley Multiple Species Habitat Conservation Plan

The Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP), approved by Riverside County and all Coachella Valley municipalities and with overall management by the Coachella Valley Association of Governments (CVAG), contains principles, policies, and a regional vision to conserve the Coachella Valley's biological resources and protect biological diversity on a regional scale. The MSHCP is intended to balance environmental protection and economic development objectives and simplify compliance with endangered species-related laws. It is intended to provide a seamless network of adequate habitat for the protection and safekeeping of long-term viable populations of the species that are currently listed as threatened or endangered.

Cathedral City is a MSHCP Permittee and subject to the terms and conditions set forth in the plan. The entire General Plan planning area, with the exception of tribal lands of the Agua Caliente Band of Cahuilla Indians (ACBCI), is within the boundaries of the MSHCP. Habitat and species protection on tribal lands is covered by the ACBCI Tribal Habitat Conservation Plan (see discussion below).

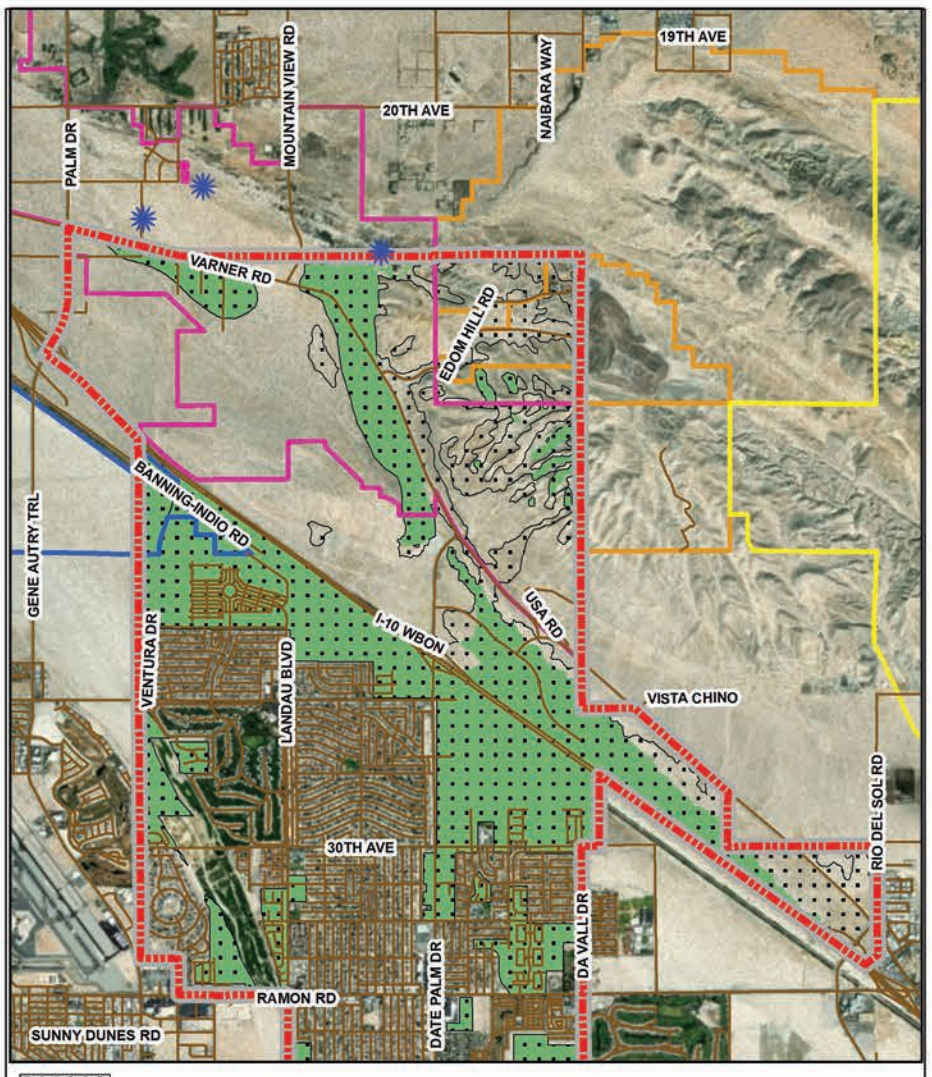
In accordance with the MSHCP, most private development projects in Cathedral City are subject to payment of development impact mitigation fees. Development within or adjacent to MSHCP-designated Conservation Areas are subject to additional requirements and guidelines to minimize potential edge effects on protected habitat and species, such as impacts from lighting, noise, and domestic animals. In the General Plan planning area, Conservation Areas include the Willow Hole and Edom Hill Conservation Areas north of US I-10, and the Whitewater Floodplain and Santa Rosa/San Jacinto Mountains Conservation Areas to the south. The MSHCP Conservation Areas in and adjacent to the City are mapped on Exhibits OS-1and OS-2.



Least Bell's Vireo, Summer Tanager, Yellow-breasted Chat, Yellow Warbler, & Crissal Thrasher

Coachella Valley Milkvetch

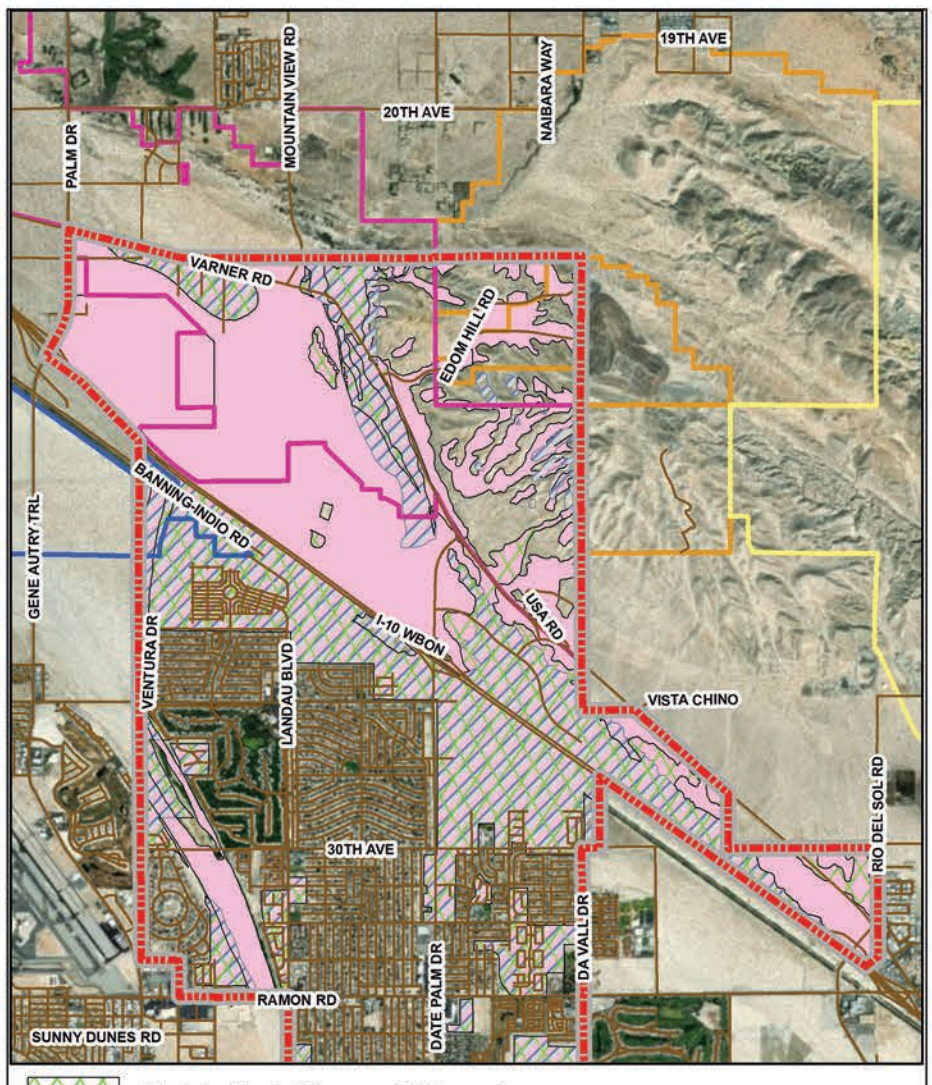
Le Conte's Thrasher



Coachella Valley Jerusalem Cricket

Coachella Giant Sand Treader Cricket

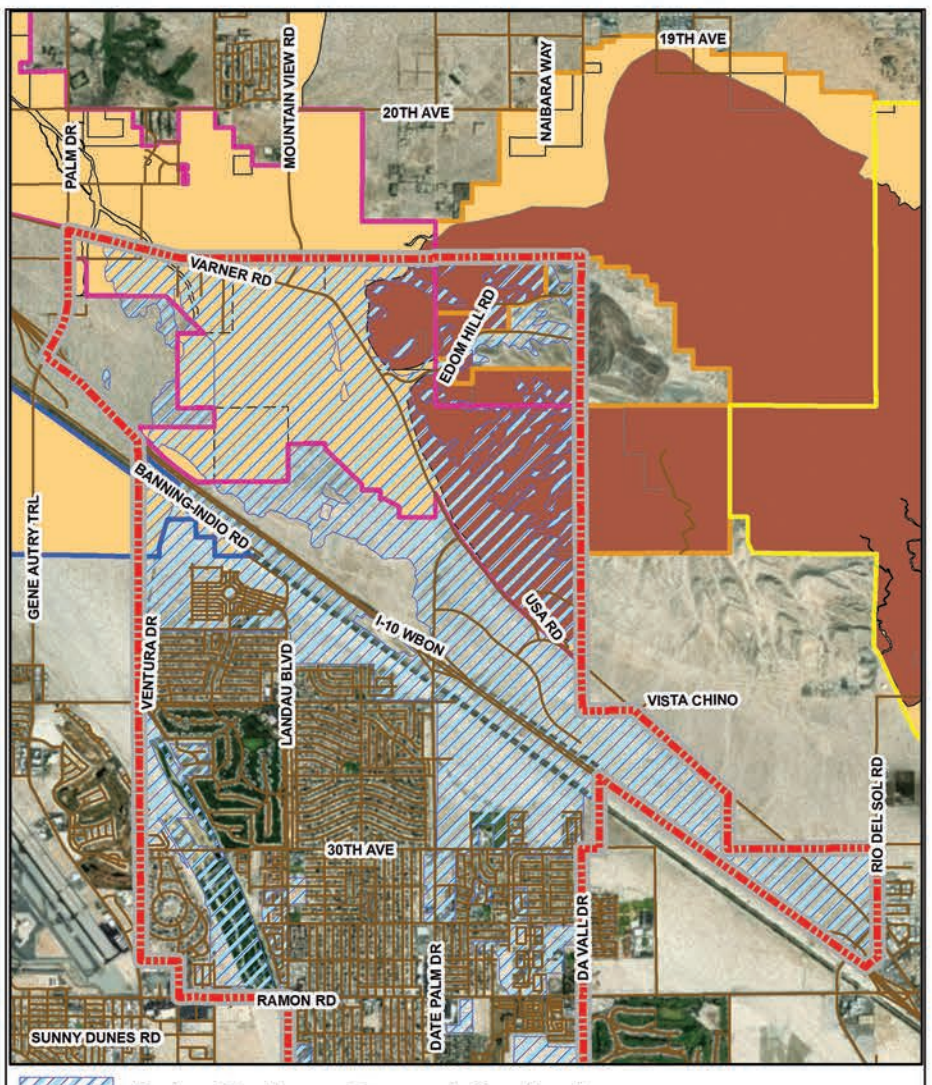
Burrowing Owl Locations



Flat-tailed Horned Lizard

Fringe-toed Lizard

Palm Springs Pocket Mouse



Palm Springs Ground Squirrel

Sand Source

Sand Transport

CVMSHCP Conservation Areas & Modeled Habitat Legend

City Limits

Edom Hill CA

Thousand Palms CA

Whitewater Floodplain CA

Willow Hole CA

Miles

0 0.75 1.5 3

Source: CVMSHCP 2008; Esri, 2018

07.30.18

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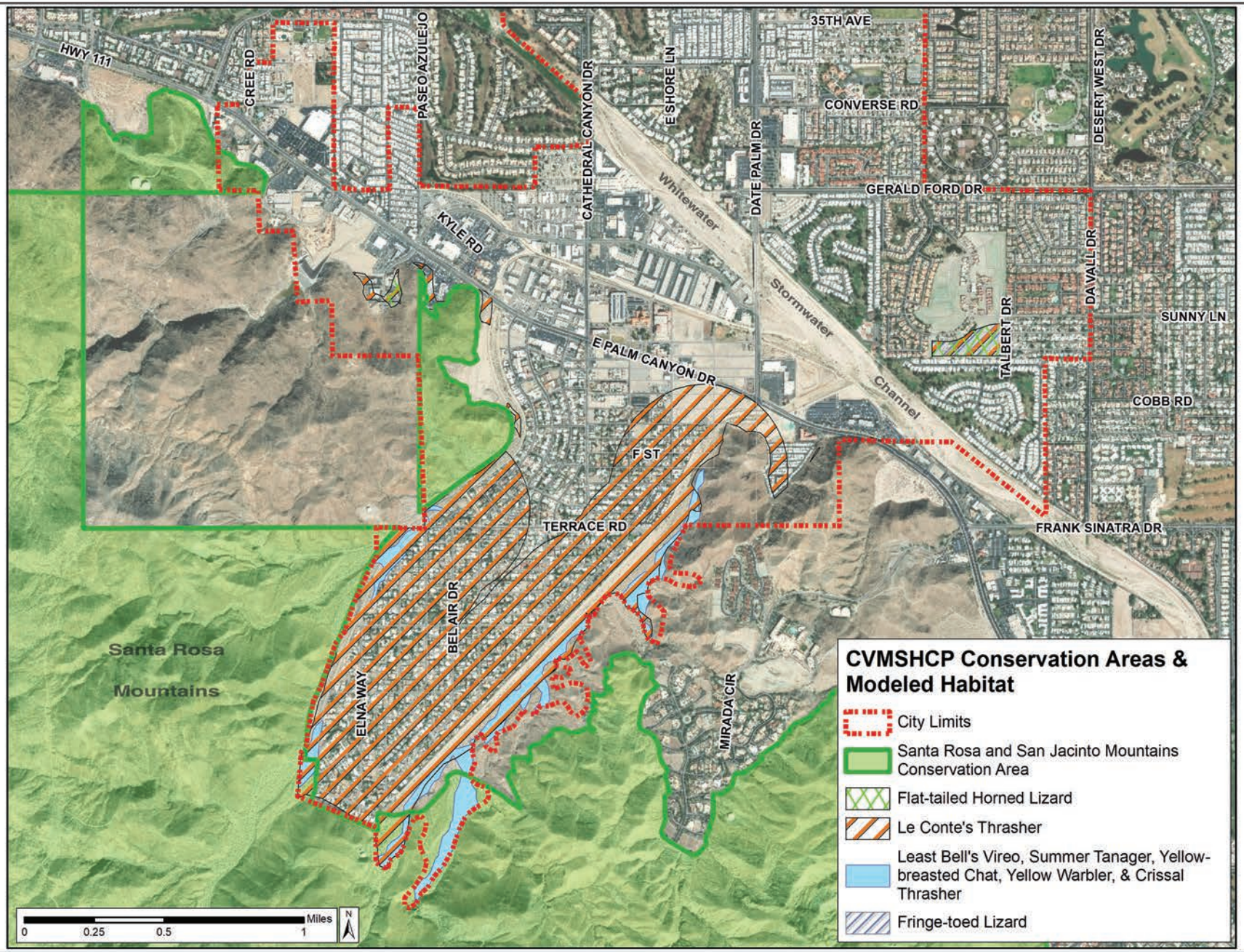
Exhibit OS-1 - CVMSHCP Biological Resources Map North
Cathedral City General Plan - Imagine 2040

Cathedral City



07.30.18 Source: CVMSHCP 2008; Esri, 2018

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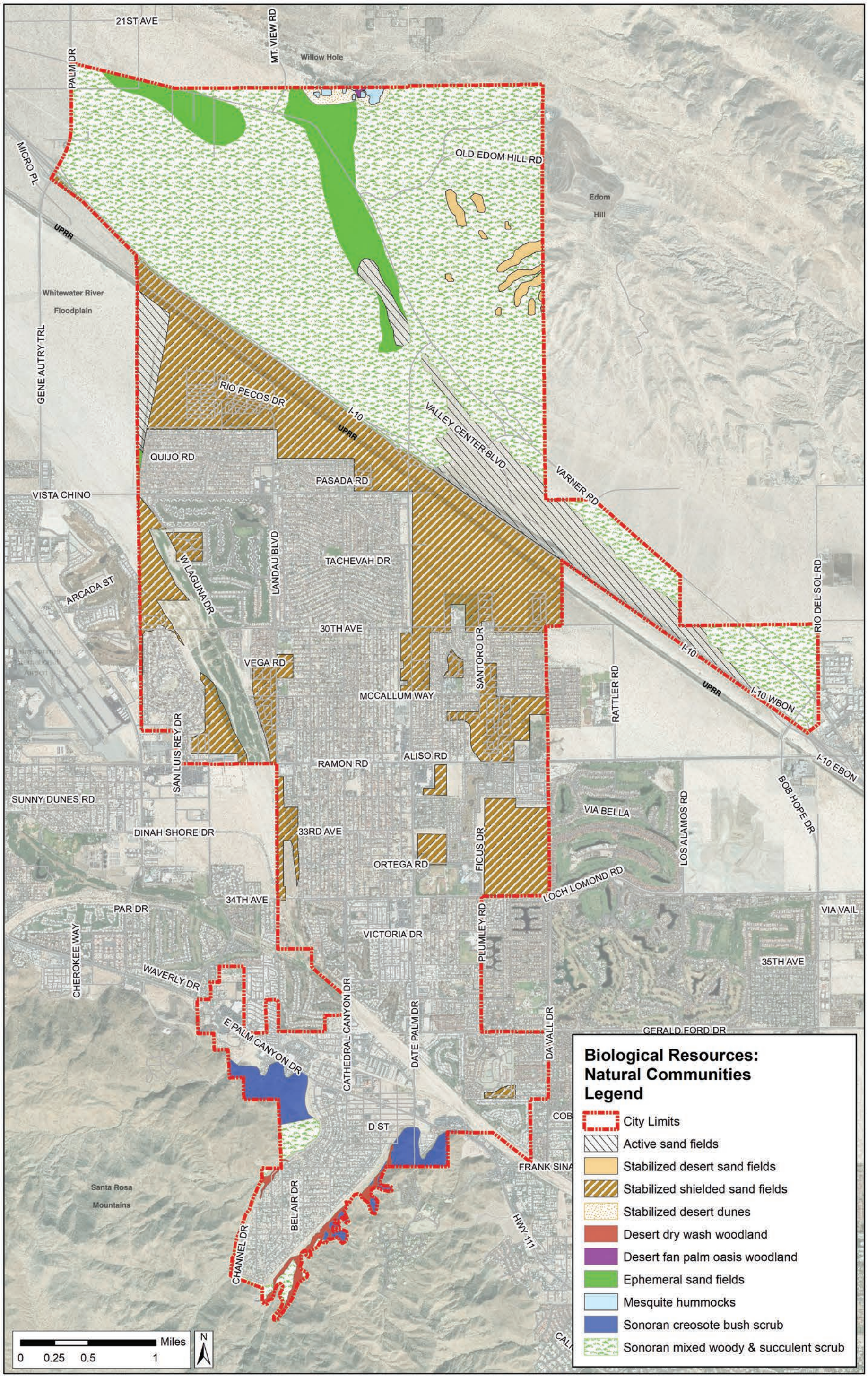
Exhibit OS-2 - CVMSHCP Biological Resources Map South
Cathedral City General Plan Update - Imagine 2040

Cathedral City



07.30.18 Source: CVMSHCP, 2008; Esri 2018

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Exhibit OS-3 - CVMSHCP Natural Communities Map
Cathedral City General Plan - Imagine 2040

Cathedral City

ACBCI Tribal Habitat Conservation Plan

The Agua Caliente Tribal Habitat Conservation Plan (HCP, 2010) provides a means to protect and contribute to the conservation of federally listed species or those deemed by the Tribe and USFWS to be sensitive and potentially in need of listing in the future. The ACBCI Reservation consists of approximately 31,500 acres within the geographical boundaries of three cities (Palm Springs, Cathedral City, and Rancho Mirage) and unincorporated Riverside County. The Reservation land is composed of a checkerboard pattern of landholdings, including Tribal trust land, allotted trust land, and fee land. The City and the ACBCI cooperate on local and regional matters of mutual concern, including protection of open space and natural resources. The City also regularly consults and shares information with the Tribe pursuant to Senate Bill 18 and Assembly Bill 52.

The Tribal HCP incorporates and builds upon the Tribe's existing conservation programs by providing additional means of protecting significant areas of Covered Species' habitat through adoption of new development standards and creation of a Habitat Preserve to be managed by the Tribe or its designee(s). The Tribal HCP has not yet been approved by the USFWS. The Tribe seeks to enter an Implementing Agreement with, and obtain a Section 10(a) Permit from, USFWS that will authorize the incidental take of Covered Species of wildlife in connection with certain activities undertaken by the Tribe, Tribal members, and in some cases, third parties. This will enable the Tribe to assist the USFWS in its mission to conserve sensitive species and their habitats, while maintaining appropriate sovereign authority over activities taking place within the Tribe's jurisdiction and protecting unique Tribal values.

Santa Rosa and San Jacinto Mountains National Monument

On October 24, 2000, the President of the United States signed legislation creating the Santa Rosa and San Jacinto Mountains National Monument. The new Monument encompasses approximately 272,000 acres within the Santa Rosa and San Jacinto Mountains, with lands administered by the Bureau of Land Management (BLM), U.S. Forest Service (USFS), California Department of Fish and Wildlife (CDFW), California Department of Parks and Recreation, Agua Caliente Band of Cahuilla Indians, and Coachella Valley Mountains Conservancy in cooperation with the county, adjacent cities, and private owners. The National Monument designation provides further protection and preservation of nationally significant biological, cultural, recreational, geological, wilderness, educational, and scientific resources. The benefits of the Monument designation include enhanced potential for funding opportunities, increased cooperative management between the federal land agencies, and additional protection for the area's natural resources.

Willow Hole-Edom Hill Preserve

The Willow Hole-Edom Hill Preserve was established to assist in preserving the federally listed Coachella Valley Fringed-toed Lizard. The preserve provides an important environment for blowsand-endemic species and has grown over time to include 2,469 acres. Important biological resources found on the preserve include mesquite hummocks, a fan palm oasis, and habitat for the Coachella Valley milk vetch, Little San Bernardino Mountains gilia, Palm Springs ground squirrel, Palm Springs pocket mouse, burrowing owl, crissal thrasher, and Coachella Valley giant sand-treader cricket.

The Willow Hole-Edom Hill Preserve is classified as an Area of Critical Concern (ACEC), with lands collaboratively managed by the Bureau of Land Management (BLM), Center for Natural Lands Management (CNLM), Coachella Valley Mountains Conservancy (CVMC), US Fish and Wildlife Service (Service), Coachella Valley Conservation Commission (CVCC), and Friends of the Desert Mountains (FODM). Additional conservation lands adjacent to the preserve and outside of it are continuing to be acquired to complete this Preserve, which is primarily managed by the BLM.

Conservation Easements

Conservation easements are an important way to maintain land ownership while assuring protection of biological and other natural resources. For instance, the City has granted conservation easements on portions of its lands in the East Cathedral Canyon Wash as mitigation for impacts to the Whitewater River associated with bridge and other transportation projects. The CVCC is an important partner for the City and other jurisdictions with responsibilities for habitat protection and impact mitigation.

Habitat Connectivity

Habitat connectivity is an essential aspect of viable habitat conservation and wildlife management. Habitat connectivity is accomplished by establishing habitat linkages and wildlife movement corridors that connect fragmented pieces of habitat. This allows for the movement of wildlife, a place for new vegetation to recolonize, and diversifies the plant and wildlife genepools across areas of available habitat. The MSHCP has established a resource corridor/linkage just north of I-10, which is designed to connect the Willow Hole CA with the Whitewater Floodplain CA.

FUTURE DIRECTIONS

The Coachella Valley Multiple Species Habitat Conservation Plan is an important and affective vehicle for the City of Cathedral City to help assure the long-term protection of important biological resources in the City and the Coachella Valley. Not only does the plan preserve important plant and animal species, it also establishes a regional ecological system that will be able to support important and intact ecosystems and communities. The City will continue to strive to make the built environment more harmonious with the natural environment, and establish means for doing so. This can be achieved by implementing the General Plan, and through thoughtful Zoning, Subdivision and Grading Ordinances. The City also has the opportunity to regulate growth and limit impacts through community planning and development regulation.

GOALS, POLICIES, AND PROGRAMS

Goal 1: Preservation and protection of the unique biological resources in the City and region.

Goal 2: A functional, productive, harmonious, and balanced relationship between the built and natural environments.

> **Policy 1:** The City shall continue to participate in the preservation of habitat for endangered, threatened, and sensitive species.
>
> > **Program 1.A**: Through the Coachella Valley Conservation Commission, maintain an accurate and regularly updated map of sensitive plant and animal species and habitat in Cathedral City and its planning area.
> > **Responsible Agency:** Planning, CVCC
> > **Schedule:** Continuous
> >
> > **Program 1.B**: The City shall continue to implement and abide by the provisions of the Coachella Valley Multiple Species Habitat Conservation Plan, including collection of development impact fees and implementation of land use adjacency guidelines for development within or adjacent to MSHCP-designated Conservation Areas.
> > **Responsible Agency**: Planning, CVCC
> > **Schedule:** Ongoing

Program 1.C: City staff will continue to request biological resource surveys for new development in compliance with applicable state and federal requirements.
Responsible Agency: Planning
Schedule: Continuous

Program 1.D: When considering development proposals near the Willow Hole CA and the Willow Hole-Edom Hill Preserve, the City will require developers to consider the impacts of their project on wind-blown sand transport, and encourage creative design techniques, such as units clustering and open space areas, in project design that sustain these ecological processes.
Responsible Agency: Planning, Public Works
Schedule: Continuous

Program 1.E: The City shall continue to work closely with the Agua Caliente Band of Cahuilla Indians to help assure that development on tribal lands in the planning area conforms to the provisions of the Tribal Habitat Conservation Plan.
Responsible Agency: Planning, ACBCI
Schedule: Continuous

Program 1.F: The City shall continue to implement and abide by the provisions of the US Fish & Wildlife Service Casey's June Beetle management plan, requiring surveys and mitigation where appropriate, and implementing land use adjacency guidelines of the CVMSHCP, where appropriate.
Responsible Agency: Planning, CVCC
Schedule: Continuous

Policy 2: As part of the development review process, projects shall be evaluated for their impacts on existing habitat and wildlife, and for the land's value as viable open space.

Program 2.A: The City shall encourage developers to recover native and drought tolerant plant materials, and incorporate them into project landscaping, to provide or enhance habitat and serve to extend the local desert environment into the urban design of the City.
Responsible Agency: Planning
Schedule: Continuous

Program 2.B: The City shall distribute a listing of planting materials which emphasizes native vegetation, but may also include non-native, plants which are compatible with the local desert. A list of prohibited plants shall also be made available to land developers and the general public.
Responsible Agency: Planning
Schedule: Continuous

Policy 3: Encourage and cooperate with other agencies in establishing multiple-use corridors that take advantage of drainage channels and utility easements as wildlife movement corridors, public access ways, and linkages between open space areas and the built environment.

Program 3.A: Consult and coordinate with relevant public and quasi-public agencies, including Riverside County Flood Control, CVWD and Southern California Edison, to encourage the establishment of a system of multiple use wildlife and public access corridors.
Responsible Agency: Planning; Riverside County Flood Control, CVWD, Southern California Edison, others
Schedule: Ongoing

Policy 4: Assure that sensitive habitat and wildlife areas, as well as state and federal lands, are appropriately buffered from the built environment and associated edge effects.

> **Program 4.A**: Where appropriate, the General Plan Land Use, Circulation, and Open Space and Conservation Elements shall recognize, reflect, and provide an effective buffer between urban land use and development and valuable and sensitive habitats and natural communities within the Santa Rosa Mountains, the Willow Hole-Edom Hill Preserve, MSHCP Conservation Plan, ACBCI Tribal Habitat Conservation Areas, and other open space and conservation lands.
> **Responsible Agency:** Planning, Planning Commission, City Council
> **Schedule:** Continuous

Policy 5: Promote the protection of biodiversity and proactively encourage an appreciation for the natural environment and biological resources.

> **Program 5.A**: Encourage the Palm Springs Unified School District and other organizations, such as The Living Desert, Friends of the Desert Mountains and others to provide educational programs that offer an understanding of the region's natural environment and make the public aware of the importance and value of biological resource issues.
> **Responsible Agency**: Planning
> **Schedule:** Ongoing

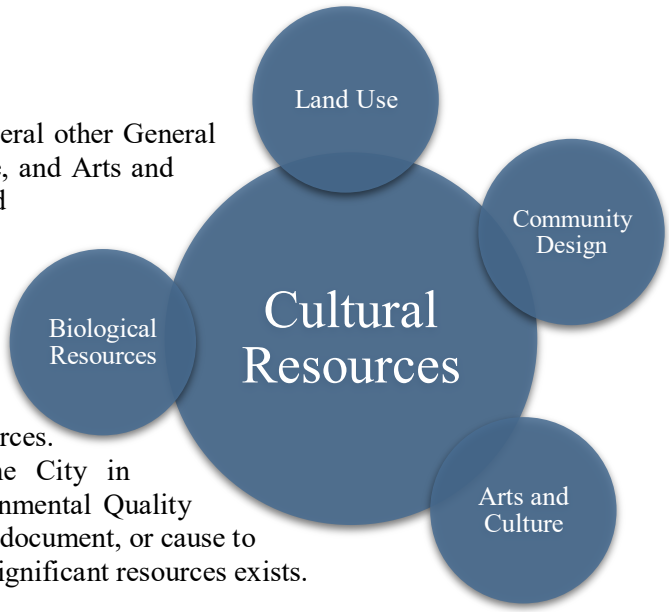
Cultural Resources Sub-Element

PURPOSE

The purpose of the Cultural Resources Element is to set forth goals, policies, and programs that preserve the cultural and historic sites, heritage, and traditions of the City of Cathedral City and its vicinity. It provides the basis for the identification and preservation of these valuable resources. The Element references information sources that provide detailed descriptions and evaluations of archaeological and historic resources within the General Plan planning area.

Within this Element, cultural resources are divided into three separate discussions: prehistoric, historic, and locally significant. These divisions are based on time periods and the differing cultures and events associated with them. While they represent different components of local history, they are equally important to the preservation of the City's and Valley's unique heritage.

BACKGROUND/SETTING



The Cultural Resources Element is directly related to several other General Plan elements, including Biological Resources, Land Use, and Arts and Culture. It may also influence the Community Image and Urban Design Element.

The issues addressed in the Cultural Resources Element are some of those identified in California Government Code Section 65560(b)(3) which addresses open space land for outstanding historic and cultural value, and Section 65560(b)(6) which addresses open space for tribal resources. Public Resources Code Section 5076 also guides the City in developing open space programs. The California Environmental Quality Act (CEQA), Section 21083.2(g), also requires the City to document, or cause to be documented, cultural resources when the potential for significant resources exists.

Cultural traditions and artifacts serve as important links between the past, present, and future. They are an integral part of community life and provide a meaningful sense of heritage and history. Numerous archaeological sites established by Cahuilla Indians as early as 1500 years ago have been identified throughout the Coachella Valley. The region also contains important historic features, including roads and trails, which were used by early European settlers beginning in the late eighteenth century.

PREHISTORIC PERIOD

The prehistoric period refers to the time prior to the arrival of non-Indians, when native lifestyles and traditions remained essentially undisturbed, strong, and viable. The prehistoric period in the Coachella Valley is generally divided into the Late Prehistoric and Archaic Periods. The transition between these two periods is generally considered to be around AD 1000 and is identified by the introduction of ceramics into the region from the Colorado River cultures. For this reason, the Archaic Period is generally referred to as the "pre-ceramic" period. Also significant during prehistoric times was the introduction of the bow and arrow around AD 500, and the change from burial practices to cremations around 500 BC.

THE CAHUILLA

Early Cahuilla

The Cahuilla people were the first known inhabitants that settled in the Coachella Valley. According to archaeologists, the Cahuilla came from the north approximately 2,000 to 3,000 years ago. They are thought to have migrated south from the Great Basin region of Nevada, Utah, and eastern California. The descent of these native peoples has been derived from linguistic relationships, which has offered traces of their ancestral past. The Cahuilla belong to the Uto-Aztecan language family and are a Takic-speaking people. Other people that belonged to the Takic group are the Serrano, Luiseño, and Gabrieliño people located in the surrounding regions of southern California.

The Cahuilla are generally divided into three groups by anthropologists, according to their geographic locations in the region: the Pass Cahuilla of the San Gorgonio Pass/Palm Springs area; the Mountain Cahuilla of the San Jacinto and Santa Rosa Mountains; and the Desert Cahuilla of the eastern Coachella Valley. All three groups spoke the Cahuilla language, had similar lifestyles, and practiced the same traditions.

The geographic range of the Cahuilla people today is in the same general location within the Coachella Valley that was inhabited by their ancestors 2,000 to 3,000 years ago. The Coachella Valley provided the people tall mountains, deep valleys, rocky canyons, passes, and arid desert land for sustenance, shelter, and places to escape the heat or cold. Many of the Desert Cahuilla lived around ancient Lake Cahuilla, which was located where the Salton Sea is today and at times extended as far north as the City of La Quinta. Remains indicate that these people ate fish, shellfish, water plants, and birds as well as land animals and plants. However, when the lake dried out around AD 1500, they had to rely more heavily on the nearby hills and mountains for water, food, and shelter.

Cahuilla in Present Times

Conflicts over land rights continued into more recent times. However, as more laws were enacted, the Cahuilla were able to adapt more efficiently to the changing times. In 1959, two bills passed that helped to provide the Cahuilla with more economic stability. The Equalization Act of 1959 allotted land to all tribe members who had not received land allotments, and ensured that the allotments were to be based on 1957-1958 appraised land values. The second bill provided that reservation lands could be leased for a period not exceeding ninety-nine years. The first large enterprise on leased land in the Coachella Valley was the Palm Springs Spa Hotel complex. The spa was completed in 1960 at a cost of $1.8 million. In the 1970s, a court decision found that Indians have control over the zoning of their lands within a city. As a result, the City of Palm Springs and local Indian planning commissions began to work together for mutual benefit. Similar arrangements have been negotiated with Cathedral City and Rancho Mirage.

The Agua Caliente Band of Cahuilla Indians (ACBCI), which descends from the lineage of the Pass Cahuilla, is a sovereign tribal nation and the nearest Native American tribe to the City of Cathedral City. The Agua Caliente Indian Reservation, established in 1876 and extended in 1877, encompasses 31,500± acres generally covering alternating Sections of land in a checkerboard pattern in the western Coachella Valley cities of Palm Springs, Cathedral City, and Rancho Mirage, as well as unincorporated Riverside County.

The ACBCI Tribal Council is an elected body that sets policy and makes and implements laws on behalf of Tribal membership. The ACBCI maintains agreements and a close working relationship with the City of Cathedral City regarding development on tribal lands within City boundaries, but also operates its own Planning and Natural Resources Division and Planning Commission for the management of tribal land and environmental resources. ACBCI establishes its own land use codes, specific plans, ordinances, habitat conservation plans, and other administrative mechanisms. It is a jurisdictional member of the Coachella Valley Association of Governments (CVAG).

The ACBCI is involved in the community and has turned increasingly toward an emphasis on its heritage. Tribal members serve as consultants to cultural anthropologists and on archaeology field crews. Efforts are undertaken to preserve the Cahuilla language and other traditional aspects of their culture. The ACBCI operates the Agua Caliente Cultural Museum in Palm Springs that teaches about the traditional lifestyles and practices of its ancestors, establishes a sense of roots for modern-day Cahuilla, and helps to revitalize their heritage. The ACBCI also owns and operates Tahquitz and Indian Canyons and several enterprises, including hotels, casinos, and golf resorts. Plans are underway for a 12.5-acre casino and mixed-use entertainment venue at the northwest corner of Date Palm Drive and East Palm Canyon Drive in Cathedral City (see *Arts and Culture Element*).

Prehistoric Resources in the Planning Area

The Eastern Information Center (EIC) at the University of California Riverside is under agreement with the California Office of Historic Preservation to integrate and supply information about cultural resources and surveys in Riverside County. According to the EIC, the Cathedral City area has not been extensively surveyed for cultural resources. The majority of the studies took place in the northern portion of the planning area on the valley floor and in the Indio Hills. In the southern portions of the planning area, several relatively small-scale studies have taken place around Cathedral City's urban core, and no archaeological sites were recorded.

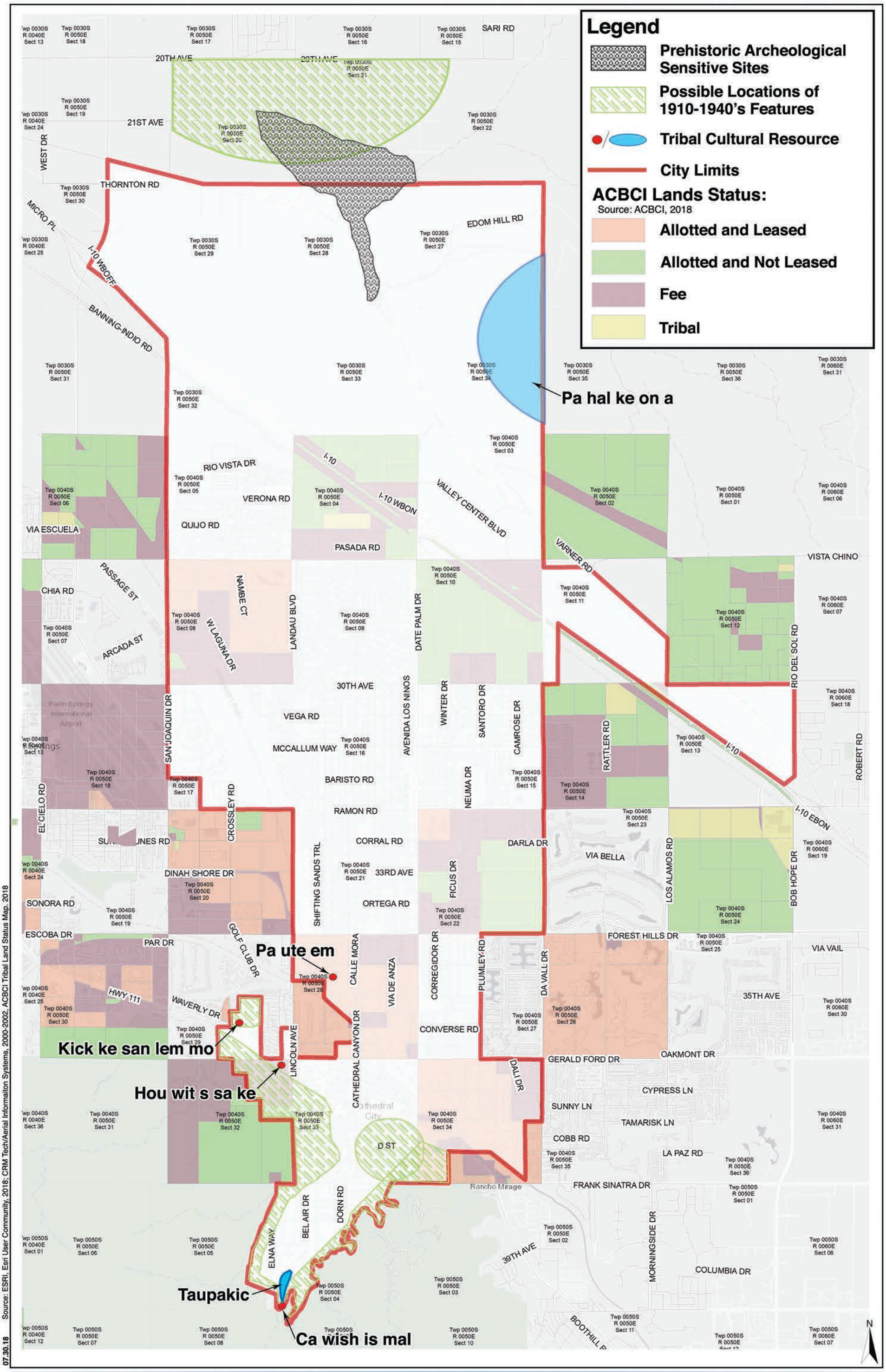
In the planning area, only one prehistoric site has been recorded into the California Historical Resource Information System. This site consists of a rock ring feature. Members of the Coachella Valley Archaeological Society reported the presence of another prehistoric site in the vicinity of Willow Hole, but the site has never been recorded. There are, however, six locations within, or in proximity to the planning area that have been identified by Cahuilla cultural authorities to be of potential cultural significance.[1] Four of the six are found along the foot of the San Jacinto Mountains, near the southern end of the planning area, while the fifth is situated in the Whitewater River bed in the same general vicinity. All five of these locations are associated with the various streams or canyons where water sources were available. The sixth location is situated in the Edom Hill area, in the northwestern portion of the planning area. None of the six sites are located on the valley floor. The six locations of cultural value are listed in the table below. Sites are shown in Exhibit OS-3.

Table OS-4
Sites of Cahuilla Cultural Value in the Planning Area

Name	Location	Remarks
Ca wish is mal	Cathedral Canyon	"Painted rock," named by Cahuilla cultural hero *Evon ga net.*
Hou wit s sa ke	Near the mouth of Eagle Canyon	"A bear-skin blanket," named by *Ca wis ke on ca*, a legendary Cahuilla leader.
Kick ke san lem mo	Convergence of Palm Canyon Wash and Tahquitz Creek	"The place where the white flowers grow," named by *Ca wis ke on ca*.
Pa hal ke on a	Edom Hill	Named by *Ca wis ke on ca*.
Pa ute em	Whitewater Wash	Named by *Evon ga net* at the "ground squirrel's home."
Taupakic	Cathedral Canyon	Names by *Hiwinut*, the legendary "great *net* (chief)," "where they gathered the mescal."

Source: "*Cultural Resources Technical Report- Cathedral City General Plan*," prepared by CRM TECH, July 2, 2001 and "*Historic Resource Context & Historic Resource Program, Cathedral City, California*," prepared by Kaplan Chen Kaplan, November 21, 2017.

[1] "Cultural Resources Technical Report- Cathedral City General Plan," prepared by CRM TECH, July 2, 2001.



07.30.18 Source: ESRI, Esri User Community, 2018; CRM Tech/Aerial Informaiton Systems, 2000-2002, ACBCI Tribal Land Status Map, 2018

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Exhibit OS-4 - Culturally Sensitive Areas
Cathedral City General Plan - Imagine 2040

Cathedral City

Areas of Sensitivity for Prehistoric Resources

Given the above findings, certain geographic locations within the planning area are regarded as highly sensitive for prehistoric and archaeological sites. The foothills and canyons area along the base of the Santa Rosa Mountains, and the mesquite dunes between Seven Palms Valley and Edom Hill are highly sensitive for prehistoric archaeological resources. The balance of the planning area on the valley floor, in contrast, contains a low sensitivity for prehistoric archaeological resources.

Tribal Consultation

Cathedral City has developed a close and cooperative relationship with the local Native American Tribes, including and especially the Agua Caliente Band of Cahuilla Indians (ACBCI). This cooperation and coordination are exemplified by the Tribe/City land use agreement, the City's well-established sharing of land use and other information with the Tribe, formal and informal consultations and references to the Tribal HCP. Recent legislation, including AB 52 and SB 18, now mandate consultation that the City has carried out for many years.

Assembly Bill 52

In July 2015, California implemented Assembly Bill 52, which allows California Native American Tribes on the Native American Heritage Commission List, including both federally and non-federally recognized tribes, to establish, through a formal notice letter, a consultation process with a lead agency regarding any proposed project subject to CEQA in the geographic area with which the tribe is traditionally and culturally affiliated. This law recognizes California tribes' expertise regarding cultural resources and provides a method for agencies to incorporate tribal knowledge into their CEQA environmental review and decision-making processes for the purpose of preserving or mitigating impacts to culturally important places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that are located within the city's or county's jurisdiction (Gov. Code § 65352.3, 65562.5).

Senate Bill 18

California Senate Bill 18 (2004) recognizes the need to establish early and meaningful consultation between tribal and local governments for projects involving cultural places. "Cultural places" include Native American sanctified cemeteries, places of worship, religious or ceremonial sites, sacred shrines, and any Native American historic, cultural, or sacred sites that are listed or may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, burial ground, or archaeological or historic site. SB 18 amended State planning statutes by requiring the City to: 1) prior to a General Plan/Specific Plan amendment, update, or adoption, contact and consult with California Native American tribes for the purpose of preserving or mitigating impacts to Cultural Places, and 2) contact and consult with California Native American tribes prior to designating land as Open-Space if it contains a cultural place, for the purpose of determining the level of confidentiality required to protect the cultural place and for the purpose of developing treatment with appropriate dignity of the cultural place in any corresponding management plan.

HISTORIC PERIOD

The Historic Period in the Coachella Valley refers to the period of time of the first European contact, around the late 1770s. This period ended about the time of World War II, and therefore, "historic resources" generally refer to significant resources that are more than forty-five years of age. Historic resources and sites generally consist of structures or buildings, permanent trails, or highways.

History of the Coachella Valley

The primary prehistoric and historic route through the Coachella Valley was a trading route known as the Cocomaricopa Trail, which connected the Pacific coast to the Colorado River. The route, originally used by the native peoples of the area, was "discovered" by European explorers as early as 1815. In 1862, the Cocomaricopa Trail was again rediscovered by Colonel William Bradshaw and became known as the Bradshaw Trail.

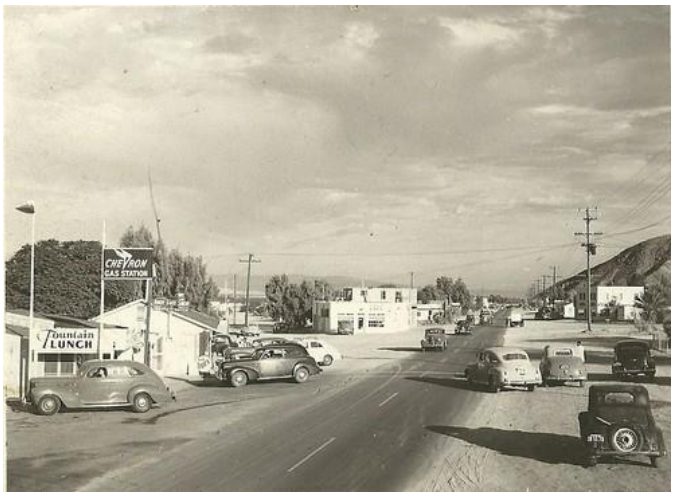
Until the completion of the Southern Pacific Railroad in 1877, it served as the primary route between the Los Angeles basin and gold mines in Arizona. The Bradshaw Trail was used in the early 20th century to create a portion of the Ocean-to-Ocean highway. In the Coachella Valley, present-day Highway 111 (East Palm Canyon Drive in Cathedral City) closely follows the historic Bradshaw Trail.

The Southern Pacific Railroad brought non-Indian settlement to the Coachella Valley in the 1870s, when stations were established, and spread further in the 1880s after public land was opened for claim under the Homestead Act, Desert Land Act, and other federal land laws. Traditionally, farming was the dominant economy in the valley, thanks in part to the development of groundwater resources. The completion of the Coachella Canal in 1948-1949, in particular, provided an adequate and reliable water supply. The main agricultural staple in the Coachella Valley was the date palm, which was first introduced around the turn of the century. By the late 1910s, the date palm industry had firmly established itself. Starting in the 1920s, the Coachella Valley developed a new industry that consisted of equestrian camps, resort hotels, and eventually country clubs. The resort industry gradually spread throughout the Valley, transforming the area to a popular winter tourist retreat.

The Founding of Cathedral City

The City of Cathedral City was founded in 1925 by four developers (John Grove, George Allen, Glenn Plumley, and M.V. Van Fleet) whose names were given to some of the original streets in the subdivisions they created. The name of the town was derived from nearby Cathedral Canyon, which had been known by that name since at least the turn of the century. Created to provide affordable low-to moderate income housing, the town was characterized by narrow streets lined by small and often odd-shaped lots, and became known as the affordable neighbor of Palm Springs.

With the upgrading of present-day Highway 111 (East Palm Canyon Drive) in 1927, several motels and restaurants were constructed along the newly paved state highway. At that time the highway was known locally as *Broadway*, and it formed the core of Cathedral City's downtown commercial district. During the 1930s, Cathedral City attracted Palm Springs visitors with the opening of two prominent gambling casinos, the Dune Club and 139 Club.



The 1940s and the early 1950s marked a period of relatively rapid growth for Cathedral City. During World War II, the town served as a bedroom community to the military installations established in the vicinity as a part of the war effort.

By the mid-1950s, residential development had expanded from the original townsite southward into the cove area, westward along Highway 111, and northward to the Ramon Road corridor. The rural northern portion of the General Plan planning area also saw significant growth in the early and mid-1950s. In this area, five-acre parcels were patented by the U.S. government under the so-called "Baby Homestead Act" to residents of the Los Angeles basin who were looking for weekend retreats in southern California's desert.

During the post-WWII era, Cathedral City and the other cities along Highway 111 became the fastest growing communities in the Coachella Valley and began to play an increasingly important role in the regional economy. In 1981, Cathedral City was incorporated as the 18th city in Riverside County. With a population over 53,000, it is currently the second most populous city in the Coachella Valley.

Historic Resources in the Planning Area

In the early 1980s, the Riverside County Historical Commission commissioned a countywide historical resources reconnaissance, which led to the recordation of eight historic-era buildings within the planning area. All of these were located in Cathedral City's old downtown area, and their construction dates ranged between the mid-1920s and the late 1930s.

Another historic building, located in the northern portion of the planning area, has been added to the California Historical Resource Information System since the original survey. It was a 1930s highway service station on Varner Road, formerly a part of the original Ocean-to-Ocean Highway. The site was reported to be in ruins at the time of its recordation. A field survey performed in 2001 found that the majority of the buildings recorded during the 1980s survey have been removed. All of the recorded historical sites are listed in the table below.

Table OS-5
Recorded Historic-Era Buildings in the Planning Area

Property Number	Property Name	Location	Property Type	Year Built
33-5627	Senior Citizen Center*	68-715 A Street	Community Center	1939
33-5628	None	68-537 B Street	Single-family dwelling	1925
33-5629	Desert Exteriors*	68-821 B Street	Residential/commercial	1930s
33-5630	None	37-236 Cathedral Canyon Drive	Single-family dwelling	1920s
33-5631	None**	68-773 D Street	Single-family dwelling	1930s
33-5632	None*	68-918 Dawes Street	Single-family dwelling	1931
33-5633	None*	68-681 Grover Street	Single-family dwelling	1930s
33-5634	Bargain Center*	68902 Highway 111	Commercial building	1920s
33-6885	Ruins of "Old Stone"	Varner Road, east of Mountain View Road	Commercial building	1930s

Source: California Historical Resource Information System
* These buildings are no longer present today.
** This building has been significantly altered.

In 2017, a Historic Resource Evaluation was prepared for the City with the focus of identifying historic property types. The Evaluation identified eight (8) historic contexts in which to categorize property types based on the City's historic growth patterns, including:

- Early Rural/Agricultural Economy, Ranches and Farms, 1910-1930
- Early Estates, 1920-1940
- Early Residential Development, 1927-1941
- Mid 20th Century Residential Development, 1942-1969.
- Cathedral City's Artists' Colony, 1932-1961
- Early Tourism, 1927-1950
- Entertainment, 1950s-1975
- Institutional, Civic and Religious, 1950s-1975

To be listed in the National Register of Historic Places, a property must not only be shown to be significant under the National Register criteria, but it also must have integrity. Many historic buildings in Cathedral City retain architectural integrity. However, many other buildings have undergone significance alterations, thus no longer retaining historic integrity. One of the goals of the City is to develop a historic preservation ordinance that establishes a Cathedral City Register of Historic Resources and the criteria and procedures to designate buildings, structures and objects for inclusion on that Register.

Areas of Sensitivity for Historic Resources

Although the buildings identified in Table OS-5 have been, in many cases, either lost or altered over time, some geographic areas of the City can be considered sensitive for historic resources. Some parts of the City still contain buildings dating from the 1910s through the 1950s, including the downtown area, in the lettered streets; the Cree Road/Palm Valley School Road neighborhood on the north side of East Palm Canyon at the western City limit; the area along 20th Avenue in the northern end of the planning area, which was used for ranching; the Cove neighborhood; and the flatlands at Edom Hill and Flat top Mountain, which may contain 1950s era structures. Although none of these areas contains sufficient coherent historic significance to be designated a historic district, individual structures may prove to have significance. Exhibit OS-4 shows sensitivity areas for historic cultural resources.

HISTORIC PRESERVATION

Various federal, state, and local government programs and legislation identify and recognize the importance of buildings, structures, objects, landscapes, and districts that meet specific criteria.

Federal Programs

The National Park Service and the State Historic Preservation Officers (SHPO) of each state administer the Certified Local Government (CLG) program, which allows local governments to take a much more active role in historic and prehistoric preservation efforts in their communities. Local governments must meet certain requirements to qualify as a CLG, including adopting local ordinances which establish systems and standards for the preservation of resources. CLGs can also take advantage of technical assistance, professional assistance, and other state-wide programs. The City is not a Certified Local Government (CLG) and there are no immediate plans to pursue this certification.

The National Register of Historic Places is maintained by the U.S. Secretary of the Interior. It provides a national inventory of districts, sites, buildings, structures, objects, and other features of national, state, or local significance. Properties eligible for listing must meet certain criteria, which is determined by analyzing age, integrity and significance. There are no properties within the General Plan planning area currently listed on the National Register.[2]

A number of other federal statutes provide programs for the preservation of historic and prehistoric resources, including tax credits for the certified rehabilitation of historic buildings, Community Development Block Grants, and the historic building reservation program which is part of the Transportation Equity Act of 1998.

State Programs

The State Office of Historic Preservation manages California's CLG program, described above, and provides a number of services to participating local governments. In addition, the State established the California Register of Historical Resources in 1992, which is California's equivalent to the National Register of Historic Places. Two other registers are managed by the Office of Historic Preservation: the California Historical Landmarks register which identifies properties of statewide historic importance; and the Points of Historical Interest register which inventories properties of regional importance. Properties listed on these registers are eligible for property tax reductions, benefits provided by the California Heritage Fund, alternative building regulations under the Historic Building Code, seismic retrofit tax credits, and historic preservation bond measures. There are no properties in Cathedral City on either register at this time.[3]

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2 National Register Listed Properties, National Park Service, accessed March 2018.

3 Listed California Historical Resources, California Office of Historic Preservation, accessed March 2018.

Local Programs

Local governments may establish historic preservation ordinances to create a register of historic resources that meet criteria similar to those of the National Register of Historic Places and California Register of Historical Resources. In 2017, a Historic Resources Evaluation and Report was prepared for the City of Cathedral City to provide a framework for evaluation of potential historic resources with a focus on identification of historic property types within the City. The evaluation was conducted in accordance with National Register Bulletin 24, *Guidelines for Local Survey: A Basis for Preservation Planning*. The historic contexts and property types presented in the report were derived from research, community input, and field review of neighborhoods and properties. Currently there is no local historic resource preservation ordinance or historic resource designation program in Cathedral City; however, the Historic Resources Evaluation and Report will facilitate future local historic designation programs.

FUTURE DIRECTIONS

The lack of identified and recorded resources in Cathedral City does not mean that the City is devoid of these resources. The City's modest beginnings may not have resulted in the high-profile development of resort hotels and "movie star hangouts" which have been well documented elsewhere in the Valley, but the City's history is no less significant. Structures and properties within the City may bear preserving and must be identified early in the development process.

The City of Cathedral City has a rich and interesting history that provides a meaningful sense of heritage to residents and visitors. As the city continues to grow and develop, every effort should be made to identify and preserve the artifacts, places, and resources which have a relation to the City's history. Although some historic structures have been lost, the City should search for ways to protect and preserve its past. Many present-day structures, resources, and traditions play a role in the City's cultural values and identity. These resources should be identified and preserved for their importance to the City.

GOALS, POLICIES, AND PROGRAMS

Goal: Identification, preservation, and revitalization of significant cultural, historical, and archaeological resources that are valuable to the City of Cathedral City's heritage.

Policy 1: The City will ensure that sites in archaeologically and historically sensitive areas are surveyed prior to development.

Program 1.A: Develop and maintain a database of archaeological and historic resources, incorporating information from the Eastern Information Center (EIC) at the University of California-Riverside, General Land Office Survey, site surveys conducted in the planning area, and other data sources.
Responsible Agency: Planning; Cathedral City Historical Society
Schedule: 2018-2020

Program 1.B: City staff shall require, early in the project review process, the preparation of focused cultural resource surveys in areas of known sensitivity.
Responsible Agency: Planning
Schedule: Ongoing

Program 1.C: The City shall adopt specific standards for the identification, preservation and maintenance of archaeological and historic sites. These standards shall include professional qualifications for persons performing site-specific surveys.
Responsible Agency: Planning
Schedule: 2020

Program 1.D: As part of the development review process, the City shall transmit development applications to the Eastern Information Center for comment.
Responsible Agency: Planning
Schedule: Ongoing

Program 1.E: In the event that archaeological resources are identified during construction, the City shall require that development cease, and a professional archaeologist shall be employed to examine and document the site to determine subsequent actions.
Responsible Agency: Planning
Schedule: Ongoing

Program 1.F: The City shall develop a historic preservation ordinance that establishes a Cathedral City Register of Historic Resources and the criteria and procedures to designate buildings, structures, and objects for inclusion on that Register. The ordinance shall also include procedures for review of proposed changes to designated resources for appropriateness.
Responsible Agency: Planning
Schedule: 2018-2025

Program 1.G: In the event that culturally significant resources are identified during construction, the City shall require that development cease, and the appropriate cultural monitor shall be employed, if not already appointed per AB 52, to examine and document the site to determine subsequent actions.
Responsible Agency: Planning
Schedule: Ongoing

Policy 2
The City shall make every effort to protect sensitive archaeological and historic resources from vandalism and illegal collection.

Program 2.A: Mapping and site-specific information shall be kept confidential, and access shall be given only to those with appropriate professional credentials.
Responsible Agency: Planning
Schedule: Ongoing

Program 2.B: The preservation of sensitive sites or artifacts in-situ should be considered whenever feasible. **Responsible Agency**: Planning
Schedule: Ongoing

Policy 3: The City shall encourage the Cathedral City Historical Society to establish a program to qualify and list locally significant resources on available state and federal registers.

Program 3.A: The City and Historical Society shall cooperate to complete a city-wide cultural resource inventory to include both prehistoric and historic resources.
Responsible Agency: Planning; Cathedral City Historical Society
Schedule: Ongoing

Program 3.B: The City will evaluate and consider participating in the Certified Local Government program in order to secure better local control over the management of cultural resources.
Responsible Agency: Planning; City Council
Schedule: Ongoing

Policy 4: Encourage public participation and appreciation of archaeological and historic resources.

Program 4.A: Continue to coordinate and cooperate with the Agua Caliente Band of Cahuilla Indians in the identification and preservation of sensitive Cahuilla Indian sites and resources, and the continued operation of the tribal Cultural Museum.
Responsible Agency: Planning
Schedule: Ongoing

Policy 5: Consider offering economic incentives, such as low-interest loans from all possible sources, and application/permitting fee reductions or waivers, to property owners to encourage the maintenance of significant historical and cultural buildings and sites.

Program 5.A: Provide property owners with information and guidance on property rehabilitation measures and financing alternatives.
Responsible Agency: Planning; Economic Development
Schedule: Ongoing

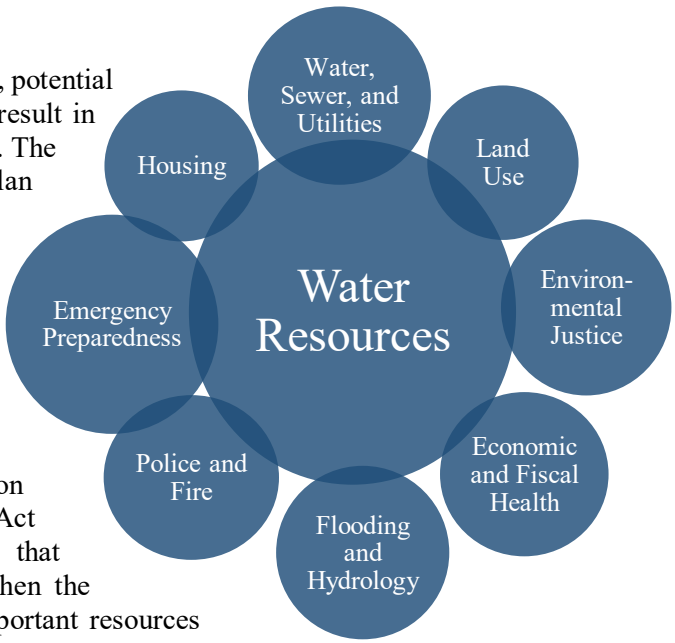
Water Resources Sub-Element

PURPOSE

The purpose of Water Resources Element is to identify water resources within the planning area and serving the planning area, examine existing and projected supply and demand, evaluate opportunities for water protection and conservation, and provide policies and programs that ensure that City's water resources are sustainable and protected over the long-term. Water resource management must consider water quality, supply, and demand to minimize declines and degradation in surface and groundwater resources.

BACKGROUND

The Water Resource Element addresses water availability, potential water resource hazards, and a range of issues that can result in water depletion, pollution, and impacts to the community. The Element is directly related to a number of other General Plan Elements, including: Land Use; Housing; Water, Sewer, and Utilities; Flooding and Hydrology; Police and Fire Protection; Emergency Preparedness; and Economic and Fiscal Health; and Environmental Justice.



The Water Resources Element has been developed to be consistent with other Elements and incorporates the requirements of California Government Code Section 65302(d). This Element also implements Section 21083.2(g) of the California Environmental Quality Act (CEQA), which empowers the community to require that adequate research and documentation be conducted when the potential for significant impacts to water and other important resources exists.

REGIONAL AND LOCAL WATER RESOURCES

Hydrologic Region and Watershed

Cathedral City is located in the Colorado River Hydrologic Region, which includes the Colorado River, one of the longest river systems in the State of California. About 85% of the Colorado River Hydrologic Region's urban and agricultural water supply comes from surface water deliveries from the Colorado River.[4]

The City and surrounding Coachella Valley lie within the Whitewater River Watershed, which is generally defined by the boundaries of the Whitewater Hydrologic Unit as described in the Water Quality Control Plan for the Colorado River Basin Regional Water Quality Control Board (Basin Plan). Much of the watershed consists of sparsely populated mountains, desert, and agricultural lands. Urbanized areas are principally located on the valley floor between Banning and Indio along Interstate 10, and from Palm Springs to Coachella along State Highway 111.

[4] California Water Plan Update 2005 (Chapter 11 Colorado River Hydrologic Region, Volume 3).

The watershed is generally bounded on the south by the San Jacinto and Santa Rosa Mountains, on the west by the Santa Ana Watershed, on the east by the Salton Sea, the Hexie and Cottonwood Mountains, and Southern Mojave Watershed, and on the north east by the little San Bernardino Mountains and Southern Mojave Watershed. The principal drainage through the watershed is the Whitewater River which emanates from the San Bernardino Mountains northwest of the Coachella Valley and drains southeast to the Salton Sea.

Water Sources

The Coachella Valley relies on a combination of local surface water, groundwater, imported Colorado River (CR) water, State Water Project (SWP) exchange water, and recycled water to meet demand. The City is located within the western portion of the Colorado River Watershed, which locally drains into the Salton Sea. Our low desert locale is characteristically dry, with an annual average rainfall of less than 4 inches on the valley floor. Despite the limited surface water supplies, the Coachella Valley is underlain by a substantial subsurface groundwater basin, which has accumulated runoff over millions of years.

The Whitewater River Groundwater Basin generally extends from the Whitewater River in the northwest to the Salton Sea in the southeast. The aquifer is naturally subdivided by fault barriers into subbasins, which are further divided into subareas. Desert Water Agency (DWA) and the Coachella Valley Water District (CVWD) jointly utilize and manage a replenishment program for the local groundwater basin, the Upper Whitewater River Subbasin.

Estimates of groundwater storage in the Upper Whitewater River Subbasin range from 10.5 to 14.2 million acre-feet. In total, the subbasins underlying the Coachella Valley contain approximately 39.2 million acre-feet of water in storage, of which about 28.8 million are within the Whitewater River subbasin. Natural recharge from precipitation and mountain runoff, supplemented with artificial recharge from imported Colorado River and State Water Project water, and recycled water from treatment plants also provide water to the Coachella Valley.

During the twentieth century the Coachella Valley experienced a rapid depletion of its groundwater in storage. DWA and CVWD data show that significant increases in total water demand in the Coachella Water Valley occurred during over the decades from 92,400 acre-feet/year (AFY) in 1936 to 376,000 AFY in 1999. The increase in water demand reflects both municipal water and agricultural irrigation. This is consistent with the growth of two primary economic activities in the Coachella Valley: agriculture and tourism.

Surface Water

Primary surface waterways include the Whitewater River and several streams, including Snow Creek, Falls Creek, and Chino Creek, as well as a number of smaller creeks and washes. Surface water supplies are affected by variations in annual precipitation; therefore, the annual supply is highly variable. The majority of local surface water is derived from runoff from the San Bernardino and San Jacinto Mountains, with lesser amounts from the Santa Rosa Mountains. This runoff either percolates in the streambeds or is captured in mountain-front debris basins where it recharges the groundwater basin.[5]

Groundwater

The majority of the Coachella Valley's domestic water supply is groundwater extracted from subsurface aquifers. The availability of groundwater in an area depends largely upon its geologic, hydrologic, and climatic conditions. In the Coachella Valley, groundwater is found in perched, unconfined, and confined zones in the Coachella Valley Groundwater Basin which is divided into subbasins and subareas based on fault barriers, constrictions in the basin profile, and areas of low permeability. The Cathedral City General Plan planning area is underlain by the Whitewater River Subbasin and Mission Creek Subbasin.

[5] Coachella Valley Water Management Plan Update – Final Report – 2012.

Whitewater River Subbasin

The Whitewater River subbasin is the primary groundwater repository for the Coachella Valley and the City of Cathedral City. Encompassing a major portion of the valley floor, it covers approximately 400 square miles and extends from the junction of Interstate-10 and State Highway 111, to the Salton Sea about 70 miles to the southeast. Its groundwater storage capacity is estimated at 28.8 million acre-feet in the first 1,000 feet below the ground surface.[6]

The subbasin is divided into four distinct subareas: Palm Springs, Thermal, Thousand Palms and Oasis. The Palm Springs subarea underlies most of the City, including lands generally west of Date Palm Drive. Lands generally east of Date Palm Drive are underlain by the upper Thermal subarea. The northernmost portion of the planning area, including lands north of Interstate-10 and south of the Indio Hills, is underlain by the Thousand Palms subarea.

Palm Springs Subarea

The Palm Springs subarea contains approximately 4.6 million acre-feet of groundwater in storage in the first 1,000 feet below the ground surface.[7] The subarea is largely comprised of alluvial fan deposits exceeding 1,000 feet in depth. It is naturally recharged by infiltration of runoff from the San Jacinto Mountains and the Whitewater River, and subsurface inflow from the San Gorgonio Pass and Garnet Hill subbasins.

Thermal Subarea

The Thermal subarea extends from eastern Cathedral City south to the Salton Sea. It contains approximately 19.4 million acre-feet of groundwater in storage in the first 1,000 feet below the ground surface, and is characterized by confined or semi-confined groundwater conditions with free moving water conditions in alluvial fans at the base of the Santa Rosa Mountains.[8]

CVWD well logs have identified two aquifer zones in the Thermal subarea. The lower aquifer zone is estimated to be at least 500 feet and possibly more than 1,000 feet thick, and is composed of Ocotillo conglomerate, which consists of gravels and silty sands interbedded with silt and clay. The upper aquifer zone is similar in composition to the lower aquifer zone, but not as thick. An aquitard layer, composed of fine-grained materials that slow the vertical flow of groundwater, separates the upper and lower aquifer zones and is estimated to be between 100 and 200 feet thick throughout much of the Thermal subarea.[9]

Thousand Palms Subarea

The Thousand Palms subarea contains approximately 1.8 million acre-feet of groundwater in storage in the first 1,000 feet below the ground surface.[10] It extends along the southerly edge of the Indio Hills and is small in comparison to the Thermal subarea. Its southwesterly boundary has been determined based on its distinctive groundwater chemical characteristics. Water in the Thousand Palms subarea is characterized by high concentrations of sodium sulfate, while water in other subareas of the Whitewater River subbasin is generally characterized by calcium bicarbonate. This is largely attributed to limited recharge to the Thousand Palms subarea. The subarea is recharged by limited runoff from the Indio Hills and experiences little, if any, inflow from other subareas or subbasins. Since there is little opportunity for intermixing or "dilution" by water of different chemical compositions, the native sodium sulfate is present in greater concentrations in the Thousand Palms subarea.

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6 Engineer's Report on Water Supply and Replenishment Assessment for the Lower Whitewater River Subbasin Area of Benefit, 2013-2014.

7 Engineer's Report on Water Supply and Replenishment Assessment for the Mission Creek Subbasin Area of Benefit, West Whitewater River Subbasin Area of Benefit and East Whitewater River Subbasin Area of Benefit, Coachella Valley Water District, 2017-2018.

8 Ibid.

9 Ibid.

10 Ibid.

Mission Creek Subbasin

The Mission Creek subbasin underlies the northern portion of the City and Sphere of Influence, north of Interstate 10. It is bounded by the Mission Creek Fault on the north and east, Banning Fault on the south, San Bernardino Mountains on the west, and Indio Hills on the southeast. Groundwater flows in a southeasterly direction within the basin, which has a storage capacity of about 2.6 million acre feet, and is estimated to have recoverable water in the range of about 1 million acre feet.

DOMESTIC WATER SERVICES

The Desert Water Agency (DWA) and the Coachella Valley Water District (CVWD) are responsible for providing domestic water to the General Plan planning area. Development east and north of the Whitewater River occurs within the service boundaries of CVWD, and development west and south of the river occurs within the service boundaries of DWA. These agencies utilize limited surface waters, and wells to extract groundwater from the Whitewater River subbasin. The Water, Sewer, and Utilities Element describes water services in the planning area.

WATER DEMAND

Historic Water Demand

Since the expansion of agricultural activities in the early 1900s, and the emergence of the Coachella Valley as a destination resort area with lushly landscaped golf courses and residential communities, depletion of the groundwater in storage has continued steadily.

Groundwater pumped from the Upper Coachella Valley (generally extending from Whitewater to Palm Desert) is typically used for domestic purposes and golf course irrigation. Water pumped from the Lower Coachella Valley (generally extending from La Quinta to the Salton Sea) is primarily used for domestic purposes and the irrigation of agricultural lands. In 1936, water demand for the Coachella Valley was approximately 96,300 acre-feet per year, of which 87% was agricultural water demand. By 1999, total water demand in the region increased almost seven-fold to 668,900 acre-feet per year, with an agriculture demand of 54% (358,700 acre-feet per year)[11]. Water demand in 2010 increased slightly to approximately 678,600 acre-feet, while the agricultural demand decreased to 317,400 acre-feet per year (47% of total demand)[12]. Although water demand continues to increase with population growth, valley-wide per capita demand agricultural water use has been steadily decreasing.

Recent and Projected Water Demand

Water is supplied to Cathedral City by both the Coachella Valley Water District (CVWD) and Desert Water Agency (DWA). Table OS-6 and OS-7, below, show the recent and projected water deliveries (demand) within the entire CVWD and DWA service areas. The CVWD service area includes lands primarily within Riverside County but also within Imperial and San Diego Counties, and covers an area much larger than Cathedral City. DWA's service area covers the remaining portion of Cathedral City, the City of Palm Springs, and a portion of unincorporated Riverside County.

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11 "Coachella Valley Integrated Regional Water Management Plan," prepared by Coachella Valley Regional Water Management Group, December 2010.

12 "Coachella Valley Water Management Plan Update Final Report," prepared by MWH and Water Consult, January 2012.

Table OS-6
Total Recent and Projected Water Deliveries in CVWD Service Area by Land Use (acre-feet per year)

Year	Potable Water Use			Non-Potable Recycled Water	Total Water Delivered
	Residential	Commercial[1]	Institutional		
2015	55,033	27,507	868	8,749	101,723
2020	67,800	33,900	1,100	14,300	128,900
2025	80,500	40,300	1,300	27,700	163,800
2030	93,300	46,700	1,500	30,800	188,500
2035	105,900	52,900	1,700	33,900	212,800
2040	115,000	57,500	1,800	36,300	230,600

Source: CVWD 2015 Urban Water Management Plan (Table ES-1 and ES-2)
1. Commercial includes "Landscaping" and "Other" water demands per Table ES-1
Note: Table does not include water losses.

Table OS-7
Total Recent and Projected Water Deliveries in DWA Service Area by Land Use (acre-feet per year)

Year	Potable Water Use			Non-Potable Recycled Water	Total Water Delivered
	Residential	Commercial	Institutional		
2015	17,800	7,700	1,200	4,045	33,136
2020	23,000	9,900	1,600	6,100	42,670
2025	24,100	10,400	1,600	7,000	45,266
2030	25,200	10,900	1,700	7,000	47,068
2035	26,300	11,400	1,800	7,000	48,870
2040	27,400	11,800	1,800	7,000	50,460

Source: DWA 2015 Urban Water Management Plan (Table IV-1)
Note: Table does not include water losses.

In 2009, the Water Conservation Act (SB X7-7) was passed under the Urban Water Management Plan Act (UWMP Act) requiring a 20 percent reduction in per capita water use by the year 2020. Both CVWD and DWA's UWMPs have set forth water conservation goals and programs that include increased general awareness of the need for water conservation, tiered billing rates that encourage conservation and wise water use, and turf buy-back programs that rewards property owners for replacing turf with drought-tolerant landscape materials.

GROUNDWATER OVERDRAFT

Despite recent conservation efforts in the DWA and CVWD service areas, the continuing demand for groundwater has led to ongoing overdraft conditions. Well monitoring data indicate that from the 1950s to 1970s, water levels in the Upper Coachella Valley decreased by approximately 50 to 100 feet. Overdraft can result in significant adverse social, environmental and economic impacts, including the increased potential for land subsidence, increased infrastructure and energy costs associated with drilling deeper wells and installing larger pumps, and the threat of a diminishing long-term water supply.

To determine the extent of overdraft in the Coachella Valley, DWA and CVWD compare the change in freshwater storage in the groundwater subbasins over time. The change in freshwater storage is the difference between inflows and outflows of the basin, excluding inflows of poor quality water from the Salton Sea and irrigation flows that are induced by overdraft conditions. Total basin outflows from 1999 to 2035, are summarized in Table OS-8, below.

The upper Whitewater River subbasin, in particular, has been characterized by historically significant declining water table conditions. To more effectively manage this area, CVWD and DWA have designated the subbasin as a "Management Area" and have carefully monitored its inflow and outflow rates. The Management Area consists of the Palm Springs and Thousand Palms subareas of the Whitewater River subbasin, and that portion of the Thermal subarea experiencing a significantly declining water table. All of these subareas underlie, to some extent, the Cathedral City General Plan planning area. Within the Management Area, overdraft is estimated at 35,621 acre-feet per year, or 0.32% per year.

Table OS-8
Comparison of Historical and Future Inflows and Outflows, 1936-2035
(acre-feet)

Water Balance Component	Total Flows 1936	Total Flows 1999	Total Flows 2015	Total Flows 2035
Inflows				
Natural Recharge	32,600	16,800	48,900	48,900
Agricultural Returns	37,200	130,700	130,900	131,300
Domestic Returns	4,300	59,200	78,200	107,200
Golf Course Returns	500	39,300	51,400	51,400
Wastewater Percolation	200	16,500	17,300	25,800
SWP Recharge	0	88,800	49,000	49,000
Inflows from outside area	12,900	11,500	11,400	11,400
Inflows from Upper Valley	59,100	29,400	21,600	7,200
Total Inflows	**146,800**	**392,200**	**408,100**	**432,200**
Outflows				
Groundwater Pumpage	92,400	376,100	450,500	555,100
Flows to Drains	3,200	55,800	45,300	34,200
Evapotranspiration	21,100	4,900	4,800	4,600
Net Flow to Salton Sea Outflows	5,300	-400	-1,300	-2,200
to Lower Valley	59,100	29,400	21,600	7,200
Total Outflows	**181,100**	**465,800**	**520,900**	**598,900**
Annual Change in Storage	-34,300	-73,600	-112,200	-166,700
Annual Change in Freshwater Storage	-41,800	-136,700	-2,948,200	-5,768,500
Cumulative Change in Storage since 1936	-34,300	-1,421,400	-191,000	-254,700
Cumulative Change in Freshwater Storage since 1936	-41,800	-4,684,000	-7,376,200	-11,866,500

Source: Coachella Valley Final Water Management Plan (2002). "Coachella Valley Water Management Plan 2010 Update Final Report," prepared by MWH and Water Consult, January 2012.

The Coachella Valley Water Management Plan (CVWMP) is a baseline document and comprehensive guide for CVWD and DWA to identify the significant groundwater overdraft that has occurred over decades and to project future groundwater overdraft through 2035. The 2002 CVWMP also guides CVWD and DWA efforts to eliminate overdraft, prevent groundwater level decline, protect water quality, and prevent land subsidence.

As shown in Table OS-8 above, total outflows are projected to increase to 598,900 acre-ft/yr by the year 2035 in the 2002 CVWMP. The 2002 CVWMP was updated in 2010 to reduce these projected water outflows and in response to changes in the water planning environment such as increased growth projections and reduced State Water Project (SWP) delivery reliability. The 2010 CVWMP incorporated the following water conservation elements to reduce the water consumption (outflows et al) projected in the 2002 CVWMP:

- Increase surface water supplies for the Valley from outsides sources;
- Substitution of surface water supplies for groundwater (source substitution);
- Groundwater recharge; and
- Monitoring and evaluation of subsidence and groundwater levels and quality to provide the information needed to manage the Valley's groundwater resources.

From these elements, source substitution is an important tool to eliminate groundwater overdraft and ensure full use of the Valley's available surface water supplies. Table OS-9 shows the ranges of reduction in groundwater overdraft due to source substitution programs.

Table OS-9
Range of Groundwater Pumping Reductions Due to Source Substitution

Action	Low Range (AFY)	High Range (AFY)
Mid-Valley Pipeline	37,000	52,000
Agricultural Canal Water Conversion	5,300	32,000
Oasis Area Conversion to Canal Water	0	27,000
East Valley Golf Course Conversion	43,900	51,700
West Valley Golf Course Conversion	15,200	17,800
Canal Water for Indoor Urban Use – East Valley	48,000	90,000
Canal Water Use for Outdoor Use – East Valley	95,000	115,000
Total	**244,400**	**385,500**

Source: "Coachella Valley Water Management Plan 2010 Update Final Report," prepared by MWH and Water Consult, January 2012.

Per 2010 CVWMP, construction of Mid-Valley Pipeline, extension of the Canal water delivery system, and use of Canal water for East Valley Golf Course will reduce the groundwater by to 244,400 in 2045.

The average overdraft for the period 2003 through 2016 was 22,000 acre-feet per year (AFY) (Chart OS-1) which is significantly less than the 2010 Overdraft Status of 70,000 AFY for the period from 2000-2009. This loss in storage is largely attributed to low replenishment at the Whitewater River Groundwater Replenishment Facility (GRF) for the period 2014 through 2016 due to the recent drought. However, implementation of the programs recommended in the 2010 CVWMP Update is expected to result in elimination of storage losses by about 2022. [13]

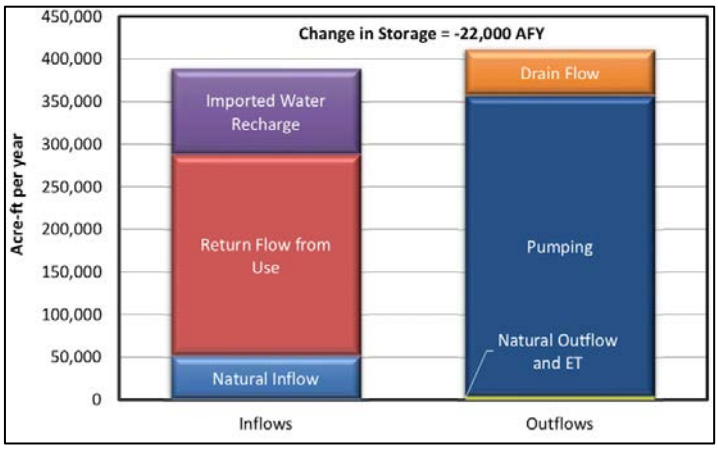

Chart OS-1: Average Groundwater Balance 2003 to 2016.

In 2017, a wet year, total inflows (489,272 AF) were higher than the total outflows (186,680 AF) of the Whitewater River Subbasin due to significant deliveries of replenishment water. Without artificial replenishment, the annual reduction in stored groundwater within the West Whitewater River Subbasin in 2017 would have been approximately -83,402 AF, compared to the annual balance of approximately 302,592 AF.[14] Continued groundwater replenishment is necessary to either eliminate or reduce overdraft in the future.

13 Coachella Valley Water Management Plan 2016 Status Report.
14 CVWD Engineer's Report on Water Supply and Replenishment Assessment 2018-2019 - Mission Creek, West Whitewater River, and East Whitewater River Subbasin Areas of Benefit.

GROUNDWATER REPLENISHMENT PROGRAM

To meet anticipated growing regional demand for domestic water, CVWD and DWA have contracted for State Water Project (SWP) water to supplement groundwater resources. These water contracts entitle CVWD and DWA to water from the SWP. However, SWP facilities are located west of the Coachella Valley and are not accessible for delivery of SWP water. While awaiting SWP system interconnection, CVWD and DWA have entered into a water exchange agreement with the Metropolitan Water District of Southern California (MWD).

The agreement allows CVWD and DWA to exchange their SWP entitlements for like-amounts of Colorado River water, which is transported to the Coachella Valley via MWD's Colorado River Aqueduct. The aqueduct passes through the northern portion of the valley, and is tapped where it crosses the Whitewater River. Exchange water is then diverted to a series of spreading ponds near Whitewater, where it percolates to replenish groundwater supplies. A substantial amount of Colorado River water is also transported to the lower valley via the Coachella Branch of the All- American Canal and serves as an important source of water for agricultural and other irrigation uses.

Since the introduction of the artificial recharge program in 1973, more than 343,398 acre-feet/year of Colorado River water has been diverted to recharge the East Whitewater River subbasin. Temporary halts or severe reductions in recharge waters are necessary when there is inadequate rain or snowfall in the western Sierra Nevada Mountains.

Despite the addition of recharge waters to the groundwater subbasins, groundwater levels in the Coachella Valley continue to decline. DWA and CVWD have sought additional and reliable sources of supply of domestic water, including increasing its Colorado River water entitlements.

In 2003, the Quantification Settlement Agreement (QSA) was signed between CVWD (and indirectly DWA), the Imperial Irrigation District (IID), and MWD, supplementing the 1931 agreement. The QSA provided CVWD with an initial base allotment of 330,000 acre-feet/year, adjusted to 301,000 acre-feet/year. In accordance with the QSA, CVWD has entered into water transfer agreements with MWD and IID that increase CVWD supplies by an additional 158,000 acre-feet/year, which will be effective by 2026.[15]

To alleviate groundwater overdraft, CVWD and DWA oversee three groundwater replenishment facilities. Artificial replenishment, or recharge, is one of the most effective methods available for preserving local groundwater supplies, reversing aquifer overdraft and meeting demand by domestic and commercial water consumers.

CVWD and DWA's groundwater replenishment program has percolated 650 billion gallons of water back into the aquifer to date.[16] This has been possible thanks to a supply of imported water from the Sacramento Bay Delta and the Colorado River, as well as entitlements to captured snow melt from the San Gorgonio Mountains.

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15 Engineer's Report on Water Supply and Replenishment Assessment for the Mission Creek Subbasin Area of Benefit, West Whitewater River Subbasin Area of Benefit and East Whitewater River Subbasin Area of Benefit, Coachella Valley Water District, 2018-2019.

16 Water Wise - Coachella Valley Water District (2017).

RECYCLED WATER

CVWD and DWA have implemented programs to allow tertiary (third stage) treated wastewater to irrigate golf courses, municipal greenbelts, and other landscaped areas. Wastewater typically undergoes two stages of treatment before being released to percolation ponds and being reintroduced into the groundwater table.

CVWD Recycled Water

CVWD operates six (6) Water Reclamation Plants (WRPs). That closest to the City is WRP-10, which currently has capacity to generate up to 15 mgd of tertiary treated water. These facilities provide tertiary treatment, and recycled water is distributed to area golf courses and other large landscape customers. WRP-9 is located in Palm Desert and its secondary effluent is used to irrigate a portion of a golf course.

DWA Recycled Water

In 1989, DWA constructed its Recycled Water Treatment Facility (RWTF) with an initial capacity of 5.0 million gallons per day (mgd). The facility was expanded in 1995 to its present capacity of 10.0 mgd (ultimate capacity of 15.0 mgd). DWA's recycled water system facilities consist of the RWTF, two booster pumping plants, and transmission pipelines. At times of high demand, particularly in the summer months, DWA has supplemented the recycled water supply with potable water. The current recycled water demand is about 4,600 AF/yr, which includes any supplemental potable water (prior to 2015) or non-potable shallow groundwater (beginning early 2015) used to supplement recycled water in meeting said demand.[17]

WATER CONSERVATION

Both DWA and CVWD work closely with the cities in their service areas to limit the amount of water that is used for domestic use and landscaping. Both agencies maintain ongoing turf rebate program (when funds are available) to encourage homeowners to replace turf with low-water demand landscaping. As a result of the adoption of statewide indoor water conservation measures requiring low flush toilets, shower and faucet flow restrictors, and other devices, the average amount of water used inside homes has been significantly reduced.

CVWD adopted water budget-based tiered rates in 2010 to discourage excessive water use and implemented a 20 percent urban water use reduction target by 2020 per the Water Conservation Act SB-X7-7. CVWD also works with the golf course industry to reduce water use at local courses. In 2014, CVWD began a partnership with the Southern California Golf Association and formed the Golf and Water Task Force to reduce overall golf course water use by 10 percent. Key activities being implemented include the establishment of water budgets to limit golf course groundwater pumping and a region-wide golf course turf reduction program. With the large number of communities constructed around golf courses throughout its service area, these conservation programs have reduced impacts of development on the aquifer.

DWA has also implemented several water conservation measures and public outreach programs since 2010. They include water waste prevention ordinances, metering, conservation pricing, public education and outreach, and programs to assess and manage distribution system real loss. DWA also provides a “Hospitality Conservation Program” which is aimed at helping local hotels reduce their water use. This program is free for hotels and provides room cards, door hangers, and pillow cards that allow guests to voluntarily reuse towels and choose when to have their sheets changed.

[17] DWA Urban Water Management Plan (2015).

WATER QUALITY

Water quality in the Coachella Valley is generally good to excellent. According to the annual CVWD Water Quality Report, the detected parameters (e.g. arsenic, barium, chloride, chromium, copper, Dibromochloropropane (DBCP), pH, sodium, and sulfate) do not exceed Maximum Contaminant Levels (MCL) for 2017.[18] Exceptions are primarily limited to perched and semi-perched water tables occurring in the lower valley, where on-going crop irrigation has increased total dissolved solids. Groundwater quality can be affected by a number of things, including the type of water-bearing materials in which the water occurs, water depth, proximity to faults, and presence of surface contaminants.

High TDS concentrations are typically detected near major faults, and have been observed along the San Andreas fault system. In the vicinity of the fault zone separating the Thousand Palms subarea from the Thermal subarea, for example, TDS concentrations have exceeded 1,000 mg/L. However, other evidence indicates that high TDS concentrations may also be associated with the importation of Colorado River water, which is about three times higher in total dissolved solids than natural upper Whitewater River groundwater. The following table illustrates the relative quality of surface water recharging the subbasin, including that imported from the Colorado River.

Mineral content has also increased in the groundwater basin through the importation of Colorado River recharge water, as well as through natural surface water runoff, wastewater percolation, the application of fertilizers, and intrusion of the Salton Sea into the southeastern-most portion of the groundwater basin. CVWD estimates that the quantity of salts added to the groundwater basin increased from approximately 12,000 tons per year in 1936, to about 417,000 tons per year in 2015. For 2035, the projected salt addition to the groundwater basin is 504,000 tons per year.[19] The majority of salts (65%) are associated with agricultural irrigation in the east valley.

WATER POLLUTION

City and regional water resources can be impacts by a wide range of contaminants, beyond the salts and minerals associated with some sources used for irrigation and groundwater recharge. These include high levels of naturally occurring salts and metals associated with nearby faults, particularly north of the Mission Creek fault. However, in the western Coachella Valley and the City, the primary contaminant encountered has been inadequately treated waste from domestic and commercial on-lot septic tanks. Existing and long-term threats to local and regional water quality are further discussed below.

Water Quality and Septic Tanks

In the past, developments in the cove area were connected to on-lot septic tanks. Use of septic tanks in those areas were contaminating the groundwater supplies. The city passed Ordinance 572 § 1 in 2000 to prohibit issuing permits for septic tank installations in the city. City's ordinance (Ord. 626 § 1, 2006) bans septic tank use in all areas of the city and requires developers to install community sewer improvements that subsequently benefit other properties located between the sewer improvements and the point of connection to an existing main, the developer shall be eligible to enter into a reimbursement agreement with the city. The ordinance included provisions to fine homeowners that are not connected to the sewer system.

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18 CVWD Water Quality Report (2016-2017 Annual Review Report).
19 Coachella Valley Final Water Management Plan - Table 4-7 (2002).

In 2008, the City initiated the Cove Improvement District Sewer and Street Project, a two-phase project that would connect Cove residences to the sewer system. All Cove residences are now connected to the sewer system.

The Regional Water Quality Control Board issued a National Pollutant Discharge Elimination System (NPDES) Permit (Municipal Permit) to the municipalities within Riverside County, including the City of Cathedral City. The minimum requirement of the Municipal Permit is to ensure that pollutants discharged from storm drain systems owned and operated by the co-permittees are reduced to the maximum extent practicable. The Municipal Permit outlines the individual responsibilities of the co-permittees, including but not limited to, the implementation of management programs, best management practices (BMPs), and monitoring programs. NPDES regulations also consider the need to conserve natural areas, minimize impervious surfaces, and encourage the use of native or drought-tolerant plant material in landscaping.

To protect water quality and minimize the potential water pollution, water quality regulation was initiated in the 1960s and 1970s with the passage of California's Porter-Cologne Water Quality Control Act and the federal Clean Water and Safe Drinking Water Acts, which prevent discharge of pollutants into water bodies and control the quality of water that comes out of the tap. The State Water Resources Control Board and nine regional boards set and enforce these standards. In the following decades, state and federal laws and regulations have been passed to address additional challenges, including the use of pesticides and other toxic substances, water pollutants from farming, and abandoned hazardous waste sites.

The City of Cathedral City has adopted a Municipal Code 15.10.040 (Discharge of Pollutants) to prohibit any potential pollutants into the local drain system.

COMMUNITY RESILIENCE

Community resilience, as it pertains to water supply and water quality, is a function of supply, behavior, governance, and public policy interventions, in addition to population and its redistribution trends. To assure long-term water resilience, the City should work with local water purveyors to:

- Conduct routine water supply assessments and reduce risks of groundwater overdraft,
- Plan for and practice responding to emergencies,
- Monitor systems for contaminants,
- Manage the water resources effectively,
- Protect water quality from septic tank usage and related potential groundwater contaminations.

CVWD Water Shortage Contingency Plan

The CVWD developed its Water Shortage Contingency Plan during the 1986-92 drought pursuant to the requirements of the Government Code 10632.[20] The Plan was implemented through a series of ordinances with phased water use restrictions and a drought penalty rate structure:

- Ordinance 1414 – Stage 2 – 10% Mandatory Reduction;
- Ordinance 1419 – Stage 3 – 36% Mandatory Reduction;
- Ordinance 1422 – Stage 3 – Adopt Additional Watering Restrictions; 36% Mandatory Reduction; and
- Ordinance 1426 – Stage 3 – Replace Previous Ordinances, 32% Mandatory Reduction.

After the State Water Resources Control Board's (SWRCB's) adoption of revised regulations in May 2016, CVWD repealed these ordinances and adopted Ordinance 1422.3 which establishes Stage 2 restrictions that remains in effect until the SWRCB rescinds its emergency regulations. The key element of CVWD's water shortage contingency plan is an ordinance with phased water use restrictions and a drought-related rate structure as summarized in Table OS-10.

[20] CVWD's 2015 Urban Water Management Plan.

Table OS-10
Coachella Valley Water District's
Water Shortage Contingency Plan Summary

Stage*	% Supply Reduction	Water Supply Condition
I	10	Normal water supplies
II	10	10% reduction in total groundwater and imported supplies relative to long-term average conditions
II	20	25% reduction in total groundwater and imported supplies relative to long-term average conditions
IV	50	50% reduction in total groundwater and imported supplies relative to long-term average conditions

* Stage 1 is voluntary reduction, stages 2 through 4 are mandatory reductions.
The Stage 2 and 3 reduction targets are flexible and may be adjusted by CVWD Board action based on actual supply conditions.
Source: 2015 UWMP, Table ES-6.

DWA Water Shortage Contingency Plan

DWA has established five stages of conservation and water use restrictions to be evoked during water supply emergencies. The stages involve voluntary and mandatory conservation measures and restrictions, depending on the causes, severity, and anticipated duration of the water supply shortage. DWA's contingency stages are provided below.

Table OS-11
Desert Water Agency's Water Shortage Contingency Plan Summary

Stage*	Water Supply Conditions	Supply Shortage (%)	Reduction Goal (%)
1. Voluntary Conservation and Prohibited Uses	Normal Conditions	0	5
2. Alert: Mandatory Conservation Measures	Threatened or existing water supply shortage	10	10
3. Warning: Mandatory Conservation Measures	Water shortage prevents demands from being met	20	20
4. Emergency: Mandatory Conservation Measures	Water shortage requires significant use reduction	25	25
5 .Water Allocations	Water shortage requires allocation of supplies	50	50
* DWA 2015 Urban Water Management Plan (2016)			

FUTURE DIRECTIONS

The wise use and conservation of water resources will continue to be a central theme of community development planning in southern California. Cathedral City plays an important role in the long-term protection of this valuable resource. The city and local water agencies have developed programs intended to increase the use of efficient landscape and irrigation design, water efficient appliances and fixtures, and recycled water. Effective storm water management programs and the protection of local mountain watersheds will also assure preservation of a viable source of groundwater. The City must continue to work closely with neighboring communities and local water purveyors to assure a healthful, long-term supply of water.

GOALS, POLICIES, AND PROGRAMS

Goal 1: A sustainable, long-term supply of clean and healthful domestic water available for existing residents and future growth.

Policy 1: The City shall require the use of water-conserving appliances and fixtures in all new development, as mandated by State law.

Program 1.A: Require the installation and application of water-conserving technologies, in conformance with Section 17921.3 of the Health and Safety Code, Title 20, California Administrative Code Section 1601(b), and other applicable sections of Title 24 of the Public Code.
Responsible Agency: Public Works Department, Planning
Schedule: Continuous

Program 1.B: Provide information to developers, contractors, property owners and other appropriate parties on the usage and benefits of water conserving bathroom fixtures.
Responsible Agency: Planning, Building Department
Schedule: Continuous

Policy 2: Continue to encourage the use of low water-consuming, drought-tolerant landscape plantings as a means of reducing water demand.

Program 2.A: The City shall maintain, update and fully implement a water conserving landscape ordinance, which requires the use of natural and drought-resistant planting materials and efficient irrigation systems in new development.
Responsible Agency: Planning
Schedule: Ongoing

Program 2.B: Coordinate with the Coachella Valley Water District and Desert Water Agency to expand and strengthen educational materials and programs that inform residents of the methods and benefits of water-saving techniques available.
Responsible Agency: Planning, Building Department, CVWD, DWA
Schedule: Continuous

Policy 3 Encourage the expanded use of tertiary treated wastewater as a means of reducing impacts of development on groundwater resources.

Program 3.A Coordinate with CVWD and DWA regarding the continued use and future expansion of recycled and reclaimed wastewater to serve new and existing development projects.
Responsible Agency: Planning, Public Works Department, CVWD, DWA
Schedule: Continuous

Policy 4: The City shall require the connection of all new development to the community sewer system.

Policy 5: The City shall require existing development currently connected to septic tanks to connect to the sewer system when it becomes available.

Program 5.A: Coordinate with CVWD and DWA regarding the feasibility and financing of extending sewer facilities to the unsewered areas of the City.
Responsible Agency: City Manager's Office, Public Works, CVWD, DWA, CRWQCB
Schedule: Continuous

Policy 6: The City shall coordinate with other appropriate agencies to minimize the potential for groundwater contamination within and in the vicinity of the city.

Program 6.A: Coordinate with the Coachella Valley Water District, Desert Water Agency, California Regional Water Quality Control Board and other appropriate agencies to share information on potential groundwater contaminating sources, and develop and maintain a system of record and information sharing with these agencies.
Responsible Agency: City Manager's Office, Planning, CVWD, DWA, CRWQCB
Schedule: Continuous

Program 6.B: Evaluate all proposed land use and development plans for their potential to create groundwater contamination hazards from point and non-point sources, and confer with other appropriate agencies to assure adequate review.
Responsible Agency: Planning, CVWD, DWA, CRWQCB
Schedule: Continuous

Policy 7: Establish and enforce guidelines for the development and maintenance of project-specific, onsite storm water retention/detention facilities in a manner consistent with local and regional drainage plans and community design standards.

Policy 8 The City shall protect aquifer recharge facilities from degradation of water quality and reduction of recharge.

Policy 9: Maximize stormwater filtration and/or infiltration in areas that are not subject to high groundwater by maximizing the natural drainage patterns.

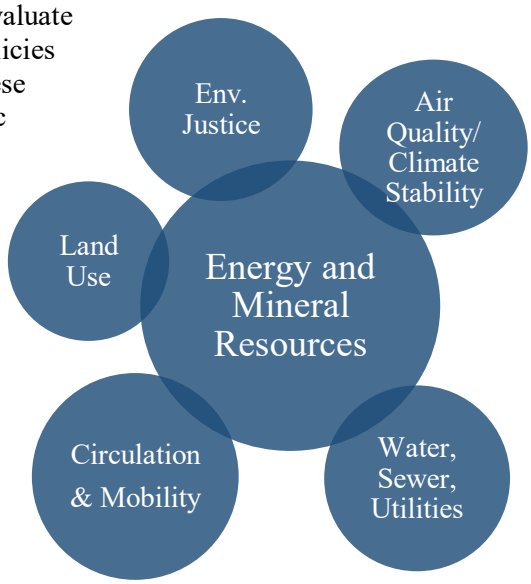
Policy 10: Require new development to protect the quality of water bodies and natural drainage systems through site design, source controls, storm water treatment, runoff reduction measures, and best management practices (BMPs).

Policy 11: Require new development to minimize the use of directly connected impervious surfaces and to retain stormwater run-off caused from the development footprint at or near the site of generation.

Energy and Mineral Resources Sub-Element

PURPOSE

The purpose of the Energy and Mineral Resources Element is to evaluate existing energy and mineral resources in the City, and establish policies that direct the City's development, use, and management of these resources. Energy and mineral resources can facilitate economic development and growth, and present opportunities for energy innovation and conservation. Traditional energy resources currently utilized are in limited supply and the extraction and use of these resources have significant impacts on the environment. Energy shortages and increasing utility rates have become a serious problem in California. This Element is intended to be responsive to the community's dependence on these resources, and to identify effective and safe alternatives and opportunities for more local control.



This Element addresses the community's continued dependence on limited fossil fuel and other finite resources, and the need for evolving and innovative local and regional energy policy. Basic policies address the wise management of the City's mineral resources, and promotion of practices and technologies that result in greater conservation and energy efficiency. This element also guides the City's ongoing shift to reliable energy resources, including solar and wind. In this regard, the Element sets forth goals, policies and programs that provide opportunities for more local control of energy production and distribution, while not negatively affecting its long-term growth.

BACKGROUND

The Energy and Mineral Resources Element is closely related to several other General Plan Elements, including Land Use, Circulation and Mobility, Environmental Justice, Air Quality and Climate Stability, and Water, Sewer, and Utilities. To a lesser degree, this Element is also related to the Housing, Community Design, and Economic and Fiscal Health Elements. California Code Section 65560(b) directs public agencies to preserve energy and mineral resources. Government Code Section 65302(d) mandates the inclusion of resource conservation in General Plans and identifies issues to be addressed in this Element, such as reclamation and resource degradation.

ENERGY RESOURCES

Non-Renewable Energy Sources

Coal

Coal is fossilized plant material preserved by burial in sediments and altered by geological forces that compact and condense it into a carbon-rich fuel. Coal was a prominent source of energy between 1870 and 1950. Coal is still widely used today for electric power generation, in the making of steel and as a chemical feedstock. The burning of coal to generate electricity is one of the largest sources of air pollution in the US, and the public health and environmental costs of coal extraction and use are great.

Natural Gas
Over the past few decades, the development and use of natural gas has grown significantly, which has fed demand and encouraged the application of new technologies, including fracturing the geological formations in which natural gas is found, a process called "fracking". Natural gas continues to be convenient, relatively cheap, and clean burning when compared to coal. Although natural gas reserves will last for many decades, they are finite and as they become scarcer, their prices will rise. Natural gas is easy to transport in large quantities, and major pipelines pass through the Coachella Valley and supply the City and other communities (also see below).

RENEWABLE ENERGY SOURCES

Geothermal
The northwestern portion of the Coachella Valley contains limited geothermal resources, including hot springs in Palm Springs and Desert Hot Springs. These hot water areas result from faults, are primarily focused along the Mission Creek fault but also along the Palm Canyon fault. The geothermal energy produced in Palm Springs and Desert Hot Springs is generally used for commercial spas and therapeutic pools. These resources are limited, are located on private lands and are not used for energy production. Geothermal energy on a utility scale has been found and developed at the south end of the Salton Sea in Imperial County, where more than 500 megawatts of geothermal electric power have been developed.

Wind
The region and portions of the City have seen major development in wind energy; the region is known internationally for the scale of wind resource development. The western Coachella Valley is a proven wind resource area, where strong and sustained winds are channeled through the San Gorgonio Pass and into the valley. Today, the San Gorgonio Pass is home to one of the nation's largest wind farms. More than 2,299 wind turbines, with a total capacity of 665 megawatts.[21] Eight wind turbines currently operated in the City on Edom Hill (BLM lands), with a capacity of approximately 2.5 megawatts. Most turbines are three-blade, horizontal axis machines with galvanized or painted steel towers; larger turbines can exceed 300 feet in overall height.

Solar
The Coachella Valley region is a growing source of electricity generated by solar photovoltaic systems being developed on residential rooftops, commercial and industrial buildings, institutional uses and a wide array of covered parking structures. The City is a leader in the installation of solar PV systems, including large systems at the Civic Center. Stand-alone industrial-scale development of PV systems have been somewhat limited, but have been integrated to some degree with wind turbine development.

[21] United States Wind Turbine Database - USGS Energy Resources, July 2018
https://eerscmap.usgs.gov/uswtdb/viewer/#14.75/33.88239/-116.46539

ENERGY PROVIDERS

Southern California Edison

Southern California Edison (SCE) is the electric service provider for the City of Cathedral City (also see the *Water, Sewer, and Utilities Element*). High voltage transmission lines deliver power to substations where power is stepped down and distributed through lower voltage lines. Residences and businesses then receive power through a transformer, which reduces voltages to safe levels. High voltage transmission lines extend through the City north of, and roughly parallel to, Interstate-10. This corridor is designated Open Space-Other in the General Plan land use plan to protect its use as an important local and regional utility resource.

The Gas Company

Natural gas is provided to the City by The Gas Company. The Coachella Valley contains no retrievable sources of natural gas. Rather, natural gas supplies are transported from Texas to the Coachella Valley through three east-west trending gas lines, which cross the valley near Interstate-10 and continue west to Los Angeles (also see the *Water, Sewer, and Utilities Element)*. Two entities have taken the lead in the research, development, and implementation of new energy resource programs in the Valley: SunLine Transit Agency and College of the Desert (COD). Several years ago, SunLine converted all its vehicles to compressed natural gas, including its buses, vans and service vehicles. Since the conversion, city vehicles, post office delivery trucks and taxicabs have also been converted to compressed natural gas. The conversion from diesel fuel to compressed natural gas represents an important reduction in air emissions generated by vehicles. COD has integrated renewable energy technologies, primarily photovoltaic (PV), on campus buildings and parking structures; the application of solar thermal technology and passive solar design has also been implemented throughout the campus.

Baseline analysis conducted for the Year 2010 and presented in the City's Energy Acton Plan, indicates that the municipal (City government) consumption of natural gas totaled 8,899± therms. In 2010, the city fleet was comprised of 143 vehicles and was driven 1,173,258 miles and consumed 67,845 therms bringing the municipal total 2010 natural gas consumption to 76,744± therms. By comparison, in 2010 the commercial sector consumed 1,255,176± therms and the residential sector 6,414,659± therms. Residential use of natural gas is by far the highest and provides significant opportunities for conservation.

ENERGY USE AND CLIMATE CHANGE

One of the most pressing problems locally and globally is the reduction in the emission of greenhouse gases (GHGs), which are contributing to the warming of the planet and causing wide spread climate change. Fossil fuel use, including coal, oil and natural gas, comprises the largest source of GHGs. The City has decided to "act locally" to help address this global crisis, which has included taking a measure of where the City sits with regard to GHG emissions. In 2013, the City of Cathedral City completed its first Greenhouse Gas Inventory. The major findings are as follows:

- Communitywide emissions in 2010 total 236.83 tonnes CO2e
- This level is 29.1% above 1990 target levels referenced in AB 32 – 183,424 tonnes CO2e.
- The 2010 municipal contribution to community's emissions was 1.3% or 3,104 tonnes CO2e.
- At 4.6 tonnes per capita, Cathedral City has low emissions relative to its neighboring cities.
- City transportation emissions are comparatively high due to a larger segment of Highway 111.

Cathedral City is an active member of the Desert Cities Energy Partnership (DCEP), a partnership of Southern California Edison (SCE), Southern California Gas Company (SCG), Imperial Irrigation District (IID), the Agua Caliente Band of Cahuilla Indians, and the cities of Blythe, Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, and Palm Springs, managed by the Coachella Valley Association of Governments (CVAG).

As part of DCEP activities, CVAG received Southern California Edison "Flight 5.6" funding for the Strategic Plan Strategic Program. Developing greenhouse gas inventories for DCEP project cities programmatic activities proposed by and funded by SCE. This umbrella of sustainably is known and called the Green for Life project.

ENERGY REDUCTION AND CONSERVATION PROGRAMS

The City continues to develop and participate in a wide variety of energy management and conservation programs. These include the innovative *Green for Life* program, which provides the City and its businesses and residents with data, information and resources to reduce energy use and associated costs (also see the Health and Sustainable Community Element). Other related City programs include the *Property-Assessed Clean Energy* (PACE) program that facilitates financing of energy conservation and production for residences and businesses. The City's *Climate Action Plan* (CAP) and *Energy Action Plan* (ECP) include a wide range of energy management, conservation and production programs that serve to reduce energy use, costs and GHG emissions, and strengthen the local economy.

SCE Energy Programs
SCE offers rebates for the installation of energy efficient equipment, including air conditioning units, refrigerators and even light bulbs. For commercial customers, the Automatic Power Shift program allows substantial savings from June through September, in exchange for allowing SCE to remotely cycle-off selected air conditioning units during peak periods of heavy use and potential power outages.

The Gas Company Programs
The Gas Company services include detailed technical assistance and incentive programs that address a wide range of use issues, land use planning, service extension, and use-specific technical consulting/problem solving. In addition, The Gas Company has developed a wide range of energy management, conservation, and equipment retrofit programs for its customer base. These programs include core nonresidential customers equipment rebates of up to 20% of the cost of qualifying equipment. Assistance in facilities planning and analysis is also provided to maximize energy efficiency and cost-effective equipment purchases and operations.

COMMUNITY RESILIENCE

Sustainability and resilience are recurring themes throughout the General Plan. While the focus has been on sustainable energy and climate change, resiliency also has an economic side and benefit that ranges from increases in disposable household income to the creation of local jobs supporting the solar and wind industries. A resilient community and economy is one that is served by a diversity of energy sources that have no or minimal impacts on the environment. Cathedral City will continue to make investments in locally grown renewable energy and energy efficiency at the municipal, business and residential level.

MINERAL RESOURCES

California Public Resources Code section 2005 defines minerals as "any naturally occurring chemical element or compound, or group of elements and compounds, formed from inorganic processes and organic substances, including, but not limited to, coal, peat, and bituminous rock, but excluding geothermal resources, natural gas, and petroleum." Mineral resources can be used for a variety of uses, making them important to community development and commerce. The importance and value of mineral resources, coupled with their limited availability, make careful planning a necessity. Moreover, the mining, processing, and distribution of mineral resources can have broad and varied implications on the environment. Surface mining, for example, can scar the landscape for hundreds of years if a mine is not adequately reclaimed.

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) of 1975 was established to deal with these issues. Its objective is twofold: acknowledging that the extraction of minerals is essential to maintaining a strong economy, while concurrently addressing environmental protection and protection of public health and safety from mining impacts.

Locally Important Mineral Resources

The region and especially the surrounding mountains have a history of mining that dates back to the late 1800s. Mines in the Santa Rosa and San Jacinto National Monument have produced gold, asbestos, beryllium, limestone, tungsten, copper, tourmaline, and garnet. With the exception of limestone, however, these mineral deposits have not been extensively mined, are limited, or are not precisely known.

Mountain ranges and eroding hills surrounding the Coachella Valley have filled the Valley with significant amounts of sand and gravel, known collectively as aggregate. Aggregate is used for asphalt, concrete, road base, stucco, plaster, and other similar construction materials. The Palm Springs Production-Consumption (P-C) Region is a 631 square mile area in the Coachella Valley that is heavily mined for aggregate. According to the California Geological Survey, the Palm Springs P-C Region has 30,072 acres classified as land where significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists. The Palm Springs region contains 3.2± billion tons of aggregate resources.

The California Geological Survey collects and analyzes information about the state's mineral resources. As set forth in Section 2761(b) of SMARA, the State Geologist classifies land for mineral resources solely on the basis of geologic factors, regardless of existing land use and land ownership. Mineral land classifications for Portland cement concrete (PCC)-grade aggregate materials in the Coachella Valley were mapped by the State Geological Survey in 1988 (Special Report 159) and updated in 2007 (Special Report 198). Areas subject to mineral land classification studies are divided by the State Geologist into Mineral Resource Zone (MRZ) categories that reflect varying degrees of mineral resource potential. The MRZ categories are briefly described below.

MRZ-1: Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.

MRZ-2 (used in Special Report 159): 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 zone shall be applied to known mineral deposits or where well-developed lines of reasoning, based upon economic-geologic principles and adequate data, demonstrate that the likelihood for occurrence of significant mineral deposits is high.

MRZ-2a: Areas underlain by mineral deposits where geologic data indicate that significant *measured or indicated* resources are present. Contains known economic mineral deposits.

MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant *inferred* resources are present.

MRZ-3: Areas containing *known* or inferred mineral occurrences of undetermined mineral resource significance.

Mineral land use classification maps of the Coachella Valley show that Mineral Resource Zone 3 (MRZ-3) applies to the City. MRZ-3 generally refers to areas where development has limited the ability to determine the presence or amount of mineral resources.

The Indio Hills area north of the community of Thousand Palms and near the city's sphere-of-influence (SOI), contains an area designated MRZ-2a PCC-3. This 50.5±-acre site was reclassified from MRZ-2 in Special Report 159 to MRZ-2a for PCC-grade aggregate in Special Report 198. The E.L. Yeager Construction Company is permitted to mine in this area. There are no other mapped or exploited mineral resources in the City or its SOI.

Local Aggregate Demand

According to Special Report 198, the average local annual per capita consumption rate for aggregate in the Palm Springs Production-Consumption Region is 9.6 tons. The State Geological Survey anticipates that demand will probably stabilize at a lower rate as the local market matures, but demand from outside the region may offset to some degree local declines. Total regional PCC-grade aggregate reserves (available permitted resources) were 167 million tons in 2005 (latest data available). They are expected to be sufficient to satisfy local demand through the year 2038, barring any unforeseen events affecting construction like a major economic recession or massive urban renewal.

While the Coachella Valley has an abundant, high-quality local supply of PCC-grade aggregate, a desirable commodity for development markets, transportation costs are a major component affecting cost competitiveness. Given the widespread deposition of aggregate materials in southern California demand for local resources is expected to remain largely local,

FUTURE DIRECTIONS

Energy and mineral resources are critical to local, regional, and broader economies. The manner in which these resources are mined, farmed, or otherwise collected can cause environmental degradation, impact wildlife habitat, affect water and air quality, and contribute to adverse public health effects. Whether applied to the generation of electricity or the mining of sand and gravel, the future of both mineral and energy resources is dependent on the wise and careful use of traditional resources, and our pursuit of new and renewable options. The rising economic and environmental costs associated with energy production and use are forcing communities and countries to develop new energy strategies and policies. A community-based approach to energy problem-solving can be a good alternative to the energy crisis in California.

GOALS, POLICIES AND PROGRAMS

Goal 1: The appropriate use of energy and mineral resources to assure that both limited and renewable resources are sustainable in the long-term.

> **Policy 1:** Encourage conservation in the planning and construction of urban uses and in the regional transportation system.
>
> > **Program 1.A**: The City shall provide developers with available data on energy efficient and conserving building design and technologies. This information the City's *Green for Life* handbooks and may also include information from utilities, trade organizations, state agencies and other system resources that can enhance overall energy conservation.
> > **Responsible Agency:** City Manager's Office
> > **Schedule**: Continuous

Program 1.B: Encourage Southern California Edison and other providers to facilitate the transfer of data, information and technologies to enhance public education on energy conservation.
Responsible Agency: City Manager's Office
Schedule: Continuous

Program 1.C: The City shall participate in the energy management and conservation efforts of SunLine Transit and encourage the expanded use of compressed natural gas, hydrogen fuel cell and other alternative-fuel buses with bike racks and other system improvements that enhance overall energy efficiency and conservation.
Responsible Agency: City Manager's office, Economic Development Department, City Council.
Schedule: Continuous

Policy 2: The General Plan and other City documents, such as the 5 Year Capital Improvement Program, shall assure an efficient circulation system and land use pattern in the City which minimizes travel.

Program 2.A: Amendments to the land use map and Land Use Element shall consider the provision of convenient neighborhood shopping, medical and other professional services appropriately located to minimize travel and facilitate the use of alternative means of transportation.
Responsible Agency: Planning
Schedule: Continuous

Policy 3: Support long-term strategies, consistent with state and federal legislation and regulations, that assure affordable, reliable and environmentally sustainable production and delivery of electrical power to the community.

Program 3.A: The City shall participate in regional efforts to provide affordable, dependable electric power to its residents and businesses, including CVAG efforts and regular consultation with SCE.
Responsible Agency: Planning, City Council, CVAG.
Schedule: Ongoing

Policy 4: Continue to proactively support and participate in local and regional efforts to develop and operate alternative systems that take advantage of local wind, solar and other renewable resources.

Program 4.A As a part of *Green for Life*, *Energy Action Plan* and other City programs, continue to evaluate the use of co-generation and other energy management systems for new larger industrial and commercial businesses in the City as they arise.
Responsible Agency: Planning; Building Department
Schedule: Continuous

Policy 5: To further reduce nonrenewable energy use in transportation, the City shall facilitate provision of information on bike and NEV routes, bus routes and the transit network, ridesharing and ride-booking services to residents and businesses.

Program 5.A: Facilitate the development of a community-wide and regional multi-modal path system to provide residents and visitors with alternatives to motor vehicle transportation.
Responsible Agency: Planning; City Council
Schedule: Ongoing

Program 5.B: The City shall make available information on ridesharing, ride-booking and SunLine Transit services available to residents and businesses, throughout the City.

Responsible Agency: Public Works, SunLine Transit
Schedule: Ongoing

Policy 6: The City shall continue to explore and update policies that increase energy efficiency and the use of alternative sources for the economic, environmental and social benefit of the City.

Program 6.A: Establish a revolving loan fund for internal efficiency upgrades. Rules for use of the fund and its reimbursement will be established.
Responsible Agency: Public Works
Schedule: Ongoing

Program 6.B: Implement the City's Commissioning/Retro-Commissioning practice and procedures to identify and plan for maintenance and enhancement of energy and cost efficiencies, as well as ensuring optimal comfort and human satisfaction in City workspaces.
Responsible Agency: Public Works, Building Department
Schedule: Ongoing

Program 6.C: The City will leverage state and federal incentives for energy efficiency to augment incentives provided by Southern California Edison, Southern California Gas, and others. Consider energy efficiency in capital improvement budget discussions.
Responsible Agency: Public Works, Building and Safety
Schedule: Ongoing

Program 6.D: The City shall seek grants and partnerships to increase the development of solar PV systems, and the continued market growth in Electric Vehicle and Compressed Natural Gas vehicles, and associated charging/refueling stations at City facilities and elsewhere throughout the community.
Responsible Agency: Planning, Public Works
Schedule: Ongoing

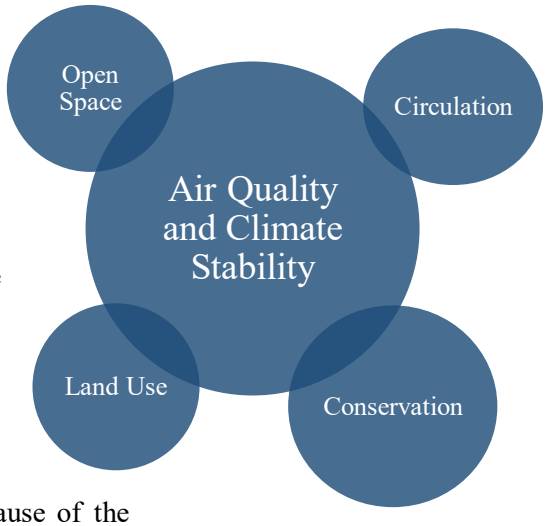
Air Quality & Climate Stability Element

PURPOSE

The intent of the Air Quality and Climate Stability Element is to provide background information on the physical and regulatory environment affecting air quality and greenhouse gas emissions in the City and the region. The Element also identifies goals, policies, and programs that are meant to balance the City's actions regarding land use, circulation, conservation and other civic issues with their potential effects on air quality and greenhouse gas emissions. This Element and local and regional air quality planning efforts are intended to address climate change, greenhouse gas reduction efforts, and ambient air quality standards set forth by the federal Environmental Protection Agency (EPA) and the California Air Resources Board (CARB).

BACKGROUND

The Air Quality and Climate Stability Element is directly related to the Land Use Element in its association with land use types and intensities, and with regard to the proximity of sensitive receptors to sources of pollutants. This Element is also related to the number, length, and timing of traffic trips, which are discussed in greater detail in the Circulation Element, as well as the amount of open space planned for preservation in the Open Space and Conservation Element. The Economic Development Element, which addresses the protection of natural resources important to the local economy, is also related to issues of air quality.



Air Quality

Air quality is a major concern in southern California, largely because of the potentially significant health effects caused by regional and local air pollutants. Concerns regarding air pollution have led to state and federal legislation and regulations mandating regional plans to improve air quality. Federal and state agencies have adopted air quality standards for a variety of pollutants. In 1971, the Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS) for managing criteria pollutants. The California Clean Air Act (CCAA) became effective on January 1, 1989 and mandated health-based air quality standards at the state level.

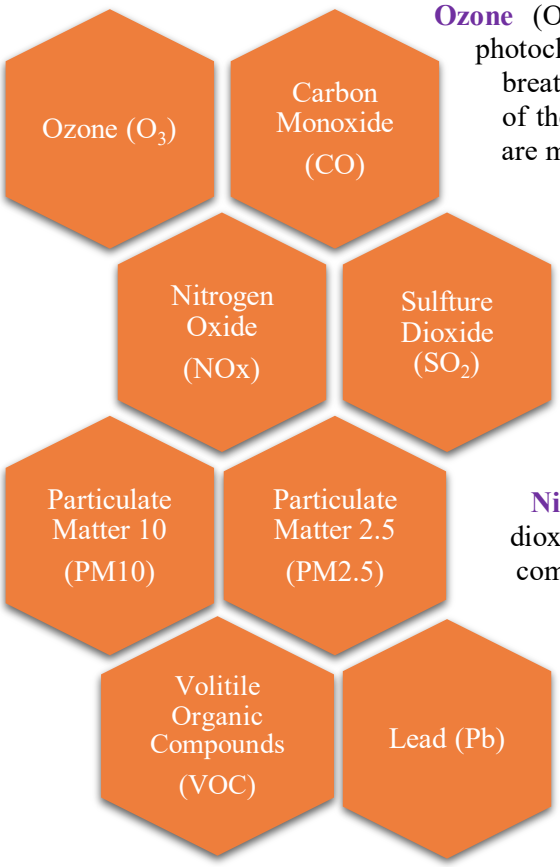
The California Air Resources Board (CARB) is responsible for enforcing state standards, which are generally more stringent than federal standards. One of the ways standards are applied is through State Implementation Plans (SIP), which are prepared to assist regional air quality management districts in meeting the federal and state ambient air quality standards in accordance with the deadlines specified in the Federal Clean Air Act (CAA) and emission reduction targets of the California Clean Air Act.

Regional and local agencies have also assumed some responsibility for assuring that state and federal air quality standards are achieved. The City of Cathedral City is located within the Salton Sea Air Basin (SSAB), a geographic region whose air quality and pollution control actions are regulated and monitored by the South Coast Air Quality Management District (SCAQMD). The SCAQMD is responsible for the development of the regional Air Quality Management Plan, a multi-tier effort to regulate pollutant emissions from a variety of sources.

Cathedral City is also involved in regional management of air quality through various actions taken by the Coachella Valley Association of Governments (CVAG) and the Southern California Association of Governments (SCAG). The City has adopted its own Fugitive Dust Emissions Ordinance to further local control of excessive fugitive dust and other particulate emissions, especially those associated with urban development.

CRITERIA POLLUTANTS

Federal and state air quality standards established for criteria pollutants are designed to protect the general population and especially that segment of the population that is most susceptible to respiratory distress or infection, including the elderly, children, asthmatics, or those who are weak from disease or illness. The following air pollutants are collectively known as criteria air pollutants and are defined as those pollutants for which established air quality standards have been adopted by federal and state governments:



Ozone (O_3) is a pungent, colorless, toxic gas, and a component of photochemical smog. Exposure to ozone can result in diminished breathing capacity, increased sensitivity to infections, and inflammation of the lung tissue. Children and people with pre-existing lung disease are most susceptible to the effects of ozone.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas and a byproduct of the partial combustion of fossil fuels, most notably from automobiles and other motor vehicles. In high concentrations, carbon monoxide can contribute to the development of heart disease, anemia, and impaired psychological behavior. Individuals that have heart and blood diseases, smokers, babies in utero, and people with chronic hypoxemia are most susceptible to the effects of CO.

Nitrogen Oxide (NO_x) includes Nitric oxide (NO) and Nitrogen dioxide (NO_2), which are the primary oxides of nitrogen and, combined, are known as nitrogen oxides. These oxides are produced at high temperatures during combustion as byproducts of motor vehicles, power plants, and off-road equipment. NOx contributes to the formation of ozone serving as the primary receptor of ultraviolet light and initiating the photochemical reaction. Short-term exposure to nitrogen dioxide can result in airway constriction, diminished lung capacity, and is highly toxic by inhalation. Populations living near roadways are more likely to experience effects of nitrogen oxides due to elevated exposure to motor vehicle exhaust.

Sulfur Dioxide (SO_2) results from the combustion of high-sulfur content fuels, such as coal and petroleum. Sources include motor vehicle fuel combustion, chemical manufacturing plants, and sulfur recovery plants. Sulfur dioxide is a colorless, pungent, extremely irritating gas that can cause airway constriction and severe breathing difficulties in asthmatics. High levels of exposure can cause fluid accumulation in the lungs, damage to lung tissue, and sloughing off of cells lining the respiratory tract.

Particulate Matter (PM_{10} and $PM_{2.5}$) consist of fine suspended particles of ten microns or smaller in diameter, and are the byproducts of road dust, sand, diesel soot, windstorms, and the abrasion of tires and brakes. The elderly, children, and adults with pre-existing respiratory or cardiovascular disease are most susceptible to the effects of PM. Elevated PM_{10} and $PM_{2.5}$ levels are also associated with an increase in mortality rates, respiratory infections, occurrences and severity of asthma attacks, and hospital admissions.

Volatile Organic Compounds (VOC) are also known as Reactive Organic Gas (ROG). This class of pollutants has no state or federal ambient air quality standards and is not classified as criteria pollutants; however, they are regulated because they are responsible for contributing to the formation of ozone.

Lead (Pb) occurs in the atmosphere as particulate matter resulting from the manufacturing of batteries, paint, ink, and ammunition. Exposure to lead can result in anemia, kidney disease, gastrointestinal dysfunction, and neuromuscular and neurological disorders. Babies in utero, infants, and children are especially susceptible to health risks associated with exposure to lead by impacting the central nervous system and cause learning disorders.

AMBIENT AIR QUALITY STANDARDS

Both the federal and California governments have established air quality standards for the criteria pollutants described above. The standards are designed to protect segments of the population that are most susceptible to respiratory distress or infection, including asthmatics, the elderly, children, and those who are weak from disease or illness. In general, state standards are more restrictive than federal standards, particularly with regard to PM_{10} and sulfur dioxide. A comparison of state and federal ambient air quality standards is provided in the following table.

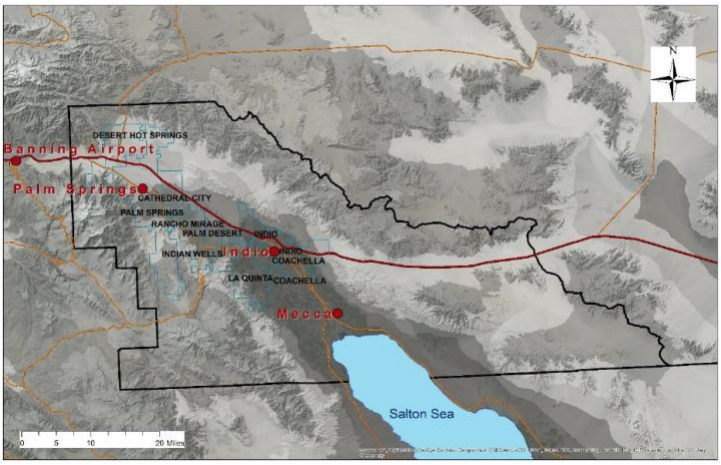
Table AQ-1
State and Federal Ambient Air Quality Standards

Pollutant	State Standards		National Standards	
	Averaging Time	Concentration	Averaging Time	Concentration
Ozone (O_3)	1-hour 8-hour	0.09 ppm 0.07 ppm	1-hour 8-hour	None 0.070 ppm
Carbon Monoxide (CO)	1-hour 8-hour	20.0 ppm 9.0 ppm	1-hour 8-hour	35.0 ppm 9.0 ppm
Nitrogen Dioxide (NO_2)	1-hour AAM	0.18 ppm 0.030 ppm	1-hour AAM	0.10 ppm 0.053 ppm
Sulfur Dioxide (SO_2)	1-hour 24-hour AAM	0.25 ppm 0.04 ppm None	1-hour 24-hour AAM	0.075 ppm 0.14 ppm 0.03 ppm
Particulate Matter (PM_{10})	24-hour AAM	50 µg/m^3 20 µg/m^3	24-hour AAM	150 µg/m^3 None
Particulate Matter ($PM_{2.5}$)	AAM 24-hour	12 µg/m^3 None	AAM 24-hour	12 µg/m^3 35 µg/m^3
Lead	30 day Avg.	1.5 µg/m^3	3 month Avg.	0.15 µg/m^3
Visibility Reducing Particles	None	None	None	None
Sulfates	24-hour	25µg/m^3	None	None
Hydrogen Sulfide	1-hour	0.03 ppm	None	None
Vinyl Chloride	24-hour	0.01 ppm	None	None

Source: California Air Resources Board, 1/3/19.
Notes: ppm = parts per million; ppb= parts per billion; µg/ m^3 = micrograms per cubic meter of air;
AAM = Annual Arithmetic Mean;

To determine whether existing ambient air quality complies with the standards shown above, the SCAQMD operates and maintains regional air quality monitoring stations throughout its jurisdiction. The City of Cathedral City is located within Source Receptor Area (SRA) 30, which includes monitoring stations in Indio, Palm Springs, and Mecca. These stations monitor contaminant levels and meteorological conditions on a daily basis.

MAJOR POLLUTANT EMITTERS



Major roadways and rail corridors are the greatest source by far of air pollutants. Motor vehicle and rail traffic pollution causes asthma attacks in children, and may cause a wide range of other effects including: the onset of childhood asthma, impaired lung function, premature death and death from cardiovascular diseases and cardiovascular morbidity. The area most affected, they concluded, was roughly the band within 0.2 to 0.3 miles (300 to 500 meters) of the highway.[1]

Adults living closer to the road—within 300 meters—may risk dementia. In 2017, a Canadian study of Ontario residents found that those who lived close to heavy traffic had a higher risk of dementia, although not for Parkinson's disease or multiple sclerosis. The strongest association were among those who lived closest to the roads (less than 50 meters), who had never moved and who lived in major cities.[2] A study of older men in 2011 also found that long-term exposure to traffic pollution increased their risk of having poor cognition.[3]

SENSITIVE RECEPTORS

Sensitive receptors are those persons or land uses that may be subject to respiratory stress and/or significant adverse impact as a result of exposure to air contaminants. The California Air Resources Board has indicated that the following segments of the population should be considered sensitive receptors: children under 14; seniors over 65; athletes; and people with cardiovascular and chronic respiratory diseases. Sensitive land uses include hospitals, nursing and retirement homes, schools, playgrounds, parks, athletic facilities, and residential and transient lodging facilities.

REGIONAL CLIMATE AND METEOROLOGY

The air quality of a particular locale is a function of the amount of pollutants emitted and dispersed and the climatic, meteorological, and geophysical conditions that reduce or enhance the formation of pollutants. The Coachella Valley is a low-lying desert basin characterized by low annual rainfall and low humidity. The valley is surrounded on the north, west, and south by mountain ranges that physically isolate the region from coastal influences. Temperatures can exceed 120°F in summer months.

The valley is occasionally susceptible to air inversions, in which a layer of stagnant air is trapped near the ground where it is further loaded with pollutants. This process, when combined with chemical aerosols and other pollutants emitted by automobiles, furnaces and other sources, can result in substantial haziness. Heat and bright sunshine can further act on this mix of pollutants to create photochemical smog.

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1 Health Effects Institute Panel on the Health Effects of Traffic-Related Air Pollution, *Traffic-Related Air Pollution: A Critical Review of the Literature on Emissions, Exposure, and Health Effects.* Health Effects Institute: Boston, 2010.

2 Chen H, KJC, Capes R, et al. Living near major roads and the incidence of dementia, Parkinson's disease and multiple sclerosis: a population-based cohort study. *Lancet*. 2017. Published online http://dx.doi.org/10.1016/5014-6736(16)32596-X.

3 Power MC, Weisskopf MG, Alexeeff SE, et al,. Traffic-related air pollution and cognitive function in a cohort of older men. *Environ Health Perspect* 2011;119:682–687. doi:10.1289/ehp.1002767

Wind direction and speed are also important climatological components that affect air quality in the Coachella Valley. The valley is subject to strong and sustained winds. As the desert floor heats up it draws cooler coastal air masses into the valley through the narrow San Gorgonio Pass, generating strong winds that cross the most erosive areas of the valley. Each year, winter rains cause erosion of the adjacent mountains, and water runoff produces and sorts substantial deposits of gravel and sand throughout the major drainage areas in the valley. These materials can become suspended in the air during strong wind events.

Most of the land within Cathedral City's incorporated boundaries is located within the "Active Blowsand Hazard Zone" designated by CVAG in the 1990 "State Implementation Plan for PM_{10} in the Coachella Valley." This zone identifies land that, based on location or soil characteristics, is subject to soil wind erosion, or to potential sand accumulation and/or abrasion.

These winds transport and deposit large quantities of sand and dust on buildings, fabrics, and automobiles, thereby reducing visibility and damaging property. Extensive wind-borne soil can dirty streets, pit windshields and obliterate landscaping. Dust on vegetation can interfere with plant respiration and stunt plant growth. The adverse health effects in humans can be severe and include reduced lung capacity.

REGIONAL POLLUTANTS OF CONCERN

Analysis of the ambient air quality data collected at the Palm Springs, Indio, and Mecca monitoring stations indicates that ozone and PM_{10} are the most prevalent air pollutants in the Coachella Valley. Detailed air quality analysis and monitoring data can be found in the GP DEIR per *§65302.1(c)(1)*.

Ozone Emissions

Under the Federal Clean Air Act, the Coachella Valley portion of the Salton Sea Air Basin (SSAB) is classified as a "severe-15" O_3 non-attainment area for the 8-hour state standard[4], which means that the region must come into compliance with Federal ozone standards by December 31, 2027. With future emission controls, the Coachella Valley will achieve the 2008 8-hour federal O_3 standard by 2024.

SCAQMD studies indicate that most O_3 is transported to the SSAB Basin from the upwind South Coast Air Basin (SCAB). It is difficult to quantify the amount of ozone contributed from SCAB; however, reduced O_3 concentration in the SSAB depends, in part, upon reduced ozone emissions in the South Coast Air Basin.

PM_{10} Emissions

Historically, PM_{10} levels in the Coachella Valley have been elevated due to geographic and meteorological conditions, and the generation of fugitive dust emissions from grading and construction activities, agricultural practices, and strong wind. The finer materials, including sand and silt, can be picked up and transported by the wind and are referred to as "blowsand." PM_{10} particles associated with blowsand are of two types: (1) natural PM_{10} produced by direct particle erosion and fragmentation, and (2) secondary PM_{10} whereby sand deposited on roadways is further pulverized by motor vehicles and then re-suspended in the air by those vehicles. The project is located in a PM_{10} non-attainment area for the state and federal PM_{10} standard.[5]

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4 "EPA Green Book Designated Non-attainment Areas for All Criteria Pollutants," as of December 2017. Accessed January 2018

5 Ibid.

The SCAQMD developed "Guidelines for Dust Control Plan Review in the Coachella Valley," which is intended to supplement local dust control ordinances. Should the region continue to fall short of federal PM_{10} standards, the U.S. EPA could impose more stringent regulations or sanctions on local jurisdictions.

The City of Cathedral City adopted its own Fugitive Dust Emissions Ordinance, which sets forth requirements for the control of dust during construction and demolition activities, as well as on certain land uses, such as unpaved roads and parking lots. In addition, the City secured grant funding to purchase alternative fuel vehicles and establish of a compressed natural gas (CNG) fueling station to service its vehicle fleet.

CLIMATE STABILITY

Until the 2nd half of the 20th Century, air pollution was been defined as chemical, physical, or biological processes that modify the chemistry and other characteristics of the atmosphere. The primary contributor to air pollution has been and continues to be the burning of fossil fuels in transportation, power and heat generation, and industrial processes. The byproducts from the combustion of fossil fuels can contain a number of air polluting substances. These emissions are responsible for the poor air quality that is evident in industrial centers worldwide.

GREENHOUSE GASES

Components of the atmosphere (carbon dioxide, methane, nitrous oxide and fluorinated gases) that contribute to the greenhouse effect

Some air polluting agents are also greenhouse gases (GHG) such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases (hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride), which are released into the atmosphere through natural processes and human activities. These gases are termed greenhouse gases due to their shared characteristic of trapping heat, and are believed to be responsible for the global average increase in surface temperatures of 0.7-1.5 °F that were observed during the 20th century.[6] The quantity of greenhouse gases in the atmosphere has increased significantly over a relatively short period.

Carbon dioxide is the greenhouse gas that has raised the most concern of atmospheric scientists due to current atmospheric levels, current and projected emission levels, and the highly correlated temperature regression curve that has been observed, predicting a future path of rising carbon dioxide levels. In 2018, carbon dioxide concentrations in the atmosphere were around 408 ppm[7]. Comparatively, prior to the Industrial Revolution, about 250 years ago, CO_2 levels were 278 ppm, and over the past 650,000 years carbon dioxide levels have fluctuated between 180 and 300 ppm, making present-day atmospheric CO_2 levels substantially greater than at any point in the past 650,000 years.[8]

California is the second largest greenhouse gas contributor in the U.S. and the sixteenth largest in the world. In 2004, California produced 492 million metric tons of CO_2 equivalent (MMTCO2e), which was approximately 7% of all U.S. emissions. However, in 2015, California's total emissions were 440.4 $MMTCO_2e$, representing an overall decrease of 10% since peak levels in 2004. During the 2000 to 2015 period, per capita GHG emissions in California continued to drop from a peak in 2001 of 14.0 tons per person to 11.3 tons per person in 2015, a 19% decrease.[9] This decrease may be due to increases in the effectiveness of energy conservation in buildings (Title 24 requirements) and the increased use of renewable energy, including solar generation, hydropower, and wind energy.

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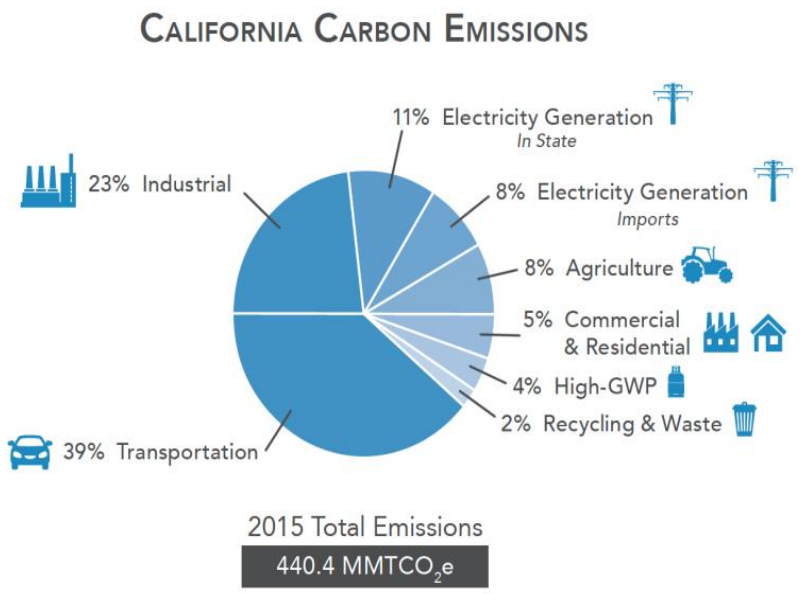
6 U.S. Environmental Protection Agency, State of Knowledge.

7 Earth System Research Laboratory, Global Monitoring Division, National Oceanic and Atmospheric Administration. Average CO2 concentration at NOAA Mauna Loa, Hawaii. November 2018.

8 "Working Group III Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report, Climate Change 2007: Mitigation of Climate Change," prepared by the Intergovernmental Panel on Climate Change, May 2007.

9 "California Greenhouse Gas Emission Inventory: 2000-2015," California Environmental Protection Agency Air Resources Board, June 6, 2017.



The transportation sector remains the largest source of GHG emissions in the state, accounting for 39% of California's emissions in 2015. Regulations and improved fuel efficiency of the state's vehicle fleet will drive down emissions over time, but population growth, lower fuel prices, improved economic conditions, and higher employment rates are potential factors that may increase fuel use.[10]

There is much debate over what the effects of climate change will be, but there is a general consensus that the levels of emissions need to be reduced in order to minimize GHG emissions and limit the amount of carbon dioxide and other pollutants that are released into the atmosphere.

CLIMATE LEGISLATION

California was the first state to establish regulations that require the reduction of emissions of GHGs from motor vehicles. The Zero Emission Vehicle (ZEV) regulation was first adopted in 1990 as part of the Low Emission Vehicle Program and has been modified over the years. Continuing its leadership role in developing innovative and groundbreaking emission control programs, CARB adopted the Advanced Clean Cars (ACC) program in 2012. The components of the ACC program are the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.

On September 24, 2004, the California Air Resources Board adopted a bill that requires all motor vehicles of 2009 vintage or later to reduce their greenhouse gas emissions by about 30% by the year 2016. On June 1, 2005, Governor Arnold Schwarzenegger issued executive order S-3-05, which calls for reduction in GHG emissions to 1990 levels by 2020, and for an 80% reduction below 1990 levels by 2050.

The California Global Warming Solutions Act (AB 32) was adopted by the state legislature in 2006. It sets forth a program to achieve 1990 emission levels by 2020 and requires CARB to proclaim 1990 GHG emissions and develop a Scoping Plan, which sets forth GHG reduction methods. CARB has reported that 1990 GHG emissions totaled 427 million metric tons (MMT) for the state of California; CARB adopted a Climate Change Scoping Plan on December 11, 2008, which was updated in 2017. The Scoping Plan includes a cap and trade program, green building strategies, recycling and waste reduction, and Voluntary Early Actions and Reductions.

[10] Ibid.

More recently, Executive Order B-30-15 was issued by Governor Brown on April 29, 2015, establishing a new California goal to reduce greenhouse gas emissions to 40% below 1990 levels by 2030, ensuring the state will continue its efforts to reduce carbon pollution. Most recently, this 40% target was codified through Senate Bill 32 (2016), which adds section 38566 to the Health and Safety Code and requires that CARB ensure statewide GHG emissions meet the 40% reduction target no later than December 31, 2030.

California SB 375 was signed by the Governor in September 2008 and is intended to, at least in part, implement greenhouse gas reduction targets set forth in AB 32 by setting regional "caps" on the GHGs emitted by the transportation sector. The bill encourages regional land use planning to reduce vehicle miles traveled and requires Metropolitan Planning Organizations (MPO) to adopt a sustainable community strategy as part of their Regional Transportation Plans (RTP).

Legislative Leadership on Climate

The California Legislature has shaped the State's climate change program, setting out clear policy objectives over the next decade:

- 40% reduction in GHG emissions by 2030;
- 50% renewable electricity;
- Double energy efficiency savings;
- Support for clean cars;
- Integrate land use, transit, and affordable housing to curb auto trips;
- Prioritize direct reductions;
- Identify air pollution, health, and social benefits of climate policies;
- Slash "super pollutants";
- Protect and manage natural and working lands;
- Invest in disadvantaged communities; and
- Strong support for Cap-and-Trade.

The applicable MPO for the Coachella Valley is the Southern California Association of Governments (SCAG), which adopted its most recent Regional Transportation Plan and sustainable community strategy in April 2016. The current reduction targets from SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) are a 9% reduction by 2020 and a 16% reduction by 2035, as compared to 2005 emissions levels.

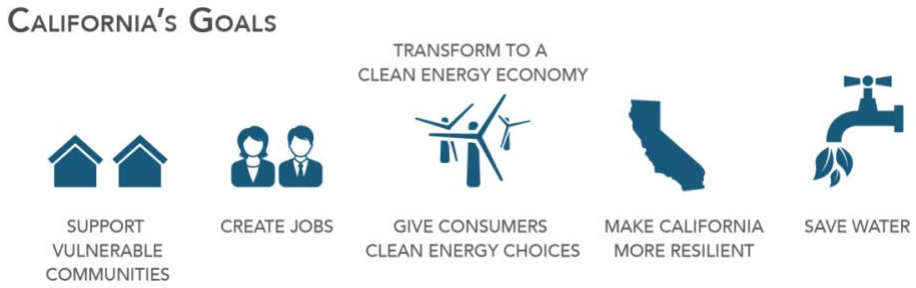
CLIMATE ACTION PLANNING

State Plans

The California Global Warming Act of 2006, also known as AB 32, marked the beginning of an integrated climate change program with the target to reduce statewide emissions to 1990 levels by 2020. Executive Order B-30-15 and SB 32 extended the goals of AB 32 and set a 2030 goal of reducing emissions 40%- from 2020 levels. The CARB's Climate Change Scoping Plan establishes a path to achieve the state's reduction targets by considering and evaluating a mix of strategies that would benefit all Californians. The Plan promotes actions that are intended to be economically viable and technologically feasible that will not only keep the state on track to achieve its 2030 targets, but to stay on track for a low- to zero-carbon economy by involving every part of the state. Currently (2018), the state is on track to achieve its 2020 target.

The following summarizes the current (2017) Climate Change Scoping Plan targets:

- 1990 levels by 2020;
- Reduce emission by 40% from1990 levels by 2030;
- Advance towards reducing emissions by 80% from 1990 levels by 2050.



Regional Plans

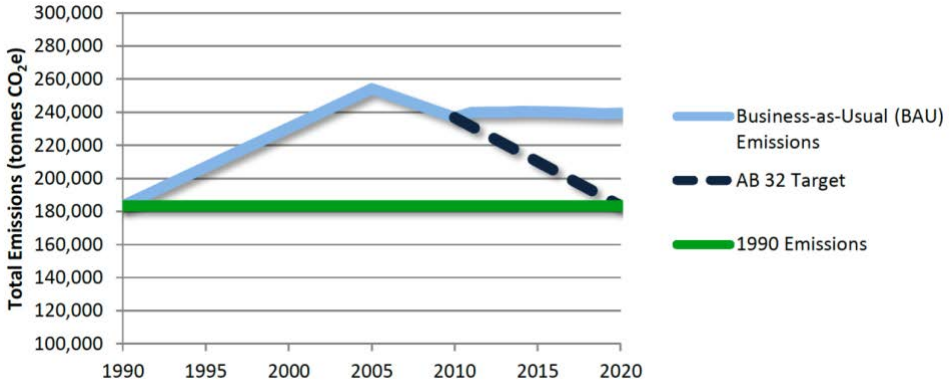
As previously mentioned, the transportation sector remains the largest source of GHG emissions in the state, accounting for 39% of California's emissions in 2015. The purpose of SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is to provide a framework for integrating land use and transportation planning that promotes sustainable communities which reduces overall greenhouse gas emissions. The current reduction targets from SCAG's RTP/SCS are 9% reduction by 2020 and a 16% reduction by 2035, as compared to 2005 emissions levels.

Local Plans

While no directives have been issued on AB 32 implementation for local governments at this time, there has been much participation in the realm of emissions measuring and reduction efforts on the local level across California. In response to AB 32 and CARB's Climate Change Scoping Plan, the City of Cathedral City completed its first Climate Action Plan in May 2013 in an effort to address climate change at the local level by reducing greenhouse gas emissions within its own operations and within the overall community. The Climate Action Plan provides a framework for the development and implementation of policies and programs that will reduce the City's emissions and is tracked via the City's Greenhouse Gas Inventory. In addition to the Climate Action Plan, the City prepared an Energy Action Plan (2013) to identify opportunities for cost savings through energy efficiency and actions necessary to meet the City's future energy needs, consistent with the energy policies set forth by the State of California.

Based on the City's Greenhouse Gas Inventory (2013), if Cathedral City were to continue with "Business-as-Usual," its carbon footprint would expand slightly as a result of population growth and increasing use of energy for comfort and convenience. With growth predicted to exceed 19% between 2010 and 2020, and to achieve the AB 32 target by 2020, Cathedral City would have to cut GHG emissions by 23.4%, or 55,909 tonnes. The projection for City emissions to 2020 is as follows:

Chart AQ-1
Projected GHG Emission Scenarios

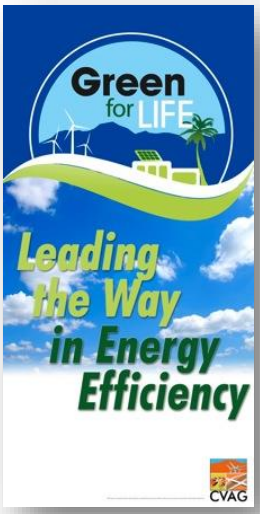


Green for Life Program

The City participated in the Green for Life Initiative of the Coachella Valley Association of Governments (CVAG). It is a regional approach to achieving energy reductions, and includes: 1) a Green Building Program, 2) Climate Action Plan, 3) Energy Action Plan, 4) a benchmarking policy, energy management software installation and training, and a commissioning and retro-commissioning policy. An important component of the Green For Life Program is benchmarking and utility management, which includes a facilities inventory and thorough review of existing energy benchmarking policies.

Disadvantaged Communities

Disadvantaged communities, as defined in SB 1000, are areas identified by the California Environmental Protection Agency (CalEPA) pursuant to Section 39711 of the Health and Safety Code, or an area that is a "low-income area" (defined below) that is disproportionately affected by air and other environmental pollution, climate change and other hazards that can lead to negative health effects, exposure, or environmental degradation. SB 1000 further defines "low-income areas" as areas with household incomes at or below 80 percent of the statewide median income or with household incomes at or below the threshold designated as low-income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093.



CalEnviroScreen 3.0 is a science-based tool created by CalEPA and the Office of Environmental Health (OEHHA) to identify communities in California that are most affected by sources of pollution, and that are often especially vulnerable to pollution's effects. In addition to socio-economic standing, the screen evaluates data on air and water quality, as well as exposure to pesticide, hazardous materials and waste. The most recent CalEnviroScreen update (June 2018) shows that there are no disadvantaged communities within the City of Cathedral City. Nearly all of the City's census tracts have scores ranging between 15% and 35%.

The census tracts with the highest scores (45-50%) are located: 1) in the Cove, and 2) north of Ramon Road and west of the Whitewater River. These census tracts are also identified as areas of concern in the Public Health Alliance of Southern California's (PHASoCal) Healthy Places Index (HPI) mapping database described in the Healthy and Sustainable Community Element. Still, none of the census tracts in Cathedral City are designated as disadvantaged communities by CalEPA. Nonetheless, the City remains dedicated to a healthy and safe environment for all of its residents.

CURRENT AND NEXT STEPS

Air pollution and climate change are two of the most pressing issues facing industrialized societies and the entire planet. The City has taken significant steps to address air quality and climate change issues, including adopting GHG inventories, energy action plans, climate action plans, and green building programs. This updated General Plan also includes a comprehensive *Active Transportation/Neighborhood Electric Vehicle (AT/NEV) Plan* (see Appendix ? of the General Plan).

SUSTAINABILITY

The practice of analyzing the impacts of decisions, policies, strategies and development projects on the Environment, the Economy and Social Equity

Some of the actions being taken to address these issues include limiting the pollution exposure near high-volume roadways and minimize and preclude traffic pollution. This is being accomplished through more stringent federal and state emissions standards for cars, trucks, and buses, state regulations for zero emission vehicle (SB 375, SB 743), regional and local policies that reduce driving, the California's Sustainable Freight Transport Initiative, and community and government-led efforts to increase alternative transportation modes including public transit, low-speed electric vehicles (LSEVs), biking, and walking.

Important City programs include the aforementioned Climate Action Plan, Energy Action Plan and Green for Life program. These and other local and regional efforts are making a difference in reducing the emission of air pollutants and GHGs, while providing new opportunities for economic development and urban revitalization. These plans are living documents that will be regularly updated to ensure they remain relevant to the needs of the community.

GOALS, POLICIES, AND PROGRAMS

Goal: Preservation and enhancement of local and regional air quality to assure the long-term protection of the community's health and welfare.

Policy 1 : The City shall be proactive in regulating local pollutant emitters and shall cooperate with Coachella Valley Association of Governments and the South Coast Air Quality Management District to assure compliance with air quality standards.

Policy 2 : The City shall fully implement dust control ordinances, and coordinate and cooperate with local, regional, and federal efforts to monitor, manage, and reduce the levels of major pollutants affecting the City and region, with particular emphasis on PM_{10} emissions.

Program 2.A : On an on-going basis, the City shall continue to cooperate and participate in efforts to monitor and control PM_{10} emissions from construction and other sources, and all other air pollutants of regional concern. The City shall coordinate with CVAG and the SCAQMD to provide all reporting data for SCAQMD annual report.
Responsible Agency: Building and Public Works, Planning, CVAG, SCAQMD
Schedule: Continuous and On-going

Program 2.B : The City shall maintain records of historic and current regional and local air quality trends and make them available to the public. Access to data may be made available via an Internet link, printed material, or other means.
Responsible Agency: Public Works, Planning, CVAG, SCAQMD
Schedule: On-going

Policy 3: City land use planning efforts shall assure that sensitive receptors are separated from polluting point sources, to the greatest extent practicable.

Program 3.A: The General Plan Land Use Map and Element shall be developed and maintained to identify and locate air pollution point sources, such as manufacturing operations and highways, at an appropriate distance from sensitive receptors, including hospitals, schools, hotels/motels, and residential neighborhoods.
Responsible Agency: Planning, CVAG, SCAQMD
Schedule: On-going

Program 3.B: Buffer zones between sensitive receptors and potential air pollutant emitters shall be incorporated into new and proposed residential developments and other developments, to the greatest extent feasible.
Responsible Agency: Planning
Schedule: On-going

Program 3.C: Health Risk Evaluation. Prior to project approval, the City or project applicant shall evaluate health risks when proposed developments would result in new sensitive receptors near existing sources of substantial toxic air contaminants (TACs) or the development of sources of substantial toxic air contaminants near existing sensitive receptors. Evaluation would be based on consideration of the California Air Resource's Board Air Quality and Land Use Handbook: A Community Health Perspective distance recommendation between sources and receptors. If the project would not meet the distance recommendations between sources and receptors, the City shall require the applicant to ensure that TAC impacts would be below the carcinogenic threshold (i.e.,

probability of contracting cancer for the Maximally Exposed Individual would be less than 10 in one million) and below the non-carcinogenic threshold (i.e., result in a Hazard Index less than 1 for the Maximally Exposed Individual). In addition, several measures to reduce potential risk from commercial or industrial land uses that would be considered include:

- Proposed commercial or industrial land uses that have the potential to emit toxic air contaminants (such as loading docks for diesel delivery trucks) would be located as far away as possible from existing and proposed sensitive receptors.
- Signs would be posted at all loading docks and truck loading areas which indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions.
- Proposed commercial and industrial land uses that have the potential to host diesel trucks would incorporate idle reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for transport refrigeration units to allow diesel engines to be completely turned off.

Responsible Agency: Planning
Schedule: Continuous and On-going

Policy 4: Development proposals brought before the City shall be reviewed for their potential to adversely impact local and regional air quality, and shall be required to mitigate any significant impacts.

Program 4.A: The City shall conduct an Initial Study and, where appropriate, require a detailed air quality analysis for all proposals that have the potential to adversely affect local or regional air quality.
Responsible Agency: Planning
Schedule: On-going

Program 4.B: Projects that may generate significant levels of air pollution shall be required to conduct detailed impact analyses and incorporate mitigation measures into their designs using the most advanced technological methods practicable. All proposed mitigation measures shall be reviewed and approved by the City prior to the issuance of grading or demolition permits.
Responsible Agency: Planning, Public Works
Schedule: On-going

Program 4.C: The City shall continue to enforce a Fugitive Dust Emissions Ordinance to reduce and control local PM_{10} emissions. All dust control mitigation plans prepared by contractors, developers, and other responsible parties shall be reviewed and approved by the City prior to the issuance of grading or demolition permits.
Responsible Agency: Building and Public Works, Planning
Schedule: On-going

Program 4.D: Provide consistent and effective code enforcement of construction and grading activities and off-road vehicle use to assure that the impacts of blowing sand and fugitive dust emissions are avoided or minimized.
Responsible Agency: Code Enforcement Department; Police Department
Schedule: On-going

Policy 5: The City shall encourage and promote the use of clean alternative energy sources for transportation, heating and cooling, lighting and other power needs.

Program 5.A: Where cost-effective, vehicles that use alternative fuel sources, such as compressed natural gas and electricity, shall be purchased and maintained for use in the City's vehicle fleet.
Responsible Agency: City Manager's Office

Schedule: On-going
Program 5.B: Site plans shall incorporate energy-efficient design elements, including appropriate site orientation, possibility for incorporation of active and/or passive solar design, and the use of shade and windbreak trees, to reduce fuel consumption for heating and cooling.
Responsible Agency: Planning, Public Works
Schedule: On-going

Program 5.C: The City shall support and promote the use of roof-top solar electric systems in new and existing development, and shall review the City Zoning Ordinance to ensure that City regulations do not create an undue burden on those who wish to install solar electric systems.
Responsible Agency: Planning, Building Department
Schedule: On-going

Program 5.D: To encourage the use of alternative energy sources, installation of electric vehicle charging stations shall be encouraged in all new development and in major retrofits.
Responsible Agency: Planning, Public Works
Schedule: On-going

Policy 6 : The City shall encourage and support the development of facilities and projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle and LSEV paths and lanes, and community-wide multi-use trails.

Program 6.A: The General Plan Circulation and Mobility Element shall encourage the incorporation of appropriate alternatives to motor vehicles in the transportation network, and shall be periodically reviewed and updated to assure the future expanded use of such alternatives.
Responsible Agency: Planning, Public Works
Schedule: On-going

Program 6.B: The City shall pursue land use patterns and mechanisms, including Mixed-Use development and a balance of employment and housing opportunities that encourage pedestrian and other non-motorized transportation and minimize vehicle miles traveled.
Responsible Agency: Economic Development Department, Planning
Schedule: On-going

Program 6.C: The City Active Transportation/NEV Plan shall be funded and implemented to the maximum extent practicable in order to make safe and convenient alternative modes of travel the norm in the City
Responsible Agency: Planning, Public Works
Schedule: On-going

Program 6D: The City shall draft new or modify existing ordinances that implement the Active Transportation Plan and that otherwise facilitate the use of LSEVs on City streets and other appropriate portions of the transportation network to the greatest extent practicable.
Responsible Agency: Planning, Public Works
Schedule: 2020

Policy 7: The City shall promote the expanded availability of mass transit services, coordinating with Sunline Transit Authority to link residential, commercial and resort businesses, and employment centers with the City's residential neighborhoods and nearby communities.

Program 7.A: Coordinate with CVAG, SCAG, Sunline Transit Agency and other public and private service providers to improve, expand, and optimize cost-effective regional mass transportation services.
Responsible Agency: Planning, Public Works, Sunline Transit Authority
Schedule: On-going

Program 7.B: Promote and support the development of ridesharing, carpooling, flexible work scheduling, telecommuting, and Park and Ride programs among public and private employers to decrease existing and future traffic levels in the Coachella Valley.
Responsible Agency: Planning, Public Works, Sunline Transit Authority, Major Employers
Schedule: On-going

Program 7.C: The City shall consider adopting a Transportation Demand Management (TDM) Ordinance that applies to new or change-of-use non-residential developments employing 100 or more persons, and which requires the project proponent to demonstrate how the development will reduce the number of project-generated vehicle trips.
Responsible Agency: Planning, Public Works
Schedule: On-going

Policy 8: The City shall continue to implement effective street sweeping and post-windstorm cleanup programs to reduce the cumulative impacts of blowsand and nuisance dust resulting from construction activities, natural processes, and other sources.

Policy 9: The City shall promote public educational programs that describe the causes of air pollution, encourage the use of alternative energy sources, and recommend methods for reducing the impacts of blowsand.

Program 9.A: Prepare and distribute to developers, contractors, consultants and others an air quality management manual that describes effective and appropriate methods of controlling and reducing development-related air pollutants, particularly PM_{10} emissions.
Responsible Agency: Building, Public Works
Schedule: On-going

Policy 10: The City shall continue to implement and update policies, regulations, and action plans that promote climate stability and greenhouse gas emission reductions, including but not limited to the Climate Action Plan, Energy Action Plan, Greenhouse Gas Inventory and Green for Life program.

Program 10.A: Update the City's Climate Action Plan, Greenhouse Gas Inventory, Energy Action Plan and Green for Life program materials to include current trends in technology, climate regulations, and to track the City's efforts to reduce overall greenhouse gas emissions.
Responsible Agency: Planning
Schedule: Every 3-5 years

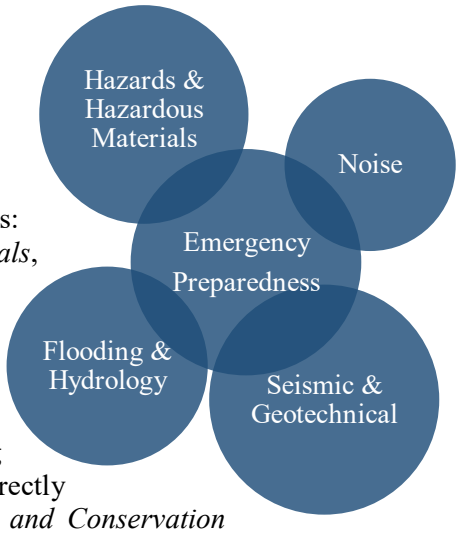
Program 10.B: Projects that require CEQA analysis shall be required to conduct detailed impact analyses and incorporate mitigation measures into their designs using the City's current Climate Action Plan prescribed reduction measures for achieving greenhouse gas emission reduction targets. All proposed mitigation measures shall be reviewed and approved by the City prior to the issuance of grading or demolition permits.
Responsible Agency: Building and Public Works, Planning
Schedule: On-going

Safety Element

PURPOSE

The Safety Element provides background information, including mapping of environmental hazards, data and analysis that provide guidance for the management of these hazards in the context of community planning and development. The Safety Element informs the planning of land uses and their distribution across the community, and the planning and development of roads, water and sewers, and other infrastructure. The goal of the Safety Element is to reduce the potential short and long-term risk of death, injuries, property damage, and economic and social dislocation resulting from fires, floods, droughts, earthquakes, landslides, and other hazards. Therefore, the purpose of the Safety Element is to ensure that those living, working, shopping and recreating in the community are safe from environmental hazards.

BACKGROUND



The Cathedral City General Plan incorporates an analysis of community health and safety as it related to natural and manmade environmental hazards. These include earthquakes and other geotechnical conditions, flooding threats, wildfire hazards, and community noise. These environmental hazards are discussed in the following individual sub-elements: *Flooding and Hydrology*, *Geotechnical*, *Hazards and Hazardous Materials*, and *Noise*. The Safety Element also includes an *Emergency Preparedness* sub-element that assesses City and regional response planning, coordination and implementation.

The *Safety Element* identifies areas that require special management or regulation because of hazardous or special conditions, including flooding and geotechnical hazard areas (Gov. Code 65560(b)(4)). The element is directly related to topics also mandated in the *Land Use Element*, *Open Space and Conservation Element*, the *Environmental Justice Element*, and the *Air Quality & Climate Stability Element*.

The Safety Element identifies hazards and hazard abatement provisions that guide decisions related to zoning, subdivisions, and entitlement permits. The element also discusses and points to general hazard and risk reduction strategies that complement the Local Hazard Mitigation Plan (LHMP). The element also includes policies for the protection of the community from risks associated with the effects of wildland and urban fires (Gov. Code 65302.6).

Climate change has been identified as one of the greatest threats facing California and the entire planet. It is affecting the hydrologic cycle resulting in extreme conditions ranging from drought to wildfires. Indirect hazards made worse by climate change include over-reliance on groundwater and induced ground subsidence and other manmade geotechnical effects. The State mandates that General Plans include a climate change vulnerability assessment, measures to address vulnerabilities, and comprehensive hazard mitigation and emergency response strategy (Gov. Code 65302(g)(4)). The effects of and policies to address and manage climate change are found in the *Air Quality & Climate Stability Element*.

Safety Element Review

State law requires that each city and county provide a draft of its Safety Element or amendments to the California Geological Survey of the Department of Conservation prior to adoption, for review to determine if all known seismic and other geologic hazards are addressed (Gov. Code 65302.5)(a)). Other state laws and regulations that must be reflected in the General Plan include *100-Year Floodplain Maps* and *Alquist-Priolo Earthquake Fault Zone* mapping.

GENERAL SAFETY ELEMENT GOALS AND POLICIES

Goal 1: City policies and programs that effectively reduce potential short and long-term risk of death, injuries, property damage, and economic and social dislocation resulting from fires, floods, droughts, earthquakes, landslides, and other hazards.

Goal 2: A land use plan and pattern that avoids the placement of people and property at risk from seismic, flooding, wildfires, excessive noise and other environmental hazards.

Goal 3: A City that fully cooperates and coordinates with local and regional emergency services, transportation agencies, public utilities, and other entities providing first responder services during local and regional emergencies.

> **Policy 1:** The City shall promote the enhanced resilience of future water, sewer, electric and other utilities, the retrofit and rehabilitation of existing weak structures and lifeline utilities, and the relocation or strengthening of certain critical facilities to increase public safety and minimize disruption of services.
>
> **Policy 2:** The City shall ensure to the greatest extent practicable the siting of critical public facilities, including hospital and healthcare facilities, emergency shelters, police and fire stations, and emergency communications, facilities outside 100-year flood plains.
>
> **Policy 3:** The City shall identify and establish specific travel routes for the transport of hazardous materials and wastes, with key considerations being capacity to safely accommodate additional truck traffic, avoidance of residential areas, and use of interstate or state divided highways as preferred routes.
>
> **Policy 4:** The City shall work to achieve consistency between the General Plan land use and related policies and the Palm Springs International Airport Land Use Compatibility Plan, as appropriate. Measures may include restrictions on permitted land uses, limitation on the intensity of a use, and such development criteria as height restrictions.

Flooding & Hydrology Sub-Element

PURPOSE

The Flooding and Hydrology Sub-Element provides background information and analysis of local and regional flooding threats that affect the City corporate limits. It includes discussions of related issues and sets forth goals, policies, and programs that address potential flooding and related hydrological hazards within the community. The purpose of this element is to protect the general health, safety and welfare of the community, including people and property, from flood and associated hazards. It references and coordinates with other elements of the General Plan, which also address threats to the lives and property of the community's homes and businesses. The potential for and extent of major future flooding is also evaluated. It is the intention of the community to facilitate, plan and implement the phased development of flood control facilities, both project-specific and Citywide. Provisions for open space and multiple uses, wildlife, and pedestrian and equestrian corridors within major drainages are also planned.

BACKGROUND

Flooding and related hydrological threats and hazards are an essential aspect of the Safety Element, and frequently have a profound effect on the community. Major drainages, including the Whitewater River Stormwater Channel, Whitewater River Floodplain, and the East and West Cathedral Canyon Washes pass through the City. In 2018, there remain major areas of the City where the threat to major flooding is unmitigated.

The Flooding and Hydrology Element is related to several other General Plan Elements, including *Land Use*, *Circulation and Mobility*, *Housing*, *Open Space and Conservation*, *Safety*, *Environmental Justice*, and Hazards and Toxic Materials. Policies and programs set forth in the Land Use Element also have some impact on and are shaped by flooding issues, as they direct the location of open space, essential public facilities, and developed areas, which potentially may be severely damaged by flooding.

California Government Code requires that adjoining jurisdictions plan for regional flood control. In addition, Government Code Section 8401(c) requires that local governments plan, adopt, and enforce flood plain management through land use restrictions when necessary. This legislation, also known as the Cobey-Alquist Flood Plain Management Act, establishes requirements for receiving state financial assistance for flood control measures.

Per Government Code Section 65302(a), the land use element shall identify and annually review those areas covered by the plan that are subject to flooding identified by flood plain mapping prepared by the Federal Emergency Management Agency (FEMA) or the Department of Water Resources. California Government Code Section 8589.5 and 65302(g)(2) require the mapping of areas subject to inundation in the event of dam failures.

Regional Climatic and Hydrological Setting

Cathedral City and the Coachella Valley are located within the Colorado sub-unit in the northwestern corner of the Sonoran Desert, and can be characterized as a hot and dry subtropical desert. The valley is bounded by slopes of the San Jacinto, Santa Rosa, San Bernardino and Little San Bernardino Mountains. Mean annual rainfall is very low (2 to 6 inches) on the desert floor and in some years no measurable rainfall has been reported. Most of the rainfall occurs during the cooler months of November through March, but occasional high-intensity thunderstorms and tropical storms occur in late summer and early fall.

Summer daytime temperatures can occasionally exceed 125°F and winter temperatures rarely fall below freezing. The surrounding mountain slopes generally receive rainfall that increases with elevation. The mountains and upper elevations are also generally cooler, with an approximate 5°F drop with every 1,000-foot increase in elevation.

Flooding in the region is generally associated with three different types of storm events: (1) general winter storms, combining high-intensity rainfall and rapid melting of the mountain snowpack; (2) tropical storms out of the southern Pacific Ocean; and (3) summer thunderstorms. Summer storms pose a greater threat of flooding to the valley than winter storms because of their high intensity, short duration rainfall with high volumes of runoff. Major historic and benchmark storm events have generated 6.45 inches of rain in a period of 6 hours.

The Whitewater River Stormwater Channel (WWRSC) is the largest drainage feature within the City and valley. The WWRSC and floodplain is both a unconfined and channelized watercourse that originates from the southerly and easterly slopes of the San Bernardino Mountains. Several of its tributaries originate from the easterly slopes of the San Jacinto and Santa Rosa Mountains, including Cathedral Canyon and Eagle Canyon washes. The Whitewater River eventually discharges to the Salton Sea through the man-made extension of the stormwater channel system known as the Coachella Valley Stormwater Channel (CVSC), extending 22 miles southeast of La Quinta to the north end of the Salton Sea. The drainage area of the WWRSC/CVSC is approximately 1,500 square miles.

Baseline Storm Events

Statistical models based on decades of historic rainfall and runoff data are used to predict and calculate the size of future storms. Benchmark storms and historic data are used by the US Army Corps of Engineers and other flood control agencies and include two distinct storm events that occurred in 1939 and 1979. The 1939 storm event occurred on September 24, was centered over Indio and originated off the west coast of Mexico. This storm generated 6.45 inches of rain in a 6-hour period. The 1979 storm event was due to the Tropical Storm Kathleen, which impacted the area from September 9 through 11 and generated 6.81 inches of rain in the low-lying areas of the central Valley, and as much as 14 inches in the surrounding mountains. The projected 100-year 24-hour storm event in the planning area is 5.42 inches of rain over a 24-hour period.

City Hydrologic Areas

For discussion purposes and based upon their distinctive drainages, the General Plan divides the City into the North and South City Hydrologic Areas. The north area is that generally from 30th Avenue on the south and the city limits on the north. North area drainage is primarily associated with runoff from the Little San Bernardino Mountains and to a lesser degree runoff from the northern portion of the Indio Hills, including Edom Hill. The south area drainage is associated with the WWRSC, which drain hundreds of square miles, to the much smaller East and West Cathedral Canyon Washes and the Eagle Canyon Wash.

South City Hydrologic Area

The South City Hydrologic Area is dominated by the Whitewater Floodplain and WWRSC, which originate northwest of the City and combine with the Morongo Wash flows to pass through the City's west and southern portions. In the upper Whitewater Stormwater Channel 100-year storm flows are calculated to be approximately 47,000 cubic feet per second (cfs) downstream of the confluence of Tahquitz Creek and the Whitewater Channel within the Cathedral Canyon golf course. The Standard Project Flood (SPF) flow at this location is calculated to be 85,000 cfs, a very large volume of water but with a recurrence interval of once every 500± years. The 100-year storm flow is considered the design storm that land use, transportation and other urban improvements should design to accommodate.

This south area is also crossed by the East and West Cathedral Canyon Washes and Eagle Canyon Wash; Eagle Canyon has been dammed to provide a stormwater detention and debris basin and discharges metered flows into the West Cathedral Canyon Evacuation Channel and on to the WWRSC. Inflow rates into the Eagle Canyon Dam in a 100-year storm are estimated at 1,180 cfs. There is no stormwater detention or storage on either the West or East Cathedral Canyon Wash, and their channelized flows discharge directly into the WWRSC.

North City Hydrologic Area

In the northern portion of the City, both north and south of the US Interstate-10/Union Pacific Railroad (I-10/UPRR) corridor, 100-year flooding extends west to east along the corridor. Stormflows in this area are associated with the Morongo Wash watershed that emanates from the north and west, Long Canyon Wash due north of the City, East and West Wide Canyons to the northeast, and Willow Hole. Flat Top Mountain forms Seven Palms Valley to the north and partly blocks drainage from Long and East and West Wide Canyons flowing toward the valley floor. Willow Hole, the low-lying gap between Flat Top Mountain and Edom Hill, is a channel eroded through the Indio Hills that has been displaced from its original position by fault movement. In a word, this drainage area and its geology are complex, and is an area where drainage facilities may be required to ensure future all-weather access.

The City's North Hydrologic Area is also especially susceptible to late-summer, high-intensity thunderstorms such as the 1977 storm north of the City that generated 4.5 inches of rainfall in 1.5 hours and flooded Willow Hole and Thousand Palms. CVWD estimates that peak flows out of Willow Hole of 420 cfs (NHC 2014). Morongo Wash and Long Canyon Wash discharges were estimated to be less than 12,200 cfs resulting from intense 1991 storms.

The general pattern for Morongo Wash floods is to cross Varner Road, then flow towards the I-10 culverts. Flows that pass beneath (or over) I-10 then combine between the I-10 and UPRR and flow southeast between the two raised grades. The flows pond at Date Palm, where they overtop the UPRR to the south; some flow continues towards Thousand Palms.

Long Canyon storm flows occupy multiple flow paths on the alluvial fan upslope of Willow Hole and the Banning Fault escarpments. Flows on the west side of the fan appear to head directly to Morongo Wash. Flows on the east side travel south towards Seven Palms Valley where they may pond before diverting west to Morongo Wash and to a lesser extent east to Willow Hole. Floods from Wide Canyon Dam appear to follow a similar pattern, flowing in multiple channels before joining with Long Canyon flows near Seven Palms Valley.

Most previous studies had assumed that Wide Canyon and part of the Long Canyon floods reached the Coachella Valley through Willow Hole. Post-flood aerial photos appear to indicate that most of these flows travel west towards Morongo Wash. However, flow patterns during extreme floods are not shown on the aerials and they remain somewhat uncertain. Also, erosion and deposition on the alluvial fan surfaces or construction of roads and other urban features may alter these patterns.

Storm Centering	100-Year Peak Flows (cfs)		
	Morongo Wash	Long Canyon	Combined
Long Canyon with contemporaneous rainfall on Morongo Wash	12,500	9,400	21,900
Morongo Wash with contemporaneous rainfall on Long Canyon	19,300	4,400	23,700
Centered over combined Morongo Wash and Long Canyon	16,200	6,500	22,700

REGIONAL FLOOD MANAGEMENT

The City has been building new and expanding existing bridges and other infrastructure along and across the WWRSC and East Cathedral Canyon Wash, ensuring all-weather access during a major storm event. In addition to flooding hazards associated with the WWRSC and the various washes emanating from the Santa Rosa Mountains, the City has been studying management options for drainages in the North City Hydrologic Area. In addition to flood flows, minor flooding and ponding of surface water also occurs on the relatively flat valley floor when flood control channels draining Cathedral Canyon (the East, West and North Cathedral Channels) overflow.

The Coachella Valley Water District (CVWD) and the Riverside County Flood Control District (RCFCD) are responsible for the management of regional drainage within and in the vicinity of Cathedral City, including rivers, major streams and their tributaries, and areas of significant sheet flooding. Both Districts are empowered with broad management functions, including flood control planning and construction of drainage improvements for regional flood control facilities, as well as watershed and watercourse protection related to those facilities.

Flood control facilities within the planning area are categorized as: regional and local control facilities. There are four watersheds which affect the City's flood control. Each of these is briefly described below:

I-10 North Watershed

The Big and Little Morongo Creeks drain the western portions of the Little San Bernardino Mountains. Big and Little Morongo Washes join south of Pierson Boulevard in Desert Hot Springs to form Morongo Wash, which enters the General Plan area as a wide braided network of washes approximately 3/4 mile wide. Flows from the Long Canyon Wash join Morongo Wash near 20th Avenue and Palm Drive about 1 mile north of the General Plan planning area. A Banning fault scarp directs much of the Long Canyon flows west to Palm Drive.

South of 20th Avenue, the Morongo Wash flows due south and crosses I-10 and the railroad right of way, through three bridges and small culverts, where a portion of the flows join the Whitewater River. A major portion of these flows continue in a southeasterly direction between I-10 and the railroad tracks, to the Date Palm Drive overpass, where flows are impounded and are forced southerly, across the railroad tracks and into the Vista Chino/Date Palm Drive intersection during large storm event. Flows from the Long Canyon Wash also pass through Willow Hole, cross Date Palm Drive north of I-10, then flow between I-10 and Varner Road in a southeasterly direction to Thousand Palms and I-10, east of the planning area.

Since 1994, CVWD has been working with the US Army Corps of Engineers (USACE) on the Thousand Palms Flood Control Project. This project consists of a series of flood control improvements designed to meet the Federal Emergency Management Agency (FEMA) 0.01 chance, or 100-year, flood event thereby providing flood protection for existing and planned development areas north of I-10 between Rio Del Sol Road and Washington Street (approximately 2,800 acres).[1]

[1] CVWD Website Updates-Thousand Palms Flood Control Project Accessed March 05, 2018.

I-10 to Whitewater River Watershed

This watershed is bounded on the north by I-10, and on the west and south by the Whitewater River and covers most of the valley floor. Floodwaters from the Morongo Wash, Long Canyon and East and West Wide Canyons combine and flow southeast along the I-10 and UPRR corridor to enter the valley floor. Once on the valley bottom, they are referred to as the "riverine flows."

This area of the City is the most rapidly growing in terms of new development. Levees along the Whitewater River, as well as concrete armoring on its east (left) bank, protect development to the east, in the City. Areas of special concern within this watershed includes the following with poorly defined drainage areas and subject to impacts from nuisance flows. Most flood water in this watershed is conveyed within existing City streets.

- area bounded by McCallum Way, Avenida Maravilla, and Vista Chino
- area within the City bounded by Date Palm Drive, Ramon Road and Tortuga
- intersection of Vista Chino and Landau Boulevard
- Dinah Shore Drive between Date Palm and Cathedral Canyon
- Gerald Ford at Plumley

CVWD has built several regional stormwater facilities in the Coachella Valley to protect the planning area and the surrounding lands. These facilities include flood channels or "greenbelts" built in the Cathedral Canyon Golf Course, and elsewhere. The Thousand Palms Flood Control Project would collect stormwater from the Thousand Palms Watershed by intercepting flood flows with a series of levees on the fans uphill from community of Thousand Palms and conveying them through southeast to a new channel to Sun City west of Washington Street.2 For the future, CVWD is coordinating with RCFCD to plan and construct facilities to manage floodwaters from the Morongo Wash Watershed and the riverine flows under the assumption that other regional projects will also be completed.

Eagle Canyon Watershed and Dam

This watershed is located west of the West Cathedral Canyon Channel, and south of Palm Canyon Wash. During periods of heavy rainfall, rain, mud and debris were funneled down Eagle Canyon and damaged structures along East Palm Canyon Drive and northward. The July 20, 2008 storm discharged a large volume of storm flows heavy in sediment, flooding a mobile home park and an auto dealership, along with other businesses. In November 2015, the Eagle Canyon Dam was built to secure the western City from the canyon's repeated damaging flash flooding affects.3

Cove Area Watershed

This watershed is bounded by the Cathedral Canyon Channel East and West, and the Whitewater River. The East and West channels convey flood waters on either side of the Cove, and discharge into the Whitewater River. A number of culverts have been constructed through the channel levees to convey flows from the Cove residential neighborhoods to the channels.

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2 North Cathedral City and Thousand Palms Stormwater Management Plan, prepared by Northwest Hydraulic Consultants (2014)

3 Zone 6 Report to the Zone Commissioners by Jason Uhley, General Manager-Chief Engineer (2017)

LOCAL FLOOD MANAGEMENT

Cathedral City Regulation of Local Drainage

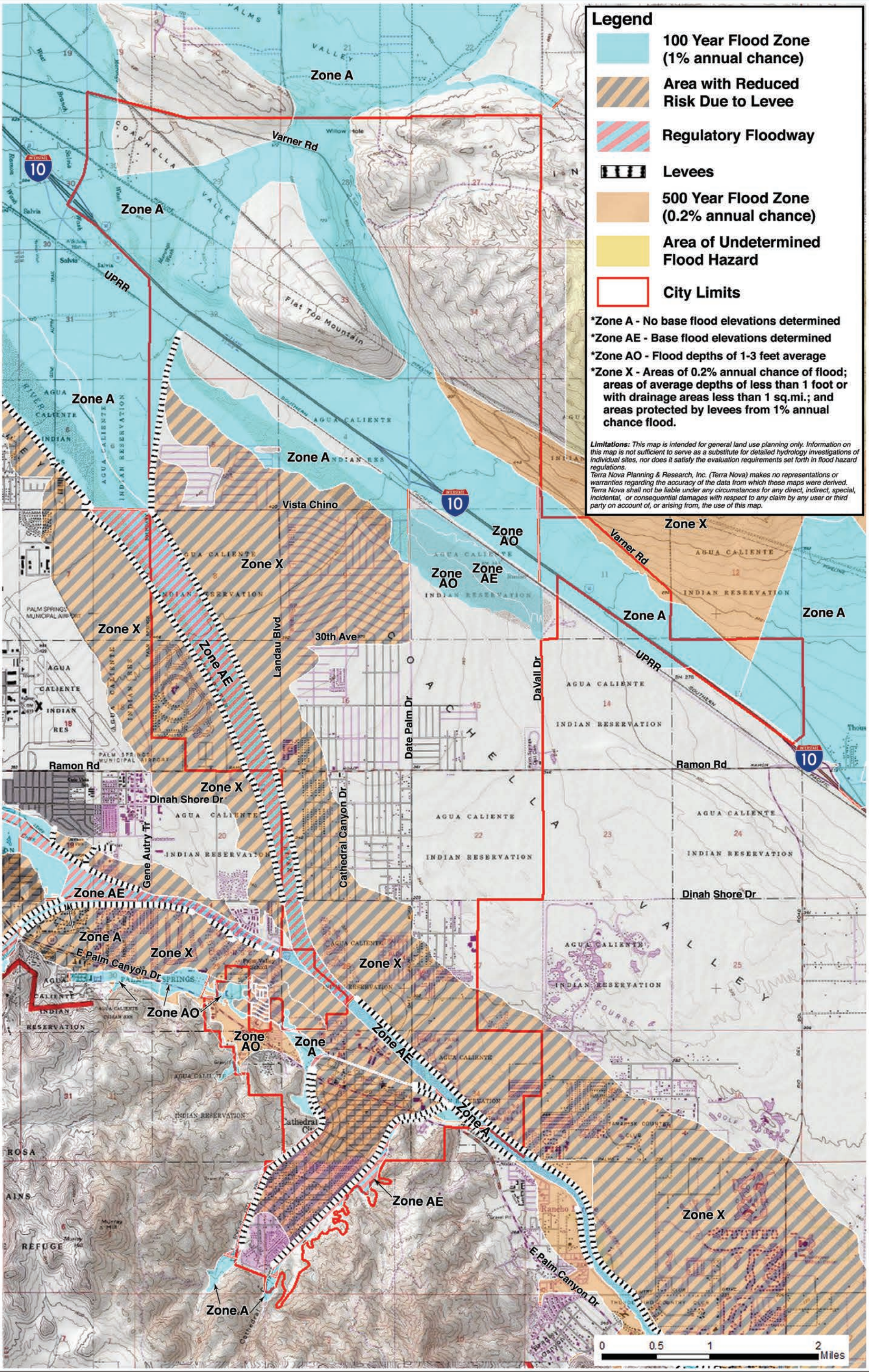
While CVWD and the County, working in close cooperation and coordination with the City, have the primary responsibility for regional facilities, it is the City that remains directly responsible for the management of local drainage. The effectiveness with which the City and Districts manage drainage issues will have a direct effect on the scale, complexity and cost of future flood control facilities. The cost-effectiveness of prevention and on-site management should be actively integrated into community land use planning and regulation, recognizing significant physical and financial constraints in many areas of the city.

FEMA AND THE FEDERAL FLOOD RATE MAPS

Exhibit S-1 depicts the general location of the FEMA flood hazard areas throughout the planning area. Flood Hazard Areas are those areas which have statistical chance of flooding once in 100 years or which have a 1% chance of occurring in any given year. The flood hazard mapping also depicts areas subject to flooding in a 500-year storm event, which CVWD defines as the Standard Project Flood (SPF), which has 0.2% chance of occurring in any given year.

The FEMA mapping for the Cathedral City planning area depicts limited areas near and adjacent to the Santa Rosa foothills, and tributary drainage from the west, that are subject to 100-year flooding with depths of between one and three feet and areas with an undetermined flood depth. With completion of the Eagle Canyon Dam, much of the southwest portion of the City that was subject to 100-year flood has been removed from this threat. The City is coordinating with Palm Springs Public Works to address the remaining flooding hazards in this area, which are contributed to by local runoff from both cities.

Exhibit S-1 is not intended to be used to locate parcel- specific sites in relation to Flood Hazard Areas, but to convey the general extent and location of such areas. The delineation of the 100-year flood zone in the area east of Date Palm Drive and south of Interstate-10 is based on CVWD-sponsored hydraulic analysis and mapping prepared by Northwest Hydraulic Consultants. Development planning and engineering in areas subject or potentially subject to flooding should rely upon FEMA maps, consultation with responsible flood control agencies, and site-specific hydraulic analysis.



08.02.18 Source: Esri, USGS, 2018; FEMA FIRM Map, Effective August 2008; NHC 2014.

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Exhibit S-1 - FEMA Flood Zones in the Planning Area
Cathedral City General Plan - Imagine 2040

Cathedral City

Cathedral City Comprehensive Storm Drain Master Plan

The current Cathedral City Comprehensive Storm Drain Master Plan, prepared in March 1990, is a strategy for the construction, maintenance and funding of storm drain improvements in the City for all four watersheds. The Plan analysis includes coordination with the plans of other agencies having jurisdiction, including the RCFCD and CVWD. Comprehensive planning between the two agencies and the City is ongoing, and includes planning efforts to manage drainage in the northwest and Thousand Palms areas north of US I-10.

Ultimately, the coordinated update of the City's Storm Drain Master Plan and those of the two District will result in a comprehensive approach and strategy to protect lives and property in the City from flood waters. The Storm Drain Master Plan is implemented by City ordinance *Chapter 15.10: Storm Water Management and Discharge Controls* and serves as the operational tool for technical guidelines and developer requirements regarding on-site stormwater retention and other specifics.

Whitewater River Channel

The Whitewater River Channel is the main drainage facility in the city and the Coachella Valley. At Cathedral City, the Whitewater River drains approximately 720 square miles, and generates 100-year storm flows of approximately 47,000 cubic feet per second (cfs) downstream of the confluence of Tahquitz Creek and the Whitewater Channel within the Cathedral Canyon golf course. The Standard Project Flood (SPF) flow at this location is calculated to be 85,000 cfs, a very large volume of water but with a recurrence interval of once every 500± years. CVWD and RCFCD are continuing programs of channel revetment (concrete armoring of channel walls) to protect the channel from stormwater erosion.

CATHEDRAL CANYON DRAINAGE

The Cathedral Canyon drainage originates in the Santa Rosa Mountains and foothills that embrace and form the Cathedral Cove neighborhood. The principal drainages in this area are West and East Cathedral Canyon Washes, but side drainages to the west and east also make important contributions to storm flows that are ultimately discharged into the WWRSC. Significant capital investments have been made in the community where these threats occur, including the revetment discussed above. Improvements have been completed over a long period of time, and in the case of the West and East Cathedral Canyon Channels, date back to 1950. The two major Cathedral Canyon drainages are briefly described below.

East Cathedral Canyon Channel

The East Cathedral Canyon Channel flows north east from the mouth of the steep-walled East Cathedral Canyon and is contained by the Santa Rosa foothills on the east and a RCFCD levee on the west. Portions of the channel were originally lined by the County prior the City's incorporation, with additional lining in 1999 at the East Palm Canyon Drive bridge. This drainage discharges direct into the WWRSC immediately west of Palm Springs Motors.

West Cathedral Canyon Channel

The West Cathedral Canyon Channel flows from the mouth of West Cathedral Canyon along the west boundary of Cathedral Cove and is contained by the Santa Rosa foothills on the west and the RCFCD levee on the east. The channel conveys flows under East Palm Canyon Drive and transitions into the full-lined West Cathedral Canyon Evacuation Channel, which turns east, picks up metered flows from the Eagle Canyon Dam and continues east, passing beneath Date Palm Drive and discharging into the WWRSC.

OTHER LOCAL DRAINAGES AND FACILITIES

A small storm drain is located at Landau Boulevard and Ramon Road, which conveys local runoff into the WWRSC. Another, Line 1, is located southeast of Rio del Sol but has not yet been completed. The City's Storm Drain Master Plan includes a number of detention and retention basins, storm drain pipelines south of I-10 and north of the Whitewater River, and several improvements in Cathedral Cove.

The City, CVWD and the UPRR are also working on the design of a railroad bridge and training levee along the Morongo Wash drainage south of Interstate 10, which will remove a portion of lands to the east from Flood Zone "A" north of Verona Road. The Cathedral City Comprehensive Storm Drain Master Plan (1990) presents proposed drainage systems, conceptual design, and cost estimates and financial analysis for funding strategies for future implementation.

FUTURE DIRECTIONS

Cathedral City is responsible for coordination with the appropriate agencies in the identification of hydrological issues and flood risks within its boundaries, and enforces and implements the City's Storm Drain Master Plan. This sub-element includes goals, policies and programs to help the City and the community assure proper flood management.

GOAL, POLICIES AND PROGRAMS

Goal 1: The protection of lives and property from local and regional flooding hazards.

Policy 1: Update the City Storm Drain Master Plan to reflect new hydraulic analysis, built facilities, changing conditions and the evolving needs of the City.

Program1.A: Local regulations and guidelines shall be established and updated consistent with the Storm Drain Master Plan to direct the management of runoff and provide for local drainage facilities which support the effective use of local and regional facilities.
Responsible Agencies: Public Works; City Engineer
Schedule: Continuous

Program 1.B: Monitor and periodically update the Storm Drain Master Plan, in coordination with the County and CVWD, to reflect changes in local and regional drainage and flood conditions.
Responsible Agencies: Public Works; City Engineer; RCFCD, CVWD
Schedule: Continuous

Policy 2: Major drainage facilities shall be designed to maximize their use as multi-purpose recreational or open space areas, consistent with the functional requirements of these facilities.

Program 2.A: Coordinate and cooperate with responsible regional agencies in multi-use agreements within flood control channels and designing safe, attractive recreational facilities while maintaining the functional requirements of the drainage facilities.
Responsible Agencies: Public Works; Planning; CVWD, RCFCD
Schedule: Continuous

Program 2.B: Work closely with responsible agencies to design drainage and flood control facilities that minimize negative aesthetic impacts, blend with surrounding lands, and retain natural groundcover and vegetation to the greatest extent practicable.
Responsible Agencies: Public Works; Planning; CVWD; RCFCD
Schedule: Continuous

Policy 3: Continue to actively participate in regional flood control and drainage improvement efforts to develop and implement mutually beneficial drainage plans.

Program3.A: Capital Improvement Plans for drainage management and control shall be developed, updated and maintained and shall be based upon the Storm Drain Master Plan project descriptions.
Responsible Agencies: Public Works, Planning
Schedule: Continuous

Program 3.B: Coordinate and cooperate with responsible regional agencies in achieving multi-use agreements within flood control channels and designing safe, attractive recreational facilities which maintain the functional requirements of the drainage facilities.
Responsible Agencies: Public Works, Planning, CVWD, RCFCD
Schedule: Continuous

Policy 4: The City shall cooperate with CVWD and RCFCD in securing FEMA map amendments for planning areas and projects, as they occur.

Program 4.A: The City shall coordinate and cooperate in the filing of appropriate FEMA application materials to secure amendments to the Flood Insurance Rate Maps for the City, consistent with existing and proposed improvements.
Responsible Agencies: Public Works; City Engineer; CVWD; RCFCD
Schedule: Continuous

Policy 5: Pursue all viable sources of funding for local and regional drainage improvements needed for adequate flood control and protection.

Program 5.A: Consider the establishment of Area Drainage Plans or Assessment Districts to fund drainage improvements.
Responsible Agencies: Public Works; City Engineer
Schedule: Continuous

Program 5.B: Explore and pursue County funding, state funding under the Cobey-Alquist Flood Plain Management Act, other State programs, and federal funding options for local and area-wide flood control projects.
Responsible Agencies: Public Works; City Engineer
Schedule: Continuous

Policy 6: All new development shall be required to incorporated adequate flood mitigation measures, such as grading that prevents adverse drainage impacts to adjacent properties, on-site retention of runoff, and the adequate siting and sizing of structures located within flood plains.

Program 6.A: Stormwater retention for the 100-year storm shall be enforced through the development review process and routine site inspection.
Responsible Agencies: Public Works; Planning Department
Schedule: Continuous

Policy 7: Assure adequate, safe, all-weather and low-flow crossings over flood control channels are provided where necessary, and are maintained for passage during major storm events.

Policy 8: Investigate the need for the construction of curbs and gutters in neighborhoods lacking sufficient street drainage improvements.

Policy 9: Critical health and safety facilities shall not be located within the 100-year flood plain unless flood-proofing or other mitigation measures are implemented.

Program 9.A: The Land Use Map and Zoning regulations shall prohibit the construction of critical facilities within the 100-year flood plain unless flood-proofing or other mitigation measures are implemented, and shall only permit residential development if adequate flood-proofing measures have been implemented.
Responsible Agencies: Planning; Public Works
Schedule: Continuous

Policy 10: The flood-prone areas designated on Exhibit S-1 and as defined by FEMA shall be considered inappropriate for conventional urban development without adequate flood control facilities. Applications for development at urban or suburban densities in areas where there is a serious risk to life shall demonstrate appropriate and cost-effective solutions before City grants approvals.

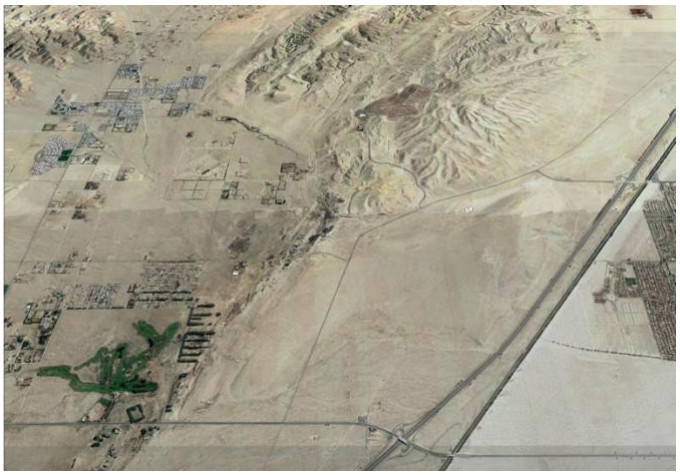
Policy 11: The City shall consider the use of floodplains as parks, nature trails, equestrian parks, golf courses, or other types of recreational facilities or joint-use facilities that can withstand periodic inundation.

Geotechnical Sub-Element

PURPOSE

The purpose of Geotechnical Element is to identify seismic and other geologic hazards within the planning area, evaluate risks to property, infrastructure and human life, and provide goals, policies and programs that address these hazards. The element also provides essential information about the geologic conditions, sets forth strategies and requirements directed at protecting the general health and welfare of the community and reducing the potential for injuries, loss of life, and property damage resulting from seismic and other geologic hazards. The element and its supporting documentation also serve as an information database on regional geotechnical hazards as a foundation upon which future land use policies and decisions will be based.

BACKGROUND



The City and the Coachella Valley are located in one of the most geologically active regions on Earth. The valley is located within the Transverse geomorphic province, a structurally complex region[4] crossed by several major fault zones (i.e. Banning, San Jacinto, and San Andreas faults). These faults strongly influence the soils, geology, and seismicity of the region. The Geotechnical Element addresses potential geologic hazards that can result in significant property damage, generate significant clean-up and reconstruction costs, and interrupt the day-to-day operations of the City for months or years.

Geotechnical issues are directly related to a number of other General Plan elements and sub-elements, including the following: Land Use, Housing, Public Buildings and Facilities, Circulation and Mobility, Water, Sewer and Utilities, Water Resources, Flooding and Hydrology, Police and Fire Protection, Emergency Preparedness, and Economic and Fiscal Health elements.

Pursuant to California Government Code Section 65302(g), the General Plan is required to address and protect the community from the effects of known geologic risks and hazards, such as seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure. The element must also address slope instability leading to rockfalls and landslides, ground subsidence and liquefaction, and other seismic hazards identified in Chapter 7.8 (commencing with Section 2690) of the Public Resources Code, and other geologic hazards known to the City, including flooding, and wildland and urban fires (also see Emergency Preparedness Sub-Element).

Government Code Section 8876 sets forth a program that mandates the City and all other jurisdictions located within the most severe seismic shaking zone, designated as Zone 4 (as established in Chapter 2-23, Part 2, Title 24 of the Administrative Code), to identify all potentially hazardous or substandard buildings and implement a program for the mitigation of these structures.

[4] The San Andreas Fault System in the Vicinity of the Central Transverse Ranges Province, Southern California, (Open-File Report 92-354; 1992), by Department of the Interior, U.S. Geological Survey.

Geologic Setting

Cathedral City is located in the Coachella Valley which is a deep fault graben formed by tectonic movement along the San Andreas Fault (SAF) (Exhibit S-54.[5] The SAF is a complex strike-slip fault that represents a continuous zone of faulting from Point Mendocino in northern California to the Salton Sea and into the Sea of Cortez. It is more correctly referred to as a fault "zone", and the motion accommodated by the fault zone is distributed along a complex system of interrelated faults.6

The Coachella Valley is bounded by the Little San Bernardino Mountains on the north and northeast, Santa Rosa and San Jacinto Mountain Range on the southwest and west. Geologic materials of the San Bernardino Mountains to the northwest are mainly comprised of ancient basement rocks that have been uplifted to their current elevations. The southwestern and southeastern margins of the San Bernardino Mountains are traversed by several strands of the San Andreas Fault zone that are part of the geomorphic and structural boundary of the range. Together, the San Jacinto and Santa Rosa Mountains form the Peninsular Ranges Province and are classified as Mesozoic granite, which was first exposed about 95 million years ago. San Jacinto Mountain Range is traversed by San Jacinto Fault zone on its western margin.

The valley includes a diverse range of rocks and sediments formed or deposited over millions of years. Sediments from the surrounding mountain ranges are carried into and across the Coachella Valley through numerous seasonal streams flowing to the Whitewater River, San Gorgonio River and the Snow Creek, Chino Canyon, Tahquitz Canyon, Palm Canyon, Eagle Canyon, Mission, Big Morongo, and Little Morongo Creeks. The Whitewater River is the master drainage for the valley, which flows northwest to southeast. Episodic flooding of major regional drainages, including the Whitewater River and Coachella Valley Stormwater Channels, results in the deposition of sand and gravel on the valley floor.

Rocks and Sediments

The City's geologic composition is also related to its proximity to the San Andreas Fault, which passes through the northern portion of the valley and north city limits, and other active faults. The rocks and sediments exposed at the surface of the General Plan planning area, which can be classified based on their age, include:

1) Mesozoic and older (66 million years old and older) rocks in the Santa Rosa Mountains,
2) Middle to Early Pleistocene (11,000 to 1.6 million years old) sediments on Edom Hill, Flat Top Mountain, and the northwestern portion of the planning area, and
3) Holocene (0-11,000 years old) sediments on the valley floor.

Metasedimentary Rocks: The oldest rocks reported within the planning area are Cretaceous and pre-Cretaceous metamorphic rocks of sedimentary and volcanic origin. It is limited to the slopes of the Santa Rosa Mountains and typically are non-water-bearing, except where they are extensively jointed and fractured.

Alluvial Sediments: The most recently deposited sediments in the planning area are found on the wash, fan and valley alluvial areas, where water transports and processes these unconsolidated sandy and gravelly materials of Late Holocene age. Some are moderately loose sand and silty sand, boulder, cobble, gravel, sand, and silt deposits eroded from the confined valley or canyons. They are found in the southern and northern portion of the planning area along Santa Rosa Mountains and Flat Top Mountain southwest of Edom Hill. Other deposits are comprised of clay, silt, sand, and gravel and are found in the central planning area mainly along the Whitewater River, and the Salvia and Morongo Washes south of the Indio Hills and the Cathedral Canyon drainages at the base of the Santa Rosa Mountains. They also occur north of the Indio Hills.
Alluvial plain sediments are typically loose near the ground surface but become denser with increasing depth. They have medium to high permeabilities, except where silt layers retard the percolation of water. Because these units

[5] Alles, D. L. (2012). Geology of the Salton Trough.
[6] Hill, M. L., & Dibblee, T. W. (1953). San Andreas, Garlock, And Big Pine Faults, California: A Study of The Character, History, And Tectonic Significance Of Their Displacements. Geological Society of America Bulletin, 64(4), 443-458.

can be readily compacted with a combination of saturation and wheel rolling with rubber-tired construction equipment, they are generally suitable for use as compacted fill. Shrinkage of 20% to 30% can be expected upon compaction. Alluvial fan sediments, which are dry with higher permeabilities, are also generally suitable for use as compacted fill. Compaction of the near-surface soils can be expected to result in up to 15% shrinkage.

Aeolian and Dune Deposits: These deposits are unconsolidated, generally well-sorted windblown (aeolian) sand which also occurs as dune sand deposits. These fine and medium-grained soils are picked up and transported by strong winds emanating from the San Gorgonio Pass at the northwesterly edge of the valley. They are redistributed along the central valley floor where they form shifting sand dunes. A thick accumulation of these windblown sands has formed the *Palm Springs Sand Ridge* that arises in Cathedral City and in places rises up to 120 feet above the valley floor. Windblown deposits underlie much of the developed portion of the planning area and sheltered portions of lands north of I-10.

Aeolian deposits are typically loose near the ground surface but become denser with increasing depth. Like alluvial deposits, they are generally suitable for use as compacted fill, as they can be readily compacted with a combination of thorough wetting and wheel rolling with rubber-tired construction equipment. These units typically have high permeabilities, and shrinkage of up to 30% can be expected upon compaction.

Geologic Hazards

Slope Instability

Land adjacent to the Indio Hills and the east to northeast-facing slopes of the Santa Rosa Mountains have a moderate to high susceptibility to rock falls and land-sliding. The metasedimentary and intrusive rocks of the slopes of the Santa Rosa Mountains have several planes of weakness, including joints, fractures, and foliation. Depending on their orientation, these areas could be susceptible to failure. Additionally, as these rocks weather they can form rounded boulders that perch precariously on steep slopes, and pose rock fall hazards down slope. Areas with surface soils comprised of sands and other less cohesive soils, and located on sloping terrain, can be subject to sliding during strong ground shaking.

Earthquake-induced landslides and rock falls may occur in both the Indio Hills and Santa Rosa Mountains and are addressed in subsequent sections of this element. Mitigation of these hazards is best accomplished by avoiding development on steep slopes and implementing structural setbacks at the toe of slopes. Any proposed development adjacent to steep slopes of the Santa Rosa Mountains or Indio Hills should include an analysis for potential slope instability. Areas of potential slope instability are shown on Exhibit S-2.

Collapsible Soils

Soil collapse, or hydro-consolidation, occurs when soils undergo a rearrangement of their grains and a loss of cementation, resulting in substantial and rapid settlement under relatively low loads. This phenomenon typically occurs in recently deposited Holocene soils in a dry or semi-arid environment, including aeolian sands and alluvial fan and mudflow sediments deposited during flash floods. The combination of weight from a building or other structure, and an increase in surface water infiltration (such as from irrigation or a rise in the ground water table) can initiate rapid settlement and cause structural foundations and walls to crack.

Alluvial and aeolian sediments in the planning area have the potential for collapse. Where development is proposed on these soils, this hazard should be evaluated as part of site-specific geotechnical evaluations, and recommendations should be made to mitigate the potential hazard. These studies should include analysis of the

settlement potential of the entire soil column to the effective depth of infiltration of irrigation water, rather than only the near-surface soils. Additional recommendations that can mitigate these impacts include pre-watering of susceptible soils to induce collapse prior to construction, designing drainage to flow away from structures, avoiding open-bottomed planters adjacent to structures, using roof gutters to direct drainage away from foundations, and limiting the use of irrigation water.

Expansive Soils

Expansive soils contain significant amounts of clay particles and have the ability to give up water (shrink) or take on water (swell). When swelling occurs, the soils can exert significant pressure on structures (e.g. buildings, channel linings and other structures) built upon them and can result in structural and other damage. Surface soils in the planning area are generally described as predominantly sand, riverwash gravels, and rock outcrop, with the relatively minor amount of clay. The minor amounts of clay present in the area are not considered a hazard to development in the planning area. The older fan deposits of the Indio Hills may contain clay-rich soils near the surface, these units are typically removed and recompacted during grading. Mixing of soils during this process is expected to reduce their expansion potential.

Ground Subsidence

Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement, and is usually associated with the extraction of oil, gas, or ground water. During this process, fluids (including water) and gases contained in subsurface clay layers are squeezed or pumped out, and the clay is compacted by the weight of overlying sediments. Subsidence can result in damage to structures that are sensitive to slight changes in elevation, such as larger buildings and foundations, canals and channel lining, and wells. Subsidence can also result in changes to surface drainage, reductions in aquifer storage capacity, and the formation of earth fissures.

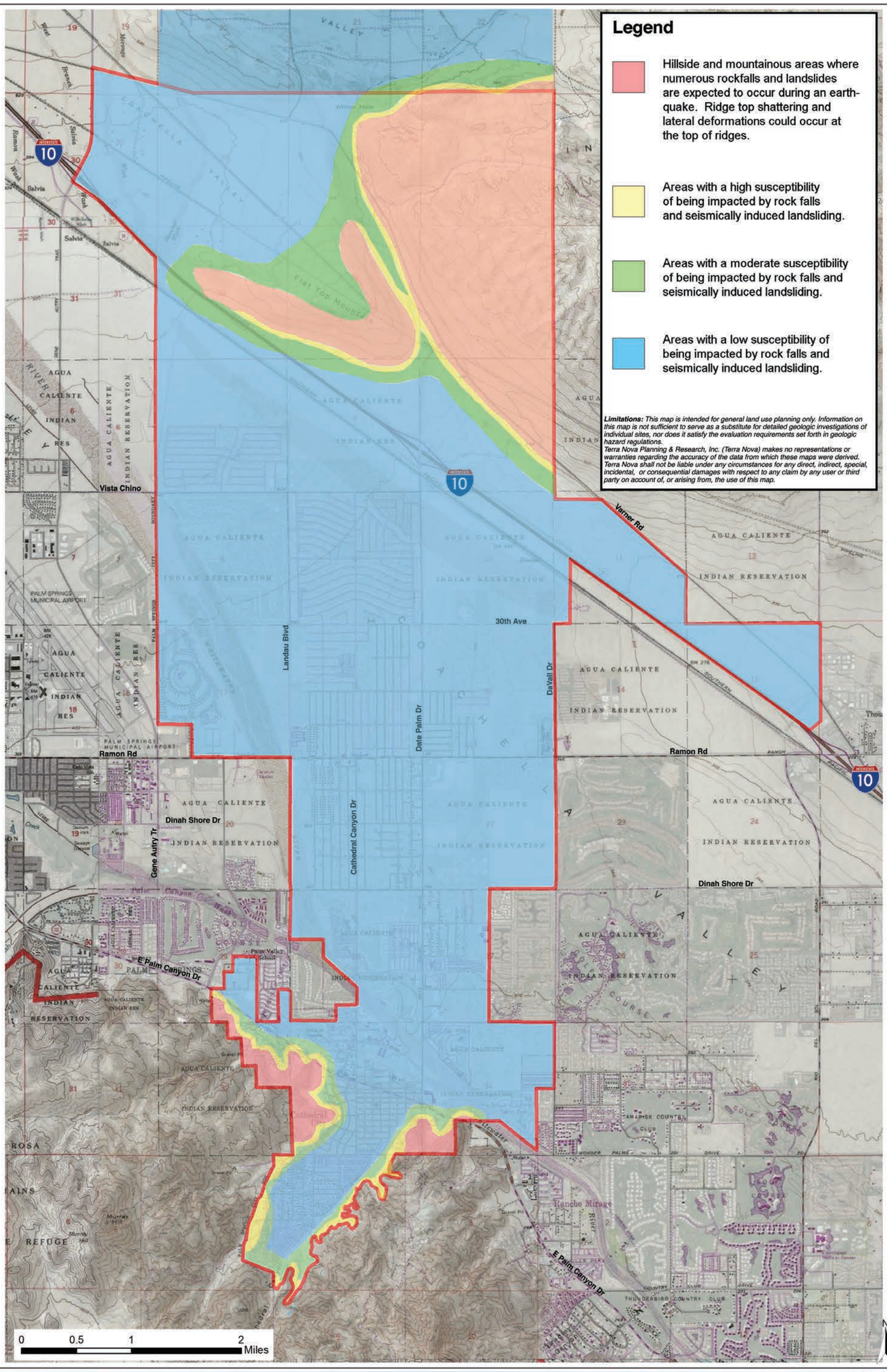
Subsidence as a result of groundwater withdrawal is one of the major environmental constraints facing the Coachella Valley, although most evidence of regional subsidence has been observed in the eastern Coachella Valley. Since the late 1970s, the regional demand for groundwater has exceeded the supply, and the ground water basin in the Coachella Valley is currently in a state of overdraft. Continued overdraft of the aquifer would result in declining groundwater levels, thereby increasing the potential for associated subsidence. It should be noted that the regional groundwater managers, including CVWD and DWA, have been proactive in securing and importing water to recharge the aquifer. It is hoped that the ongoing overdraft condition will end by the early 2020s.

Wind Erosion

Wind funneling through the San Gorgonio Pass picks up sands and silts from the alluvial plain and washes and carries them across the valley floor, sorting these materials into various grades of coarseness. Wind erosion is a serious environmental problem in the valley often resulting in soil degradation, damage to cars and structures, and contributing to poor air quality.

As shown in Exhibit S-3, most of the General Plan planning area is located within *very severe* and *severe* wind erosion hazard zones. While winds may be strong across all portions of the City, it is the silty and light sandy soils that are most erosive. Land development and other sources of soils destabilization directly and indirectly aggravate soil erosion by removing the stabilizing crust of undisturbed soils, and destroying vegetation.

Pursuant to California Government Code Section 65302(d)(2), the General Plan is required to incorporate policies to prevent soil erosion and protect the community from its effects. For Cathedral City, the mitigation of this hazard has required the development and implementation of multi-faceted dust control plans during and following development. Please see the *Air Quality Element* for more information on City and regional dust control measures.



Source: Esri, USGS, 2018; Earth Consultants International, 2001

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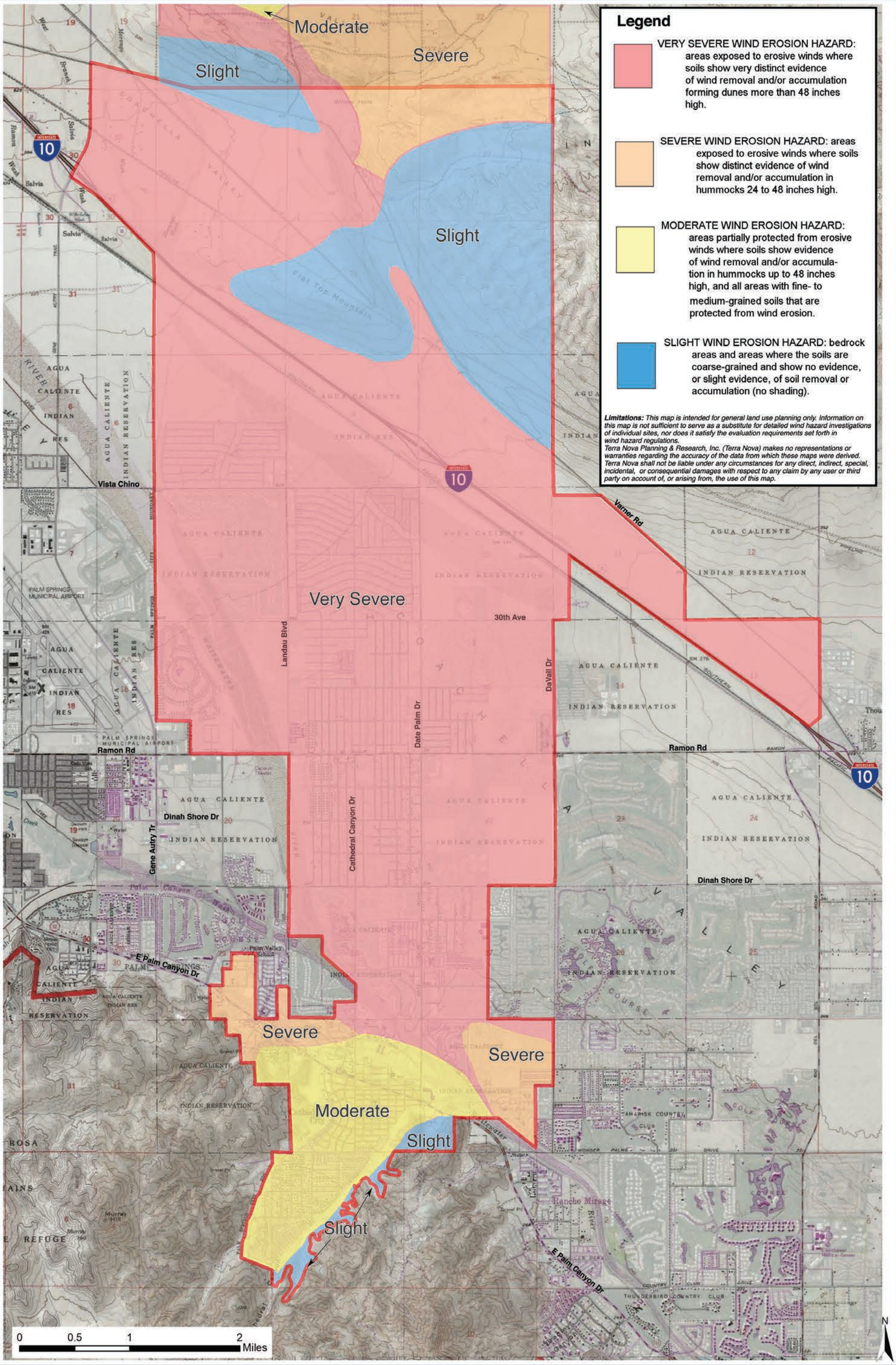
Exhibit S-2 - Seismically Induced Rock Fall and Landslide Suceptibility
Cathedral City General Plan - Imagine 2040

Cathedral City



Source: Esri, USGS, 2018; Earth Consultants International, 2001

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Exhibit S-3 - Wind Hazard Zones
Cathedral City General Plan - Imagine 2040

Cathedral City

REGIONAL TECTONIC SETTING

Cathedral City is located along the southern segment of the San Andreas Fault Zone, an active fault zone that has the greatest influence on seismic hazards in the City and valley. The San Jacinto Fault Zone west and at the foot of the San Jacinto Mountains also has the potential to generate strong ground shaking in the City. Other numerous earthquake-producing faults in the region include the Pinto Mountain Fault to the north, faults in the Eastern California Shear Zone (including the Burnt Mountain, Eureka Peak, and Pisgah-Bullion Mountain-Mesquite Lake faults), and the Elsinore Fault to the west. Faults that have not shown movement within the past 11,000 years are considered to be "*inactive*".

The San Andreas Fault passes through the northern portion of the City and is capable of generating magnitude 8.0+ earthquakes. Portion of faults in this area are within the Alquist-Priolo Earthquake Fault Zone and Riverside County-designated fault zone hazard maps. The network of the faults in the City is shown in Exhibit S-4 and discussed below.

San Andreas Fault Zone

The San Andrea Fault Zone consists of northwest-southeast trending faults and folds that extend from the Salton Trough and the Sea of Cortez on the southeast, northward to approximately Point Mendocino. This fault zone is approximately 800 miles in length. In southern California, the San Andreas fault system is comprised of three segments: 1) Mojave Desert segment, 2) San Bernardino Mountains segment, and 3) Coachella Valley segment.[7]

Currently, portions of the Coachella Valley segment fault are located within Alquist-Priolo Earthquake Fault Zone. The Coachella Valley segment crosses the General Plan planning area. It consists of two fault strands: the San Andreas Fault strand (also known as the North Branch or Mission Creek fault) which occurs north and east of the planning area; and the Banning Fault strand (also known as the South Branch fault) which extends across the northern portion of planning area.

The two strands merge southeast of the planning area, near Indio, and continue southeastwardly toward the United States-Mexico border. Paleoseismic studies that include fault trenching indicate that the last surface-rupturing earthquake on the Coachella Valley segment occurred around 1680. Prior to this, earthquakes on this fault occurred at an average recurrence interval of every 220± years. The merged segment is creeping at a rate of about 25 mm/year (5± mm/year), has more than a 22% probability of rupturing before the year 2024, and is expected to generate earthquakes with a magnitude of 6.0-7.0 on the Richter scale.

The Banning Fault of the Coachella Valley segment, which passes through the planning area, is capable of producing a magnitude 7.4 earthquake that would result in peak horizontal ground accelerations of between 0.45 and 0.9g in Cathedral City. Within the planning area, it consists of several splays that branch off from one another, then come together. In the vicinity of the Edom Hill Landfill, just east of the planning area, the fault consists of one main fault and at least three secondary splays. The Banning Fault is believed to have been responsible for generating the magnitude 5.9 North Palm Springs earthquake in 1986. Although the ground surface did not rupture during this quake, ground fractures occurred on the northern side of the fault, between Whitewater Canyon and State Highway 62.

[7] Natural Hazard Mapping, Analysis, and Mitigation: a Technical Background Report in Support of the Safety Element of the New Riverside County 2000 General Plan, prepared by Earth Consultants International on August 2000.

The Mission Creek fault is capable of generating a magnitude 7.1 earthquake, with resultant peak ground accelerations of between 0.4 and 0.8g in the City. Geotechnical studies in the Desert Hot Springs area have documented several breaks that can be traced upward to within one foot of the ground surface. It is estimated that the City would be susceptible to ground accelerations greater than 1.0g during a simultaneous rupture of the Banning and Mission Creek faults.

The Coachella Valley segment joins the San Bernardino Mountains segment to the northwest of the planning area, near the northwestern limits of the City of Desert Hot Springs. The San Bernardino Mountains segment has a slip rate of about 24± mm/year (5± mm/year), with an average recurrence interval of 146 years. It is estimated that this segment has a 28% probability of rupturing before year 2024.

Garnet Hill Fault

The Garnet Hill fault is mapped as a buried fault and is based on a gravity anomaly survey of the Coachella Valley by a major oil company.[8] The Garnet Hill fault is not mapped as offsetting Holocene- age materials[9] and, therefore, does not display evidence of being active[10]. The fault can act as a plane of weakness and move in response to an earthquake on another nearby fault.

Although the California Division of Mines and Geology (California Geological Survey) has not designated it as an active fault subject to fault study, Riverside County has designated the Garnet Hill fault for further study. The Garnet Hill fault extends from the vicinity of Whitewater Canyon to the southeast portion of Edom Hill where it crosses the planning area near and north of I-10 and dies out.[11] This fault is primarily a right-lateral strike-slip fault along most of its trace, but splays into a series of oblique reverse faults at its western end. The Garnet Hill fault consists of a series of left-stepping, northwest-trending right-lateral faults with active folds at each stepover.[12] The discontinuous geometry of the Garnet Hill fault and the small size of these folds suggest that cumulative slip is too low to have led yet to integration of the fault into a single strand. The slip rate of the Garnet Hill fault has not yet been determined.

The Garnet Hill fault and the Coachella Valley segment of the Banning fault merge at a depth of about 5 km to form a single fault and merge with the San Gorgonio Pass fault system.[13] Seismological data also suggest that the Garnet Hill fault merges with the San Gorgonio Pass fault zone to carry slip between the disconnected segments of the San Andreas fault, thus making the Banning-Garnet Hill-San Gorgonio Pass system a significant seismic source in the region. Based on the seismic pattern, it is interpreted that the M5.9 1986 North Palm Springs earthquake main shock and aftershock sequences have occurred on the Banning strand[14]; however, the main event has occurred on the linked San Gorgonio Pass-Garnet Hill-Coachella Valley Banning fault[15]. The Garnet Hill fault has been mapped by the County of Riverside and referred to as County Fault Zone.[16] The County applies Alquist-Priolo Earthquake Fault Zoning Act provisions to the Garnet Hill fault to minimize the impacts.

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8 Geology of the Desert Hot Springs-Upper Coachella Valley area, California, California Division of Mines and Geology Special Report 94, 50 (1968). by Richard J. Proctor.

9 Jennings, C.W. 1994. Fault Activity Map of California and Adjacent Areas with Locations and Ages of Recent Volcanic Eruptions: California Division of Mines and Geology, Geologic Data Map No.6, Scale 1:750,000.

10 Hart, E.W., Smith, D.P., and Saul, R.B. 1979. Summary Report: Fault Evaluation Program, 1978 Area (Peninsular Ranges-Salton Trough Region): California Division of Mines and Geology, Open File Report 79-10.

11 Holocene geologic slip rate for the Banning strand of the southern San Andreas Fault, southern California by Gold et al., 2015.

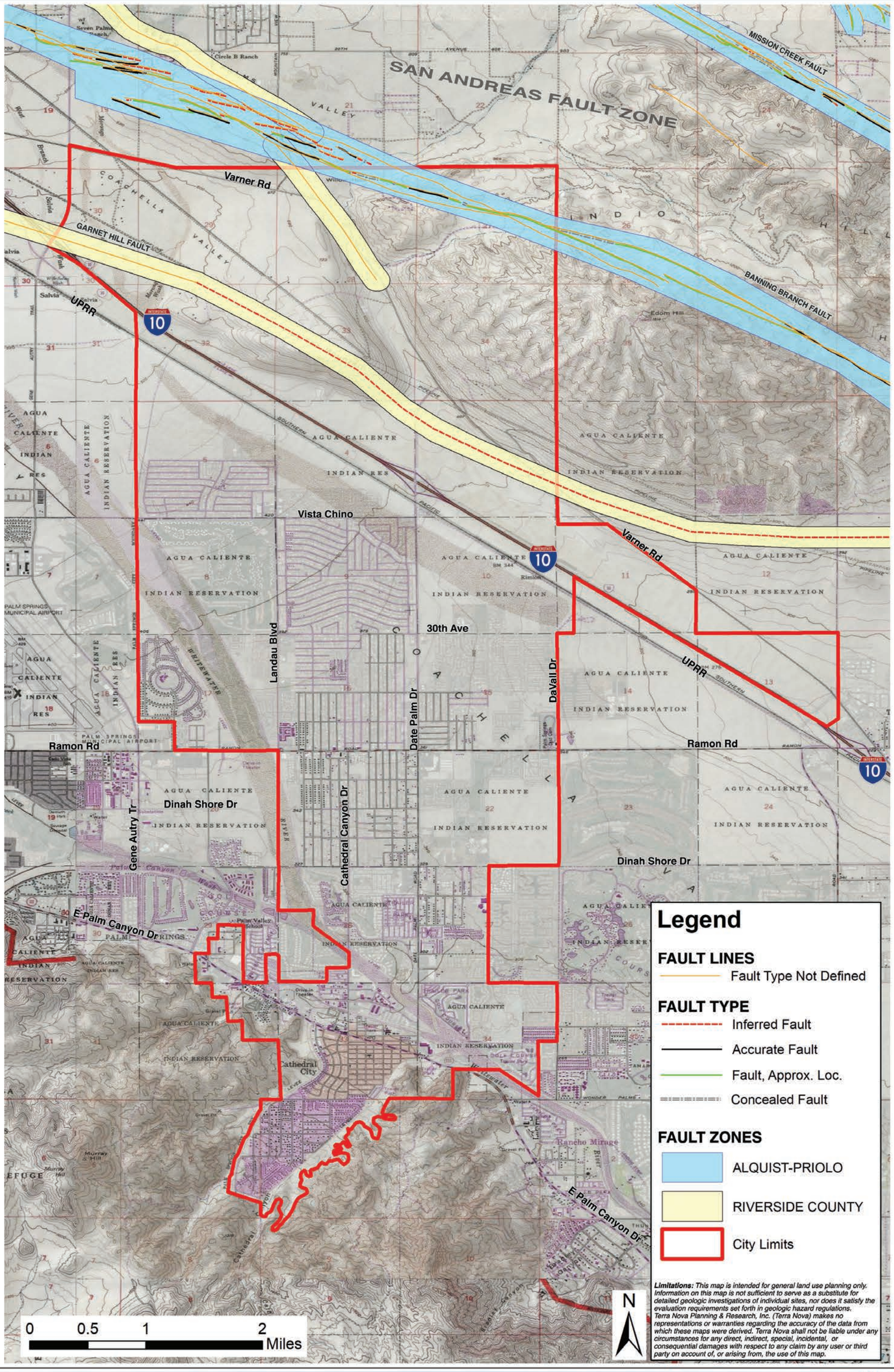
12 Complexities of the San Andreas fault near San Gorgonio Pass: Implications for large earthquakes, by Yule and Sieh (2003).

13 Ibid.

14 Jones, L. M., L. K. Hutton, D. D. Given, and C. R. Allen (1986), The North Palm Springs, California, earthquake sequence of July 1986, Bull. Seismol. Soc. Am., 76, 1830–1837.

15 Ibid.

16 County of Riverside General Plan (2004)-Safety Element.



Source: Esri, USGS, 2018; Gold, et. al., 2015.

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Exhibit S-4- Earthquake Fault Map
Cathedral City General Plan - Imagine 2040

Cathedral City

San Jacinto Fault Zone

As noted, the San Jacinto Fault Zone extends from the City of San Bernardino, southeasterly toward the Brawley area, where it continues south of the U.S./Mexico border as the Imperial Fault. The fault is south of the Planning Area but has a high level of historic seismic activity, with at least ten moderate (M6> to 7>) earthquakes having occurred between 1890 and 1986, with an estimated recurrence interval of between 150 and 300 years.

Available data suggest that the slip rates of the fault's northern segments are about 12± mm/year (6± mm/year), and slip rates of the southern segments are about 4± mm/year (2± mm/year). The San Bernardino and San Jacinto Valley segments are estimated to have a 37% and 43% probability, respectively, of rupturing before the year 2024. Based on a maximum credible earthquake of magnitude 7.0 on the closest segment on this fault, such an event would generate horizontal ground acceleration of 0.1 to 0.25g in the City.

East Mojave Shear Zone

The East Mojave Shear Zone includes several northwest-trending faults in the southern Mojave Desert that collectively appear to be accommodating between 9% and 23% of the motion between the North American and Pacific tectonic plates. Paleoseismic studies indicate that several earthquakes have occurred in this area during the Holocene Epoch, including the 1992 Landers earthquake, which occurred on the Johnson Valley fault. A magnitude 7.3 earthquake on one of these fault segments is expected to generate a peak horizontal ground acceleration of between 0.1 and 0.15g and MMI seismic intensity of between VII and VIII in Cathedral City.

Pinto Mountain Fault

The Pinto Mountain fault is an east-trending fault that is traceable for approximately 47 miles, from its junction with the San Andreas fault eastward to just east of the City of Twentynine Palms, north of the planning area. The Pinto Mountain fault is considered active, and Holocene Epoch movement has been documented. The fault is capable of generating a maximum credible earthquake of 7.0, which would generate peak horizontal ground accelerations of between 0.15 and 0.3g in the General Plan planning area.

Seismic Activity in the Planning Area

California Government Code Section 65302(g)(1) requires that the General Plan incorporate policies to address seismic risks, avoid earthquake-caused ground-failure hazards and protect the community from seismic hazards. Several faults present in the planning area are capable of generating strong ground shaking. Potential seismic intensities in the City and surrounding area associated the earthquakes are shown in Table S-1 below.

Table S-1
Potential Seismic Intensities Associated with the Maximum Credible Earthquake (MCE)

Fault Name	Distance to GP Area (miles)	Magnitude of MCE	Peak Ground Acceleration of MCE (g)*	MMI** from MCE
San Andreas				
Coachella Segment (south strand)	0 –9	7.4	0.459	X-XII
Coachella Segment (north strand)	1 – 10	7.1	0.435	X-XI
San Bernardino Mtns. Segment	4 – 11	7.3	0.332	IX-XI
Garnet Hill	0-6	7.0	0.17 – 0.70	VIII - XI
East Mojave Shear				
Burnt Mountain	7 – 14	6.4	0.201	VIII-IX
Eureka Peak	9 – 16	6.4	0.165	VII-IX
Landers	20 – 28	7.3	0.15-0.25	VI-IX
Lenwood-Lockhardt-Old Woman	34 – 40	7.3	0.06 - 0.11	VI-VII
Camp Rock-Emerson-Copper Mtn	25 –32	6.9	0.10-0.15	V-VIII
Johnson Valley (northern)	30 – 38	6.7	0.05-0.10	V-VII
Pisgah-Bullion Mtn-Mesquite	31 – 37	7.1	0.05-0.15	V-VIII
Calico-Newberry-Hidalgo	35 – 43	7.1	0.05-0.10	IV-VIII
Helendale-S. Lockhardt	41 – 47	7.1	0.05-0.10	IV-VII
North Frontal Fault Zone	30 – 47	7.0	0.15-0.30	VIII-IX
Pinto Mountain	15 – 22	7.0	0.15-0.30	VIII-IX
San Jacinto				
Anza	17 – 24	7.2	0.135	VIII-IX
Coyote Creek	21 – 29	6.8	0.092	VI-VIII
San Jacinto (San Jacinto Valley)	25 - 29	6.9	0.09 - 0.10	VII-VII
Elsinore	40 – 47	7.1	0.05-0.10	V-VII

* Peak Ground Acceleration, where g is the acceleration of gravity, equal to 9.8 m/sec^2
** MMI = Modified Mercalli Intensity
Sources:
Table 3, "Geotechnical Engineering Update Report Environmental Impact Assessment Proposed 567 Acre Specific Plan Development Area of Varner Road and Bob Hope Drive, County of Riverside, California," prepared by RJR Engineering, June 2013.
Table 1-2, "Technical Background Report to The Safety Element of The General Plan for The City of Palm Springs, Riverside County, California," prepared by Earth Consultants International, Inc., September 2005.
Table 1-2, "Seismic, Geologic, and Flooding Sections of the Technical Background Report to the Safety Element of the General Plan for Cathedral City," prepared by Earth Consultants International, Inc., June 1999.

SEISMICALLY INDUCED GEOTECHNICAL HAZARDS

Liquefaction

Liquefaction is the total or substantial loss of shear strength of loose, sandy, saturated sediments in the presence of ground accelerations greater than 0.2g. When liquefaction occurs, the sediments involved behave like a liquid. This phenomenon can result in structural stress and/or failure due to settlement, the buoyant rise of buried structures such as tanks and pipelines, the formation of mud spouts and sand boils, and seepage of water through ground cracks.

As shown on Exhibit S-5, the potential for liquefaction to occur is low-to-none throughout most of the planning area, principally because groundwater in the Cathedral City area typically occurs 150 to 200 feet below the ground surface, too deep to saturate the loose sediments of the valley floor. Although depth to groundwater may be less than 50 feet adjacent to the Santa Rosa Mountains in the southern planning area, the alluvial sediments in this area are coarse-grained sand, gravels, cobbles, and boulders that are not susceptible to liquefaction.

The potential for liquefaction is moderate to high, however, in the northern portion of the planning area, in the vicinity of the San Andreas Fault. In this area, the fault acts as a barrier or dike to the flow of groundwater. This causes groundwater to rise along the fault and to occur at shallow depths at these locations, which are also typically boundaries between subbasins. Historically, springs and flowing wells have been observed at Willow Hole and areas just north of the planning area. During well drilling in 1981, groundwater was reported at depths of less than 30 feet northeast of Willow Hole. Given that groundwater occurs within 50 feet of the surface in this area, the unconsolidated alluvial sediments are highly susceptible to liquefaction. Shallow groundwater has also been reported along the northern side of the Banning Fault, but sediments in this area are semi-consolidated to consolidated and not as susceptible to liquefaction.

Seismically Induced Settlement

Strong ground shaking can cause soils to become dense or to compact, resulting in local or regional settlement of the ground surface. Settlement can damage structures and foundations, as well as pipelines, canals, and other grade-sensitive structures. The potential for seismically induced settlement to occur is controlled by the intensity and duration of ground shaking and the density of subsurface soils.

As shown in Exhibit S-6, the valley floor is mainly comprised of loose, recently deposited sediments and is highly susceptible to seismically-induced settlement. Development proposed in these areas should include subsurface geotechnical investigations that evaluate the potential for seismically-induced settlement. Proper foundation design and the densification or compaction of subsurface soils prior to development can mitigate some of the damaging effects associated with settlement.

Seismically-Induced Slope Instability

It is estimated that a ground acceleration of at least 0.10g in steep terrain is necessary to generate earthquake-induced rock falls. Given that several nearby faults are capable of generating peak ground accelerations of this magnitude in Cathedral City, there is a moderate to high potential for seismically-induced rock falls and landslides to occur in the General Plan planning area. Susceptible areas are shown on Exhibit S-2 and include areas within and adjacent to the slopes of the Santa Rosa Mountains and Indio Hills, particularly where the bedrock of the Santa Rosa Mountains is highly fractured or jointed. As shown in Exhibit S-2, nearly all of the areas with a moderate or high susceptibility to slope instability are currently undeveloped. The East and West Cathedral Canyon Washes act as a buffer between the slopes of the Santa Rosa Mountains and development in the Cove, and would be expected to absorb much of the potential damage from rock falls and provide some level of protection to existing habitable development.

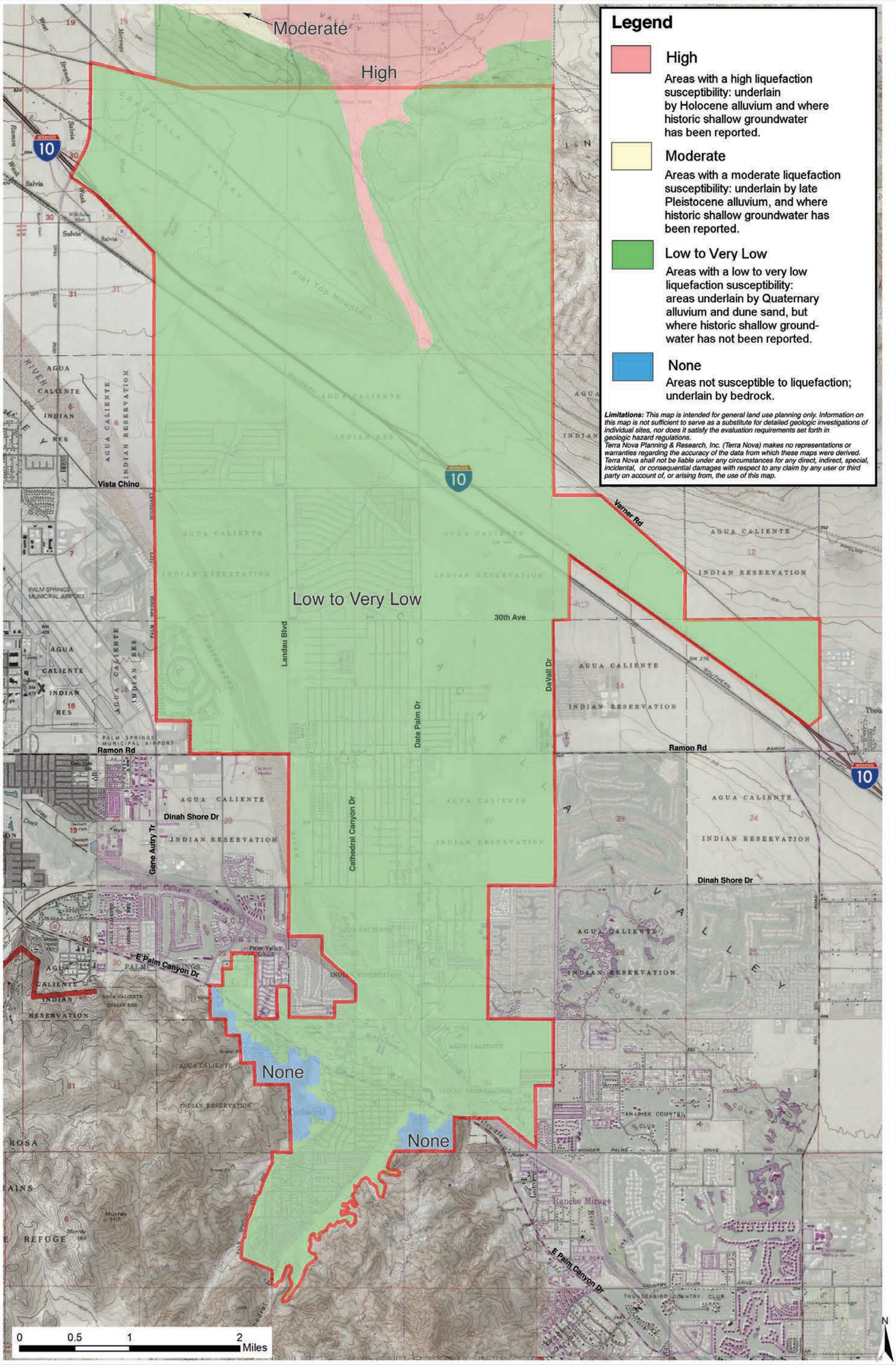
Intense ground shattering can be expected at the top of Edom Hill and other narrow, steep ridges, where topographical features can localize and focus the ground shaking at the ridge top. Mitigation of these hazards can be best achieved by avoiding development on steep slopes and enforcing appropriate building setbacks at the base of the slopes. Even engineered cut and fill slopes constructed on the valley floor may be subject to failure if they are of sufficient height. These slopes must be designed to resist seismically induced failure, and their design should be based on site-specific soil stability analyses that include subsurface soil sampling and laboratory testing.

Seiches

Seiches refers to the seismically-induced oscillation or sloshing of water contained in an enclosed basin, such as a reservoir, pond, water storage tank, or swimming pool. This hazard is dependent upon the frequency of seismic waves, distance and direction from the epicenter, and design criteria of the enclosed body of water. Although damage from small bodies of water, such as swimming pools, would be expected to be minor, damage to or failure of larger bodies of water, such as water tanks and retention basins could result in the inundation of land and structures downslope, hinder efforts to suppress fires, and limit the supply of potable water after a major earthquake.

The Desert Water Agency owns four water reservoirs, which are situated on elevated terrain in the Santa Rosa Mountains surrounding and near the Cathedral Canyon Cove. Damage to and/or failure of these tanks could result in inundation of homes and property in these areas of the City. Two water reservoirs owned by the Coachella Valley

Water District are located on the north edge of Flat Top Mountain just south of Varner Road in the northern portion of the planning area. Although land downgradient from these tanks is currently vacant, tank damage or failure could impact future development. Design elements, such as baffles and braces, are warranted to reduce the potential for seiches in tanks, open reservoirs, and ponds where overflow or structural failure may cause damage to nearby properties. The American Water Works Association (AWWA) Standards for Design of Steel Water Tanks includes updated criteria for the seismic design of water tanks.



Source: Esri, USGS, 2018; Earth Consultants International, 2001

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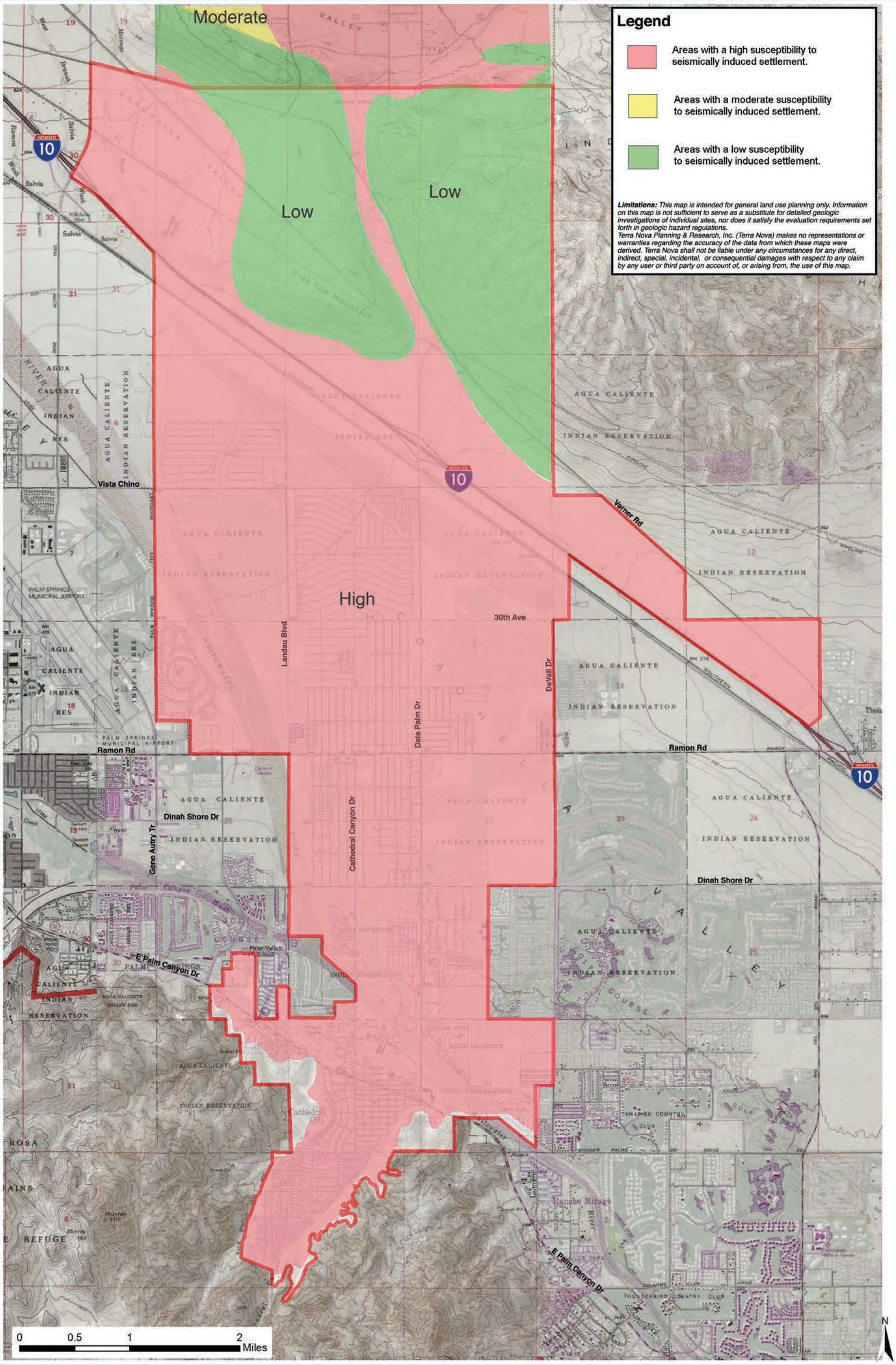
Exhibit S-5 - Liquefaction Suceptibility Map
Cathedral City General Plan - Imagine 2040

Cathedral City



Source: Esri, USGS, 2018; Earth Consultants International, 2001

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Exhibit S-6 - Suceptibility to Seismically Induced Settlement
Cathedral City General Plan - Imagine 2040

Cathedral City

FUTURE DIRECTIONS

This section of the General Plan sets forth goals, policies and programs that address issues related to geologic and seismic hazards. Comprehensive mitigation measures include the identification and mapping of potential hazards, prudent planning efforts, enforcement of applicable building codes, and expedient retrofitting of weak or dangerous structures. The City will also rely on the regulations and guidelines set forth in the Alquist-Priolo Earthquake Fault Zoning Act, State CEQA statutes, PM_{10} control plans, and the Uniform/International Building Code. The Planning Department must assure that development proposals are thoroughly evaluated with regard to geotechnical and seismic safety, and that all necessary site-specific geotechnical studies are conducted and thoroughly evaluated.

GOALS, POLICIES AND PROGRAMS

Goal 1: The protection of human life, public and private property, utility structures, and land from the adverse effects of seismic and geologic hazards.

Policy 1: The City shall establish and maintain an information database containing maps and other information which describe seismic and other geotechnical hazards occurring within the City boundaries, sphere-of-influence and planning area.

Program 1.A: Consult and coordinate with surrounding communities, the California Division of Mines and Geology, Riverside County, other applicable state and federal agencies, and professional engineering geologists to establish, improve and routinely update the database.
Responsible Agency: Planning, California Geologic Survey, County Geologist, Consulting Geologists
Schedule: 2019-20; Continuous

Program 1.B: Establish and maintain a GIS database and mapping of the various geotechnical conditions, hazards and constraints within the City
Responsible Agency: Planning
Schedule: 2019-20; Continuous

Program 1.C : Secure available publications from trade organizations and the state, and make available to developers, property owners, and other appropriate parties, regarding geotechnical investigations that must be carried out within Alquist-Priolo Earthquake Fault Zones.
Responsible Agency: City Engineer, Building Department
Schedule: 2019-20

Policy 2: Continue to regularly update building and fire codes to provide for changes or advancements in seismic safety design.

Program 2.A Regularly consult and coordinate with the California Geological Survey, other relevant state and federal agencies, and surrounding communities to establish, maintain, and update building, seismic and fire codes.
Responsible Agency: Planning, City Engineer/Consulting Geologist
Schedule: 2019; Routine updating

Policy 3: All new development shall be constructed in accordance with the prevailing seismic design requirements contained in the most recently adopted edition of the Uniform Building Code/International Building Code and as otherwise required by the City.

Policy 4: The City shall require geological and geotechnical investigations in areas of potential seismic or geologic hazards as part of the environmental and development review process. The City shall not approve proposals and projects for development or redevelopment which do not provide for mitigation of seismic or geologic hazards to the satisfaction of the responsible agencies.

> **Program 4.A :** The City shall pursue a cooperative agreement with the Riverside County Geologist, State Geologist, or contract geological engineer to review and determine the adequacy of geotechnical and fault hazard studies.
> **Responsible Agency:** Planning, City Engineer
> **Schedule:** 2019-20

Policy 5: Promote and encourage the strengthening of older, inadequately reinforced structures in the City by retrofitting to better resist the effects of strong ground shaking.

Policy 6: The City shall encourage the strengthening of such critical public facilities such as utilities, schools, hospitals, healthcare facilities, eldercare facilities, police and fire stations, and emergency communication facilities.

> **Program 6.A:** The City shall prepare and distribute informational to residents, business owners and property owners, that encourage and facilitate retrofitting of privately-owned structures, including describing appropriate methods of rehabilitation, and possible methods of financing such improvements.
> **Responsible Agency:** Planning, City Engineer
> **Schedule:** 2019-2020

> **Program 6.B:** Coordinate with CVWD, DWA, SCE, SCG, Frontier Communications, Spectrum and other appropriate agencies, to develop and implement strategies to safeguard major utility systems, and to strengthen or relocate facilities that are in potentially hazardous areas.
> **Responsible Agency:** Planning Department, Public Works Department, City Engineer, public and quasi-public agencies
> **Schedule:** Immediate; Continuous

> **Program 6.C :** Coordinate and cooperate with Caltrans, County Transportation and adjoining cities to maximize the resilience of local and regional transportation systems, including US Interstate-10 and other major transportation corridors in the event of a major quake.
> **Responsible Agency:** Public Works Department, City Engineer, Caltrans, County Transportation, Adjoining Cities, CVAG
> **Schedule:** Immediate; Continuous

Policy 7: To the extent feasible, regulate the location of new structures, including utilities, schools, hospitals, healthcare and eldercare facilities, police and fire stations, and emergency communication facilities, in and near areas that would directly be affected by seismic or geologic hazards.

Policy 8: Development proposed for human occupancy on lands within a City Fault Hazard Management Zone and where the location of the fault has not been firmly determined, fault trenching and other geotechnical investigations shall be required. Based on these investigations the City may restrict or prohibiting construction of structures for human occupancy across the fault trace.

> **Program 8.A:** The City shall cooperate with county, state and federal agencies in conducting geological investigations of the Garnet Hill and San Andreas faults. The City shall investigate the possibility of partnering with the Earthquake Hazards Program of the U.S. Geological Survey to better identify the active traces of the Garnet Hill and San Andreas faults.
> **Responsible Agency:** Planning, City Engineer
> **Schedule:** On going.

Program 8.B: The City shall require geological studies, such as fault-trenching, of the defined traces of the Garnet Hill and San Andreas fault traces shown on Exhibit S-4. The studies shall be conducted by State-certified engineering geologists following the guidelines established in the Alquist-Priolo Earthquake Fault Studies Act. The City Geologist shall review the fault studies to ensure that excavations were conducted with an acceptable level of effort to determine whether there are active faults through the proposed development, and that suitable fault setbacks are defined.
Responsible Agency: Planning, City Engineer, County Geologist
Schedule: On going.

Program 8.C: The City shall require geological studies of the less well-defined traces of the Garnet Hill and San Andreas faults shown on Exhibit S-4 for critical facilities proposed within this zone. The studies shall be conducted by State-certified engineering geologists.
Responsible Agency: Planning, City Engineer
Schedule: On going.

Policy 9: Where development is proposed in areas identified as being subject to geotechnical hazards (including, but not limited to slope instability, soil collapse, liquefaction and seismically induced settlement), the City shall require the preparation of site-specific geotechnical investigations by the applicant prior to completion of CEQA studies and development approval. All such studies shall include mitigation measures that reduce associated hazards to insignificant levels.

Policy 10: To avoid and minimize soil erosion, all grading, earthwork, and construction activities shall be in accordance with applicable fugitive dust control ordinances and regulations, including those established by the City, CVAG, SCAQMD, and other appropriate agencies.

Policy 11: To minimize the potential impacts of subsidence due to the extraction of groundwater, the City shall actively support and participate in local and regional efforts at groundwater conservation and recharge.

Policy 12: Restrict development along the foothills to minimize the potential impacts of slope failure. In addition, minimize grading and modification to the natural topography to prevent potential for man-induced slope failures.

Program 12.A: The City shall discourage any grading beyond that necessary to create adequate and safe building pads. The City Engineer and Consulting Geotechnical Engineer shall conduct regular inspection of grading operations to maximize site safety and compatibility with community character.
Responsible Agency: Planning, City Engineer, Consulting Geologist
Schedule: On going.

Program 12.B: In the hillside or mountainous areas of Cathedral City, the City shall discourage excessive grading of slopes greater than 3:1 (horizontal:vertical), and shall encourage varied slope ratios on design slopes to reduce the visual impact of grading. Cut or fill slopes steeper than 2:1 shall not be permitted.
Responsible Agency: Planning, City Engineer
Schedule: On going.

Policy 13: The City Shall ensure to the fullest extent possible that, in the event of a major geologic disaster, dependent care and high-occupancy facilities will remain safe.

Policy 14: The City's Fire Department, as part of their annual review of businesses and dependent care facilities, shall encourage and educate the owners or operators about maintaining accessibility following and earthquake, emergency backup power, and securely anchored shelves, computers and other equipment, and other non-structural elements.

Hazards and Hazardous Materials Sub-Element

PURPOSE

The purpose of the Hazards and Hazardous Materials Sub-Element is to identify, assess threats and protect the general public from hazards and hazardous materials within the community. It also provides guidance and methods to safely manage these hazards. As a part of the Safety Element, it is related to Emergency Preparedness Element and others. Primary issues addressed in this sub-element include hazards management and the transport, storage, use, and disposal of hazardous materials and waste, and the release of hazardous materials during construction and manufacturing. Hazards may also include exposure to safety and high noise levels associated with aircraft operations at nearby airports. Management of the hazardous materials is important and necessary to protect the community and the environment. As urban growth continues in the City, it becomes increasingly important to safely manage hazardous materials.

BACKGROUND

One of the principal objectives of the General Plan is to protect the community from exposure to environmental hazards, including hazardous materials, by minimizing associated health risks and ensuring that use of hazardous materials does not adversely affect environmental resources. The policies and programs set forth in this sub-element are intended to assure effective and safe use, storage, and transport of hazardous and toxic substances in the City.

Government Code Section 65302(g) requires that General Plans include policies and programs that minimize the exposure of the community to hazardous materials. Responsibility for regulating and monitoring the management, disposal, labeling, and use of toxic and hazardous materials lies with a variety of federal, state, county and local agencies, including the U.S. Environmental Protection Agency, the California Office of Health Planning and Development, and the Riverside County Department of Health. AB 2948 (Chapter 1504, Statutes of 1986), commonly known as the Tanner Bill, authorizes counties to prepare Hazardous Waste Management Plans (HWMP) in response to the need for better management of hazardous materials and waste products. The California Regional Water Quality Control Board (CRWQCB), as well as DWA and CVWD, maintains information concerning contaminated water wells and groundwater.

Hazardous Materials Defined

Under Title 22 of the California Code of Regulations (CCR), the term hazardous substance refers to both hazardous materials and hazardous wastes that are classified according to four properties: toxicity, ignitability, corrosiveness, and reactivity (CCR Title 22, Chapter 11, Article 3). According to Title 22, "*A hazardous material is defined as a substance or combination of substances that may cause or significantly contribute to an increase in serious, irreversible, or incapacitating illness or may pose a substantial presence or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.*" Products as diverse as gasoline, paint solvents, film solvents, chemicals associated with cannabis products manufacturing, pool chemicals, household cleaning products, refrigerants, and radioactive substances are categorized as hazardous materials.

State and federal agencies regulate hazardous materials. The Hazardous Waste Control law (Chapter 6.5 of Division 20 of the Health and Safety Code) and Title 26 of the California Code of Regulations list more than 800 potentially hazardous materials and establish criteria for identifying, packaging, and disposing of such wastes. Under these regulations, the generator of hazardous waste material must complete a manifest that accompanies the material from the point of generation to transportation to the ultimate disposal location, with copies of the manifest filed with State Department of Toxic Substance Control.

Hazardous Materials Management and Transport

One of the City's primary concerns is that businesses are housed in buildings which are properly rated for their level of hazardous material use. Proper housing of hazardous materials is enforced through the Hazardous Material Disclosure Program[17], which is administered by the Riverside County Department of Environmental Health. Under this program, businesses are required to identify the type and quantity of the hazardous materials they handle. This information is updated each year and Environmental Health carries out site inspections to determine compliance with the company's business plan and applicable regulations. The City Emergency Manager maintains a copy of the list of these businesses. In 2018, there are 36 locations in the Cathedral City that are categorized as LUST Cleanup Site, Land Disposal Site, or Permitted Underground Storage Tank (UST). These sites are regulated by the Riverside County Department of Environmental Health.

Hazardous materials are transported on the City's roads and freeways, as well as on UPRR lines. Both the East Palm Canyon Drive/Highway 111 and Interstate-10 and Union Pacific Railroad corridors cross through the City and are used for transporting chemicals, flammable fuels, wastes and other potentially hazardous materials. East Palm Canyon Drive and Interstate-10 are principal east-west thoroughfares where trucks carry these materials. Date Palm Drive, Landau Boulevard, Dinah Shore Drive, Ramon Road, and Vista Chino are on truck routes that would could be used for hazardous materials transportation.

The City's Fire Department and Riverside County Fire Department Hazardous Materials Response Team respond to all hazardous material incidents within Cathedral City. The California Highway Patrol responds to spills on East Palm Canyon Drive and Interstate-10 and works in conjunction with local authorities to manage traffic diversion and any off-highway effects.

Hazardous Waste and Sewage Disposal

Over the past several decades, an area of concern in the Coachella Valley and the Cathedral City area has been the impact of long-term septic tank use on groundwater resources. Contamination problems have not been particularly evident, although impacts on the lower portions of alluvial cones with extensive upslope residential development are areas where septic tank effluents have affected groundwater. Monitor wells in the Cathedral Cove area have shown elevated levels of nitrate and other contaminants; however, the recent extension of sewage collection system throughout the Cove has reduced the effects of on-lot septic systems on local groundwater.

HAZARDOUS WASTE MANAGEMENT PLANS

Riverside County Hazardous Waste Management Plan

AB 2948 (Chapter 1504, Statures of 1986), commonly known as the Tanner Bill, authorizes counties to prepare Hazardous Waste Management Plans (HWMP) in response to the need for safe management of hazardous materials and waste products. Originally adopted by the County and approved by the state in 1990, the County HWMP was established to identify the types and amounts of wastes generated in the County and enact programs for managing these wastes. The HWMP identifies the type and quantity of hazardous waste generated in the County. It projects future quantities likely to be generated, and includes goals, policies, and standards for the management of hazardous waste. Also, the HWMP establishes procedures for the siting of new hazardous materials treatment, storage, and disposal facilities.

[17] Riverside County Department of Environmental Health.

HWMP policies require the County to coordinate its efforts with state and federal agencies in the identification and establishment of programs for managing these wastes. As an integral part of the County HWMP, the City hazardous waste management policies of the General Plan are basically extensions of the County Plan and are hereby incorporated by reference.

Countywide Integrated Waste Management

The Countywide Integrated Waste Management Plan (CIWMP) was prepared in accordance with the California Integrated Waste Management Act of 1989, Chapter 1095 (AB 939). AB 939 redefined solid waste management in terms of objectives and planning responsibilities for local jurisdictions and the state. AB 939 requires each of the cities and unincorporated portions of counties throughout the state to divert a minimum of 25% of the waste stream by 1995 and 50% of the solid waste landfilled by the year 2000. To attain these goals for reductions in disposal, AB 939 established a planning hierarchy utilizing new integrated solid waste management practices.[18] The Riverside County revises the CIWMP every five years and publish a Five-Year Review Report to assure that the County's waste management practices remain consistent with the hierarchy of waste management practices. The City has developed a *Refuse and Recycling Guide* to further waste diversion.

Cathedral City's Local Hazard Mitigation Plan

Cathedral City coordinates with appropriate county, state and federal agencies in the identification of hazardous material sites, and the active regulation of their timely cleanup. Management strategies include establishing and maintaining information on impact sites, and periodic monitoring of facilities and operations that produce, utilize or store hazardous materials in the city. Involvement in multi-agency monitoring of illegal dumping in the City, conferring in the regulation of underground storage tanks and septic systems, and regulating the transport of hazardous materials through the community is coordinated by the Engineering and Public Works Department.

In compliance with AB 2140, the City prepared its first local hazard mitigation plan in 2012. The purpose of the Local Hazard Mitigation Plan (LHMP) is to integrate hazard mitigation strategies into the City's daily activities and programs. The LHMP assesses risk from earthquakes, transportation accidents, transportation system loss, wild land/urban interface fires, terrorism, nuclear accidents, utility loss or disruption, water and wastewater disruption, hazardous materials incidents, information technology loss or disruption, severe weather, explosions, economic disruption, floods, drought, dam failure, and special events. The Local Hazard Mitigation Plan as amended by the City from time to time is hereby incorporated into the Cathedral City 2040 Hazards and Hazardous Materials Element.

Household Hazardous Waste

Residential use of household chemicals, automobile batteries and used oil, paint and similar materials result in hazardous waste and the need for its safe and responsible disposal. The County offers a number of services for the disposal of residential hazardous wastes. These include the "ABOP" (Antifreeze, Batteries, Oil and Latex Paint) site, located at the Palm Springs Fire Department Training Center in Palm Springs, which will dispose of these materials for residential users. The facilities will take up to 5 gallons or 50 pounds of materials per trip, and all materials must be clearly marked and sealed. The site is open every Saturday, and will only take materials from individuals. No business wastes are accepted.

Hazardous Materials Emergency Response

Pursuant to the Emergency Services Act, California has developed an Emergency Response Plan to coordinate emergency services provided by Federal, State, and Local governmental agencies and private persons. Response to hazardous materials incidents is one part of this plan, which is administered by the State Office of Emergency Services (OES). The OES coordinates the responses of other agencies, including the US Environmental Protection Agency (EPA), California Highway Patrol (CHP), California Department of Fish and Wildlife (CDFW), the Regional Water Quality Control Board's (RWQCB), the local air quality management districts (in this case, the South Coast Air Quality Management District (SCAQMD)), and local agencies.

[18] Riverside County Department of Waste Resources.

As a part of its emergency mitigation and outreach program, Cathedral City maintains fire safety programs in schools and throughout the year at special community events. The City Fire Department maintains Mutual Aid Agreements for fire and emergency medical services with the Riverside County Fire Department and the Palm Springs Fire Department. Mutual Aid Agreements are also in place with both the Riverside County and Palm Springs Fire Departments (see Riverside County OA MJHMP). The Fire Department hosts Community Emergency Response Training (CERT) and Teen CERT to the public, regardless of their residency status in Cathedral City.

FUTURE DIRECTIONS

Cathedral City will continue to coordinate with the appropriate agencies in the identification of hazardous material sites, and the active regulation of their timely cleanup. A long-term goal of the Local Hazard Mitigation Plan is to assimilate mitigation strategies into the City's day-to-day functions, and to periodically update the plan as needs, regulations and capabilities evolve. This element sets forth general goals, policies and programs that extend and reference the LHMP and other emergency coordination programs addressing community hazards and hazardous materials.

GOAL, POLICIES AND PROGRAMS

Goal 1: A community and environment that is safe from the threat of hazardous conditions and hazardous and toxic materials.

Policy 1: Utilizing the resources available through the County of Riverside and the Regional Water Quality Control Board, maintain current data on hazardous materials users within the planning area.

Program 1.A: Update the City's data on hazardous materials users quarterly, by regularly contacting the County Department of Environmental Health and the Regional Water Quality Control Board and reviewing online databases or lists.
Responsible Agencies: Fire Department; County Environmental Health Department; Regional Water Quality Control Board
Schedule: Continuous

Program 1.B: Coordinate with responsible agencies to assure enforcement of state and federal regulations for the testing and monitoring of underground fuel storage tanks for leakage.
Responsible Agencies: Public Works Department; Planning; Fire Department; State and US EPA; County Health Department
Schedule: Continuous

Program 1.C: A Conditional Use Permit (CUP) shall be required for all new development that generates, transports, or stores hazardous materials and shall be so reflected in the City's Zoning Ordinance.
Responsible Agencies: Planning and Fire Department
Schedule: Continuous

Policy 2: Encourage and facilitate the adequate and timely cleanup of existing and future contaminated sites within the City and its sphere-of-influence.

Program 2.A: Coordinate with responsible county, state and federal agencies to activate cleanup procedures, and monitor the status of cleanup efforts on an ongoing basis.
Responsible Agencies: Fire Department; State and federal EPA; County Health Department; CRWQCB
Schedule: Continuous

Policy 3: The City shall thoroughly evaluate development proposals for lands directly adjacent or in proximity to sites know to be contaminated with hazardous or toxic materials.

Policy 4: The City shall designate appropriate access routes to facilitate the transport of hazardous and toxic materials and wastes.

> **Program 4.A:** Coordinate with the Fire Department, Police Department, neighboring jurisdictions, and other appropriate agencies to identify segments of highway or local roads that shall be restricted from transporting hazardous and toxic materials.
> Responsible Agencies: Planning; Fire Department; Police Department
> Schedule: Continuous
>
> **Program 4.B**: Enforce roadway access restrictions and consider the implementation of fines or penalties for violations.
> Responsible Agencies: Public Works; Fire Department; Police Department
> Schedule: Continuous

Policy 5: The Fire Department shall maintain a citywide Local Hazard Mitigation Program, which provides for emergency services in the event of a hazardous spill or airborne release.

Policy 6: Encourage households and small businesses to dispose of hazardous and toxic wastes in accordance with county, state, and federal regulations.

> **Program 6.A:** Continue to distribute information materials provided by the County and the Regional Water Quality Control Board regarding proper management and disposal of household hazardous and toxic wastes, and also post information on the City web site.
> Responsible Agencies: Environmental Conservation Manager, County Environmental Health
> Schedule: Immediate; Continuous
>
> **Program 6.B:** Implement the Household Hazardous Waste Element (HHWE) as prepared by the Coachella Valley Association of Governments (CVAG) and its member cities.
> Responsible Agencies: Engineering, Public Works
> Schedule: Immediate; Continuous

Policy 7: The City shall actively oppose plans for hazardous or toxic waste dumps, landfills, or industrial processes that may potentially adversely affect the City and its Sphere-of-Influence, and shall participate in the identification of alternative sites.

Policy 8: Confer and coordinate with the CVWD, DWA, and the California Regional Water Quality Control Board in the regulation, monitoring, and phased removal of subsurface sewage disposal systems.

> **Program 8.A:** The development review process shall be used to assure that all new development connects to the sewage collection systems of the Coachella Valley Water District and Desert Water Agency where that service is available.
> Responsible Agencies: Planning, Public Works Department; DWA; CVWD
> Schedule: Continuous

Policy 9: The travel route for the transport of hazardous materials and wastes shall have adequate capacity to safely accommodate additional trucks and shall avoid the residential areas.

Policy 10: Hazardous sites susceptible to leak or collapse during earthquakes shall be identified.

Policy 11: The location and number of the hazardous facilities close to the schools, hospitals, and residential areas shall be regulated properly and introduce buffer zones between the hazardous facilities and sensitive facilities and/or receptors.

Policy 12: The City shall minimize exposure to hazardous substances where ever possible.

Policy 13: Encourage and promote practices in the community to reduce the use of hazardous materials and the generation of hazardous waste at their source, recycle the remaining hazardous wastes for reuse, and treat those wastes which cannot be reduced at the source or recycled.

Policy 14: Engage the community in overseeing remediation of toxic sites. Promote the permitting and monitoring of potentially hazardous industrial uses. Develop a response plan to address existing contaminated sites in the city.

Policy 15: The City shall support reductions in the use of hazardous fuels to minimize their impacts to the human health and environment.

Emergency Preparedness Sub-Element

PURPOSE

The purpose of the Emergency Preparedness Sub-Element is to provide information on emergency response services and plans currently (2018) in effect. It outlines critical facilities and services necessary to respond adequately to emergencies, and discusses potential impacts of natural and man-made threats which could significantly affect the City. Finally, the Sub-Element sets forth the goals, policies and programs that have been developed by the City to ensure adequate preparation for and response to such emergencies, and to minimize human and economic losses.

BACKGROUND

This Sub-Element is included as part of the overall discussion and planning regarding general environmental hazards and is in accordance with Government Code Section 65302(g), which mandates that General Plans address hazards such as seismic disturbances and their effects, and "other geologic hazards ... flooding; and wild land and urban fires." As an integral part of the Safety Element and its other sub-elements, the Emergency Preparedness Sub-Element is related to other elements, including Circulation and Mobility, and Public Services and Facilities.

As discussed throughout the Safety Element, the City and its planning area are subject to a variety of environmental conditions and hazards that can precipitate a local, city-wide or region-wide emergency. These conditions include high seismicity and associated hazards, local and regional flooding, high and erosive winds, major rail and highway facilities and associated accident potential, and other land uses and activities that could prompt an emergency response.

Emergency Scenarios

Portions of the City are crossed by the San Andreas Fault Zone and are vulnerable to seismically-induced ground shaking, ground rupture, slope failure, rockfalls and landslides, ground subsidence and soils liquefaction. These seismic hazards and related structure damage, as well as urban wildfires, flooding, and hazardous materials releases all require emergency planning. The potential for man-made emergencies, such as power outages, major accidents involving trains, motor vehicles or aircraft, also exists. More current concern over urban terrorism and increasing incidents of school shootings and other forms of violence, may also necessitate an emergency response.

"By failing to prepare we are preparing to fail."

"An ounce of prevention is worth a pound of cure."
Benjamin Franklin

"There is no harm in hoping for the best as long as you're prepared for the worst."
Stephen King

Inter-Agency Coordination

On a regular and ongoing basis, Cathedral City consults and coordinates with the Riverside County Emergency Management Department (EMD), which tasked with developing and implementing new and better ways to solve issues and adapt to future changes in the fields of emergency management and emergency medical services in the City and regionally.[19] Riverside County EMD works alongside the California Office of Emergency Services (Cal OES), and is a part of Cal OES Region VI,[20] which consists of the counties of Riverside, San Bernardino, Imperial, Inyo, Mono, and San Diego. The Operational Area (OA) is the intermediate level of the State's emergency services organization and is made up of County government, local (city) governments, school districts, and special districts located within the Riverside County area.

[19] County of Riverside Emergency Management Department Annual Report (2016).
[20] California Office of Emergency Services (Cal OES) Fire and Rescue Division – Regional Assistant Chief Map (2018).

During a State of Emergency, a State of War Emergency, or a Local Emergency, the OA is required to coordinate resources, priorities, and information, as well as serve as a coordination and communication link to the State Mutual Aid System. OA activities include coordinating information, resources, and priorities between the regional level at the Governor's Office of Emergency Services and the local government level.

The County Emergency Management Department also manages the Regional Disaster Medical Health Coordinator (RDMHC) Program for Region VI. Promulgated under the California Health and Safety Code, the RDMHC program is tasked with the management of regional; medical and health mutual aid, mutual cooperation amongst the counties, coordination of medical and health resources, and support for County Medical and Health Operational Area Coordinator programs.

The RDMHC program provides staff to support the Regional Disaster Medical Health Coordinator (RDMHC) and supplements the State medical and health response system through the development and sharing of information and emergency management systems. The RDMHC Program has improved the Southern Region Medical and Health Communications Directory by adding satellite phone numbers and addressing radio communications compatibilities to increase redundant communications in the region.

Community Emergency Response Training (CERT)

Cathedral City participates in the Federal Emergency Management Agency's (FEMA) Community Emergency Response Training (CERT) program, which is a series of classes that educate and train residents to effectively address dangerous situations if emergency services are delayed in responding. In the CERT program, citizens learn to manage utilities and put out small fires, perform CPR, control bleeding, and provide basic medical aid and treatment for shock. CERT trainees are also trained to search for and rescue victims safely, organize themselves and volunteers to be effective, and collect disaster intelligence to support first-responder efforts. Additional educational resources are provided to the public via disaster-preparedness presentations, flyers, and a web site and information-retrieval system.

Emergency Preparedness and Climate Resilience

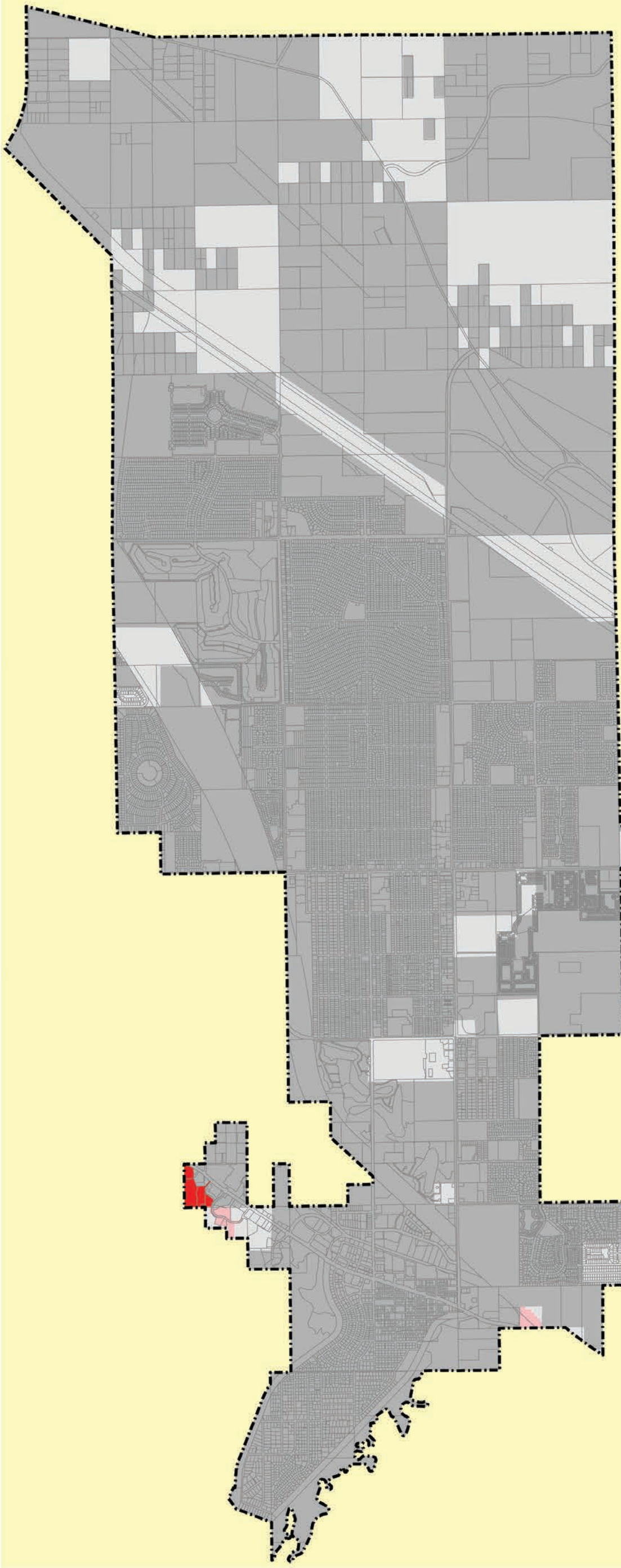
In accordance with the requirements of SB 379, codified in Government Code section 65302(g)(4), climate change adaptation and resilience must be addressed in the safety element of all general plans in California. A vulnerability assessment that identifies the risks that climate change poses to the local jurisdiction and the geographic areas at risk from climate change impacts is also required. The City has until 2022 to develop climate adaptation and resiliency strategies, goals, policies, and implementation programs based on the information specified in the Government Code for the protection of the community. The City's Local Hazard Mitigation Plan recognizes and plans for such climate-related emergencies as drought, extreme weather and wind events, and power outages. The City's Climate Action Plan and the Local Hazard Mitigation Plan satisfy the requirements of SB 379. Also see the *Air Quality and Climate Stability Element.*

Environmental Risks

Cathedral City is located in an area that is susceptible to a variety of potential disasters, including earthquakes, flooding, wind, and extreme weather. Preparing for emergencies and disasters and having pre-planned procedures to coordinate a strategic response is not only important for government agencies, but also for local residents and businesses. Emergency preparedness ensures that government agencies, residents, and businesses have made the necessary plans and secured the necessary equipment and resources to stay safe during a disaster and to survive without regular services (such as water and electricity) during the recovery phase. Risks and vulnerabilities identified in the City's Local Hazard Mitigation Plan are given below.

Table S-2
Hazards and Severity

Hazards	Description	Ranking 1 = High / 4 = Low		Ranking
		Severity	Probability	1-19
Earthquake	The City is located in a severe seismic hazard zone and could be exposed to severe ground shaking.	2	3	1
Flood	Heavy rain in and around Cathedral City continues to lead to problems with storm drainage and creates localized flood problems.	3	1	2
Wild land fire		3	1	12
Other Natural Hazards				
Drought	The City's risks or vulnerabilities from drought do not differ from the rest of the valley.	2	4	6
Landslides		1	2	4
Insect Infestation		3	4	13
Extreme Summer/Winter Weather	Entire City would be subject to extreme heat; therefore, the City has a cooling station plan to be located at Salvation Army, Library and Senior Center.	3	4	5
Severe Wind Event	Entire City is subject to extreme wind events with gusts as high as 50 mph; the northern most portion of Cathedral City experience the greatest winds. These events cause hazards in downed power lines, snapped power poles, downed trees, and poor visibility caused by blow-sand.	2	1	3
Agricultural				
Disease/Contamination	Not applicable.	2	2	16
Terrorism		1	2	15
Other Man-made				
Pipeline		2	2	11
Aqueduct		0	0	19
Transportation		2	3	8
Power Outage		3	3	6
Hazmat Accidents		2	3	7
Nuclear Accident		0	0	18
Terrorism		2	2	9
Civil Unrest		2	2	10
Jail/Prison Event		1	1	17
Medical				
Pandemic				14
Source: Cathedral City's Local Hazard Mitigation Plan (2017)				



Fire Hazard Severity Zones

Local Responsibility Area	State or Federal Responsibility Areas
VHFHSZ	VHFHSZ
Non-VHFHSZ	Non-VHFHSZ

City Boundary

Parcels

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of very high fire hazard severity zones within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of, **potential** fuels over a 30-50 year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings. Details on the project and specific modeling methodology can be found at http://frap.cdf.ca.gov/projects/hazard/methods.htm. Local Responsibility Area VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data.

In late 2005 to be effective in 2008, the California Building Commission adopted California Building Code Chapter 7A requiring new buildings in VH FHSZs to use ignition resistant construction methods and materials. These new codes include provisions to improve the ignition resistance of buildings, especially from firebrands. The updated very high fire hazard severity zones will be used by building officials for new building permits in LRA. The updated zones will also be used to identify property whose owners must comply with natural hazards disclosure requirements at time of property sale and 100 foot defensible space clearance. It is likely that the fire hazard severity zones will be used for updates to the safety element of general plans.

This specific map is based on a geographic information system dataset that depicts final CAL FIRE recommendations for Very High FHSZs within the local jurisdiction. The process of finalizing these boundaries involved an extensive local review process, the details of which are available at http://frap.cdf.ca.gov/projects/hazard/btnet/ (click on "Continue as guest without logging in"). Local government has 120 days to designate, by ordinance, very high fire hazard severity zones within its jurisdiction after receiving the recommendation. Local government can add additional VHFHSZs. There is no requirement for local government to report their final action to CAL FIRE when the recommended zones are adopted. Consequently, users are directed to the appropriate local entity (county, city, fire department, or Fire Protection District) to determine the status of the local fire hazard severity zone ordinance.

0 2 Miles

N

Source: CalFire, December 2009

07.11.19

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit S-7 - Fire Hazard Zones Map
Cathedral City General Plan - Imagine 2040

Cathedral City

CRITICAL FACILITIES

Critical facilities such as hospitals, police and fire stations, governmental operations, communications centers and utility facilities form a vital network implementing emergency preparedness plans in the event of a natural disaster or other emergency. Support facilities, such as fire and police communications, auxiliary personnel and commercial radio stations, can support the primary critical facilities by providing information and direction to the public during a crisis. The City also relies on the Radio Amateur Civil Emergency Services (RACES) organization for amateur radio communications county-wide during a disaster, which is a protocol created by the FEMA and the Federal Communications Commission (FCC Part 97, Section 407).

Emergency access, including evacuation routes and routes for the transport of the injured, peak-load water supply and delivery, and airport services must also be considered. It is important to take into account transportation system constraints, which may hinder ground-based access or delivery of supplies and emergency services to the affected areas.

Number of the critical facilities and infrastructure within the Cathedral City is given below:

Table S-3
Critical Facilities in the City

Critical Facilities Type	Numbers
Public Safety Dispatch	1
Emergency Operations Center	2
City Hall	1
Fire Stations	3
Water Reservoirs	6
Water Treatment Plants	0
Waste Water Treatment Plants	0
Health Care Facilities	4
Police facility	1
Maintenance Yards	1
Senior Community Centers	3
Schools	10
Radio Repeaters	2
Source: Cathedral City's Local Hazard Mitigation Plan (2017)	

EMERGENCY ACCESSIBILITY AND TRANSPORTATION

Immediate access to impacted areas by emergency personnel and supplies is essential after a disaster. East Palm Canyon Drive, Dinah Shore Drive (Mid-Valley Parkway), Ramon Road, Date Palm Drive and US Interstate-10 are major intercity and regional access routes serving Cathedral City. These arteries, including their bridges and overpasses, could be blocked or damaged in the event of a major disaster, including major earthquakes or floods, urban wildfires, major truck or rail accidents, or by other natural or manmade disasters. The loss of freeway overpasses, bridges over the Whitewater River, or the closing of roads due to rockfalls or landslides would each impede the delivery of emergency services and supplies.

The City is generally well protected from major flooding by extensive drainage facilities, including levees and channels adjacent to the Santa Rosa Mountains and passing through the City. All-weather crossings over the Whitewater River currently exist at Date Palm Drive, Ramon Road and Dinah Shore Drive. and East Palm Canyon Drive crosses the East and West Cathedral Canyon Washes. Planned all-weather crossings include the Cathedral Canyon Drive and Vista Chino bridges, which will provide additional all-weather crossings of the Whitewater River. Other parts of the City are susceptible to major flooding and possible isolation from major transportation links and the rest of the community. Lands at the west end of the City, and north and south of East Palm Canyon Drive, are located in an AO flood zone with possible inundation depths of one to three feet. In the northern portion of the City, lands north and south of I-10 are also susceptible to major flooding, which could affect access and isolate these lands from emergency services.

The City shall continue to coordinate with Caltrans, the Federal Highway Administration, CVAG, adjoining cities and Riverside County, as well as Sunline Transit Authority, to provide the highest functional reliability of major roadways and the public transportation system serving the City and the region. The City shall also continue to coordinate with Riverside County Flood Control, the Coachella Valley Water District (CVWD) and the Federal Emergency Management Agency (FEMA) to address continuing flooding hazards that threaten people and property, and which may isolate portions of the community during disasters. Programs shall be developed to identify and address weak links in the circulation system, in conjunction with the efforts of other Coachella Valley jurisdictions.

EMERGENCY MEDICAL SERVICES AND FACILITIES

City Fire Department and EMS

Emergency medical services are provided by the City Fire Department and include paramedic services on-site and during emergency transport. Backup services are provided by the private provider American Medical Response (AMR) in the City and valley. AMR maintains a ring-down communication line with City Fire Department dispatchers and has ambulances staffed with Emergency Medical Service personnel (paramedics). AMR can link with California Highway Patrol to provide airlift capabilities based out of the Thermal Airport, and with Mercy Air, which operates out of Banning. The Palm Springs International Airport is located within 5 miles of most portions of Cathedral City and provides an important access point for helicopter and fixed-wing aircraft.

Local Hospitals

There are three valley hospitals (Eisenhower Medical Center, Hospital and Desert Regional Medical Center) and John F. Kennedy Memorial that can provide care and personnel in the event of an emergency in the Cathedral City. These are located at:

Eisenhower Medical Center
39000 Bob Hope Drive
Rancho Mirage, CA 92270

Desert Regional Medical Center
1150 N Indian Canyon Drive
Palm Springs, CA 92262

John F. Kennedy Memorial Hospital
47111 Monroe St
Indio, CA 92201

These three hospitals provide emergency medical services with 24-hour emergency rooms but differing levels of service. Eisenhower Medical Center and Desert Regional Medical Center have 550 and 369 beds, respectively. Only Desert Regional Medical Center has a trauma care center, a Level II Trauma Center certified by California Emergency Medical Services. John F. Kennedy Memorial Hospital currently has 145 beds Also see the *Public Services and Facilities Element*.

EMERGENCY RESPONSE & ORGANIZATIONAL STRUCTURE

Cathedral City's emergency responders, including Fire and Police services, cooperate and coordinate closely with other valley cities and the County on an on-going basis. In the event of a local or valley-wide emergency, agency cooperation, coordination and joint emergency simulations are essential to providing continuity of basic services and to manage large-scale emergency operations.

The City's Emergency Operations Plan (EOP, 2015) is based on the functions and principles of the National Incident Management System (NIMS) and the Standardized Emergency Management System (SEMS), which is based on the FIRE SCOPE Incident Command System (ICS). 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. The City's Emergency Operations Plan addresses emergency planning, organization, and response policies and procedures. It also addresses the integration and coordination of the City with other governmental levels when required.

State and national organizations, such as the American Red Cross and the National Guard, have specific roles in emergency management. American Red Cross provides emergency assistance to families and communities in disasters, such as earthquake, fire, or flood, providing assistance with shelter, clothing, medical supplies, mental health counseling, and other emergency needs. It also provides disaster and first aid supplies.

The National Guard provides supporting emergency response to battle fires and help communities deal with floods, tornadoes, hurricanes, snowstorms or other emergencies. The Guard also provides emergency services during the times of civil unrest within communities, state or nation. The State National Guard will primarily serve as a peace-keeping or security force, unless required to function otherwise by an emergency declaration by the President of the United States. Should a large-scale regional or state-wide emergency require airlifting of stable injured individuals out of the State to make room for more severely injured, less mobile persons, the National Guard has the capability to provide that service.

Emergency Operations Center

The City of Cathedral City Emergency Operations Center (EOC) is located at Fire Station 412 at 32100 Desert Vista Road, just south of Ramon Road. It provides a location, facilities and staffing that allows a coordinated central command and control of the emergency response. The EOC is responsible for strategic direction and operational decisions, and does not typically directly control field assets, instead leaving tactical decisions to lower commands. Common EOCs functions include data and information collection and analyze; making decisions that protect life and property, maintaining continuity of the response. Professional staff and communications assets are the primary components of the EOC.

City Emergency Response Programs

The City's *Fire Suppression Program* is designed to reduce injuries, deaths, environmental damage, and property losses due to medical emergencies, fires, hazardous materials incidents, and physical and natural disasters within the City. Fire suppression personnel perform public education programs, company fire prevention inspections, and cause and originate investigations to prepare the City and community for emergencies and/or disasters. They also maintain all emergency response apparatus, equipment and facilities on a daily basis. The City's *Paramedic Services Program* provides advanced life support and emergency ambulance transport services. The City's *Disaster Preparedness Program* provides for the needs of the community before, during and after a disaster, including the CERT program, EOC equipment and supplies, and staff training.

FUTURE DIRECTIONS

Cathedral City has devoted substantial resources to its disaster preparedness efforts and is ensuring that response plans and systems are maintained and upgraded to keep pace with population growth, new construction, business development, and growth-induced circulation issues. The City must also consider that the expansion of its planning area requires extension of emergency services to areas north of US I-10, which could be cut off from the rest of the City in a major flood or earthquake.

The City's emergency management efforts must continue to include educating residents about their need to prepare household emergency plans and to stockpile supplies, which will render them self-sufficient for a period of at least 72 hours during an emergency. The City must remind homeowners of this challenging task, as other daily priorities and concerns quickly overtake the initial sense of urgency immediately following an emergency. This initiative is a part of the City's planning and the City should continue to develop and implement this program.

The City shall continue to work with neighborhood and homeowner associations to assist in their establishment and use of the CERT structure, and provide pre-appraisal of the development's facilities, on-site triage and first aid training, and education about initial responses to emergencies and supplies needed. The City may also want to explore offering incentives to increase the number of residents and neighborhoods participating in CERT, as such participation would effectively reduce immediate strain on City resources during an emergency.

Nursing homes, licensed day care facilities and private schools, all of which serve potentially vulnerable populations, are required to develop disaster plans. However, since these are non-public agencies, they may not be part of established communications networks or back-up systems. Following an earthquake, the City will conduct basic damage assessments of nursing home facilities, but resources may not allow more than a preliminary status check. A more established planning system, which would incorporate skilled nursing facilities into the CERT program, should be explored. It is also critical that the staff at such facilities is fully educated regarding what resources and chain of communication they can access in the event of emergencies.

Private schools and licensed day care facilities should also be included in a comprehensive education and information program, which trains them regarding available resources and also encourages them to adequately prepare for potential disasters. The City shall also coordinate department heads and other staff to ensure that disaster planning for City facilities is current, workable and that appropriate personnel are adequately informed regarding coordination of disaster planning and appropriate responses to emergencies affecting City facilities. The City shall ensure adequate resources are dedicated to identifying and cross-training additional staff to strengthen the City's in-house emergency response and allow for expansion of services to improve contingency planning with all sectors of the community.

GOALS, POLICIES AND PROGRAMS

Goal 1: A detailed, integrated and effective emergency preparedness plan for the City ensuring a high level of readiness and responsiveness to man-made and natural disasters of any scope, and which maximizes response capabilities of the City, County, State and Federal governments.

> **Policy 1:** The City shall give priority to maintaining and updating of all hazard summaries and responses of the Local Hazard Mitigation Plan and the Emergency Operations Plan.
>
> > **Program 1.A:** The City shall periodically review and update the Local Hazard Mitigation Plan and the Emergency Operations Plan, including but not limited to fire protection, law enforcement, communications, alternative access, public health services, damage assessment and other emergency response parameters of Emergency Operations Plan.
> > **Responsible Agency:** Fire Department, Police Department, All Other City Departments
> > **Schedule**: On-going; Comprehensive update minimum once every five years

Policy 2: The City emergency response plans shall recognize and accommodate the physical, environmental and other conditions that could pose potentially significant hazards, and shall take proactive steps to minimize these threats to the community's residents, businesses, visitors and economy.

Program 2.A: The City shall evaluate the full range of physical and other constraints to the effective implementation of the Emergency Operations Plan, shall develop or update strategic planning to address and minimize the effects of these constraints, and periodically report to the City Council on progress made in addressing these constraints.
Responsible Agency: Engineering, Public Works, Fire Department, Police Department, Riverside County Emergency Services, Other City Departments
Schedule: Annual Report

Program 2.B: The City shall coordinate with responsible flood control agencies and shall jointly develop long-term strategies and capital improvement plans that, to the extent practicable, eliminate or minimize significant flooding hazards which threaten lives, property and emergency access.
Responsible Agency: Engineering, Public Works, County Flood Control, CVWD
Schedule: 2019-2020; Update every five years

Program 2.C The City shall ensure that responsible domestic water providers comply with State requirements for water storage and distribution systems to withstand strong ground shaking and other seismic hazards.
Responsible Agency: Engineering, Public Works, Desert Water Agency, CVWD
Schedule: Ongoing

Policy 3: The City shall identify and establish emergency evacuation and supply routes and plans to preserve or reestablish the use of East Palm Canyon Drive, Date Palm Drive, Dinah Shore Drive, Ramon Road, Vista Chino, Interstate-10 and other essential transportation routes.

Program 3.A: Establish and appoint a staff liaison with adjoining cities, Riverside County, CVAG and Caltrans to facilitate the designation of emergency evacuation and supply routes, and for the development of a multi-agency emergency response plan that provides expeditious and timely repair to major streets and highways damaged by earthquakes, flooding or other disasters.
Responsible Agency: City Manager, Engineering, Public Works, Neighboring Cities, Riverside County Emergency Management, Caltrans, CVAG
Schedule: 2019; Continuous

Policy 4: Formal lines of communication shall be established and maintained between the City, County Geologist, and the US Geological Service and/or the California Institute of Technology to assure the provision of earthquake predictions and alerts that may help minimize impacts to the City and surrounding area.

Program 4.A The City shall coordinate with the County Geologist and contact Caltech and the appropriate office of the US Geological Survey and establish a liaison and procedures by which these organizations contact and inform the City of updated earthquake predictions that may affect the community.
Responsible Agency: Fire Department, Police Department, County Geologist, USGS
Schedule: 2019; Continuous

Program 4.B Once available, the City shall take part in the *ShakeAlert* program developed by the US Geological Service, which will issue public warnings of potentially damaging earthquakes and provide warning parameter data to the City and other government agencies, and private users on a region-by-region basis.
Responsible Agency: Fire Department, Police Department, USGS
Schedule: 2019; Continuous

Policy 5: The City shall cooperate and coordinate with Riverside County Emergency Management, local utilities purveyors and other agencies and utilities in the preparation and distribution of public information materials to assist residents, visitors and business owners on how to prepare for and respond to local disasters and emergencies.

Program 5.A: Coordinate and cooperate with Riverside County Emergency Management, Desert Water Agency, CVWD, Southern California Edison, Southern California Gas, and other agencies and utilities in the development and dissemination of information and instructions on appropriate actions in the event of a local disaster or emergency.
Responsible Agency: Police Department, Riverside County Emergency Management, SCE, SCG, DWA, CVWD
Schedule: 2019; Continuous

Program 5.B: Coordinate with local schools and appropriate public and quasi-public agencies to ensure that they are adequately prepared for and are a part of a city-wide and regional emergency response when disaster strikes.
Responsible Agency: Fire Department, Palm Springs Unified School District
Schedule: 2019; Continuous

Policy 6: The City shall thoroughly consider and assess vulnerability to natural and manmade disasters or emergencies when reviewing proposals for the siting and development of critical and essential public/quasi-public facilities.

Program 6.A: In order to assure the maximum possible protection from environmental and manmade hazards, including earthquakes and flooding, the City shall consider vulnerability to natural and manmade disasters and emergencies when reviewing proposals for critical and essential facilities, as well as sensitive land uses.
Responsible Agency: Planning, Engineering, Public Works, Fire Department, Police Department,
Schedule: Continuous

Policy 7: Where practicable, the City shall encourage the development of critical facilities within private residential communities, including congregate care and similar facilities, in order to ensure preparedness and maximum safety during periods of disaster which may limit accessibility and resources.

Program 7.A: Coordinate with management within local private and gated communities to train and educate residents, and develop, maintain and implement emergency preparedness plans, including stockpile essential supplies, in accordance with the Citizens Emergency Response Teams (CERT) program, to ensure their self-sufficiency for a period of at least 72 hours following an emergency or disaster.
Responsible Agency: Fire Department, gated communities.
Schedule: 2019, Continuous

Program 7.B Develop and maintain a record-keeping system indicating which private and gated communities have participated in the CERT training, and communicate with those communities on an annual basis to schedule training updates and coordinated response planning.

Responsible Agency: Fire Department, private/gated communities.
Schedule: 2020-22, Annually

Policy 8: The City shall make every effort to minimize the risk of hazards associated with aircraft operations of the Palm Springs International Airport and through the adoption and implementation of land use plans and policies consistent with the County Airport Land Use Compatibility Plan.

Policy 9: Continue to encourage residents, business-owners and others in the community to sign up for the automated emergency *Cathedral City Notification System* to get critical information quickly in the event of severe weather alerts, unexpected road closures, missing person alerts, and evacuations of buildings or neighborhoods.

Policy 10: The City shall review its emergency preparedness plans and ensure that it includes programs that address the need for social and emotional support following an emergency or major disaster.

Policy 11: The City shall coordinate with the Palm Springs School District, City Senior Center, Library and the Salvation Army, and other organizations that can serve as emergency shelters for displaced residents in the event of a major disaster.

Policy 12: The City shall require all new development in areas within or adjacent to a high fire hazard zone use retardant landscaping, non-flammable roofing materials and other construction materials and techniques that reduce their fire hazard.

Program 12.A: The City shall provide information on and encourage residents to plant and maintain drought-resistant, fire-retardant landscape species to reduce the risk of brush fire and soil erosion in areas adjacent to canyons; and to develop stringent site design and maintenance standards for areas with high fire hazard or soil erosion potential.
Responsible Agency: Fire Department, Planning
Schedule: 2020-22, Annually

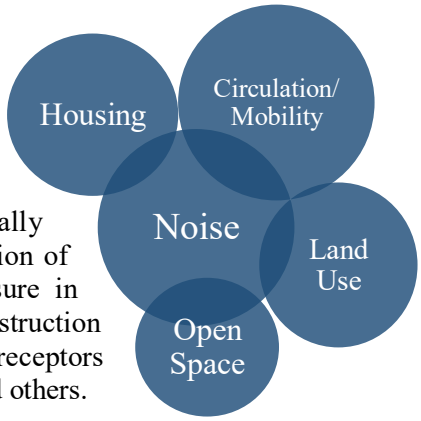
Noise Sub-Element

PURPOSE

The purpose of the Noise Sub-Element is to limit the exposure of sensitive lands, residents, students and visitors to excessive noise levels and that noise-sensitive land uses are protected at all times but especially during the most sensitive times of day. It is also meant to coordinate the community's land uses with the existing and future noise environment, and to design measures that minimize or avoid community exposure to excessive noise levels. As the City grows, so does the potential for land use conflicts which can result in an unacceptable and even harmful noise environment. This sub-element addresses potential adverse noise impacts associated with vehicular traffic, railroads and airports, industrial operations and other mobile or stationary noise sources. Through the implementation of the policies and programs in this sub-element, current and future noise impacts can be greatly reduced or avoided entirely.

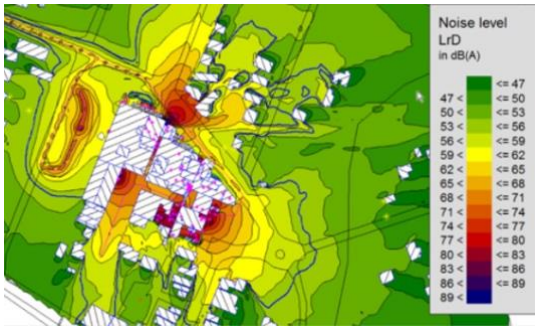
BACKGROUND

The Noise Sub-Element is directly related to the Land Use, Housing, and Circulation/Mobility Elements. It also has a direct relationship with the Parks and Recreation and the Economic and Fiscal Health Elements, low noise levels being a fundamental characteristic of a quality residential and resort community. The City's relatively quiet, peaceful atmosphere should be considered a major community asset. The noise environment can have a significant influence on the health and comfort of the community. In general, the noise levels in Cathedral City's residential neighborhoods are average, typical of quiet suburban and rural areas.



Motor vehicles are the major source of continuous, excessive noise in the City. Primary noise generators include traffic on Interstate-10, East Palm Canyon Drive, Date Palm Drive, Vista Chino, Palm Drive, DaVall Drive, and Ramon Road. Freight rail traffic along the Union Pacific Railroad is also responsible for generating excessive noise and ground vibration. High noise levels resulting from aircraft operations at the Palm Springs International Airport also occasionally have an intrusive impact on the community's noise environment. The extension of airport runways to the northwest have reduced future airport noise exposure in Cathedral City to acceptable levels. Other noise generators include construction activities, industrial operations, HVAC and other stationary sources. Sensitive receptors within the planning area include homes, schools, congregate care facilities, and others.

Noise Regulations



Issues addressed in the Noise Sub-Element are identified in Government Code Section 65032(f), which requires that the Noise Sub-Element identify, quantify where possible and evaluate the community's noise environment and issue areas. Section 21083.1 of the California Environmental Quality Act (CEQA) requires the adherence to the State Guidelines and allows cities to determine whether a development project will have a "significant effect on the environment," ranging from traffic noise in a residential neighborhood to unacceptable noise generated by the equipment at a commercial shopping center or industrial operation. The State requires the adoption of a noise control ordinance for the resolution of local noise complaints.

Airport noise is also an important consideration for the City with the Palm Springs International Airport (PSP) located immediately west of the city limits. Local airports and associated noise generation, including PSP, are regulated by the Federal Aviation Administration and noise requirements established under Title 21, Section 5000 et seq of the California Code of Regulations. New or expanded school sites within two nautical miles of an airport runway, including Agua Caliente Elementary School, are subject to review by Caltrans Division of Aeronautics pursuant to Code of regulations Title 21, Section 3570 and State Education Code Section 17215. The primary purpose of state school regulation is to address compatibility issues associated with schools located within an airport's existing or projected future 65 dB CNEL contour (also see Community Noise Equivalent Level or CNEL below). None of the City's schools are located within an existing or future 65 CNEL noise contour generated by PSP.

The California Department of Health Services has prepared a Model Community Noise Control Ordinance as a model for use by local jurisdictions. The City of Cathedral City has such an ordinance in place (Chapter 11.96 of the City Municipal Code).

Ranges and Consequences of Noise

Noise sources are classified as either "line source" (a busy street) or "point source" (a commercial compressor). A number of factors affect the noise as it travels through the air, including temperature, wind speed and direction, hard and soft ground surfaces, and landscaping and walls. This is particularly important when considering the noise generated by a roadway, insofar as these factors can mitigate or intensify the noise level.

Noise is measured in decibels (dB) and is a ratio that quantifies sound pressure. Normal conversation is roughly 55 dBA at five feet of separation, whereas a loud engine noise is about 100 dBA. Most everyday sounds occur in the range of 40 to 100 dBA. Doubling the sound energy of a noise source only increases the decibel rating by 3 dBA, due to the logarithmic nature of the sound measuring (decibel) scale; however, because of the internal mechanism of the human ear and how it receives and processes noise, a sound must be nearly 10 dBA higher than another sound to be considered twice as loud. High noise levels can affect everything from property values and economic productivity to psychological health.

When there is an increase in the difference between background or ambient noise and the noise generated from a particularly intrusive source such as, traffic, a barking dog, aircraft or industrial operations, adverse reactions to noise generally intensify. Noise control measures should reduce noise by 5 to 10 dBA in most circumstances to effectively lower the perceived sound. Therefore, loud and short duration noises from barking dogs and low-flying aircraft, for example, generally have little impact on community noise levels because of the averaging used in this measuring technique.

Community Noise Equivalent Level

The definition of "noise" is unwanted or undesired sound. Sound becomes unwanted noise when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. The combination of noise from all sources near and far is known as the Ambient Noise Level. A very sudden change in air pressure from the immediate "normal" atmospheric pressure results in airborne sound. For purposes of this discussion, the ambient noise level at a given location is termed "environmental noise".

In order to understand environmental noise, some familiarity with the physical description of noise is necessary. Frequency range, intensity/loudness and temporal/time-varying aspects are the primary physical characteristics of sound. The decibel (dB), A-weighted level (dBA), and Community Noise Equivalency Level (CNEL) are all used to describe and numerically weight noise. Each of these measurement scales are briefly described below.

As noted, the decibel is the unit of measurement describing the amplitude, or strength of sound. The A-weighted decibel approximates the subjective response of the ear to a noise source by discriminating against the very low and very high frequencies in the spectrum. The Community Noise Equivalent Level (CNEL) is the average of the intensity of a sound over a 24-hour period, with corrections for time of day. The time of day corrections includes the addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m., and the addition of 10 decibels to sound levels at night between 10 p.m. and 7 a.m. It is necessary to make these adjustments because of the decrease in background noise levels during the evening and night hours when compared to daytime hours. People are therefore more sensitive to noise during these times, and sounds are weighted accordingly. During evening and night hours, tolerable noise levels should be 5 to 10 dBA lower, and the CNEL number is weighted accordingly.

Table S-4
Typical Noise Level

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		SLEEP DISTURBANCE
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

Traffic Noise Analysis

As part of the 2040 General Plan update an exterior noise impact analysis was completed to determine the existing and future transportation-related noise levels and to identify potential necessary mitigation measures for future uses within the Plan update. The analysis indicates the primary source of noise impacts will be traffic-related noise from US I-10, other City roadways, and rail-related noise from Union Pacific Railroad (UPRR) lines. These are collectively referred to as “transportation corridors”.

Traffic generated by buildout of the 2040 General Plan will influence the traffic noise levels at land uses adjacent to study area roadways throughout Cathedral City. To quantify the traffic noise level increases at adjacent land uses, the changes in traffic noise levels on 39 roadway segments in the study area were calculated based on the change in the average daily traffic (ADT) volumes. The traffic noise levels provided in this analysis are based on the traffic forecasts found in the General Plan *Transportation Analysis* (see Appendix E of the General Plan EIR).

To assess the off-site noise level impacts associated with the 2040 General Plan buildout, noise contour boundaries were developed for existing conditions (2017/2018) and General Plan Buildout (2040) traffic conditions. A comparison of the 2009 General Plan Buildout to the 2040 General Plan Buildout shows that the buildout traffic noise level increases will be less than significant in 2040.

Exterior Noise Levels

The results of the future transportation noise analysis show that the future noise-sensitive uses may experience future unmitigated exterior noise levels greater than the *normally acceptable* exterior noise level compatibility criteria identified in this sub-element. Based on the results of this analysis and the proximity of future noise-sensitive land uses to transportation corridors, the on-site transportation-related noise impacts at future noise-sensitive uses are expected to potentially exceed the General Plan land use compatibility guidelines, and therefore, impacts are *potentially significant*, and will require noise mitigation.

With noise management policies and programs set forth in this sub-element and noise mitigation measures in the General Plan EIR, the on-site transportation noise levels at future developments within the City can be reduced to a range from *normally acceptable to normally unacceptable* levels. If future developments are properly conditioned, interior noise levels satisfying the 45 dBA CNEL interior noise level standard for noise-sensitive uses can be achieved. Therefore, on-site traffic noise impacts can be considered *less than significant* with mitigation for future development as a part of the 2040 General Plan update.

Interior Noise Levels

With typical building construction and a windows-closed condition, a minimum 25 dBA CNEL reduction is achievable for new dwelling units and in other noise-sensitive uses. However, since the exterior noise levels from City transportation corridors have the potential to exceed 70 dBA CNEL, in some cases the minimum 25 dBA CNEL with standard building construction may still result in interior noise levels greater than 45 dBA CNEL. In some instances, detailed interior noise analysis based on site-specific architectural floor plans and elevations will be required to satisfy General Plan standards and the California Building Code for residential dwelling units. Therefore, since future interior noise levels of residential dwelling units may exceed 45 dBA CNEL, the noise level impact will be *potentially significant*, requiring interior noise mitigation. However, with the detailed interior noise analysis and the policies and programs set forth in this sub-element and the mitigation measure in the General Plan EIR, on-site transportation noise impacts on interior noise levels will be *less than significant*.

Long-Term Traffic Noise

Vehicular traffic, including automobiles, trucks, buses, and motorcycles, is the major noise source measured within the City. Cars generate noise from engine vibration, the interaction of tires and the roadway, and the exhaust system. Noise produced by traffic fluctuates in relation to its volume, the percentage of trucks, and the average speed. Compared to buildout of the previous General Plan, the 2040 General Plan buildout conditions will generate traffic noise level changes ranging from decreases of 0.7 to increases of 0.6 dBA CNEL on the study area roadways. These decreases and increases are based on the Year 2040 ADT volumes form the *Transportation Analysis*, which vary by roadway segment based on the changes in conditions from 2040 General Plan conditions. The increases in noise levels represent a *less than significant* impact. Table S-5 presents the 2040 General Plan Buildout roadway noise levels measured from roadway centerlines and are calculated to range from 67.9 to 77.4 dBA CNEL. Exhibit S-8 graphically illustrates future roadway and railroad noise contours

Interstate-10 and Southern Pacific Railroad Lines

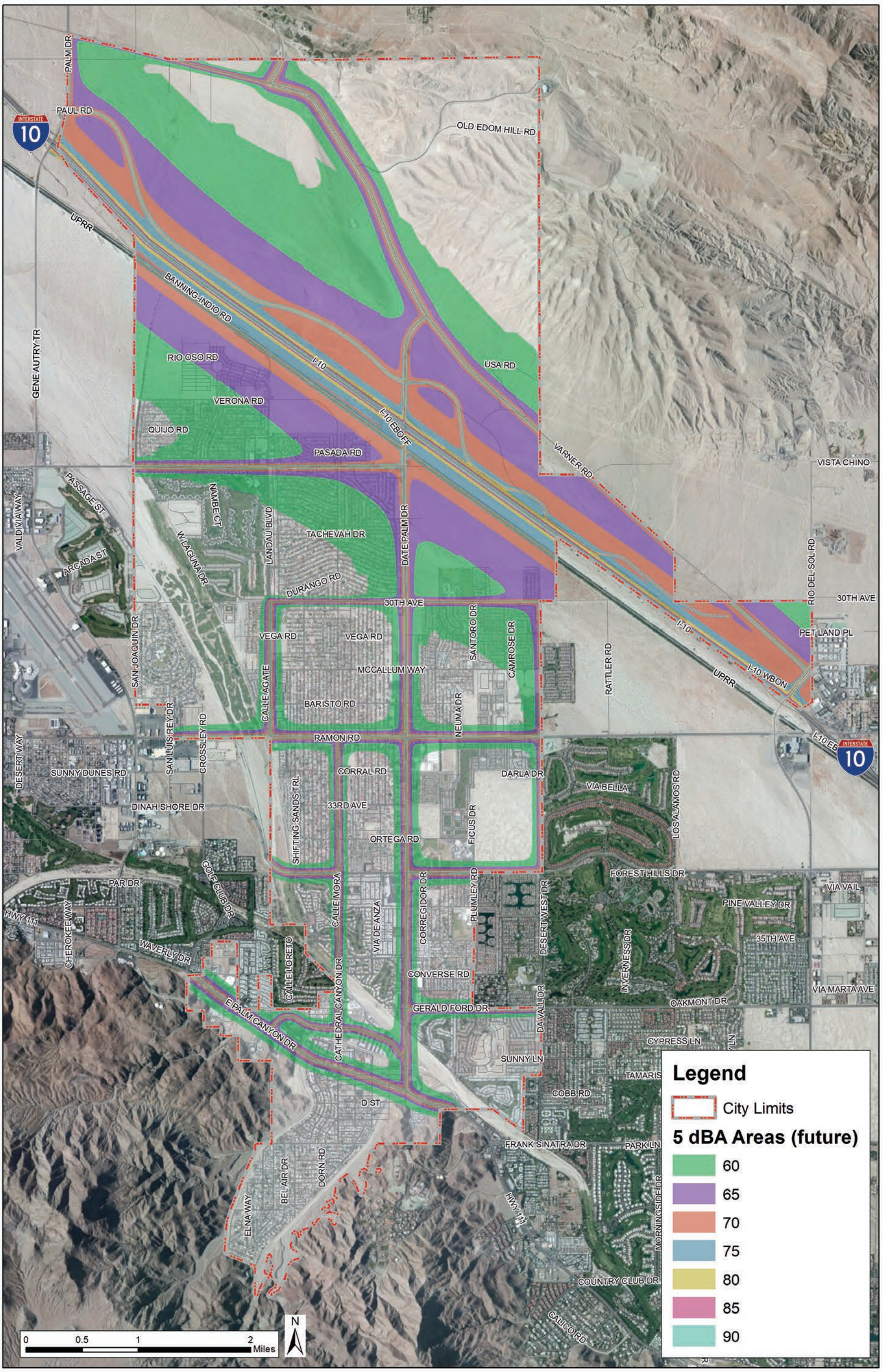
In addition to traffic along East Palm Canyon Drive/Highway 111 and the other major arterial roadways, both incorporated and sphere areas are impacted by rail and vehicular traffic associated with the Southern Pacific Railroad line and U.S. Interstate-10, respectively. The passage of trains, although an intrusive noise event, occurs only periodically and with limited duration. The substantial groundborne vibrations generated by rail traffic are further discussed below (see Rail Vibration Analysis).

More significant is the influence of Interstate-10 traffic noise, which increases at night due to persistent truck volumes combined with an atmospheric nighttime temperature inversion. This inversion tends to reduce the acoustic attenuation typical of distance over open terrain, making noises seem louder. Railroad traffic currently (2018) is an average of 40 trains per day, with an assumed speed of 70 mph, an average of 80 cars per train and a train length of 5,200 feet. By 2040, traffic on the UPRR lines could reach 70± trains per day.

Table S-5
Roadway Noise Levels in 2040

Road	Segment	Adjacent Land Use[1]	dBA CNEL			
			@ Adj. Land Use	70	65	60
				CL to Contour Distance (Feet)[2]		
Palm Dr.	n/o I-10 WB Ramps	Mixed-Use (Urban)	75.2	140	302	652
Gene Autry Tr.	s/o I-10 EB Ramps	Vacant	75.1	139	299	644
Mountain View Rd.	n/o Varner Rd.	Open Space (Public)	76.3	152	327	704
Landau Bl.	n/o Ramon Rd.	Residential	74.2	97	210	452
Cathedral Cyn Dr.	n/o Dinah Shore Dr.	Residential	72.2	62	133	287
Cathedral Cyn Dr.	s/o Dinah Shore Dr.	Business Park/Residential	72.5	64	139	299
Date Palm Dr.	s/o Varner Rd.	Mixed-Use (Urban)	73.6	109	235	506
Date Palm Dr.	s/o I-10 EB Ramps	Commercial	75.5	147	316	681
Date Palm Dr.	n/o 30th Av.	Mixed-Use/Business Park	74.1	118	253	546
Date Palm Dr.	n/o Ramon Rd.	Commercial/Residential	73.8	112	241	520
Date Palm Dr.	n/o Dinah Shore Dr.	Commercial/Residential	72.9	98	212	457
Date Palm Dr.	n/o Gerald Ford Dr.	Commercial	72.1	87	188	404
Date Palm Dr.	n/o Hwy. 111	Commercial	71.6	80	173	374
Da Vall Dr.	n/o Ramon Rd.	Public/Residential	72.7	84	181	391
Da Vall Dr.	s/o Ramon Rd.	Commercial/Residential	72.4	81	174	375
Bob Hope Dr.	n/o I-10 WB Ramps	Mixed-Use (Urban)	77.4	198	426	917
Bob Hope Dr.	s/o I-10 EB Ramps	Mixed-Use (Urban)	75.7	151	326	703
Varner Rd.	e/o Palm Dr.	Mixed-Use (Urban)	67.9	RW	79	171
Varner Rd.	w/o Date Palm Dr.	Open Space (Public)	76.5	158	339	731
Varner Rd.	e/o Date Palm Dr.	Mixed-Use (Neighborhood)	74.5	101	219	471
Valley Center Bl.	e/o Palm Dr.	Mixed-Use (Urban)	72.5	82	176	379
Valley Center Bl.	e/o Date Palm Dr.	Mixed-Use (Urban)	70.3	58	125	270
Valley Center Bl.	e/o Da Vall Dr.	Open Space (Public)	68.4	RW	95	205
Vista Chino	w/o Landau Bl.	Commercial/Residential	74.2	110	237	510
Vista Chino	w/o Date Palm Dr.	Commercial/Residential	73.7	103	221	476
30th Av.	w/o Date Palm Dr.	Commercial/Residential	68.9	RW	81	174
30th Av.	e/o Date Palm Dr.	Mixed-Use (N)/Residential	70.6	48	103	223
Ramon Rd.	w/o Landau Bl.	Open Space (Water)	74.8	120	259	558
Ramon Rd.	e/o Landau Bl.	Commercial/Residential	73.5	100	215	464
Ramon Rd.	w/o Da Vall Dr.	Commercial/Residential	73.4	97	210	452
Dinah Shore Dr.	w/o Cathedral Cyn. Dr.	Business Park/Residential	72.9	81	175	377
Dinah Shore Dr.	e/o Date Palm Dr.	Business Park/Residential	74.2	99	213	460
Gerald Ford Dr.	e/o Date Palm Dr.	Open Space (P)/Residential	72.6	80	173	373
Perez Rd.	w/o Cathedral Cyn. Dr.	Industrial	69.8	RW	113	244
Perez Rd.	e/o Cathedral Cyn. Dr.	Industrial	70.2	56	120	258
Hwy. 111	w/o Canyon Plaza Dr. W.	Commercial/Public	75.4	145	311	671
Hwy. 111	w/o Cathedral Cyn. Dr.	Commercial	73.1	101	217	468
Hwy. 111	w/o Date Palm Dr.	Commercial	73.2	103	223	480
Hwy. 111	e/o Sungate Wy.	Commercial	74.2	120	258	555

1 Source: Proposed General Plan Land Use Map.
2 "RW" = Location of the respective noise contour falls within the right-of-way of the road.



Source: Esri, Urban Crossroads, 2019

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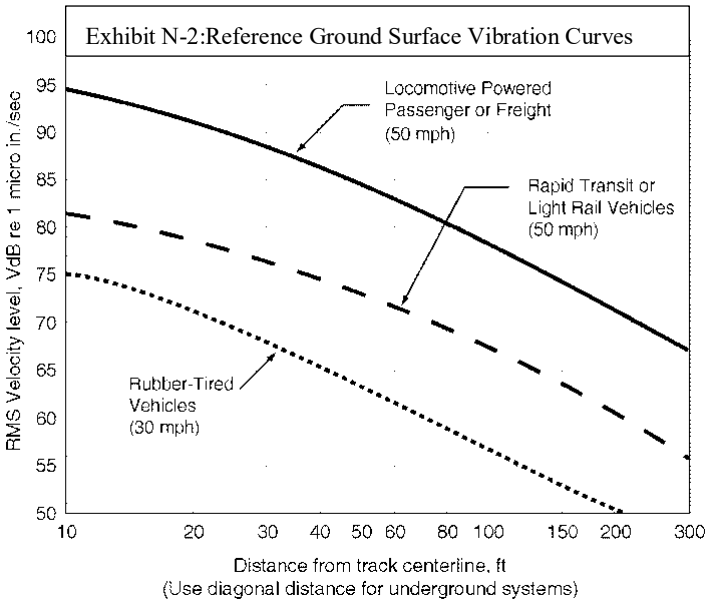
Exhibit S-8- 2040 Roadway and Railroad Noise Contours
Cathedral City General Plan - Imagine 2040

Cathedral City

Rail Vibration Analysis

The effects of groundborne vibration generated by rail traffic on the UPRR lines were analysed based on the methodology provided by the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment*. As with sound pressure waves that comprise "noise", rolling and impact vibrations from railroad engines and cars generate a pressure wave in the ground at different speed and intensities depending on the type of rock and soils they move through. Like sound pressure waves traveling through air, ground vibrations are measured in decibels and are noted as Vdb.



Rail activities are projected to generate vibration levels of up to 84 VdB at 50 feet from trains traveling at 50 mph. At the typical speed of 70 mph of rail activities on rail lines passing through the City, the reference vibration level is increased by 2.9 VdB, and results in estimated vibration impacts of 86.9 VdB at 50 feet from the railroad tracks.

The analysis shows that noise-sensitive and non-noise-sensitive uses within the City could be located within 50 to 150 feet of the UPRR railroad tracks and, therefore, may experience vibration levels which would exceed the noise-sensitive 72 VdB and non-noise-sensitive 75 VdB criteria for frequent rail events identified by the FTA. Policies and programs set forth in this sub-element and mitigation measures in the EIR are designed to reduce or otherwise mitigate these potential impacts to *less than significant* levels.

Aircraft Noise

Aircraft noises impacting the community come from commercial and general aviation operations at the Palm Springs International Airport (PSP), located west of the City Limits. The most current Airport Master Plan and Part 150 Noise Compatibility Study evaluated airport operations, monitored portions of the noise environment, and projected future noise impacts from planned expansions and increased operations. The flight tracks, or patterns, that aircraft are assumed to follow in the abovementioned noise study indicate limited overflights in Cathedral City, although in fact aircraft overflights are common. Although limited, military jets also land and take off from PSP.

As noted above, PSP noise is an important consideration for the City. New or expanded school sites within two nautical miles of an airport runway, including Agua Caliente Elementary School, are subject to review by Caltrans Division of Aeronautics. The primary purpose of state school regulation is to address compatibility issues associated with schools located within an airport's existing or projected future 65 dB CNEL contour (also see Community Noise Equivalent Level or CNEL above). None of the City's schools are located within an existing or future 65 CNEL noise contour generated by PSP.

Based on applicable PSP land use policies, "*dwellings may require incorporation of special noise level reduction measures into their design to ensure that* (compliance with) *the interior noise limit of 45 dB CNEL"*. These features would be incorporated into new residential construction as part of the building permit process, and based on the exterior noise levels approaching and around 60 dBA CNEL, are anticipated to reduce aircraft flyover noise to below the 45 dBA CNEL interior noise level standard for residential uses with standard building construction. Given the location of the 2025 60 dbA CNEL PSP noise contour, little or no specific mitigation would be required to ensure that new residential development satisfies the 45 dBA CNEL interior noise level standard. Therefore, while noise from aircraft operations will likely be heard, they will not significantly impact noise-sensitive uses in the City.

Source: Esri, 2018; CalFire January, 2010

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Exhibit S-9 - Palm Springs International Airport Noise Contours (2025)
Cathedral City General Plan - Imagine 2040

Cathedral City

Mechanical and Industrial Noise

There are other noise generators within the City, in addition to noise generated by motor vehicles, rail traffic and aircraft that could create significant noise impacts. Activities such as construction and automotive repair and other related industrial operations can result in unacceptable noise levels. Loading areas, materials transfers and other acoustically unscreened operations will also raise issues of excessive noise and compatibility.

Significant noise can also result from the operation of mechanical equipment, including refrigeration units and heating/ventilation/air conditioning (HVAC) equipment in commercial and industrial centers. Noise from roof-mounted equipment can travel to bordering neighborhoods and impact sensitive receptors. Fans and compressors, as well as pool equipment, emit a constant hum that can be a significant annoyance and adversely affect the quality of life in a residential neighborhood. The thoughtful design and location of equipment can help mitigate this potential impact and should be included in the review of new development projects by the City.

Community Noise and Land Use Compatibility

The standard used for maximum outdoor noise levels in residential areas in California and in the City is a CNEL of 65 dBA. Within the City, the applicable limit one-hour average for outdoor noise levels in residential areas is 55 dBA (Ordinance 11.96.030; further discussed below). The noise impacts are “unmitigated” or represent the worst-case noise impact without any obstruction of the noise. A number of tools are available to the City to substantially reduce noise impacts, as discussed below.

Sensitive noise receptors include residences, schools, libraries, churches, hospitals and nursing homes, and destination resort areas. Golf courses, parks, and other outdoor activity areas can also be sensitive to noise levels. Less sensitive land uses include commercial and industrial centers, hotels and motels, neighborhood ballparks and other outdoor spectator sport facilities. The least sensitive uses are heavy commercial and industrial uses. Table S-6 depicts the CNEL ranges of allowable exterior ambient noise levels for various land uses at buildout.

Table S-6 Land Use Compatibility for Community Noise Environments

Land Uses	CNEL (dBA)						
	50	55	60	65	70	75	80
Residential - Single Family Dwellings, Duplex, Mobile Homes	A						
		B					
					C		
						D	
Residential – Multiple Family		A					
			B				
					C		
						D	
Transient Lodging: Hotels and Motels		A					
			B				
					C		
							D
School Classrooms, Libraries, Churches, Hospitals, Nursing Homes and Convalescent Hospitals			A				
			B				
					C		
							D
Auditoriums, Concert Halls, Amphitheaters							
			B				
					C		
Sports Arenas, Outdoor Spectator Sports							
			B				
					C		
Playgrounds, Neighborhood Parks			A				
					C		
						D	
Golf Courses, Riding Stables, Water Recreation, Cemeteries			A				
					C		
							D
Office Buildings, Business, Commercial and Professional			A				
					B		
						D	
Industrial, Manufacturing, Utilities, Agriculture			A				
					B		
						D	

Source: *California Department of Health Services, "Guidelines for the Preparation and Content of the Noise Element of the General Plan,"* 1990

A - Normally Acceptable: With no special noise reduction requirements assuming standard constructions.

B - Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design.

C - Normally Unacceptable: New construction is discouraged. If new construction does not proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

D - Clearly Unacceptable: New construction or development should generally not be undertaken.

Cathedral City Noise Ordinance

Chapter 11.96 of the City Municipal Code establishes community-wide noise standards and emphasizes the value of an acceptable noise environment. It provides regulations for noise measurement and monitoring and cites special provisions of, and exemptions to, the ordinance. It is intended to regulate excessive noise from existing uses and activities, and to serve as a reference guide for identifying other pertinent noise regulations. The City Noise Ordinance provides definitions of key terms and establishes exterior noise level standards on a time-of-day basis along with adjustments for intensity and duration. Violations of the Noise Ordinance are defined as a nuisance and subject to the procedures, remedies and penalties for such nuisances. The Noise Ordinance regulates existing uses and activities, while the noise standards in the General Plan are intended to guide the location of future noise generators and sensitive land uses.

Mitigating Noise Impacts

Preserving a quiet noise environment can be accomplished through thoughtful land use and transportation planning, project and building design and orientation, project-specific mitigation, simple and sophisticated technology, and acoustical barriers. Site planning and design standards should provide direct noise impact mitigation for areas particularly impacted by noise. The use of buffer zones consisting of earthen berms, walls and landscaping between sensitive land uses and roadways and other noise sources is an effective tool for noise mitigation. Building orientation, particularly the placement of windows, can significantly mitigate impacts on residential land uses. A number of materials are also available which can baffle noise sources, and result in effective outdoor and interior noise mitigation. When development proposals include sensitive receptors planned next to high-noise roadways (see Table S-5) they should be required to complete noise analysis, which will provide project-specific mitigation measures to ensure that the buildout of the project will not result in unacceptable noise impacts.

Section 2.12 of the General Plan EIR (and EIR Appendix D) sets forth specific mitigation measures for a variety of potential noise impacts. When applied where appropriate, they will effectively reduce noise impacts to levels that are less than significant. These include measures that address traffic and railroad noise and vibration, HVAC, commercial and industrial noise sources, construction and other noise sources. Areas of greatest concern include the UPRR/US I-10 corridor and arterial roadway corridors. While aircraft noise will be an occasional nuisance, on a CNEL-basis these impacts will be less than significant.

FUTURE DIRECTIONS

Consistent with its character as a resort residential community, Cathedral City benefits from an essentially quiet noise environment. However, highway and major roadway and railroad noise sources clearly impact the City. Future efforts to manage the community's noise environment should focus on the preservation of the peaceful and quiet atmosphere presently enjoyed by residents and visitors to the community. The Land Use Element, and particularly the assignment of land use designations, will play a critical role in the City's ability to control noise for sensitive receptors. Another level of land use control is provided by zoning designations and the City Noise Ordinance, which provide development standards that reduce impacts and enhance compatibility. The Circulation and Mobility Element has also been designed, where possible, to protect the City's residential areas from excessive traffic noise and to assure appropriate noise levels. The ongoing coordination of these two elements of the General Plan must play a key role in the City's consideration of development projects, and public works construction.

GOAL, POLICIES AND PROGRAMS

Goal: A community noise environment that complements the City's low density, resort residential character and its various land uses.

Policy 1: Protect noise sensitive land uses, including residential neighborhoods, schools, hospitals and assisted living facilities, libraries, churches, resorts and community open space, from high noise levels generated along major transportation corridors.

Program 1.A: Develop and maintain an inventory of existing and future noise sources and areas of incompatibility and establish procedures, methods and standards to reduce the noise levels in these areas to acceptable levels.
Responsible Agency: Planning; Public Works
Schedule: Immediate; Ongoing

Program 1.B: Prior to development plan approvals for new noise-sensitive development projects, require submittal of noise impact and mitigation analyses to the Planning Department identifying practicable noise mitigation measures ensuring compliance with City standards.
Responsible Agency: Planning, Public Works
Schedule: Immediate; Ongoing

Program 1.C: Prior to development plan approvals for new residential and similar noise sensitive projects, require submittal of noise impact and mitigation analyses to the Planning Department that demonstrates that the interior noise levels in all habitable rooms will satisfy the 45 dBA CNEL interior noise level standard of the General Plan and Title 24, Part 2, of the California Building Code
Responsible Agency: Planning, Public Works
Schedule: Immediate; Ongoing

Program 1.D: Prior to development plan approvals for new noise-sensitive development projects within 150 feet of UPRR railroad tracks, require submittal of a final vibration study, which identifies all practicable mitigation measures to satisfy the 72 VdB noise-sensitive and 75 VdB non-noise-sensitive vibration level standards, as defined by the FTA for frequent rail events.
Responsible Agency: Planning, Public Works
Schedule: Immediate; Ongoing

Program 1.E: Maintain, update and enforce the City's Noise Ordinance that establishes community-wide noise standards and identifies measures designed to resolve noise complaints.
Responsible Agency: Planning
Schedule: Immediate; Ongoing

Program 1.F: Require major stationary noise-generating sources throughout the City to install additional noise buffering or reduction mechanisms on development sites and/or within facilities to reduce noise generation levels to the lowest extent practicable prior to the renewal of conditional use permits or business licenses or prior to the approval and/or issuance of new conditional use permits for said facilities.
Responsible Agency: Planning
Schedule: Immediate; Ongoing

Program 1.G: Parking lots, loading zones, and large trash bins shall be located the greatest distance practicable from adjacent residential properties, and designed is a manner that reduces associated noise impacts to levels allowable by the City's Noise Ordinance.
Responsible Agency: Planning Department
Schedule: Immediate; Continuous.

Policy 2: The relationship between land use designations in the Land Use Element and changes in the circulation pattern of the City, as well as individual developments, shall be monitored and mitigated.

Program 2.A: The City Zoning Ordinance and development review standards shall be used to limit land use patterns and project designs to those that are compatible with the existing and long-term noise environment.
Responsible Agency: Planning
Schedule: Immediate; Continuous

Program 2.B: Develop guidelines and minimal criteria requirements for noise analyses for future development projects and in compliance with the General Plan Noise Study. Studies shall evaluate project impacts and the effectiveness of proposed mitigation measures.
Responsible Agency: Planning, Public Works
Schedule: 2020; Every five years.

Program 2.C: Periodically review and amend the Land Use map as appropriate to assure reasonable land use/noise level compatibility.
Responsible Agency: Planning
Schedule: Annually.

Policy 3: Private sector project proposals shall include measures that assure that noise exposures levels comply with State of California noise insulation standards as defined in Title 25 (California Noise Insulation Standards).

Policy 4: Maintain a circulation map which ensures low levels of traffic within residential neighborhoods, and assigns truck routes to major roadways only.

> **Program 4.A:** Designate primary truck routes and ensure that they are clearly marked throughout the community and properly identified on mobile apps and other web-based platforms. Except for traffic providing location-specific services and deliveries, construction and delivery trucks shall be limited to those truck routes identified in the Circulation and Mobility Element.
> **Responsible Agency:** Planning**,** Public Works, City Engineer
> **Schedule**: 2021
>
> **Program 4.B:** Development projects which result in through-traffic in residential neighborhoods shall be discouraged through the development review process, and most viable alternative routes shall be identified and adhered to.
> **Responsible Agency:** Planning, Public Works, City Engineer
> **Schedule**: Ongoing

Policy 5: Maintain an ongoing contact with the Palm Springs Airport to ensure that flight paths and airport improvements and operations do not impact or extend noise contours into the City.

Policy 6: Coordinate with adjoining municipalities to ensure noise-compatible land uses across jurisdictional boundaries.

Policy 7: The City shall restrict grading and construction activities that may impact residential neighborhoods to specified days of the week and times of day as set forth in the City Noise Ordinance.

Policy 8: The City shall evaluate and condition all development and other construction projects that have the potential to impact sensitive nearby land uses.

> **Program 8.A:** Where applicable, prior to the issuance of building permits for new development or other construction projects, when sensitive receiver locations are within 100 feet of proposed construction activities the City shall require the submittal of construction noise impact analysis and management plans that demonstrate:

- Exterior construction noise levels at the closest sensitive receiver locations will satisfy the FTA 80 dBA L_{eq} residential and 85 dBA L_{eq} commercial 8-hour construction noise level standards and the 0.01 in/sec RMS vibration standard for sensitive uses. The site-specific study shall identify the necessary noise and/or vibration mitigation measures, if any, required to reduce exterior noise and vibration levels to below FTA noise and City vibration thresholds; and
- Measures to reduce construction noise and vibration levels, such as those provided below, shall be incorporated in the final noise management plan, if necessary:
  - Install temporary construction noise barriers at the development site boundary which break the line of sight for occupied sensitive uses for the duration of construction activities. The noise control barrier(s) must provide a solid face from top to bottom and shall:
    - Provide a minimum transmission loss of 20 dBA and be constructed with an acoustical blanket (e.g. vinyl acoustic curtains or quilted blankets) attached to the construction site perimeter fence or equivalent temporary fence posts;

  - Properly maintained with any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired.
- Install sound dampening mats or blankets to the engine compartments of heavy mobile equipment (e.g. graders, dozers, heavy trucks). The dampening materials must be capable of a 5 dBA minimum noise reduction, must be installed prior to the use of heavy mobile construction equipment, and must remain installed for the duration of the equipment use.
- Construction activities requiring loaded trucks, large bulldozers, and jackhammers within 50 feet of nearby sensitive land uses (e.g. residential, school, etc.) shall be minimized, or alternative equipment or methods shall be used, unless the vibration levels are shown to be less than the City threshold of 0.01 in/sec RMS.

Responsible Agency: Planning, Public Works, City Engineer
Schedule: Immediate; Ongoing

Public Services and Facilities Element

PURPOSE

This Element describes and provides background information on the various public services and facilities provided by the City and other public and quasi-public agencies. It is intended to provide sufficient information to assure that adequate resources are provided to meet the demands of the growing community. The purpose of this element is also to describe the demand for police and fire protection services, identify standards of performance or responsiveness, and set forth goals, policies and programs that reinforce and strengthen the City's commitment to the provision of quality, responsive service. To this end, the element's goals, policies and programs address the City's long-term public services and facilities planning needs.

BACKGROUND

The importance of coordinated planning, funding and operation of essential public facilities is clearly recognized by state, county and local jurisdictions. Government Code Section 65103(c) states that the planning agency is to "annually review the Capital Improvement Program of the City or County and the local public works projects of other local agencies for their consistency with the General Plan…" Furthermore, according to Government Code Section 65303, the local jurisdiction may emphasize the importance of this issue by requiring an optional Public Facilities Element in the General Plan.

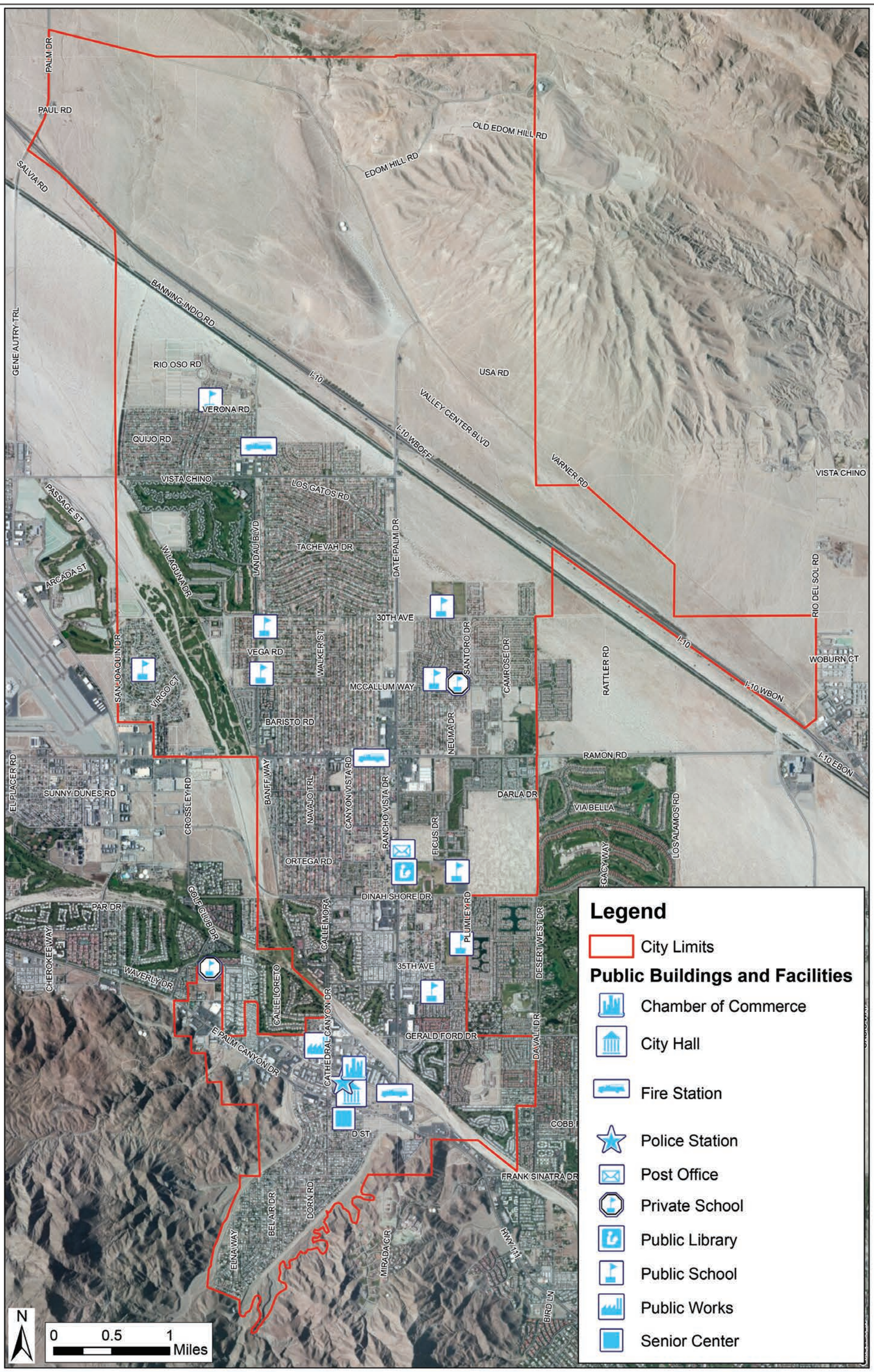
Although critical facilities are built to accommodate present and anticipated needs, some (most notably water and sewer facilities) play a major role in determining the location, intensity, and timing of development. Therefore, the timing, type, and quality of new and upgraded facilities are often directly related to the availability of infrastructure and public services. The principal funding sources for local government infrastructure are taxes, benefit assessments, bonds, and exactions (including impact fees). Water and sewer districts also can avail themselves of these and other types of financing, while public agencies and utilities also have bonding capabilities and rate-based revenue streams to implement long-term facilities and service plans.

The Public Services and Facilities Element is directly related to the Land Use Element, which assigns land use designations and assures that adequate and optimally planned lands are available for existing and future public buildings and facilities. It is also related to the Circulation and Mobility Element, which is directed at providing efficient, safe transportation corridors throughout the City, and especially to essential public facilities. The Community Design Element, which sets forth the architectural and design criteria to be used throughout the community, is responsive to occasional aesthetic issues that arise with the siting and construction of these buildings and facilities.

FORMAT OF THIS ELEMENT

The Public Services and Facilities Element addresses the importance of a full range of municipal services and public resources in the City. Its goals, policies, and programs are intentionally broad to address public services in over-arching terms. Focused analysis and policy direction for specific types of open space is provided in four (4) sub-elements:

- Fire and Police Sub-Element
- Libraries and Schools Sub-Element
- Public Facilities Sub-Element
- Water, Sewer, and Utilities Sub-Element



03.21.19 Source: Esri; City of Cathedral City, 2018

TERRA NOVA® PLANNING & RESEARCH, INC.

Exhibit PSF-1 - Public Facilities Map
Cathedral City General Plan - Imagine 2040

Cathedral City

Fire and Police Sub-Element

PURPOSE

The purpose of the Fire and Police Sub-Element is to assure the provision of adequate levels of fire and police protection throughout the community. These services are among the most important and essential functions of local government. It is intended that this sub-element help coordinate the planning of the community growth and development with the requisite level of public safety services as defined in this sub-element and throughout the General Plan. It is also designed to define existing and future levels of fire and police protection services and to identify the agencies (and partners) that provide these services. The sub-element also provides policies and programs that, through their implementation, assure the continued long-term provision of adequate public safety services for all portions and socio-economic sectors of the community.

BACKGROUND

The Fire and Police Sub-Element has a direct and important relationship to several other General Plan elements and sub-elements, including Land Use, Circulation and Mobility, Emergency Preparedness, Water Resources, Healthy and Sustainable Community, and Community Design. The distribution and intensity of land uses, accessibility, coordination of emergency responses, availability of water to fight fires, medical services to treat and transport the injured, and the provision of "defensible space" in urban development are all tied to the effective provision of fire and police services. Police and fire protection services are essential to the continued safety of this growing community. The City provides its own police and fire departments, and maintains cooperative/mutual aid agreements with other communities and agencies for additional emergency response support.

A number of state regulatory codes focus on the importance of addressing the protection of the community from natural and man-made hazards. Government Code Section 65302(g) requires that a Safety Element or its equivalent be included in the General Plan to address measures necessary to protect the community from risks associated with fire and other hazards and threats. Public Resources Code 4125(a) states that the State Board of Forestry shall classify all lands within the State for the purpose of determining hazards and addressing financial responsibility for the prevention and suppression of fires. Unclassified lands fall under the jurisdiction of the City or appropriate federal agency, such as the U.S. Bureau of Land Management or U.S. Forest Service.

CATHEDRAL CITY FIRE DEPARTMENT

The City of Cathedral City operates its own fire and emergency medical services department, including ambulances, located at 32100 Desert Vista Road. Fire Department staff includes 43 sworn fire personnel (42 firefighters and 1 Fire Chief), including 14 on-duty 24/7/365, 2 administrative personnel and 1 full-time fire inspector. This equates to 0.77 firefighters to every 1,000 residents.[1]

[1] Fire Chief Paul Wilson, July 2018. Estimated population from California Department of Finance Demographic Research Unit Report E-5, Table 2: E-5 City/County Population and Housing Estimates, 1/1/2018.

Three fire stations are located within the City, including: 1) Station No. 411 at 36913 Date Palm Drive, 2) Station 412 at 32100 Desert Vista Road, and 3) Station No. 413 at 27610 Landau Boulevard. Emergency response vehicles include two fire engines, one aerial ladder truck, two ambulances, and one command vehicle. Reserve apparatus includes one engine, one telesquirt truck, two ambulances, one command vehicle, one rehab unit, and one engine under agreement with the California Office of Emergency Services (OES).[2] The Department maintains a mutual aid agreement with the City of Palm Springs and a county-wide agreement with the Riverside County Fire Department for additional fire support, as necessary. A new station will be built at the corner of Date Palm Drive and Buddy Rogers Avenue to replace the aging Station No. 411; it is expected to be completed in 2020.

The City Fire Department is a "Class 3" agency, as rated by the Insurance Services Organization (ISO) Public Protection, where Class 1 is the highest rating and Class 10 is the lowest.[3] The Fire Department responded to more than 5,800 emergency calls in 2018; emergency medical services and resident assistance accounted for approximately 75% of its emergency response activity.[4] The Department's average response time is 6 minutes 21 seconds within the City, and less than 6 minutes 56% of the time.[5]

In addition to fighting fires, the Fire Department provides advanced life support and emergency ambulance services. It is licensed by the California Emergency Medical Services Authority to provide pre-hospital emergency medical services and is authorized by the Riverside County Emergency Medical Services Agency to operate 9-1-1-ambulance services in the City. The Fire Department plays a key role in disaster preparedness and is responsible for coordinating, in conjunction with other City departments, the City's response to a wide range of hazards and threats (please refer to the Emergency Preparedness Sub-Element of the Safety Element for more information about emergency and disaster preparedness).

The Fire Department's Strategic Plan 2019-2023 guides the development of the fire department for the next four years. Among its objectives are improving the ISO Class 3 rating to a Class 2 by 2020, adding an ambulance and additional personnel at Fire Station 412, and adding a pumper and additional firefighters at Station 412.

CATHEDRAL CITY POLICE DEPARTMENT

The Cathedral City Police Department was created in 1984 and is located in the Civic Center at 68700 Avenida Lalo Guerrero. The Department is staffed by 52 sworn officers, 35 non-sworn support and administrative personnel, and 6 reserve officers. Police vehicles include 38 marked and approximately 22 unmarked cars.[6]

Departments and specialized units include the following:

- Detective Bureau
- Auto Theft Task Force
- Coachella Valley Narcotics Task Force
- Real Estate Fraud Task Force Traffic Division
- Homeless Liaison Team
- Gang Investigations Unit
- K-9 Unit
- Dispatch
- SWAT (Special Weapons and Tactics)
- School Resource Officer Program
- Post Release Community Supervision Accountability Team

2 Cathedral City Fire Department 2019-2023 Strategic Plan.
3 Ibid.
4 Ibid.
5 Ibid.
6 Chief of Police Travis Walker, July 2018.

The City Police Department is a full-service agency providing around-the-clock patrol services, a Detective Bureau that investigates all manner of crimes, a crime scene forensics unit, a highly trained regional SWAT Team for high risk incidents, a K-9 team, a Real Estate Fraud Taskforce, a School Resource Officers assigned to our high school, a Gang Unit dedicated to the City, a Traffic Bureau with motor officer enforcement, a Narcotics Task Force Officer, and an Auto Theft Task Force Officer. The Police Department is supported by civilian staff, such as a Records Unit that maintains all criminal and civil reports, and a Communications Center that takes calls from the public and dispatches police and fire personnel for not only Cathedral City, but also for the Desert Hot Springs Police Department.

The Police Department's Strategic Plan 2016-2020 (further discussed below) recommends a minimum officer-to-resident population ratio of no less than one officer per thousand residents.[7] With 52 sworn officers, the City currently provides approximately 0.90 officers for every 1,000 residents. According to the Strategic Plan, the public considers an emergency police response time within 6 minutes or less to be acceptable. The City's Police Department has consistently met this goal by keeping their response to an emergency (Priority 1) in 7 minutes or less.

Emergency and non-emergency calls for Police and Fire are received by the city's Emergency Communications Center. The Cathedral City Dispatch Center is staffed 24 hours a day and 7 days a week to answer emergency and non-emergency phone calls. In 2017, approximately 212,077 calls were received by the Emergency Communication Center.

Community-Oriented Policing

The Police Department has adopted a Community-Oriented Policing philosophy, which is founded upon a working partnership between the community and police to reduce and prevent criminal activity and to identify neighborhood problems and their underlying causes. The officers' primarily function is emergency response, but also to address specific local policing problems, such as traffic control and illegally parked or abandoned vehicles. The City recently created a "Community Service Officer" position, a highly visible member of the force within the community and easily accessible to the public.

Community outreach includes leading community groups, supervising community contacts, and other associated Community-Oriented Policing actions. Department staff implement community contacts, community groups, and business groups, etc., which they engage with regarding crime trends and concerns on a regular basis. The Department continuously evaluates funding sources for participation in crime prevention programs.

Response times can vary significantly, depending on the nature of the incident and the location of patrol cars at the time a 911 call is received. All calls are prioritized, and the response time is contingent on the number of calls pending and their urgency. In 2017, the average response time to a "hot" (emergency) call in Cathedral City, from the time the dispatcher contacted an officer to the time the officer arrived at the scene, was approximately 4.2 minutes. The average response time to an incident that "just occurred" was also 4.2 minutes.

[7] Cathedral City Police Department Strategic Plan 2016-2020 and Fire Department Strategic Plan 2019-2023.

Community-Based Policing

The Police Department sponsors and supports a variety of community-based policing programs and other special community events. The Neighborhood Watch program educates residents about implementing crime prevention strategies in their neighborhoods. The Police Explorers Program allows teenagers and adults ages 14 to 21 to learn about and participate in a variety of law enforcement functions, including crime prevention support and ride-along programs with officers. One officer is assigned to Cathedral City High School as a School Resource Officer.

The Citizens-on-Patrol (COP) program consists of volunteers who serve as the eyes and ears of the police department. Responsibilities include facilitating towing of abandoned vehicles, directing traffic at collision sites, looking for graffiti, and alerting police to potential criminal activity. Volunteers are trained by sworn police officers and attend monthly meetings. The program currently (2019) includes approximately 23 volunteers.

Strategic Plan

The Police Department's Strategic Plan 2016-2020 establishes the department's vision for the future and identifies strategies to accomplish its objectives. Among its objectives are maintaining adequate staffing ratios, tracking and maintaining adequate Priority One response times, enhancing community partnerships, continuing to participate in multi-agency task forces, and utilizing state-of-the-art technology and equipment. Other Police Department goals set forth in the strategic plan include prevention and suppression of crime, maintaining adequate staff-to-population ratios, maintaining and expanding partnerships within the community, participation in multi-agency task forces, maintaining fiscal efficiency, periodic review of practices and policies, and tracking and addressing emerging policing trends.

FUTURE DIRECTIONS

As the City continues to grow, so will the need for additional police and fire protection. New and replacement police and fire facilities will need to be constructed, as future development occurs north of Interstate-10. The City will be responsible for monitoring growth patterns and responding to the demand for additional public safety facilities and services. Considerations will include land use and circulation patterns, the provision of water for adequate fire flows, the delivery of emergency medical and ambulance services, the financing of future and replacement fire and police stations, and the adequacy of emergency response times.

GOALS, POLICIES, AND PROGRAMS

Goal 1: Protection of the community from the threat of loss of life and property from fire, natural and human-caused disasters, and environmental hazards.

Goal 2: High level of security and police protection that ensures public order and a sense of community well-being and is responsive to emerging policing needs.

> **Policy 1.1:** The City shall periodically review, assess and update the Police and Fire Department Strategic Plans and the Fire Department Local Hazard Mitigation Plan, and their goals and policies.
>
> > **Program 1.1.1:** The Fire and Police Departments shall coordinate with other City departments and schedule periodic review, access and update the Strategic Plans and Local Hazards Mitigation Plan .
> >
> > **Responsible Parties:** Fire and Police Departments, Planning, City Manager, City Council
> > **Schedule:** Strategic Plans- 2020, Location Hazards Mitigation Plan - 2022

Policy 1.2: All new development proposals shall be thoroughly reviewed for potential impacts and the ability to effectively provide public safety and fire and police protection.

Program 1.2.1: The Fire and Police Departments shall evaluate proposals for new development to assure adequate emergency access, the integration of defensible space principles, clear street name signage and numbering, internal circulation, fire flow and other safety design considerations.
Responsible Parties: Fire Department, Police Department, Planning, Public Works
Schedule: Immediate; Ongoing

Policy 1.3: The City shall provide for the adequate and timely expansion of fire and police protection capabilities, services and facilities to meet future development demands.

Program 1.3.1: Apply objective criteria, including appropriate minimum response time, the matching of services and facilities to local needs, and the availability of alternative routes to serve target neighborhoods, and assure the optimal siting of future fire and police stations.
Responsible Parties: Fire Department, Police Department, Planning
Schedule: Immediate; Ongoing

Program 1.3.2: Evaluate current and potential methods of financing the expansion of fire and police services, including developer impact fees, assessment districts, and fire and police permitting fees for development occurring in high security or fire risk areas.
Responsible Parties: Planning, Police Department, Fire Department, Finance Department
Schedule: Immediate; Ongoing

Program 1.3.3: Continue to collaboration between County Health and Human Services staff and law enforcement personnel to provide training and education on methods for addressing mental health patients in the criminal justice system.
Responsible Parties: Planning, Police Department, County Health
Schedule: Immediate; Ongoing

Policy 1.4: The City shall support the highest level of code enforcement practicable in order to protect property and lives, property values, and quality of life.

Program 1.4.1: Strictly enforce the California Building and Fire Codes, City Municipal Code and other applicable building standards in the course of reviewing development plans and conducting building inspections.
Responsible Parties: Planning, Public Works, Building & Safety, Fire and Code Compliance Departments
Schedule: Immediate; Ongoing

Program 1.4.2: Encourage community involvement in code enforcement efforts, including a volunteer neighborhood-based code enforcement program, with specific attention directed toward property maintenance.
Responsible Parties: Police Department, Planning, Code Compliance
Schedule: Immediate; Ongoing

Policy 1.5: Review and comment on proposals for the use, manufacture, storage and transportation of potentially hazardous materials and monitor such sites on a regular basis to ensure that potential hazards to the community are minimized.

Program 1.5.1: The siting of facilities that produce, store, use or transport hazardous, flammable or explosive materials shall be conducted in a manner which assures the highest level of safety, in strict conformance with the California Building and Fire Codes, Municipal Code and other applicable regulations.
Responsible Parties: Planning, Fire Department, Code Compliance
Schedule: Immediate; Ongoing

Policy 1.6: Continue to support community-based policing efforts, including the Neighborhood Watch and Citizens on Patrol programs and disaster readiness programs, including Community Emergency Response Team (CERT) training and resident cell phone enrollment for emergency notifications.

Program 1.6.1: Enhance public awareness and participation in crime prevention, and encourage and promote the Neighborhood Watch Program, Citizens on Patrol and other community-oriented policing programs. The City shall develop new and expand existing educational programs dealing with personal safety awareness, such as neighborhood and commercial association watch/protection programs, and emergency preparedness and education for residents to register their cell phone with "Alert RivCo" at https://rivcoready.org/AlertRivCo used to alert Riverside County community members of urgent actions to take during disasters, such as earthquakes, wildfires, and floods.
Responsible Parties: Police Department, Fire Department
Schedule: Immediate; Ongoing

Schools and Libraries Sub-Element

PURPOSE

The Schools and Libraries Sub-Element describes the City's educational facilities, services, resources, and the opportunities made available through the local school and library systems. It also helps to anticipate and plan for future needs and directs decision-makers to assure that adequate and accessible educational facilities are provided to the community. The sub-element identifies the City's role in planning and siting new school and library facilities, and how it coordinates with the school district, community college district and county library system, and sets forth policies and programs designed to enhance the educational experience of the City's residents.

BACKGROUND

The Schools and Libraries Sub-Element addresses the need for adequate and conveniently located public lands for educational facilities, and therefore, is directly related to the Land Use Element. It is also related to the Circulation and Mobility and Noise Elements, as the City strives to protect schools and libraries from excessive noise and traffic.

California Government Code Section 65302(a) requires that, among other things, the General Plan assess the general distribution, location and adequacy of educational facilities. Also applicable is State legislation (AB 2926), effective January 1, 1987, which authorized school districts to charge per square foot development fees to fund the construction and reconstruction of public school facilities. The fees are paid by developers directly to the appropriate school district prior to the issuance of building permits. In the Palm Springs Unified School District, which provides public education services to Cathedral City, the 2018 fee for residential development was $3.79 per square foot, and the fee for commercial development was $0.61 per square foot.

PUBLIC EDUCATION

Cathedral City is located within the boundaries of the Palm Springs Unified School District, which provides K-12 education services and facilities. Over the past two decades, the City and Coachella Valley have also seen an important expansion of higher educational facilities and opportunities. These include the expansion of the Desert Community College District's College of the Desert (COD), a new California State University/San Bernardino campus and a University of California Graduate Center. A variety of private colleges have also become established in the valley, including in Cathedral City. These are further discussed below.

Palm Springs Unified School District

The Palm Springs Unified School District (PSUSD) provides kindergarten through 12th grade public educational services and facilities to Cathedral City and other communities in the western Coachella Valley. In 2019, PSUSD schools enrolled approximately 22,496 students in 28 schools and in independent study programs. PSUSD operates nine schools within Cathedral City, including five elementary, two middle, one high, and one continuation high school. These include the following:

Agua Caliente Elementary School is located at 30800 San Luis Rey in the western part of the City and includes kindergarten through fifth grades. A new campus opened in February 2019. The school's maximum capacity is 726 students, and in January 2001 it enrolled 532 students.

Cathedral City Elementary School is located at 69300 Converse Road in the southeastern portion of the City. It includes kindergarten through fifth grades and operates year-round. The school can accommodate a maximum of 899 students and enrolled approximately 695 in 2017.

Landau Elementary School is located at 30310 Landau Boulevard. The school includes kindergarten through fifth grades. Its maximum capacity is 790 students, and enrollment as of January 2017 was exactly 790 students.

Rio Vista Elementary School is located at 67770 Verona Road. The school includes kindergarten through fifth grades. Its maximum capacity is 870 students, enrollment as of January 2017 was 718 students.

Sunny Sands Elementary School is located at 69310 McCallum Way. The school operates year-round and has a maximum capacity of 966 students. In 2017, the student body included 744 students.

Nellie N. Coffman Middle School includes sixth through eighth grades and is located at 34603 Plumley Road in the City's eastern limits. The school can accommodate a total of 1,252 students and enrolled 1,149 in January 2017.

James Workman Middle School is located at 69300 30th Avenue and includes sixth through eighth grades. Although the school has a maximum design capacity of 1,222 students, the student body totaled 1,368 students in 2017.

Mt. San Jacinto High School, a continuation high school, is located at 30800 Landau Boulevard. Approximately 280 students were enrolled in the school in January 2017.

Cathedral City High School, located at 69250 Dinah Shore Drive, includes ninth through twelfth grades. It can accommodate a maximum of 1,800 students and enrolled 1,594 in January 2017. The "Home of the Lions" is also home to a wide range of Science, Technology, Engineering, Mathematics (STEM) and arts and culture programs, including the Math, Engineering and Science Achievement Program (MESA), Advancement Via Individual Determination Academy (AVID), and the Health and Environmental Academy of Learning (HEAL). CCHS is also internationally known for its award winning Choral and Instrumental Music Programs and its Ballet Folklorico Program, to name just a few.

PRIVATE K-12 EDUCATION

Palm Valley School is located at 35525 Da Vall Drive in Rancho Mirage, a short distance from Cathedral City. This school serves students from throughout the Coachella Valley and provides classroom instruction from preschool through grade 12. Enrollment for the 2018-19 academic year was 307 students..

Kings School is located at 67675 Bolero Road in Palm Springs. The school serves students from preschool through 8th grade. Enrollment for the 2018-19 academic year was approximately 276 students.

COLLEGES AND UNIVERSITIES

Higher education provided by colleges and universities are very important to any community for many reasons, including providing the basis for long-term financial success, creating a capable labor force and job stability, enhancing career satisfaction, and broadening individuals to ensure their success outside of the workplace. With more and more occupations requiring advanced education, a college degree is critical to success in today's workforce. As already noted, the Coachella Valley is in the middle of an education renaissance and students no longer need to travel outside the valley to get a quality college or university education. And local institutions are also providing curricula that address the needs of the market for specialty training and degrees in sustainable technology, allied health, hospitality, and arts and culture.

Regional colleges and universities include the College of the Desert (COD), Coachella Valley Campus of California State University-San Bernardino (CSUSB), and University of California-Riverside (UCR) Graduate Center in Palm Desert. Private for-profit colleges include Brandman University, and Mayfield College located at 35325 Date Palm Drive in Cathedral City.

College of the Desert

The College of the Desert was formed in 1958 by valley voters and the first campus buildings opened in 1962 on the site of the 160-acre Odell Ranch in Palm Desert. Since its beginning, COD has been a leader in climate-adaptive architectural design, which has been carried forward since its inception.

Today, COD is a multi-campus institution with its main campus in Palm Desert, an east-valley campus in the Mecca-Thermal area, the Indio Educational Center, and the new West Valley Campus in Palm Springs. Campus planning and building design is environmentally responsive, dynamic and reflective of COD's commitment to its students, providing the most progressive and up to date educational experience possible. Cathedral City is roughly equi-distant between the Palm Desert and West Valley Campuses and both are easily accessible for City residents.

COD provides excellent educational programs and services that contribute to the success of its students and the vitality of the communities it serves. It provides students with the opportunities and encouragement to learn the skills, knowledge and behaviors needed to succeed in their chosen endeavors. COD supports the educational, economic, ethical, cultural and civic needs of the valley's diverse population, and emphasizes the importance and value of life-long learning.

COD offers a wide range of courses, certificates, degrees, and transfer programs. These academic services are designed to fulfill students' goals, meet the needs of local employers, and articulate well with four-year institutions. It provides work force training relevant to the needs of business and industry, and promotes the economic development of the region. COD selects and supports quality, committed faculty and staff to provide excellent academic programs, as well as effective student and academic support services.

The College is committed to an on-going process of planning, assessment, and measurable improvement with the goal of providing the best educational opportunities possible for its students. COD is committed to an intellectually open and nurturing environment that welcomes and appreciates a diversity of ideas and people. It provides the encouragement, means and professional setting for faculty and staff to operationalize the college's mission of providing a premier choice for higher education.

California State University-San Bernardino

The Palm Desert campus of CalState was established in 2000 with an initial 55-acre land grant from that city. In 2015, Palm Desert transferred an additional 114± acres to the CalState campus, which now totals 169± acres. It is conveniently located just south of Interstate-10 at the Cook Street exit. The campus is only partially built out and has an average enrollment of about 1,000 students. At buildout, the campus is expected to host approximately 8,000 students. Coursework also includes a variety of online classes.

Undergraduate courses currently offered at CalState Palm Desert include accounting, business management, marketing and advertising, entrepreneurship, and hospitality management. The curricula also include public relations, human and organizational communications, criminal justice, English literature, history, liberal studies, psychology, and nutrition and food science. Graduate programs include accountancy and business administration, nursing, public administration social work and others. The campus also includes a doctoral program educational leadership, and a variety of credential and certificate programs.

University of California Graduate Center

The UC-Riverside Graduate Center was founded in 2005 and provides a variety of programs in such diverse disciplines as conservation biology, business and management. UCR Extension offers more than 90 certificate programs and enrichment courses online and in classroom settings to meet students' educational, career and enrichment needs. These include programs in business, computer science and technology, education, healthcare, natural resources, law and criminal justice, creative arts and design, and other disciplines. The UCR Graduate Center is also home to the Osher Lifelong Learning Institute that also holds classes at the Eisenhower Medical Center campus in Rancho Mirage. The campus also provides its UC Master Gardener program and the UCR certificate program in nonprofit management.

LIBRARY FACILITIES

The Cathedral City Public Library is a branch of the Riverside County Library System and is located at 33520 Date Palm Drive. The library opened in 1996 and consists of a 20,000 square foot facility containing approximately 70,000 volumes. It offers a full range of community programs and services, including youth activities, computer facilities and workshops, literacy programs, a community meeting room, and a comprehensive HIV/AIDS information center. The library also offers "English as a Second Language" courses, has a speaker series, family story-time program, a book club, meditation programs and others. "Friends of the Library" provides volunteer services and operates a bookstore within the library.

Regional library facilities include College of the Desert (COD) Libraries at the Palm Desert, Palm Springs, and Indio campuses, which are open to COD students and the general public and include state-of-the-art research systems. The medical library at Eisenhower Medical Center in Rancho Mirage (lending to non-hospital staff is prohibited) and other branches of the Riverside County Library System are also available for public use.

FUTURE DIRECTIONS

The City's and the region's schools and library are important community assets and indicators of the community's social health and quality of life. And both provide a wide range of learning, research, and art and cultural experiences that were unavailable in years past. These facilities and the resources and programs they offer are also important considerations for many contemplating moving to the City. Schools and libraries are sensitive land use, and their location requires consideration of many factors, including student and user safety, accessibility, and impacts from excessive noise.

Public school districts are considered "responsible agencies" and have "lead agency" status for the siting, planning and processing development plans associated with their own facilities. While consultation with local jurisdictions is required, most decisions rest with the school districts, including the community college district. Building, planning and architectural plans of schools and community colleges are processed and approved by the State Architect's Office. Nonetheless, the City of Cathedral City can assist and coordinate with the local school district, COD and state agencies to assure the provision of adequate educational facilities and services, and at locations that are compatible with other surrounding land uses. As important community destinations, the City's Circulation and Mobility Element and its Active Transportation Plan will play a major role in making schools and libraries especially accessible to our youth and others that uses these facilities.

The General Plan provides the City with the opportunity to preserve and protect existing and future school and library sites from excessive noise and traffic conditions, and to ensure accessibility and compatibility with surrounding land uses.

GOALS, POLICIES, AND PROGRAMS

Goal 3: The provision of quality school and library facilities in the City that are accessible and conveniently located within the community.

> **Policy 3.1:** Assist, cooperate and coordinate with the Palm Springs Unified School District, the community college district and state agencies in identifying, acquiring and developing school sites needed to meet future growth demands. Encourage the selection of potential school sites that are centrally located in areas of existing or future residential development.
>
> > **Program 3.1.1:** Review PSUSD and COD development proposals and environmental documentation, and otherwise coordinate with these institutions in planning new public school facilities as part of the City's continuing effort to provide enhanced educational opportunities for the community's residents.
> > **Responsible Parties:** PSUSD, COD, Planning, Public Works, Economic Development Department
> > **Schedule:** Immediate; Ongoing
>
> **Policy 3.2:** Schools and libraries shall be protected from excessive noise and traffic conditions, and incompatible land uses to the greatest extent practical.

Program 3.2.1: Routinely evaluate and update the Land Use Element and confer with potentially affected institutions to ensure that school and library sites are compatible with surrounding land uses, arterial roadways and significant noise generators.
Responsible Parties: Planning, Public Works
Schedule: Immediate; Ongoing

Program 3.2.2: The City shall encourage and/or require the use of design and development techniques, such as sound attenuation walls, earthen berms and acoustical insulation in buildings, that mitigate potential traffic and other noise impacts on schools and libraries.
Responsible Parties: Planning, Building Department
Schedule: Immediate; Ongoing

Policy 3.3: The City shall consult and coordinate with the Palm Springs Unified School District to maximize shared/joint use of school open space and recreation facilities.

Program 3.3.1: The City shall proactively pursue agreements with the Palm Springs Unified School District regarding the shared purchase, lease, and/or joint use of land for school and recreational purposes. Provisions shall be made which allow for accessible recreation facilities and open space for the community during non-school hours.
Responsible Parties: Economic Development Department, Planning, PSUSD
Schedule: Immediate; Ongoing

Policy 3.4: The City shall coordinate with the Riverside County Library System to assure that adequate library facilities, services and resources are provided to meet the educational and literary needs of the community.

Policy 3.5: The City shall cooperate in securing school impact fees from developers, in accordance with state law.

Policy 3.6: Ensure provision of safe pedestrian access for students of new and existing school sites throughout the city.

Program 3.6.1: The City shall coordinate with PSUSD, COD and the Riverside County Library System to ensure that safe routes and means to school and library facilities through the thoughtful implementation of the Circulation and Mobility Element and the Active Transportation Plan.
Responsible Parties: Planning, Public Works Department, PSUSD, COD
Schedule: Immediate; Ongoing

Public Facilities Sub-Element

PURPOSE

This sub-element describes and provides background information on the various public and quasi-public facilities and structures in the City. It is intended to provide sufficient information to identify important structures and assure that adequate facilities are provided to meet the demands of the growing community. It is also meant to help identify issues associated with these important and critical facilities. The sub-element also sets forth goals, policies and programs, which address the City's long-term planning needs.

BACKGROUND

The importance of coordinated planning, funding and operation of essential public facilities is clearly recognized by state, county and local jurisdictions. Government Code Section 65103(c) states that the planning agency is to "annually review the Capital Improvement Program of the City or County and the local public works projects of other local agencies for their consistency with the General Plan…" Furthermore, according to Government Code Section 65303, the local jurisdiction may emphasize the importance of this issue by requiring an optional Public Facilities Element in the General Plan.

The Public Facilities Element is directly related to the Land Use Element, which assigns land use designations and assures that adequate and optimally planned lands are available for existing and future public buildings and facilities. It is also related to the Circulation and Mobility Element, which is directed at providing efficient, safe transportation corridors throughout the City, and especially access to essential public facilities. The Community Design Element, which sets forth architectural and design criteria to be used throughout the community, is responsive to occasional aesthetic issues that arise with the siting and construction of these buildings and facilities.

The City contains a number of public buildings and facilities, including the Civic Center, schools and libraries, fire stations, post offices and other public buildings, as well as utility infrastructure. Municipal maintenance yards, roads, bridges, and traffic signals also fall into this category. Advance planning for public facilities assures that they are built in time to accommodate existing and anticipated future needs of the community. Some, most notably utility infrastructure, play a key role in determining the location, intensity, and timing of future development. Most of these facilities are shown on the map included in this sub-element.

The location of public buildings and facilities is largely based on their function in the community. Functional criteria should not preclude the logical and sensitive integration of these facilities into the City's existing and planned land use patterns. Fire and police stations, for example, should be strategically located throughout the community so as to provide optimal emergency response times. Public office buildings should be conveniently located with safe public access and adequate parking. Electrical substations, water wells, and other utility infrastructure can be effectively screened from public view and aesthetically and cost-effectively integrated into the natural and built environment.

PUBLIC FACILITIES

Civic Center

The Civic Center is located at 68700 Avenida Lalo Guererro and serves as an important civic monument and community focal point in the heart of the downtown district. The building is designed on a grand scale with strong neo-classical architectural features. It overlooks a public plaza which showcases the Fountain of Life, an interactive water sculpture that reflects the nature and history of the desert. This space serves as a dynamic and beautiful community-gathering place for important civic and other community functions.

The building opened in July 1998 and contains approximately 65,000 square feet. It houses the Police Department and city staff and administrative offices, including the Mayor's office and City Council chambers.

Corporate Yard

The City's corporate yard is located at 68385 Kieley Road, near Cathedral Canyon Drive. The facility includes two masonry buildings with a total of approximately 8,500 square feet. One building serves as a vehicle maintenance garage/workshop, and the other includes staff offices for the Public Works Department and warehousing space. The remainder of the site consists of an asphalt parking lot, which accommodates staff and City-owned vehicles. City staff has indicated that additional parking space is needed and that the corporate yard may be expanded in the future.

Community Center

The Cathedral City Community Center, once located on East Palm Canyon Drive across from the Civic Center, was demolished in 2016. The City is in the process of evaluating available sites and potential costs and constraints related to construction of a new community center.

Senior Center

The Cathedral City Senior Center, at 37171 West Buddy Rogers Avenue, is a non-profit organization that strives to improve the quality of life for seniors aged 50+ in Cathedral City and surrounding communities. It offers a wide range of programs that benefit the mental and physical health of seniors, including games, parties, physical fitness activities, health resource fairs, and art, computer, and language classes. It also houses a food pantry that provides food items for approximately 100 low-income senior households per week.

Fire Stations

The Cathedral City Fire Department is responsible for fire suppression and prevention, paramedic services, disaster preparedness, hazardous materials response, and fire code enforcement. It operates three fire stations: No. 411 at 36913 Date Palm Drive, No. 412 at 32100 Desert Vista Road, and No. 413 at 27610 Landau Boulevard. A new Fire Station No. 411 will be built across the street from the existing station; it is expected to be completed by 2020. The Department maintains mutual aid agreements with neighboring communities for additional fire support. Please refer to the Fire and Police Sub-Element for more information.

Police Department

The Cathedral City Police Department is located in the Civic Center at 68700 Avenida Lalo Guerrero. It is staffed by approximately 52 sworn officers, 6 reserve officers, and 35 support and administrative personnel. Additional support is provided by the Citizens on Patrol program, which currently enrolls approximately 23 volunteers. The Department implements a wide range of community programs, including Neighborhood Watch, the School Resource Officer Program, and the Police Explorers Program. Please refer to the Fire and Police Sub-Element for more information.

Schools

As discussed in the *Schools and Libraries Sub-Element, above,* Palm Springs Unified School District (PSUSD) provides K-12 public education services and facilities to the City of Cathedral City. Nine PSUSD schools are located in Cathedral City. Local K-12 private educational facilities include the Palm Valley School, Kings School, and other private schools in the Coachella Valley. Regional colleges and universities include College of the Desert, the Coachella Valley Campus of California State University-San Bernardino, and the University of California-Riverside Palm Desert Graduate Center. Private for-profit colleges include Mayfield College in Cathedral City and Brandman University in Palm Desert, Educational facilities and services are discussed further in the *Schools and Libraries Sub-Element*.

Cathedral City Public Library

The Cathedral City Public Library is located on an eight acres and incudes park-like open space lands that extend south along the east side of Date Palm Drive. Its address is 33520 Date Palm Drive and is a branch of the Riverside County Library System. In addition to traditional book stacks, the library offers a full range of community services, including computer workshops, literacy programs, youth activities, and an HIV/AIDS information center. Regional library facilities include the COD Libraries in Palm Desert, Palm Springs, and Indio; the medical library at Eisenhower Medical Center in Rancho Mirage; and other branches of the Riverside County Library System. Please refer to the *Schools and Libraries Sub-Element* for more information.

Cathedral City Post Offices

The Cathedral City Post Office is a full-service facility located at 33940 Date Palm Drive, at the intersection of Date Palm Drive and Dave Kelley Road. It provides basic postal services, post office boxes, voter registration forms, mail boxes, shipping services, and postage stamp sales.

Utility Infrastructure

Utility buildings and facilities, including electrical substations and switching facilities and well sites, can generate noise and also detract from the scenic value of an area. Landscaping and architectural elements can be incorporated into the design of these structures to minimize their visual and noise impacts, screen them from public view, and assure their compatibility with the surrounding built and natural environment. Effective design elements include decorative block walls, vegetative buffers, and the use of locally compatible architectural style and color. Some utility transmission lines can be undergrounded to shield them from view.

The primary utility companies serving the City of Cathedral City are the Coachella Valley Water District, Desert Water Agency (DWA), Southern California Edison (SCE), Frontier Communications, Spectrum, and Southern California Gas Company (The Gas Company). Major utility buildings and facilities in the City include a Frontier (formerly Verizon) telephone sub-switching unit on the east side of Date Palm Drive, south of McCallum Way, and DWA sewage pumping plants on Date Palm Drive and Cathedral Canyon Drive.

SCE has high voltage transmission lines and three substations within the City limits and one immediately outside the City limits which serve Cathedral City residents and the region. SCE also has a wide range of distribution lines that pass through and serve the community. Also see the *Water, Sewer and Utilities Sub-Element*.

Drainage Facilities

Given its proximity to the adjacent mountains, the City can be prone to flooding. Drainage is typically divided into two categories, local and regional drainage, and are ultimately interrelated. Local drainage refers to limited drainage areas and the generation of runoff associated with urban development. Regional drainage typically consists of high-volumes and facilities capturing and conveying runoff from a larger geographic area. There is a mix of responsibilities among the City, Riverside County Flood Control District, Coachella Valley Water District, Federal Emergency Management Agency (FEMA), U.S. Army Corps of Engineers, regarding regulation, ownership and management of local and regional drainage facilities. These agencies maintain close cooperation and coordination to ensure effective flood control planning and management in the community.

The City's primary drainage facility is the Whitewater River Stormwater Channel, which extends from Vista Chino southeast to East Palm Canyon Drive. Additional capital projects include the East and West Cathedral Canyon Channels and a variety of other levees, channels, storm drains, and detention/retention basins. Please refer to the Safety Element's Flooding and Hydrology Sub-Element for more information.

Critical Facilities

The term "critical facilities" refers to any building or facility that provides important and/or essential emergency services following a major disruptive event, such as an earthquake, flood or fire. Critical facilities include fire and police stations, hospitals, major airports and roadways, and primary communications facilities. They may also include other civic structures, as well as school facilities. Elevated water storage can also be considered as critical facilities. These facilities and structures should be located, to the greatest extent practicable, in areas that are the least susceptible to impacts from seismic activity, flooding and other hazardous occurrences. Specifically, they should not be located within or near the 100-year floodplain or a fault zone.

Given the City's proximity to the Whitewater River and the San Andreas and other fault zones, special considerations should be made in the construction of critical facilities and structures. In particular, the City and other responsible agencies should assure that thorough engineering analyses are performed, to the extent necessary, prior to construction of future critical facilities. Building and other structural design should include allowances for the offset of foundations resulting from surface displacements. These and other safety issues are addressed in more detail in the Safety Element's Emergency Preparedness Sub-Element.

FUTURE DIRECTIONS

Ongoing capital improvement funding of public facilities, including those supporting police and fire functions, will be crucial to meeting the future security needs of the community, including accommodating future growth. Until December 1999, the City's Community Services District (CSD) provided a steady revenue stream to fund law enforcement and other services and facilities. In December 1999, the residents of Cathedral City voted to terminate the CSD. With the loss of CSD income, the City has pursued other funding opportunities, such as state and federal grants, General Fund revenues, Developer Impact Fees, Measure A funds and the expanded use of volunteers, to meet increasing demands for public services.

Each year, local government agencies (including cities, counties, school districts and special districts) planning the construction of capital facilities must submit to the planning agency a list of proposed projects which they would like implemented. The City's Capital Improvement Program (CIP) identifies existing and proposed projects that require on-going and forward-looking governmental funding, such as traffic signals, street widenings and re-paving, parks and recreation facilities, and public parking lots. It is essential that the City carefully review and adjust its CIP, as necessary, to assure consistency with General Plan goals and policies and to respond to the changing needs of the community.

GOALS, POLICIES, AND PROGRAMS

Goal 4: Public buildings and facilities that optimize functionality, while being compatible with surrounding land uses and aesthetically integrated into the City's built and natural environments.

Policy 4.1: The Land Use Element shall assure the long-term availability of sites for future public and quasi-public buildings, infrastructure, and other facilities.

Program 4.1.1: The City shall periodically review its official Land Use Map and development patterns to assure the availability of adequate sites for future public and quasi-public buildings, infrastructure, and other facilities. The City shall confer and coordinate with utilities and other public and quasi-public agencies regarding their long-term needs.
Responsible Parties: Planning, Public Works, CVWD, DWA, Riverside County Flood Control, SCE, SCG, Frontier, Spectrum.
Schedule: Immediate; every five years

Policy 4.2: The City shall routinely evaluate and update, as appropriate, its Capital Improvement Program.

Program 4.2.1: Establish and implement a Capital Improvement Program review and update schedule, which includes annual reviews, analysis and comprehensive revisions every five years.
Responsible Parties: Planning, Public Works, CVWD, DWA, Riverside County Flood Control, SCE, SCG, Frontier, Spectrum.
Schedule: Immediate; every five years

Policy 4.3: Coordinate with public utility providers and other public/quasi-public agencies to assure that utility buildings and facilities are compatible with the surrounding landscape.

Program 4.3.1: All new maintenance and utility facilities (and their signage) shall be integrated into the surrounding environment using landscape treatments, architectural elements, and/or other appropriate design mechanisms. Whether as a regulatory or advisory function, design plans shall be reviewed by the Planning Department.
Responsible Parties: Planning, Public Works, CVWD, DWA, Riverside County Flood Control, SCE, SCG, Frontier, Spectrum.
Schedule: Immediate; Ongoing

Policy 4.4: To the greatest extent practicable, the City shall encourage the undergrounding of electrical power lines.

Program 4.4.1: Consult and coordinate with Southern California Edison regarding the costs, methods, potential barriers to, and feasibility of undergrounding electrical power lines.
Responsible Parties: Planning, Southern California Edison
Schedule: Immediate; Ongoing

Policy 4.5: Critical structures and facilities (including civic administrative center, hospitals, fire stations, police stations, schools and major communications facilities) shall be restricted from geologically and hydrologically hazardous areas, to the greatest extent practical.

> **Program 4.5.1:** The City shall review all development proposals for new critical structures to assure they demonstrate safety in terms of geologic, hydrologic and other engineering conditions of the site.
> **Responsible Parties:** Planning, Public Works
> **Schedule:** Immediate; Ongoing

Policy 4.6: Public facilities shall be responsive to the needs of the community and maintained in a manner that enhances the comfort and safety of community members, City employees, and other occupants.

> **Program 4.6.1:** Investigate the feasibility of expanding the City's existing corporate yard to accommodate larger office space, parking lots, and maintenance facilities.
> **Responsible Parties:** Planning, Public Works
> **Schedule:** Immediate; Ongoing

> **Program 4.6.2:** Continue to investigate the feasibility of constructing a new community center, including potential sites, constraints, and funding opportunities.
> **Responsible Parties:** Planning, Parks and Recreation
> **Schedule:** Ongoing

> **Program 4.6.3:** Establish a facilities upkeep and restoration master plan for City-owned facilities.
> **Responsible Parties:** Facilities Services Division
> **Schedule:** Ongoing

Water, Sewer and Utilities Sub-Element

PURPOSE

The Water, Sewer and Utilities Sub-Element establishes City policies and programs pertaining to domestic water, sewage treatment, and other utilities. The provision of these services is essential for the orderly growth and development of the community. In addition to water and sewer services, this sub-element addresses natural gas, electricity, telephone, cable, and solid waste management. It sets forth goals, policies and programs necessary to provide a coordinated system of services to the City at full buildout.

BACKGROUND

The Water, Sewer and Utilities Sub-Element is directly related to the Land Use Element, in that new development must be planned in conjunction with the extension and availability of essential infrastructure. Other related sub-elements include Water Resources, Energy Resources, Mineral Resources, and Flooding and Hydrology.

According to California Government Code Section 65302(d), the General Plan is required to address the conservation, development, and utilization of natural resources, including water. Related to this is the availability and utilization of natural resources, such as natural gas and electricity. This sub-element satisfies, in part, the requirement for a Conservation Element, and addresses other utilities as allowed by Section 65303. California Government Code Section 65103(c) requires that the City review its capital improvement program annually to assure consistency with the General Plan. This sub-element provides an effective and meaningful framework from which to comply with this law.

DOMESTIC WATER

Groundwater Resources

The primary groundwater repository for the Coachella Valley is the Whitewater River Subbasin, which encompasses nearly 400 square miles. Most of the City of Cathedral City overlies the Palm Springs subarea of the Whitewater River Subbasin, which contains an estimated 4.6 million acre-feet of groundwater in storage in the first 1,000 feet below the ground surface. The easterly portion of the City occurs over the Upper Thermal subarea, which extends as far east as the Salton Sea. The entire Thermal subarea (including the Upper and Lower portions) contains approximately 19.4 million acre-feet of groundwater in storage in the first 1,000 feet below the surface. The northernmost portion of the planning area, north of Interstate-10 and south of the Indio Hills, overlies the Thousand Palms subarea. This subarea contains approximately 1.8 million acre-feet of groundwater in storage. The hydrological and geophysical characteristics of these subareas are discussed in greater detail in the Water Resources Sub-Element, as are methods of groundwater replenishment and consumption rates in the Coachella Valley.

Coachella Valley Water District

The Coachella Valley Water District (CVWD) provides domestic water to development north and east of the Whitewater River Stormwater Channel. CVWD utilizes deep wells to extract groundwater from the Whitewater River Subbasin. Within the planning area, CVWD's domestic water system includes 12 well sites, 2 booster stations, 3 water storage reservoirs, and water mains up to 30 inches in diameter. Major water trunk lines include those beneath Date Palm Drive, Vista Chino, 30th Avenue, Ramon Road, Dinah Shore Drive and Gerald Ford Drive. Nearly all development in CVWD's service area, south of I-10, is connected to its water delivery system.

Land north of Interstate-10 in the planning area is also located within CVWD's service area. However, there is currently (2019) no development in this part of the City. CVWD's domestic water infrastructure in this area is limited to two large water storage reservoirs located south of Varner Road, approximately one-half mile west of Date Palm Drive. The reservoirs are connected to development south of I-10 by a 30-inch water main, which extends south along Varner Road and Date Palm Drive, then crosses beneath the interstate. Other water mains north of I-10 are limited to those on 20th Avenue west of Mountain View Road and outside the city limits. CVWD has indicated that it will be able to expand its water delivery system to serve future development in this area, should the demand for such facilities warrant.

Desert Water Agency

The Desert Water Agency (DWA) provides domestic water to development south and west of the Whitewater River Stormwater Channel. Nearly all development in DWA's service area, including development in the Cove and the downtown district, is connected to DWA's water delivery system. Within Cathedral City, DWA's water delivery system includes 3 wells, 2 booster stations, 4 water storage reservoirs, and water mains ranging in size from 2 to 24 inches in diameter. Two of the wells are located near the intersection of Crossley and Ramon Roads, and the other is located at Cathedral Canyon Drive and Kieley Road. Each is capable of producing between 1,800 and 2,400 gallons of water per minute. The booster stations are located in the Cove and are capable of pumping between 200 and 400 gallons per minute. The reservoirs are in the immediate vicinity of the Cove, and their capacities range from 100,000 to 500,000 gallons. Major trunk lines include those under East Palm Canyon Drive, Cathedral Canyon Drive, and Perez Road.

WASTEWATER COLLECTION AND TREATMENT

Coachella Valley Water District

The Coachella Valley Water District provides wastewater collection and treatment services to lands north and east of the Whitewater River Stormwater Channel. Wastewater is conveyed through sewer lines ranging from 4 to 24 inches in diameter. The major wastewater conveyance facilities include 15-inch and 24-inch sewer trunk lines, which extend along Date Palm Drive. From Date Palm Drive, the 15-inch line continues east on Gerald Ford Drive, and the 24-inch line continues east along the Whitewater River Stormwater Channel, where it feeds into the Cook Street Wastewater Reclamation Plant in Palm Desert.

CVWD operates six wastewater reclamation plants (WRP) in the Coachella Valley, with treatment capacities ranging from 0.03 to 24 million gallons per day. Three of its WRPs generate recycled wastewater used for irrigation of golf courses and landscaping. CVWD receives a combined average of 18 million gallons of wastewater per day. Approximately 6.3 billion gallons of wastewater are treated yearly. CVWD continually increases the capacity of its wastewater reclamation facilities by constructing new treatment ponds, aeration plants and other structures. Wastewater from Cathedral City is conveyed to and treated at WRP-10 in Palm Desert.

Desert Water Agency

DWA's service area encompasses lands south and west of the Whitewater River Stormwater Channel. Its sewer mains range from 8 to 18 inches in diameter. DWA does not operate a wastewater treatment plant. Instead, its wastewater collection system is connected to CVWD's sewer system by two lift stations at: 1) Date Palm Drive and Buddy Rogers Drive, and 2) Cathedral Canyon Drive near Kieley Road. Wastewater collected by DWA is gravity-fed to these lift stations, where it joins CVWD's sewer system and is conveyed to the Cook Street wastewater reclamation plant (WRP-10) in Palm Desert.

Septic Usage

In the 1990s, septic tank usage in Cathedral City was linked to high nitrate and bacteria levels in drinking water due to septic tank seepage in the upper levels of the underground aquifer. The City worked with septic tank users in the Cove, Dream Homes, and other neighborhoods to establish assessment districts and secure grants and other funding to complete millions of dollars of sewer improvements. In 2008, the City initiated the Cove Improvement District Sewer and Street Project, a two-phase project that connected Cove residences to the sewer system. The city also passed an ordinance banning septic tanks and began fining homeowners who are not connected to the sewer system. It passed an ordinance (Ord. 626 § 1, 2006) that allows developers to be reimbursed by the city when sewer improvements they install subsequently benefit other properties located between the sewer improvements and the point of connection to an existing main.

Tertiary Treated Water

In response to increasing demands for groundwater supplies in the Coachella Valley, CVWD has implemented the use of tertiary (third-stage) treated wastewater for the irrigation of golf courses and other landscaped areas. Traditionally, wastewater is treated to secondary levels and reintroduced into the groundwater table through percolation ponds. With tertiary treatment techniques, wastewater undergoes an additional stage of treatment, which renders it suitable for irrigation and contributes to water conservation efforts. The Cook Street wastewater treatment plant has a tertiary water capacity of 15 mgd.

Green Infrastructure

The U.S. Environmental Protection Agency has been the major federal proponent of green infrastructure, developing further guidance on how agencies can meet their EPA mandates, promoting low-impact development as part of its sustainable development initiatives, and adopting the Strategic Agenda to Protect Waters and build More Livable Communities through Green Infrastructure to provide assistance to local governments, and to also encourage better urban stormwater management.

OTHER UTILITIES

Electric Services

Southern California Edison (SCE) provides electricity to much of coastal, central, and southern California, including Cathedral City. SCE derives its power from a number of sources, including cogeneration, geothermal, hydroelectric, solar, and wind sources. Its most important generating facilities are the Big Creek hydroelectric system, a complex of hydroelectric facilities located on the western slope of the Central Sierra Nevada Mountains, which comprises approximately 90% of SCE's hydroelectric generation capacity. SCE recently closed its San Onofre Nuclear Generating Station (SONGS), which it jointly owned with San Diego Gas & Electric and the cities of Riverside and Anaheim. This facility is now closed and in the process of being decommissioned. In 2017, 38 percent of SCE's power supplies came from fossil fuels (Coal and natural gas) and 9 percent came from nuclear.

SCE offers a wide range of programs that promote energy conservation and help residential and business consumers reduce their electricity costs. These include rebates for customers who install energy-efficient home appliances, air conditioners, insulation, and insulated windows. SCE's Design and Engineering Services department conducts technical analyses to encourage and facilitate the creation and use of new energy-efficient technologies. The company showcases a variety of residential, business, industrial and agricultural energy solutions at technology centers and offers training courses and special events to present these solutions to the public. SCE also provides a number of tools to analyze and improve energy usage habits, such as home and small business energy surveys, which evaluate energy usage and recommend methods for reducing energy costs and consumption. A series of low-income programs provides qualified customers with energy-efficient refrigerators, discounted cooling systems, and weatherization services.

SCE's facilities include high-voltage transmission lines, lower voltage distribution lines, and substations, which "step down" voltage so that it can be distributed to homes and businesses. SCE's transmission system includes high-voltage lines rated at 500, 230, 115, 66, and 55 kilovolts (kV). These lines connect substations and feed into the distribution network serving businesses, homes, and other electric power customers. Distribution lines are those rated below 55 kV. Electric power is transported to individual homes and businesses from substations through 33 and 12 kV distribution lines. Some distribution lines are supported by wooden and steel poles, while others are undergrounded.

Within Cathedral City, SCE's facilities include four substations, major transmission lines (including those on Date Palm Drive, Landau Boulevard, and Dinah Shore Drive), and distribution lines which carry electricity to homes and businesses.

Planning for future electricity infrastructure involves determining the need for additional facilities, assessing potential environmental impacts, preparing applications for necessary regulatory permits, and regulatory review and approval. SCE performs annual five-year and ten-year growth and service forecasts to assure that its electrical transmission system will be adequate to serve future populations.

Natural Gas

Southern California Gas (SoCalGas; The Gas Company) provides natural gas services and facilities to Cathedral City. The natural gas originates in Texas and is transported to the Coachella Valley through three east-west trending gas lines, which cross the valley just north of Interstate-10 and continue west to Los Angeles. These include one 30-inch line and two 24-inch lines, with pressures of 2,000 pounds per square inch (psi). In 2019, SoCalGas announced it filed a request with the California Public Utilities Commission seeking to offer renewable natural gas to its customers. Renewable natural gas is produced from waste and agriculture; it can help California reduce its greenhouse gas (GHG) emissions and decrease costs to consumers.

High-pressure gas lines are typically steel pipes with pressures greater than 60 psi. Within Cathedral City, major high-pressure gas lines are located within the rights-of-way of Date Palm Drive, Vista Chino, Varner Road and Mountain View Road. Two high-pressure lines are also located along East Palm Canyon Drive, one on the north side of the street and one on the south. Medium-pressure distribution lines typically consist of plastic pipes (older pipes may be constructed of steel) with pressures less than 60 psi. Most residences are fed through pipes rated at 25 to 40 psi. The Cove and most other residential neighborhoods in the planning area are connected to medium-pressure distribution lines.

Most development in Cathedral City is connected to the natural gas system; however, several small pockets of development are not connected and use propane as an alternative fuel source.

Telecommunication Services

Frontier Communications, formerly Verizon California, provides a wide range of residential and commercial telephone services to the City. Telephone services include local and long distance services, calling cards, business 800 numbers, and voice mail. Frontier also provides state-of-the-art data services such as FiOS fiber-based and DSL internet and high-speed data connections, offering speeds of up to 150 Mbps. The backbone of Frontier's communications system consists of central switching offices, which are responsible for the connection of telephone and data transmissions. The City is connected to three central switching offices located outside the City limits, including the following: 1) on the west side of DaVall Road, north of Gerald Ford Drive in Rancho Mirage, 2) on the southwest corner of Sunrise Way and Amado Road in Palm Springs, and 3) on the east side of Palm Drive at 1st Street in Desert Hot Springs. A smaller, unmanned sub-switching unit, located on the east side of Date Palm Drive south of McCallum Way in Cathedral City, is fed by the Rancho Mirage central switching office. All calls to the City are handled out of these switching stations.

Cable Television

Cable television services is provided to the City by Spectrum and Frontier. The City also has access to Channel 17, a public service channel, which it uses to broadcast City Council meetings. Access to this channel is not exclusive to Cathedral City, but is shared with other cities in the Coachella Valley.

Solid Waste Management

Burrtec Recovery and Transfer provides solid waste collection and disposal services to Cathedral City through a franchise agreement. Standard residential pick-up occurs once a week, and commercial pick-up is offered up to six days per week. Additional collection services are offered to large waste generators, such as restaurants and hotels. Burrtec collects solid waste from its service area and transfers it to the Edom Hill Transfer Station in northern Cathedral City. Edom Hill is permitted to receive a maximum of 3,500 tons of waste per day. From Edom Hill, waste is trucked to Lamb Canyon Sanitary Landfill in Beaumont, Badlands Landfill in Moreno Valley, or El Sobrante Landfill in Corona. These landfills are owned and operated by Riverside County and have a combined remaining capacity of 178.8 million cubic yards.

Burrtec uses a two-cart automated collection system throughout Cathedral City. Customers are provided with one bin for trash and one for green waste; the bins are lifted and dumped into garbage trucks mechanically. Recyclables are placed in curb-side 18-gallon tubs, which are lifted and dumped manually. During 2017, a total of 43,045 tons of trash were collected in Cathedral City.[8]

Recycling

In 2016, Governor Brown signed a mandate that California would reduce, recycle, or compost 50% of waste by 2020 and a 75% reduction by 2025. The City's recycling program has proven beneficial in the preservation of landfill space for non-recyclable materials. During 2017, a total of 3,590 tons of recyclable materials were collected in Cathedral City. This includes 1,532 tons from residential curb-side sources; 570 tons from commercial sources; and 1,488 tons of concrete and other debris from construction sites. Green waste is recycled at BioMass in Thermal. Other recyclables, including glass, plastic and newspaper are transported by a third-party hauler to a recycling company in Los Angeles.

Street Sweeping

Routine street sweeping helps reduce PM_{10} blowsand throughout the Coachella Valley. Many of Cathedral City's arterial streets are part of the Regional PM_{10} Street Sweeping Program managed by the Coachella Valley Association of Governments (CVAG). CVAG administers arterial street sweeping through funds the City receives from the Air Quality Fund. The City Public Works Department manages street sweeping on local streets. The City is divided into eight (8) zones, and streets in each zone are swept once a month.

FUTURE DIRECTIONS

Nationally and locally, we are in a revolution of evolving water, sewer and utility services. All utilities are seeking ways to make service more efficient and less resource intensive. Lowering water demand at every level, reducing solid waste and the amount that gets to the landfill, and converting sewage waste into soil amendments and energy, and converting other waste to methane to generate "renewable natural gas" are just some of the examples of current efforts. And the City is working to get more out of its buildings and services, while continuing to improve the quality of life for its residents, visitors and business. Meanwhile, our schools are providing the intellectual backbone or infrastructure for more conscientious consumers and the development of young entrepreneurs that will help all of these advanceds take root. While the role the City can play in many of these areas is indirect, it can provide important encouragement and support to help make them a reality.

[8] CalRecycle Jurisdiction Disposal by Facility: Cathedral City 2017

GOALS, POLICIES AND PROGRAMS

Goal 5: Economical utility services and facilities that adequately and safely meet the immediate and long-term needs of the community.

Policy 5.1: The City shall encourage CVWD and DWA to implement short- and long-term plans for a fully integrated, city-wide sewer system.

Program 5.1.1: Confer and coordinate with CVWD and DWA on methods to finance the upgrading and expansion of the sewer and domestic water systems, including the establishment of assessment and/or community facilities districts that also provide financial assistance for economically disadvantaged neighborhoods.
Responsible Parties: City Manager's Office, Public Works, Finance Department, Coachella Valley Water District, Desert Water Agency
Schedule: Ongoing

Policy 5.2: Monitor resource management activities of the CVWD, DWA, and California Regional Water Quality Control Board (CRWQCB) to preserve and protect water resources and quality.

Program 5.2.1: The City shall support the efforts of DWA and CVWD to construct and expand facilities that treat and distribute reclaimed water.
Responsible Parties: Desert Water Agency, Coachella Valley Water District
Schedule: Ongoing

Policy 5.3: The City shall encourage and, to the extent practicable, facilitate the diversification of the energy resources through the development of renewable sources of electricity, natural gas and hydrogen fuels.

Program 5.3.1: The City shall explore avenues for the expansion of roof-top solar and utility-scale wind energy development, and the implementation of domestic and utility-scale storage systems.
Responsible Parties: Planning, Public Works, SCE
Schedule: Immediate; Ongoing

Program 5.3.1: The City shall explore avenues for the expansion of renewable sources of natural gas from landfills, hydrogen fuels, and associated storage systems.
Responsible Parties: Planning, Public Works, SoCal Gas, SunLine Transit Agency
Schedule: Immediate; Ongoing

Policy5.4: To enhance their long-term viability and to protect against service disruptions due to earthquakes, floods and extreme weather, utility lines shall be undergrounded wherever practicable. Those most subject to disruption and located along major streets and image corridors shall have primary consideration for undergrounding.

Program 5.4.1: The City shall confer and coordinate with SCE to identify existing above-ground power lines that are candidates for cost-effective undergrounding, with a special emphasis on those occurring along City image corridors.

Responsible Parties: Planning, Public Works, SCE
Schedule: Immediate; Ongoing

Policy 5.5: The City shall confer and coordinate with the local solid waste hauler/manager and identify and evaluate the potential to expand waste recycling, encourage use of packaging materials that are most recyclable, and eliminate non-recyclable packaging from the waste stream.

Appendix A

Cathedral City

Active Transportation Plan

February 14, 2019

Cathedral City Active Transportation Plan

CATHEDRAL CITY, CALIFORNIA

PREPARED BY:

John Kain, AICP
jkain@urbanxroads.com
(949) 336-5990

Marlie Whiteman, PE
mwhiteman@urbanxroads.com
(949) 336-5991

Janette Cachola
jcachola@urbanxroads.com
(949) 336-5989

FEBRUARY 14, 2019

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LIST OF ABBREVIATED TERMS

CALTRANS	California Department of Transportation
CAMUTCD	California Manual on Uniform Traffic Control Devices
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
CV	Coachella Valley
CVAG	Coachella Valley Association of Governments
DIB 89	Design Information Bulletin Number 89 (CALTRANS)
EIR	Environmental Impact Report
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LSEV	Low Speed Electric Vehicle
NACTO	National Association of City Transportation Officials
NEV	Neighborhood Electric Vehicle
OPR	Governor's Office of Planning and Research, California
Project	Cathedral City Active Transportation Plan
RivTAM	Riverside County Transportation Analysis Model
SB 743	California Senate Bill 743 (Steinberg, 2013)
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
VMT	Vehicle Miles Travelled

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1 INTRODUCTION

This report presents the Active Transportation Plan (ATP) for Cathedral City that's been developed to work with the General Plan Circulation and Mobility Element to provide transportation alternatives via modal layers, resulting in a broader range of options for travel. Layered networks of bike, pedestrian, and low speed electric vehicle (LSEV) routes that allow for use of outdoor and active transportation choices can often be provided in an efficient manner without diminishing the availability of access for automobile travelers.

"Active transportation" refers to human powered transportation and low-speed electric assist devices. For the purposes of this report, the ATP will generically refer to active transportation trips as bicycle, LSEV, and pedestrian trips, since these represent the majority of active transportation trips, and a growing body of data and research is available to support the analysis of the effects of these trips on the broader transportation system.

A robust sidewalk, bikeway, and low speed electric vehicle network provides an alternate to the automobile. Thoughtful and strategic investment can help to reduce emission-related pollution, congestion and improve overall community character. Effective linkages for alternatives to automobile travel result in vehicle trip reduction, alternate mode attraction and vehicle miles travelled (VMT) benefits.

This Plan identifies the layered transportation networks, discusses their respective roles in personal mobility and provides a framework for a cohesive and comprehensive local transportation system. A thoughtful approach toward future transportation modal layers also addresses legislative requirements, provides a basis for future strategic transportation investment and ensures a vibrant community through active mobility options. With this approach, the city is able to plan balanced infrastructure needs to maximize limited resources. In addition, development of layered transportation networks will allow the City to access various local, state and federal funding sources.

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2 SUBREGIONAL CONTEXT

This section documents recent regional plans and programs that shape the context of the system in which the Cathedral City ATP is developed. Additional information on surrounding area plans and programs is provided in the Cathedral City General Plan Update Transportation Analysis (Urban Crossroads, Inc. January, 2019).

2.1 SCAG REGIONAL TRANSPORTATION PLAN / SUSTAINABILITY COMMUNITIES STRATEGY

Southern California Association of Governments maintains a Regional Transportation Plan / Sustainability Communities Strategy (RTP/SCS), which was most recently adopted in 2016. Trips of less than three miles represent 38 percent of all trips in the SCAG region. Increasing the percentage of these short trips made by bicycling and walking can potentially have a significant impact on greenhouse gas emissions and public health. SCAG proposes to invest $7.6 billion in short-trip strategies.

Short trip strategies are designed to provide active transportation options to a broader segment of the population by increasing the quality and density of sidewalks and bikeways. Land use is interrelated with the transportation options that residents have to access nearby destinations, whether they be transit stations, schools, parks or local destinations. The short-trip strategies outlined in the SCAG RTP/SCS are designed to complement transit integration strategies, and they help further integrate active transportation into the context of local land uses.

Land use and transportation options are also interrelated with the health of residents. Walking or bicycling regularly can reduce the chances for obesity or other diseases related to a sedentary lifestyle, such as diabetes and high blood pressure. While incorporating the short trip strategies in the 2016 RTP/SCS is anticipated to increase the number of walking and biking trips, there is most notably the public health benefit. More people walking or bicycling daily helps individuals meet the minimum activity requirements to maintain health.

Local governments implement most transportation infrastructure. Just over 3,900 miles of local bikeways existed in the SCAG region in 2012, and local governments have proposed an additional 8,850 miles. This density of bikeways is likely to have an increasingly positive impact on the number of bicyclists and bicyclist trips. Anecdotal evidence from various cities indicates that an increased density of bikeways increases transportation safety.

While a significant portion of the region has access to bikeways, only a small percentage uses bikeways for their daily work commutes (less than one percent). The lack of bicycling commute trips may be attributed to the type of bikeways, confidence of the rider, adequate facilities at their destination (bicycle parking, showers, etc.), and accessibility to their desired destinations.

2.2 CV LINK

The “core” phase of the CV Link Master Plan envisions a multi-modal transportation facility which could ultimately connect eight of the nine cities in the Coachella Valley and three tribal

land reservations. The CV Link project was approved by CVAG in 2017. Bicycles, pedestrians, and low-speed electric vehicles (LSEVs) will use the corridor to access employment, shopping, schools, friends, and recreational opportunities. LSEVs include golf carts and Neighborhood Electric Vehicles (NEVs) that can travel up to 25 mph.

The addition of an integrated and safe option for bicycle travelers, LSEV users, and pedestrians in Coachella Valley is projected to induce travel by these modes and reduce vehicle miles traveled in conventional automobiles, compared to conditions without the CV Link accommodations for these alternative modes of travel. By addressing current deficiencies in the existing walking and bicycling network in Coachella Valley, and creating an iconic new multimodal corridor, CV Link will help achieve goals relating to public health and safety by providing safer infrastructure for people to walk and ride bicycles and utilize LSEVs for transportation and recreation. It will also provide transportation options that are more economical than automobiles, thereby improving the mobility of all income populations.

2.3 COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS ACTIVE TRANSPORTATION PLAN

The Coachella Valley Association of Governments (CVAG) Active Transportation Plan (ATP) was developed in 2016 as an update to previous non-motorized transportation plans. It envisions bike, walk, and neighborhood electric vehicle (NEV) access throughout the CVAG region.

Bicycle and pedestrian facilities are shown in the CVAG ATP along Varner Road, Valley Center Road, Ramon Road, Landau Boulevard, Date Palm Drive, Da Vall Drive, Highway 111, and various other locations in Cathedral City (see Exhibit 2-1).

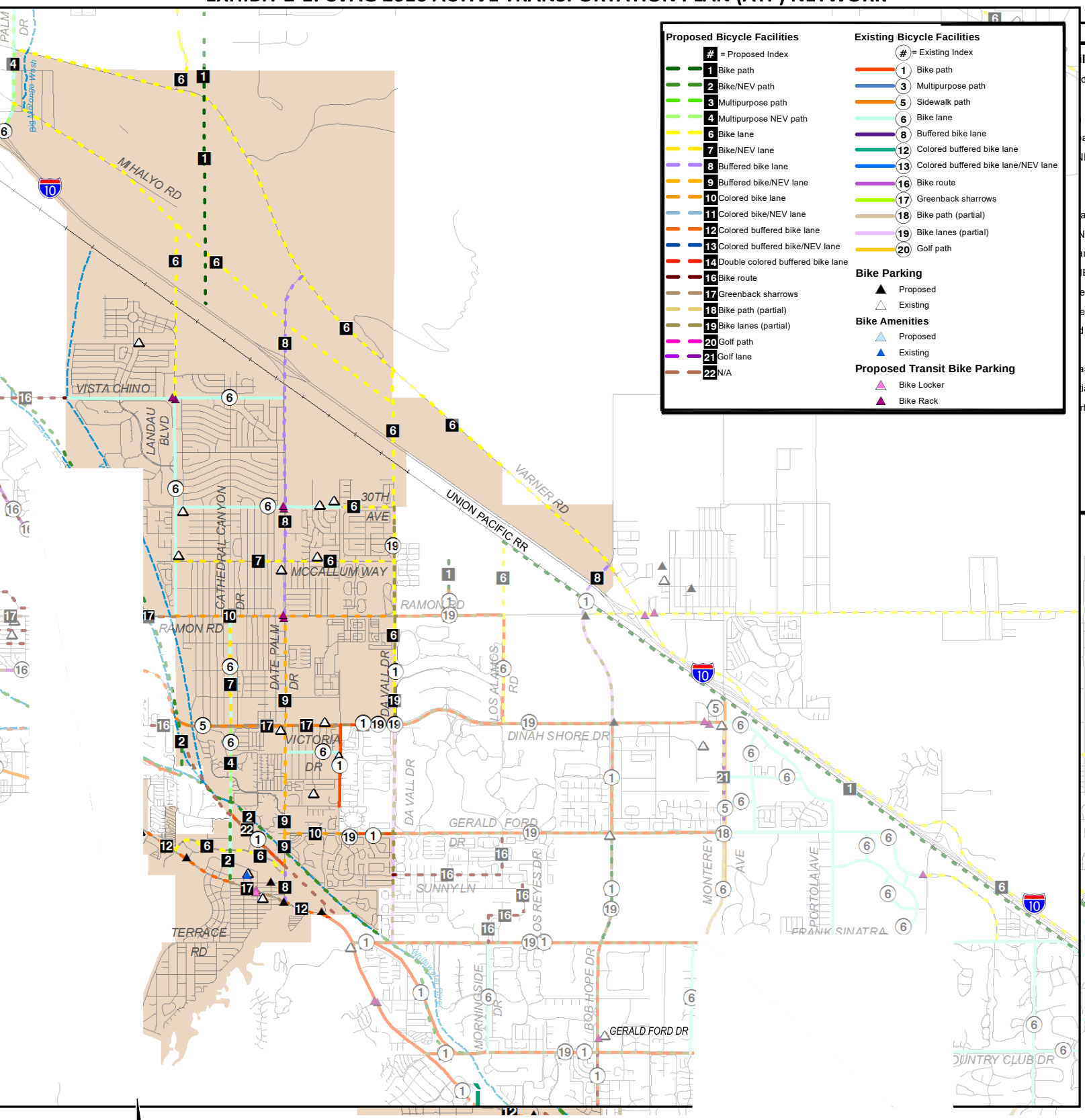
The proposed Cathedral City ATP (see Chapter 3 of this report) represents a comprehensive evaluation of local bicycle and pedestrian facilities for both existing and future General Plan conditions. Table 2-1 indicates the changes in route classifications for the proposed Cathedral City ATP (in comparison to the 2016 CVAG ATP).

The proposed Cathedral City ATP network also incorporates a system of Shared Low Speed Vehicle Routes that provide an important function for neighborhood-to-neighborhood interaction involving autos, bikes, pedestrians, and NEVs/golf carts. These two-lane, low-to-moderate speed connections should be protected and expanded where feasible.

2. 4 COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS NEIGHBORHOOD ELECTRIC VEHICLE PLAN

This 2014 report provides a potential network concept for future NEV routes in the Coachella Valley, and was developed in conjunction with planning and design of CV Link, with the expectation that the CV Link would become the backbone for further pathways throughout the valley. Existing conditions are documented, and design guidelines are presented. Implementation strategies are also proposed.

EXHIBIT 2-1: CVAG 2016 ACTIVE TRANSPORTATION PLAN (ATP) NETWORK



thedral City
ocal Network

SOURCE: COACHELLA VALLEY ASSOCIATION OF GOVERNMENTS (CVAG) ACTIVE TRANSPORTATION PLAN (2016)

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URBAN CROSSROADS

Figure 4-6

TABLE 2-1: CATHEDRAL CITY ATP CHANGES (IN COMPARISON TO THE 2016 CVAG ATP)

Roadway	Segment	CVAG ATP	CCGP ATP
Landau Bl.	• s/o Vista Chino	• Bike Lane	• Bike Lanes and Off-Road NEV/Bike/Ped Trail
Cathedral Cyn. Dr.	• b/w Ramon Rd. & Dinah Shore Drive • b/w Dinah Shore Drive & Whitewater River • b/w Whitewater River & E. Palm Canyon Dr.	• Bike/NEV Lane • Multipurpose NEV Path • Bike/NEV Path	• On-Street Bike Lanes • On-Street Bike Lanes • On-Street Bike Lanes
Date Palm Drive	• s/o Ramon Road	• Buffered Bike/NEV Lane	• On-Street Bike Lanes
Plumley Road	• s/o Dinah Shore Drive	• Bike Path	• Shared Low Speed Vehicle Route
Varner Rd.	• b/w Palm Dr. & Bob Hope Dr.	• Bike Lane	• Off-Road Ped/Bike Trail
Valley Center Bl.	• b/w Palm Dr. & Da Vall Dr. • Da Vall Dr. & Bob Hope Dr.	• Bike Lane • Unclassified	• Off-Road Ped/Bike Trail • Off-Road Ped/Bike Trail
Vista Chino	• east of Date Palm Dr.	• Unclassified	• On-Street Bike Lanes
McCallum Wy.	• b/w Landau & Da Vall Dr.	• Bike Lane	• Shared Low Speed Vehicle Route
Ramon Rd.	• within City Limits	• Colored Bike Lane	• Off-Road Ped/Bike Trail
Dinah Shore Drive	• within City Limits	• Greenback Sharrows	• Off-Road Ped/Bike Trail
Perez Rd.	• b/w Hwy. 111 & Date Palm Dr.	• Bike Lane	• On-Street NEV/Bike Lanes

R:\UXRjobs_11100-11500\11326\Excel\[11326 - LOS Results.xlsx]ATP_Changes

NEV parking spaces can be smaller than those used for automobiles, if appropriately signed. A typical dimension for NEV parking is 15’ x 7’ (in comparison to 18’ x 8.5’ for autos). NEV parking spaces and charging stations should be located within functional reach of one-another (i.e. a NEV should be able to be plugged in while parked in the space).

It is important to note that in 2016, the neighboring jurisdiction of Rancho Mirage adopted Ordinance 1099, prohibiting LSEVs and NEVs in certain areas and on certain streets within the jurisdiction of the City of Rancho Mirage, so the CV Link does not formally connect easterly from Cathedral City into Rancho Mirage. However, bicycle and pedestrian facility connections are available.

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3 LOCAL ACTIVE TRANSPORTATION PLAN

The Cathedral City ATP has been developed in conjunction with the General Plan Update, which includes a scaled evaluation of transportation modes. As shown on Exhibit 3-1, the shared infrastructure accommodates motorists, delivery services, cyclists, LSEV users, pedestrians, transit riders, and freight operators. Environmental impact considerations, personal preference and economic situations all drive the need to accommodate "layered" networks. Various modal layers provide the framework for the relationship between the ATP and the Cathedral General Plan Circulation and Mobility Element.

Enabling the use of transportation alternatives with modal layers provides a broader range of options for travel. Investment in layered networks that allow for use of active transportation choices can often be provided in an efficient manner without diminishing the availability of access for the automobile mode.

Mode choice is influenced by sidewalk/pathway connectivity and proximity of buildings, bike accommodations, transit stop density and service characteristics, electric vehicle charging stations, and availability of interconnected low speed routes. Layered transportation networks have been created to serve this demand. Alternative mode choices will also contribute to sustainable development by allowing users to satisfy their functional travel needs while supporting their environmental, social, and recreational interests.

Cathedral City has a pleasant walk / bicycle environment, especially during the winter and shoulder (spring/fall) seasons. Such activities tend to occur mostly in the morning during summer months – terrain is flat, it rarely rains, and temperatures are ideal for exercise. However, the peak heat during summer months and periodic high winds in certain areas can limit outdoor activity or even present a safety risk.

Although conditions during certain time periods on some summer days increase relative desirability of enclosed travel modes, there are time periods of most days which are suitable for the average outdoor traveler. During summer months, many long term residents have adapted their outdoor recreation, exercise, and commute travel to early morning and late night hours to avoid uncomfortable weather patterns. Some particularly hardy cyclists are not deterred by most weather, and the advent of electric assist bicycles and improving battery technologies will help minimize the impact of wind on usage for other travelers. During the most intense heat of summer, it is likely that travelers may choose enclosed travel modes more often than at other times of the year; they will also travel less. For shorter trips and those when non-automobile modes are more convenient, travelers may choose their preferred mode regardless of weather conditions.

3.1 BIKEWAYS AND SHARED LOW SPEED ROUTES

Bikes can be accommodated through thoughtful street design, striped lanes and separate off-street paths. The proposed overall new Cathedral City General Plan bikeways and shared low speed routes (Exhibit 3-2) work in conjunction with the proposed Cathedral City General Plan Roadway Network to provide a framework for key routes and facilities that will enhance connectivity for all users.

EXHIBIT 3-1: CITY OF CATHEDRAL CITY
LAYERED TRANSPORTATION NETWORKS

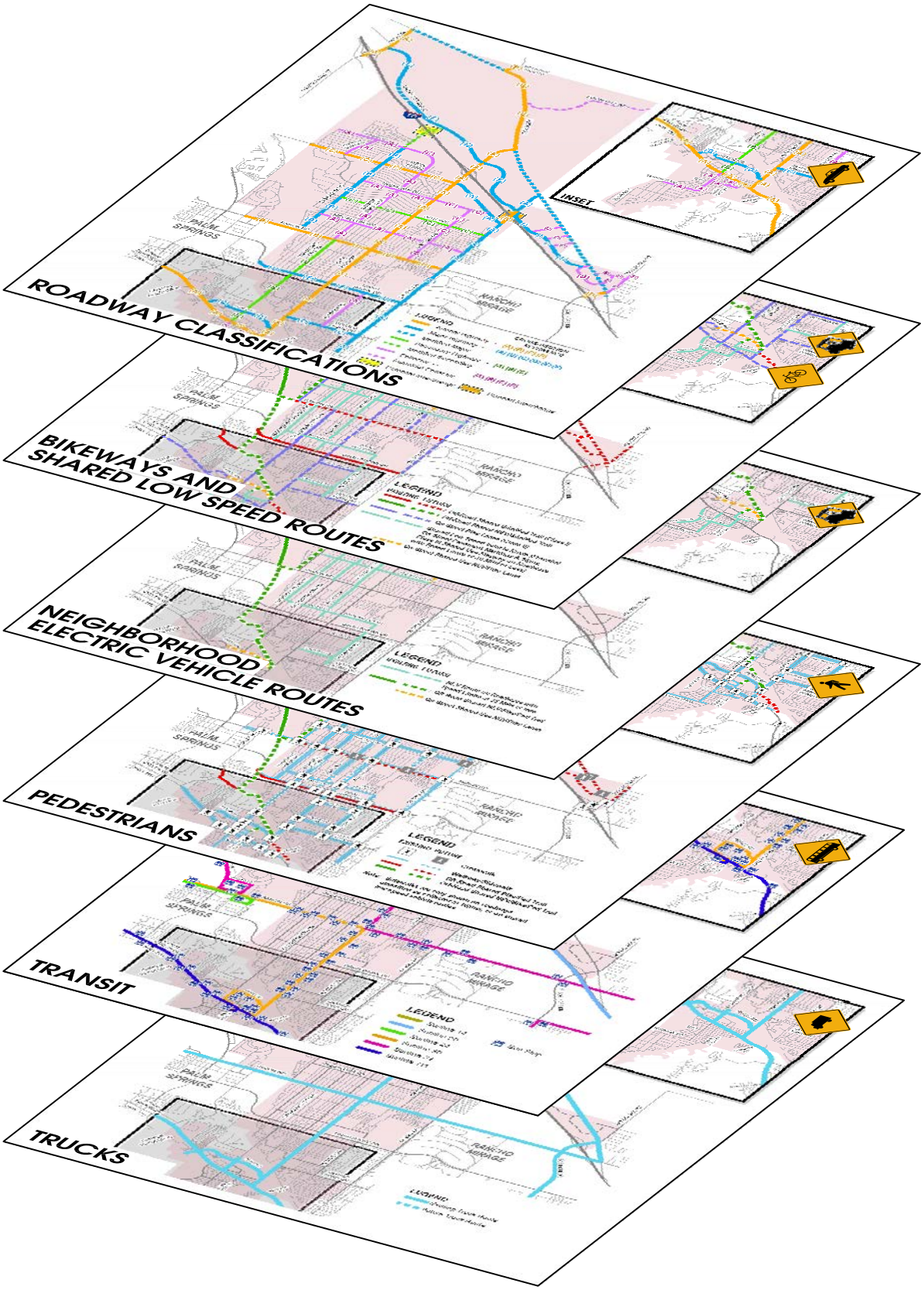
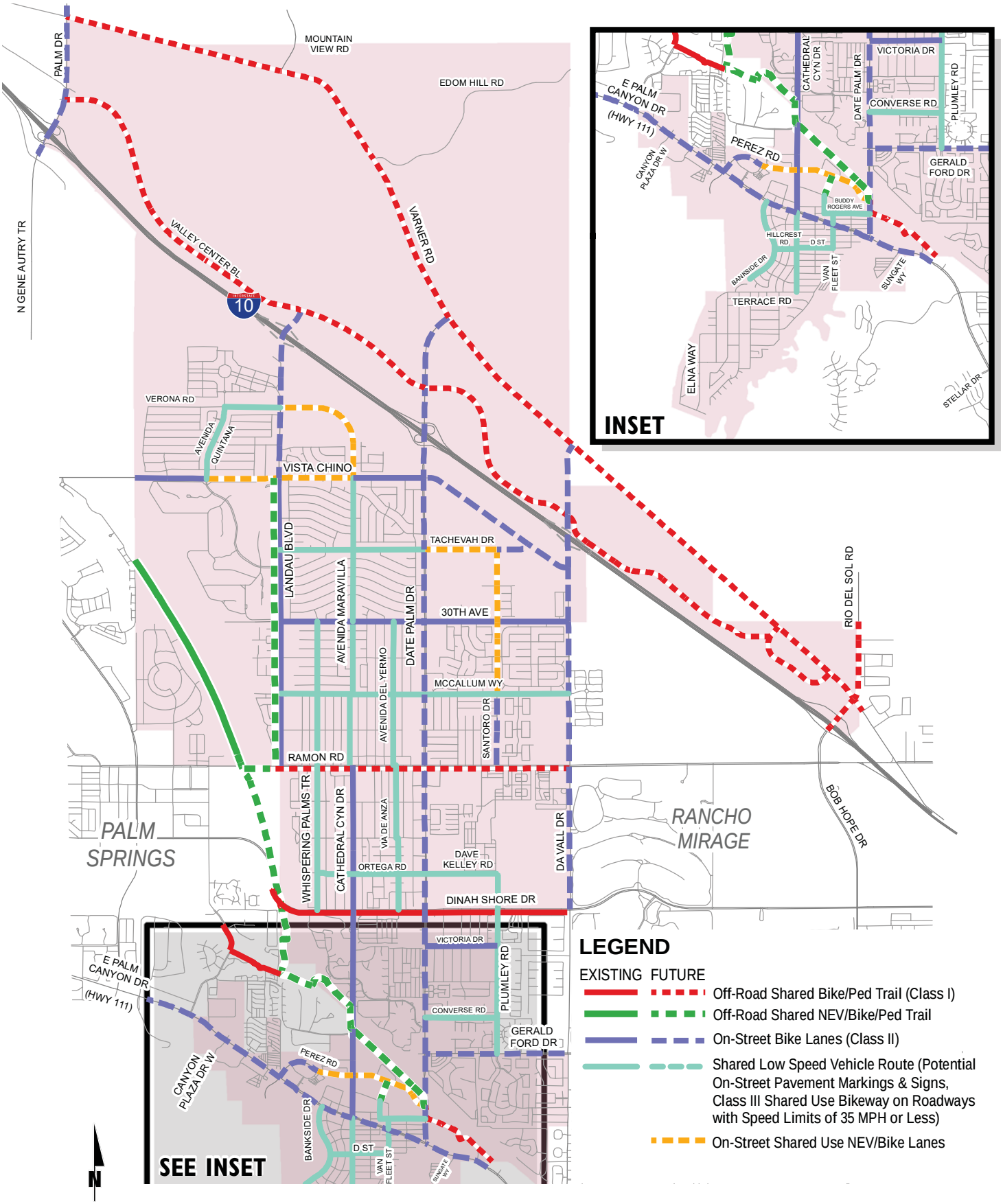


EXHIBIT 3-2: OVERALL NEW CATHEDRAL CITY GENERAL PLAN BIKEWAYS AND SHARED LOW SPEED ROUTES



The proposed Cathedral City ATP incorporates a system of Shared Low Speed Vehicle Routes that provide an important function for neighborhood-to-neighborhood interaction involving autos, bikes, pedestrians, and NEVs/golf carts. These two-lane, low-to-moderate speed connections provide an alternative to traveling on higher capacity and higher speed roads in order to navigate through existing areas of Cathedral City for short trips.

Bikeway classifications are illustrated on Exhibit 3-3. A Class I Bikeway is a bike path that provides for bicycle travel on a right-of-way completely separated from any street or highway. The paths may be located along alignments parallel to streets or unrelated alignments as long as there is no encroachment from motor vehicle or pedestrian traffic except at grade intersections. The minimum paved width of travel way for a two-way bike path shall be 8 feet, 10-foot preferred. A minimum 2-foot wide shoulder, composed of the same pavement material as the bike path or all weather surface material that is free of vegetation, shall be provided adjacent to the traveled way of the bike path when not on a structure.

A Class II Bikeway is a bike lane that provides a striped lane for one-way bike travel within the paved area of a street or highway. These bike lanes are within an exclusive right-of-way designated and signed for use by bicyclists. However, cross traffic is permitted for driveway access.

A Class III Bikeway is a bike route in which both bicycle and motor vehicle traffic share the same roadway surface area. The route is marked with signs or stenciled lettering on the pavement identifying the roadway as part of a bikeway system, but does not provide a separate striped on-street lane.

A Class IV Bikeway (separated bikeway) is an on-street bikeway for the exclusive use of bicycles and includes a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking. Separated bikeways typically operate as one-way bikeway facilities in the same direction as vehicular traffic on the same side of the roadway. However, two-way separated bikeways can also be used, usually in lower speed (35 miles per hour or less) environments.

Cathedral City ATP off-road shared bike and pedestrian trails are presented on Exhibit 3-4. The off-road pedestrian and bike trails generally connect northwest to/from southeast through Cathedral City, near Varner Road, Valley Center Boulevard, Ramon Road, Dinah Shore Drive, and the CV Link alignment. The CV Link and Landau Boulevard trails are shared with NEVs as well.

On-street bike lanes and shared low speed vehicle routes are shown on Exhibit 3-5. Shared low speed vehicle routes are 2-lane roadways that are shared between the automobile, bicycle, and LSEV travel modes. On-street bike lanes are shown on Palm Drive, Landau Boulevard, Date Palm Drive, Da Vall Drive, Vista Chino, 30th Avenue, Ramon Road, Gerald Ford Drive, and Highway 111 (aka East Palm Canyon Drive). On-street shared use NEV / bike lanes are shown along portions of Avenida Maravilla, Cathedral Canyon Drive, Santoro Drive, portions of Vista Chino, Tachevah Drive, and Perez Road.

EXHIBIT 3-3: ILLUSTRATIONS OF BIKEWAY CLASSES

CLASS I - BIKE PATH

CLASS II - BIKE LANE

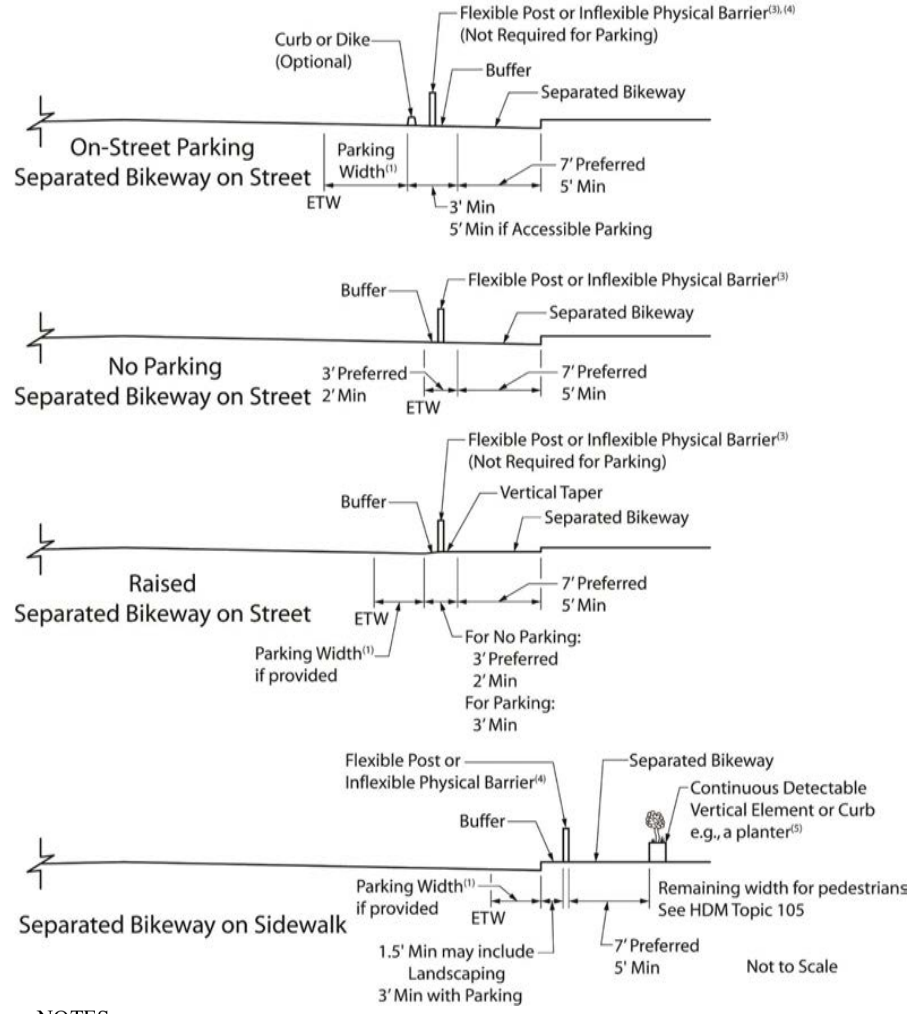
CLASS III - BIKE ROUTE

SOURCE: CVAG ACTIVE TRANSPORTATION PLAN

Figure 3.0

Typical Class IV Bikeway (Separated Bikeway) Cross Sections

CLASS IV - BUFFERED BIKE LANE



SOURCE: CALTRANS DESIGN INFORMATION BULLETIN (DIB) 89

NOTES:

(1) See CA MUTCD Section 3B.19 for parking guidance.
(2) For separated bikeway marking and signing guidance, see the CA MUTCD Part 9.
(3) May be a raised island in lieu of flexible posts or inflexible physical barriers.
(4) Flexible posts or inflexible physical barriers may be omitted.
(5) Periodic openings should be provided for bicyclists to access buildings.

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EXHIBIT 3-4: OFF-ROAD SHARED BIKE/PEDESTRIAN TRAILS

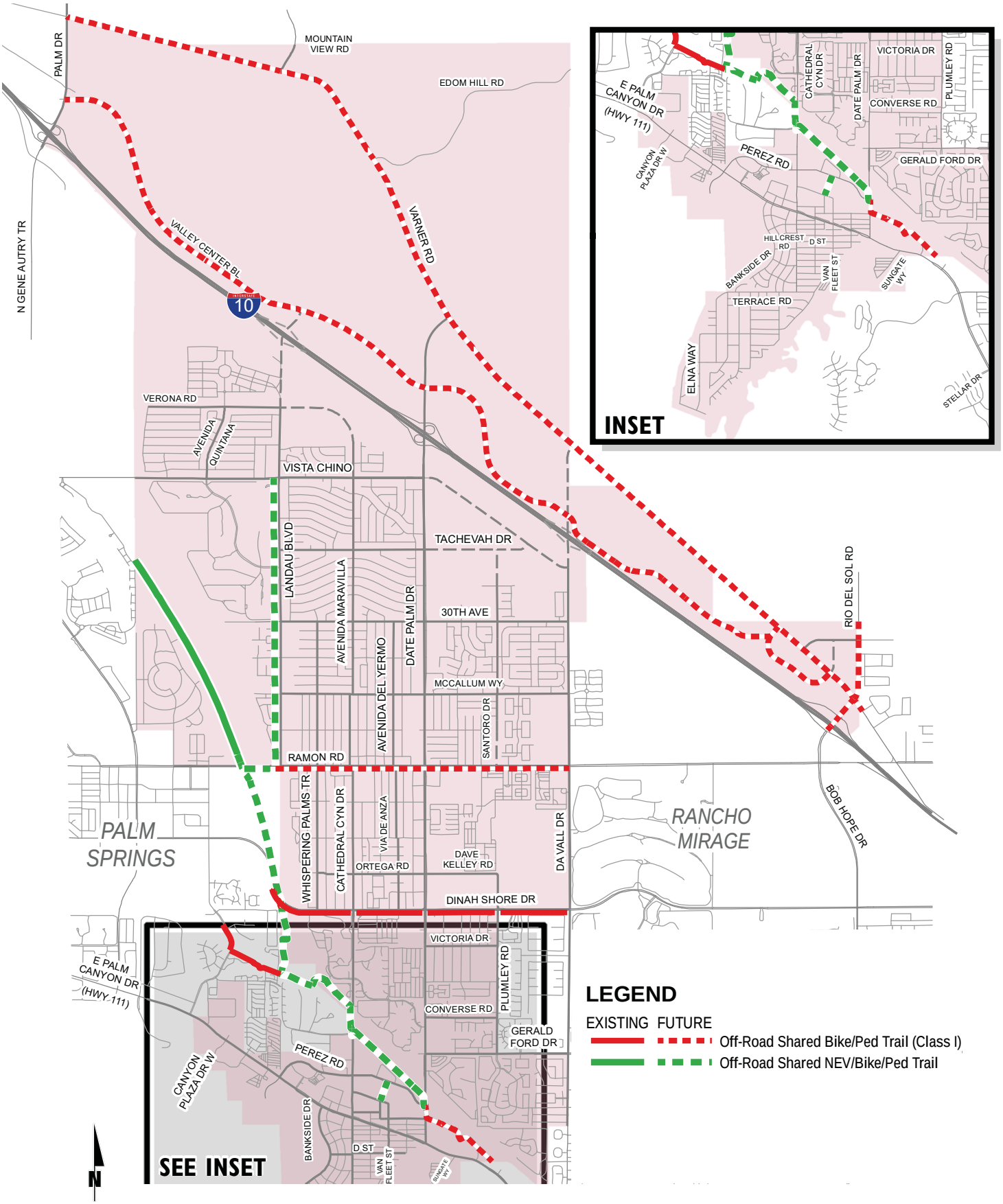
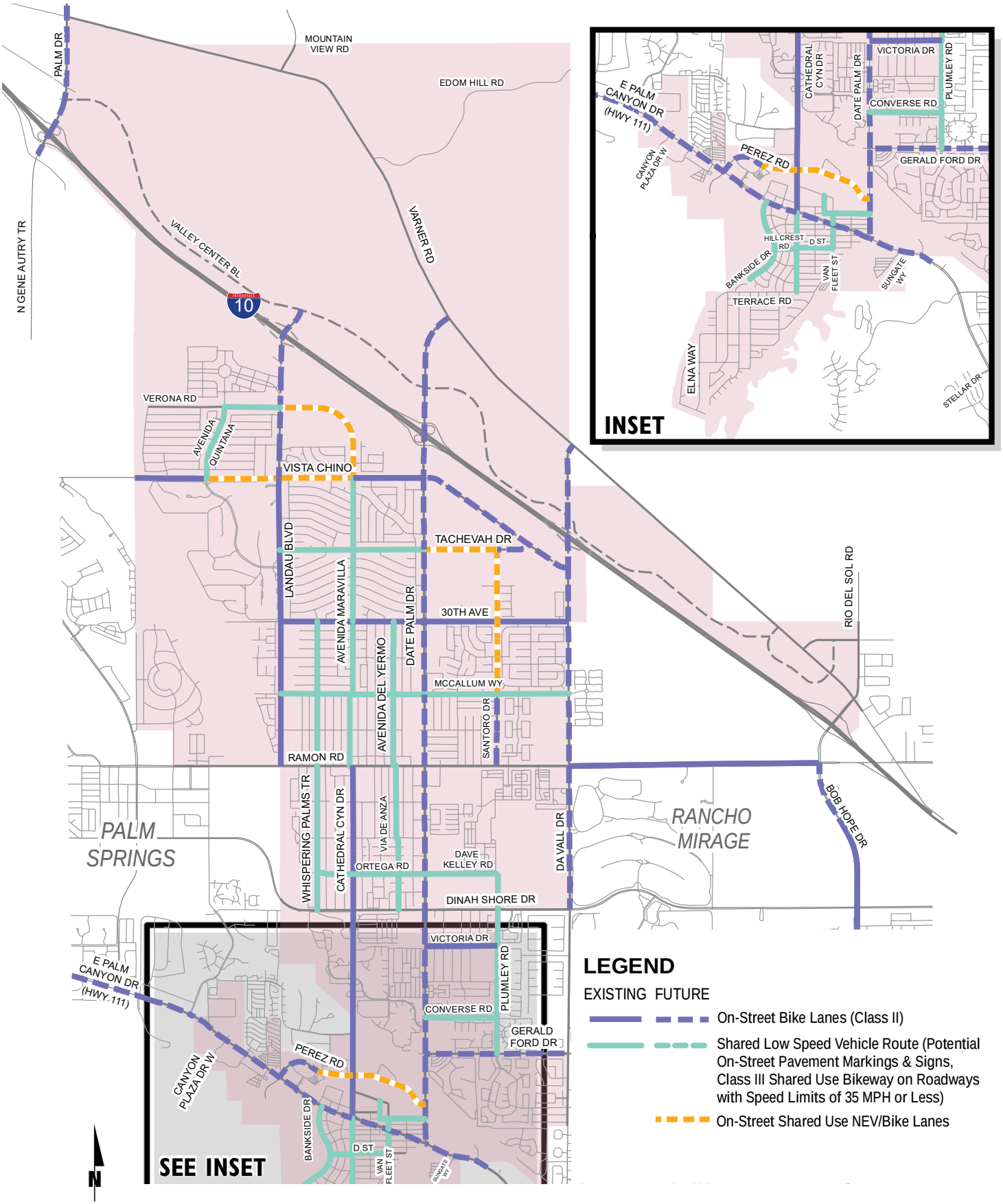


EXHIBIT 3-5: ON-STREET BIKEWAYS AND SHARED LOW SPEED ROUTES



Key bicycle planning considerations include:

- Bicyclists need streets and paths to ride on where they feel safe and visible.
- Bikeway types are planned according to rights-of-way, traffic volumes, destination points and other factors.
- A comprehensive network will contain closely spaced parallel routes and connections to accommodate trips of all lengths.
- Bicyclists need secure parking at their destinations. Commuters often need longer term parking such as lockers. Neighborhood travelers may find simple bike racks sufficient.
- Bicycle education should be actively promoted through K-12 schools, community centers and other public outlets.

Bicycles are used for recreation and commute trips to schools, jobs, parks, activity centers, and other social activities. There are 5 elementary schools, 2 middle schools, 2 high schools, and 1 private school in Cathedral City. There is one private college in Cathedral City, and three public colleges or universities are located in nearby Palm Desert, with a new community college campus anticipated in Palm Springs in 2020. Exhibit 3-6 shows points of interest for access via the ATP networks.

The proposed Cathedral City General Plan Bikeways and Shared Low Speed Routes provide linkages to these key destinations, and connections to local transit options. Destinations can encourage bicycle trips through careful parking lot design to avoid conflicts with cars and pedestrians, security (racks/lockers), comfort stations including drinking fountains, benches and restrooms where practical, and well maintained surfaces.

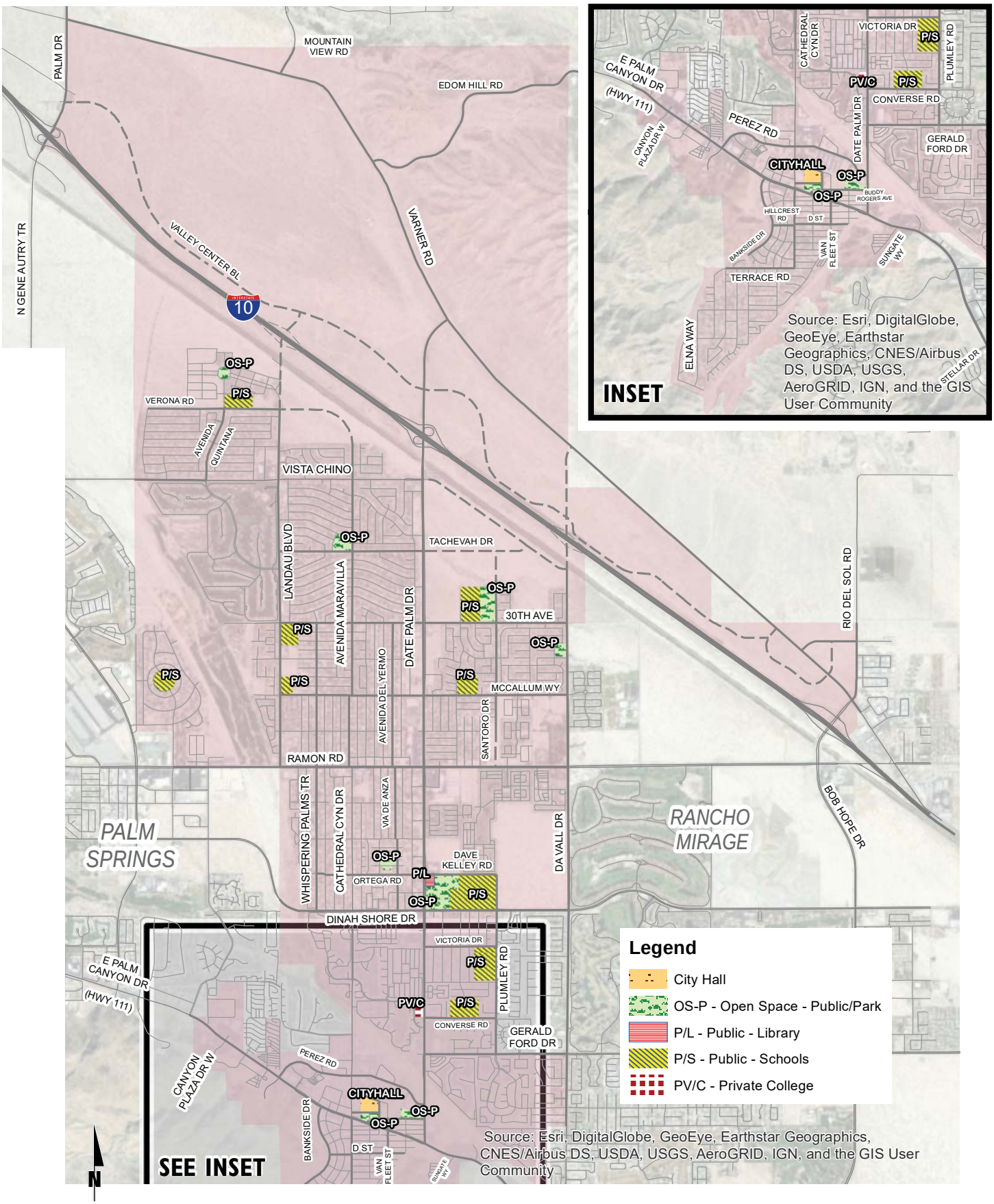
Design guidance for Class I bikeways (bike paths), Class III bikeways (bike routes) and Trails are provided in Chapter 1000 of the California Highway Design Manual (HDM). Design guidance that addresses the mobility needs of bicyclists on all roads as well as on Class II bikeways (bike lanes) is distributed throughout the California Highway Design Manual where appropriate. Design guidance for Class IV bikeways (separated bikeways) is provided in DIB 89.

The AASHTO Guide for the Development of Bicycle Facilities and the National Association of City Transportation Officials (NACTO) Urban Street Design Guide also provide additional bikeway guidance not included in the California Highway Design Manual.

3.2 PEDESTRIANS / MOBILITY DEVICE USERS

Walking is the simplest form of transportation available. Sidewalks, paths and trails serve as the pedestrian roadway, and are therefore an integral part of the roadway network discussed above. Walking trips are made out of necessity, preference or for exercise. Walking trips are traditionally shorter in length (less than one mile) in comparison to other modes. Typical walking trips are to neighborhood shopping, school, parks/recreation, visit friends, or to a transit stop. Without a formal structure in place, walkers will forge a new path, follow unsafe routes or seek out less convenient or more costly alternatives. Neighborhoods and activity centers (such as schools, parks, retail, employment, etc.) should be accessible by foot wherever practical.

EXHIBIT 3-6: EXISTING POINTS OF INTEREST FOR NON-MOTORIZED AND LSEV ACTIVITY



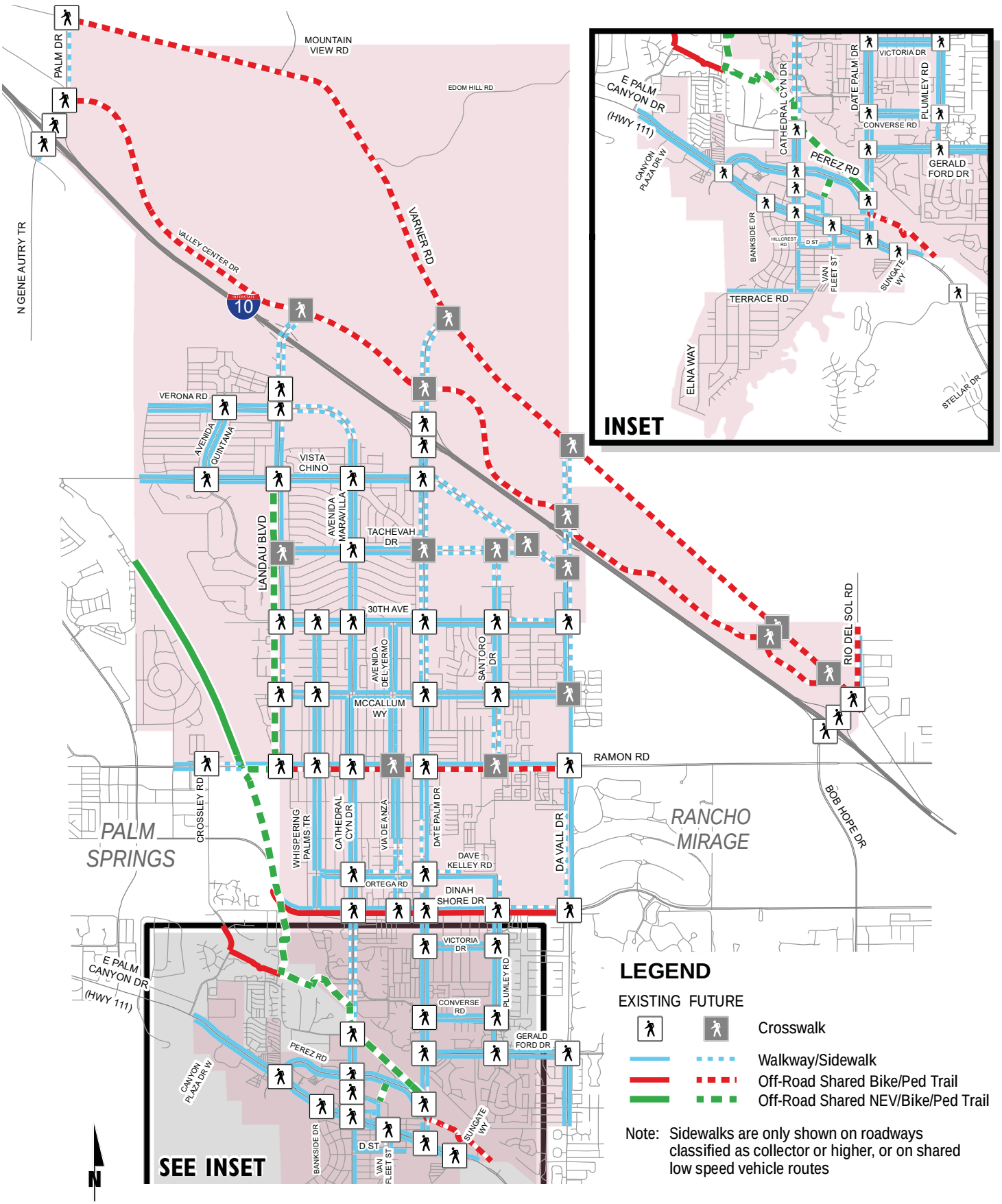
Walking is the least expensive transportation mode, so building and maintaining a high quality pedestrian infrastructure is advisable to help ensure that the community will be a safe, convenient, and attractive place to walk, emphasizing safe routes to school, core area paths, and connections to transit. Everyone is a pedestrian at some point during the day. We all walk with or without mobility aids (including wheelchairs, walkers, crutches, canes, scooters, and service animals used by people with disabilities), whether to a school, transit stop, to a parked car, to work, or for exercise.

Cathedral City ATP pedestrian facilities are shown on Exhibit 3-7. Off-road trails are typically shared with other uses, such as bicycles and NEVs. Walkways and sidewalks are generally indicated along collector and larger facilities, resulting in a generalized grid pattern in Cathedral City. The citywide network is supplemented by neighborhood pathways that generally consist of sidewalks along local streets.

Safe pedestrian crossings are critical components of the pedestrian network. Although the California Vehicle Code states that a crosswalk implicitly exits on every leg at every intersection, it is important to recognize that visibility and safety are important factors that determine where people will attempt to cross a street. The following guidelines are recommended for pedestrian crossings, including both signalized and unsignalized crosswalks:

- Crosswalks should meet MUTCD standards and criteria, with wide crosswalks considered in areas of high pedestrian volumes.
- The City should use high-visibility crosswalks, especially along busy streets, in school zones, along pedestrian-oriented streets, and where a significant number of pedestrians are present. "Zebra" style crosswalks are most visible.
- Unsignalized pedestrian crosswalks should be adequately lighted, have clear sight distances, and be free from obstructions, such as landscaping and poles.
- Appropriate pedestrian crossing signs should be displayed in advance of, and adjacent to, all marked unsignalized crosswalks in order to enhance visibility of pedestrians by motorists.
- Mid-block crosswalks should be designated only in areas with relatively high pedestrian activity and crossing patterns, or where the distance to the nearest crosswalk is greater than 600 feet.
- At signalized intersections, efforts should be made to install marked crosswalks at every leg of the intersection where feasible, given traffic and other considerations.
- ADA-compliant curb ramps should be provided at all corners. Where physically feasible, every corner should have two perpendicular ramps.
- Where feasible, pedestrian crossing islands should be considered where pedestrians are required to cross a wide multi-lane street.
- Curb extensions should be considered at intersection corners as a way to minimize the crossing distance of pedestrians and to increase visibility.
- Raised crosswalks also contribute to pedestrian safety through catching the attention of drivers, slowing automobiles, and they provide a more comfortable walking environment. According to the Federal Highway Administration (FHWA), raised crosswalks increase pedestrian visibility and eliminate the need for curb ramps, which improves access for people with mobility impairments and increases the sidewalk area available to pedestrians waiting to cross the street.

EXHIBIT 3-7: PEDESTRIAN FACILITIES



3.3 LOW SPEED ELECTRIC VEHICLES

LSEVs include any electrically powered or assisted mobility device (e.g. electric longboards, bicycles, trikes, golf cars, and NEVs). NEVs and golf carts have similar characteristics but also contain important differences.

The California Vehicle Code (CVC) defines golf carts as vehicles designed to operate at a maximum speed of 15 mph and states that golf carts can be driven only on roadways with posted speed limits of up to 25 mph except in cases where travel on roadways with higher speed limits is permitted by ordinance or resolution of a local authority. Golf carts are restricted to private property, golf courses or with one mile of a golf course if the street is identified in an approved Golf Cart Plan.

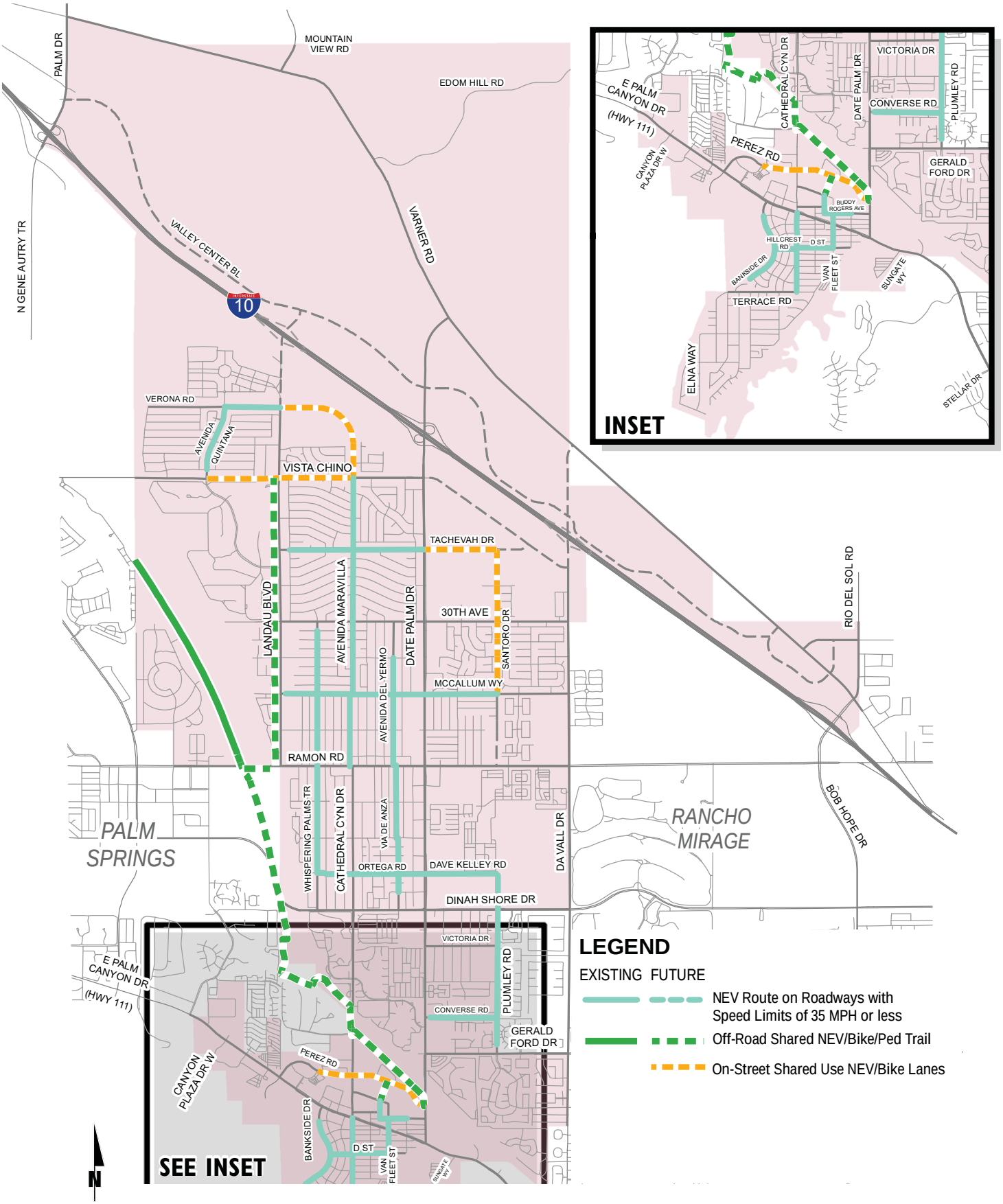
The CVC defines NEVs as vehicles that can reach speeds of 20 to 25 mph within one mile. NEVs may be operated on any roadway with a posted speed limit of 35 mph or less unless specifically prohibited by an adopted NEV plan and may cross at intersections that have a higher speed limit. NEVs are permitted to operate in separate lanes on roads with posted speed limits of 40 MPH or greater when included in an approved NEV Plan.

Neighborhood electric vehicles (NEVs) are a street legal, low cost, energy efficient, zero emissions mode of local travel that is currently available – but current impediments to widespread usage include the following: (1) lack of interconnected low speed routes, and (2) driver confusion regarding where these vehicles can safely be operated. These problems can be addressed in Cathedral City by the implementation of a local NEV plan which overcomes connection issues, identifies safe routes, and enable clear communication about where residents can go in low speed vehicles.

The proposed Cathedral City low speed electric vehicle routes are shown on Exhibit 3-8, and provide a network of on-road shared NEV/bike routes and shared off-road NEV lanes or trails. Cathedral City off-road LSEV routes are primarily oriented to CV Link and a segment of Landau Boulevard. On-street NEV/bike lanes are indicated on segments of Perez Road, Santoro Drive, Tachevah Drive, Vista Chino, and Avenida Maravilla / Verona Road. Low Speed Vehicle Routes are also identified and NEVs may be legally operated on these routes where there is a posted speed limit of 35 MPH of less.

Although some level of NEV ownership and operation will occur regardless of the city's attention to the matter, Cathedral City can proactively address conflicting mode issues and encourage safe NEV operations by identifying the suitable NEV backbone routes, implementing street signage and striping of lanes for appropriate operation of low speed vehicles, providing parking incentives and low cost charging stations, and promoting the NEV plan to the public – activities that are essential to acceptance and use of NEVs by residents and businesses.

EXHIBIT 3-8: LOW SPEED VEHICLE ROUTES



3.3.1 SHARED NEV/BIKE LANE DESIGN CONSIDERATIONS

A 4-seat LSEV is approximately 5.5' wide with a 7' minimum design envelope. The updated General Plan roadway cross-sections accommodate 8' shared NEV/bike lane widths on segments of Perez Road, Santoro Drive, Tachevah Drive, Vista Chino, and Avenida Maravilla / Verona Road where needed to accommodate the on-street lanes. NEV classifications are illustrated on Exhibit 3-9.

Perez Road is an east/west roadway which currently exists as 4-lane major roadway and accommodates on-street parking for both the north and south side of the roadway. The existing curb to curb width of Perez Road is approximately 64 feet immediately west of Cathedral Canyon Road and widens to 76 feet west of Kyle Road. East of Cathedral Canyon Road, Perez Road has approximately 76 feet of curb to curb width.

The updated General Plan recommends modification of Perez Road roadway classification to provide one auto travel lane in each direction, a striped center median lane, directional NEV/bike lanes, and on-street parking (with buffers). Exhibit 3-10 depicts a conceptual striping plan to address the needs of automobile, bicycle, and NEV users at the intersection of Cathedral Canyon Drive at Perez Road.

There will always be situations on our streets where cars, trucks, bikes, motorcycles, NEVs and pedestrians must cross the same space. Because motorized vehicles are generally becoming quieter in their designs, visual caution is necessary by all users of streets, drivers must be vigilant for the needs of visually impaired pedestrians, and all aspects of our transportation networks need to be professionally evaluated in terms of vehicle operations and pedestrian safety.

3.3 TRANSIT NETWORK

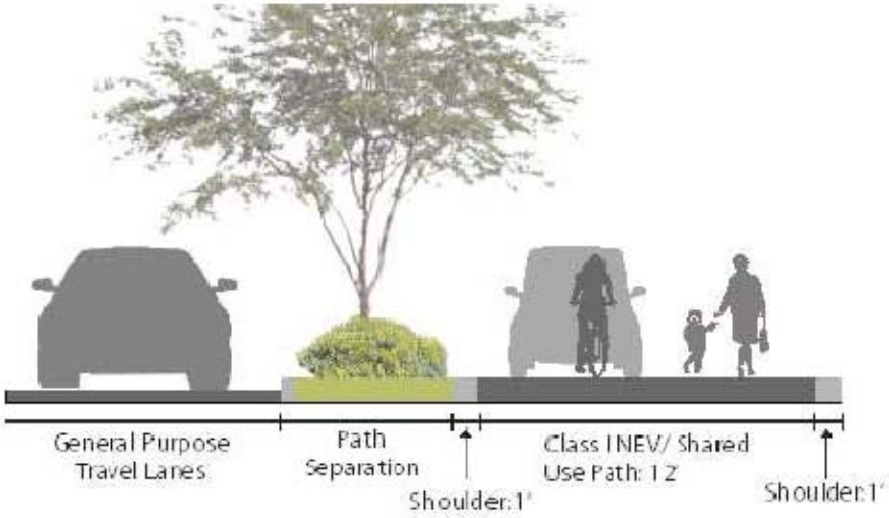
Coachella Valley is served by the SunLine Transit Agency, a Joint Powers Authority formed in 1977 to operate the Valley's public transportation system. SunLine Transit Agency offers fixed route and curb-to-curb paratransit service for people with disabilities. The Agency's fixed route and paratransit vehicles travel more than 4 million miles per year, carrying over 4.8 million riders. The network of existing transit services is shown on Exhibit 3-11.

The updated Cathedral City General Plan roadway network and ATP provide a framework for key routes and facilities that will further enhance connectivity for all users. Bicycle and pedestrian connections to transit serve to facilitate more travel options. The distance to/from transit is referred to as first mile or last mile. Typically transit users walk, bike, drive, or use a mobility aid for some distance to access transit. Providing transportation options for this first / last mile in destination-rich areas attracts additional transit users.

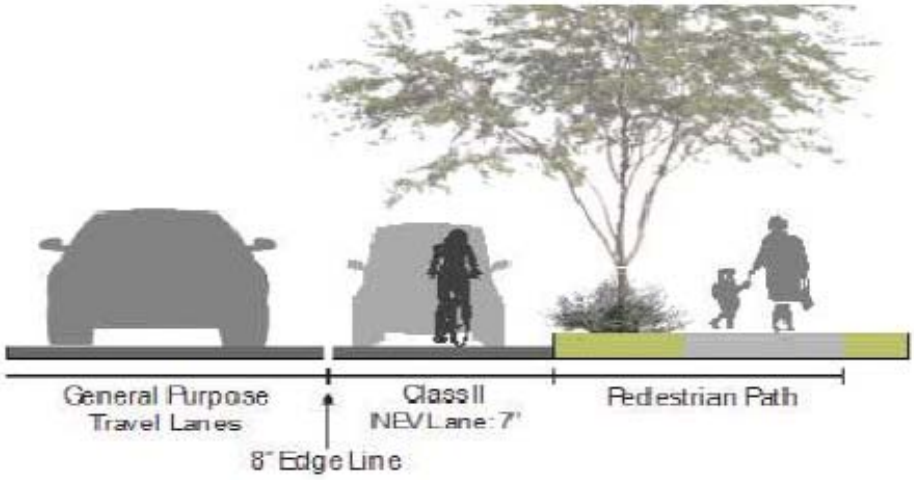
Transit routes in Cathedral City are provided on Palm Drive, Avenida Maravilla, Date Palm Drive, Vista Chino, 30th Avenue, Ramon Road, and Highway 111. Sunline 20 traverses Cathedral City on the I-10 freeway, with a connection to Palm Drive. Bus stops are generally placed by the SunLine Transit Agency on public rights of way. These stops may include signage only, bus bench, shelter or other amenities.

EXHIBIT 3-9: ILLUSTRATIONS OF NEV CLASSES

CLASS I - NEV/SHARED USE PATH



CLASS II - NEV LANE



SOURCE: CVAG NEIGHBORHOOD ELECTRIC VEHICLE TRANSPORTATION PLAN (Volume IV of CV Link Master Plan)

EXHIBIT 3-10: PEREZ ROAD CONCEPTUAL STRIPING PLAN

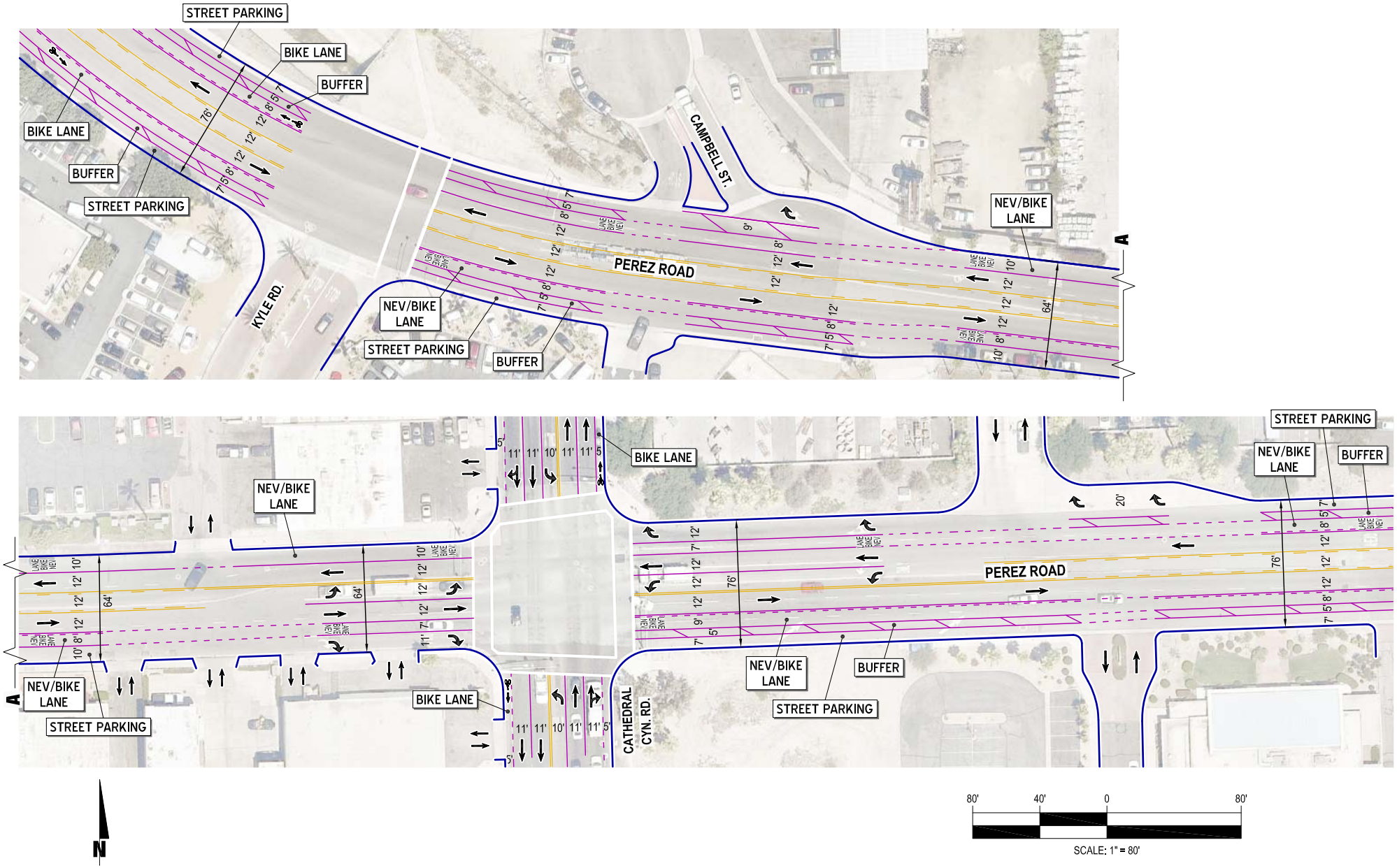
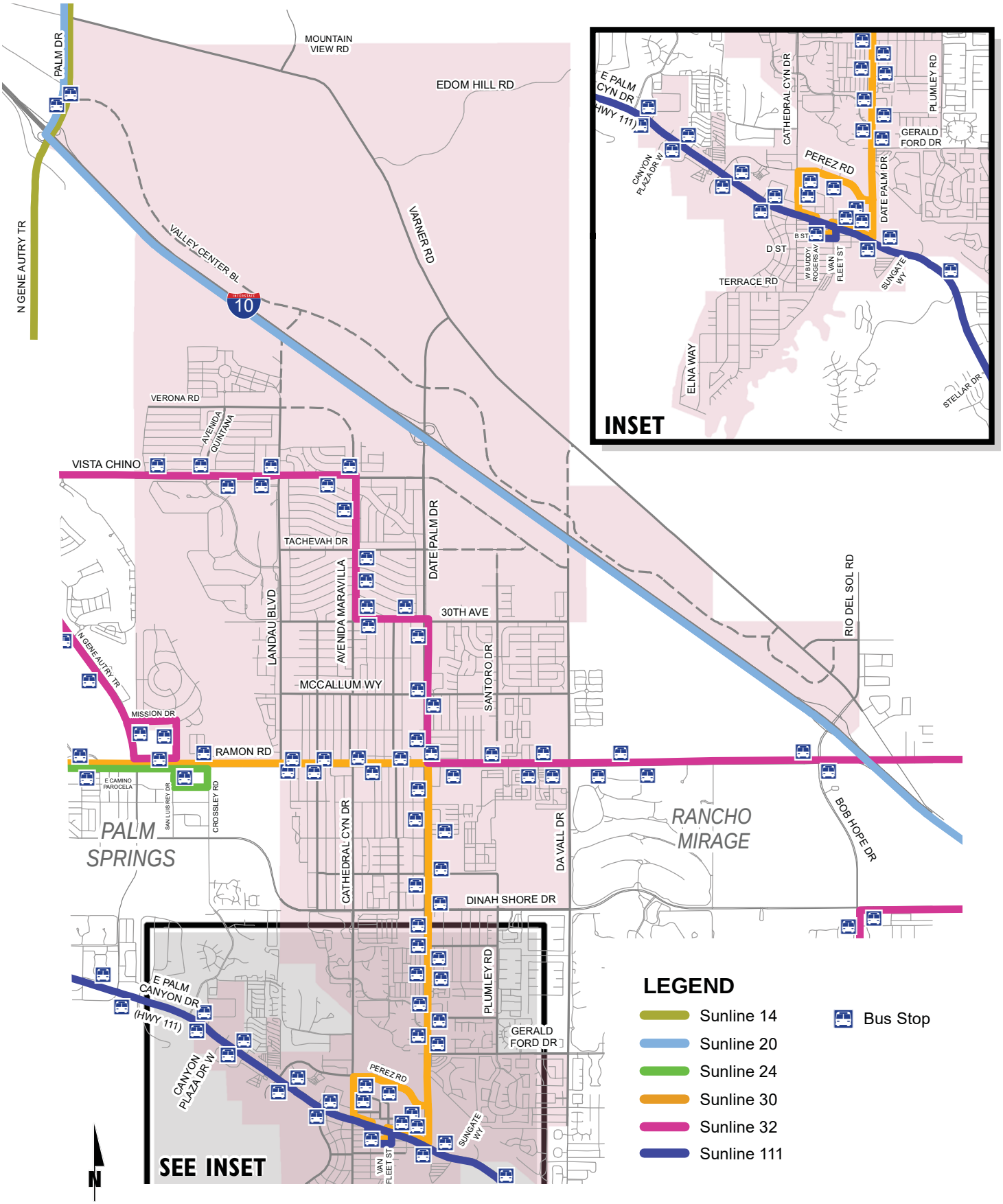


EXHIBIT 3-11: EXISTING TRANSIT SERVICE ROUTES AND BUS STOPS



SunDial provides origin-to-destination paratransit service in Cathedral City and throughout the Coachella. The purpose is to meet the requirements of the Americans with Disabilities Act (ADA), providing next day public transportation service for persons who are unable to use regular SunLine service. SunDial service is available within 3/4 of a mile on either side of any local SunLine route.

4 EXISTING CONDITIONS

The built areas of Cathedral City are generally located south of Interstate 10. A network of existing trails is provided in these areas. This section summarizes the 2018 facilities, and provides background on safety data and procedures already in place.

4.1 EXISTING BIKE AND PEDESTRIAN FACILITIES

Existing off-road trails (see Exhibit 3-3) are provided along the Ramon Wash (located between Vista Chino and Ramon Road near the western City boundary), Dinah Shore Drive, and a portion of the Whitewater River.

On-street bike lanes and shared LSEV routes (see previously presented Exhibit 3-4 and 3-6) generally exist as bike lanes along Landau Boulevard from Vista Chino to Ramon Road, Vista Chino west of Avenida Quintana and from Avenida Maravilla to Date Palm Drive, 30th Avenue, Avenida Maravilla, Cathedral Canyon Drive, Tachevah Drive west of Date Palm Drive, Whispering Palms Trail, Avenida Del Yermo, Via De Anza, Mccallum Way, Ortega Road / Dave Kelley Road, Avenida Quintana, Plumley Road, Victoria Drive, Converse Road, Bankside Drive, Hillcrest Road, D Street, and Buddy Rogers Avenue.

In Cathedral City, bike parking is currently provided at City Hall, downtown, shopping centers (Cathedral City Marketplace, Golden Mile, and Canyon Plaza), Cathedral City High School, Rio Vista Elementary School, and 30th Avenue Soccer Park. At City Hall, a shower and locker facility is also provided for City employees who commute by bicycle.

Existing pedestrian facilities are shown on Exhibit 3-5, and generally are provided along the same facilities that also have existing on-street bike lanes and shared LSEV routes. Sidewalks are also provided along Highway 111. Crosswalks are available throughout much of the existing walkway / sidewalk network. HAWK crosswalks on Dinah Shore provide additional pedestrian accommodations.

4.2 TRANSPORTATION SAFETY

The California Office of Traffic Safety (OTS) maintains and publishes collision data for California cities. Cities are grouped by population range, with Cathedral City included in Group C (50,001 to 100,000 persons). Group C includes 104 California cities that are ranked with lower numbers being worse (1/104 would be worst).

The most recent published data is from 2016, and is included in Appendix 4.1. As shown in Attachment 1, OTS ranking is provided by type of collision (e.g. – hit and run, driver had been drinking, motorcycles, pedestrians, bicyclists, etc.) and number of victims killed or injured. Based on the 2016 OTS results and comparing collision data between 104 cities, Cathedral City is generally in the upper half for most types of collisions (rank ranges between 63 – 99 out of 104 cities). For collisions that involve bicyclists under the age of 15, Cathedral City ranks at 41 out of 104 cities which is worse than average.

On May 15, 2018, Cathedral City Police issued a memorandum regarding Bicycle Safety Month. Safety statistics were provided, and recommendations to cyclists include wearing a helmet, obeying rules of the road, riding in the same direction as traffic, wearing brightly colored clothing for visibility, and using lights / reflectors as required by law. The same memorandum provides recommendations to automobile drivers regarding sharing the road, being courteous, looking for and yielding to cyclists, and remaining outside of the bike lane until allowed for turning.

Safety education has been provided at Cathedral City public schools via assemblies, printed materials, special events (such as Walk to School Days, bike rodeos, Walking School Buses, etc.).

5 GOALS AND POLICIES

The Cathedral City General Plan Update Active Transportation Plan uses layered transportation networks to guide the provision of transportation facilities for users of all modes, such as bicycle, pedestrian, low speed electric vehicle, and transit.

Goal 1: ***A bikeway, pedestrian, and low speed electric vehicle network that provides safe and appealing transportation options.***

Policies

1.1 Require on- and off-street pathways to:

- Comply with federal, state and local design and safety standards.
- Meet the needs of many types of users / abilities (families, commuters, recreational beginners, exercise enthusiasts), and meet ADA standards and guidelines.
- Be compatible with the streetscape and surrounding land uses.
- Be maintained / repaired in accordance with best practices.

1.2 Consider active transportation facilities and traffic calming for public works projects and development projects.

1.3 Encourage safety of all travelers via well-designed facilities, regular maintenance / repair, education, and enforcement of laws.

1.4 Provide adequate access around or safely through construction projects to avoid impacting non-motorized travelers.

1.5 Establish a routine maintenance schedule for active transportation facilities to remove litter and obstacles, repaint striping, and replace aged signs and lighting.

Goal 2: ***Robust usage of an active transportation system that facilitates and encourages non-automobile travel throughout Cathedral City.***

Policies

2.1 Provide off-street multipurpose trails and on-street bike or shared lanes as primary paths of citywide travel, and explore the shared use of low speed roadways for connectivity wherever it is safe to do so.

2.2 Require walkways that promote convenient travel between residential areas, businesses, schools, parks, recreation areas, transit facilities, and other key destination points.

2.3 Support pedestrian activity by providing enhancements for locations with automobile interaction (such as high visibility cross-walk striping, crossing beacons, exclusive pedestrian signal phases, etc.).

2.4 Work with the Coachella Valley Association of Governments (CVAG) and adjacent cities to implement seamless transitions for active transportation facilities in areas that are not under Cathedral City jurisdiction.

2.4 Monitor use of non-automobile modes via routine collection of pedestrian, bicycle and LSEV data during traffic count programs.

2.5 Consider partnering with privately owned bike share and scooter share firms to provide short term transportation options on an as-needed basis within City acceptable parameters (such as parking locations, helmet use, etc.).

Goal 3: ***Well-maintained facilities that are kept up-to-date with current design standards.***

Policies

3.1 Explore opportunities to expand the active transportation networks; this includes consideration of utility easements, drainage corridors, road right-of-ways and other potential options.

3.2 Review available funding sources and update City Capital Improvement Projects to incorporate Active Transportation Plan improvements.

3.3 Continue to engage community members and periodically update the Active Transportation Plan as traveler needs, technologies, and design standards evolve over time.

2.4 Provide supporting infrastructure where possible such as wayfinding signs, directional arrows, lighting, shade trees, bicycle / LSEV parking, restrooms, water fountains, etc.

3.5 Establish a routine maintenance schedule for active transportation facilities to remove litter and obstacles, repaint striping, and replace aged signs and lighting.

3.6 Facilitate user involvement in reporting maintenance needs and safety concerns to the appropriate City personnel (perhaps with a phone app).

Goal 4: ***A public transit system that is a viable alternative to automobile travel and meets basic transportation needs of the transit dependent.***

Policies

4.1 Maintain a proactive working partnership with Sunline to ensure that adequate public transit service is available.

4.2 Require new development to provide transit facilities, such as bus shelters, transit bays and turnouts, as necessary.

4.3 Provide additional development-related incentives to those inherent in the Land Use Plan for projects that promote transit use.

4.4 Require the future development of community-wide facilities, such as libraries, schools, parks, and community centers, to be sited in transit-ready areas that can be served and made accessible by public transit. Conversely, plan (and coordinate with other transit agencies to plan) future transit routes to serve existing community facilities.

4.5 Coordinate the transit network with active transportation networks to serve first / last mile trip by connecting trails to transit and providing bike parking.

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6 IMPLEMENTATION

To satisfy Cathedral City's goals and policies to provide for more circulation options, implementation measures were developed for the ATP. The proposed Cathedral City General Plan layered networks are designed to accommodate the range of travel modes, such as bicycle, pedestrian, transit, LSEV, automobiles and trucks. The roadway network has been evaluated in terms of long range future capacity requirements using the Riverside County Transportation Analysis Model (RivTAM), which takes into consideration the cumulative growth of adjacent Cities and unincorporated County areas. The proposed networks maintain connectivity with the plans of adjacent jurisdictions and regional plans at the Plan boundaries.

The layered networks of the ATP are intended to work in concert with components of the General Plan, such as the transportation networks and Land Use Element updates.

Cathedral City maintains a Capital Improvement Program (CIP) to identify and coordinate funding / timing of capital improvement needs. The CIP provides the City with a long-range program for major municipal capital construction projects. Development Impact Fees (DIFs) are collected based upon project size (number of units or square footage), and may be used for transportation improvements (such as the Transit Development Fee).

Riverside County and the Coachella Valley Association of Governments (CVAG) each maintain plans and programs for the region. The Riverside County Congestion Management Program (CMP) directly links land use, transportation, and air quality for all of Riverside County, providing recommendations for transportation level of service on major facilities in the region. Regional funding sources include the Transportation Uniform Mitigation Fee (TUMF) Program, Measure A (sales tax initiative), and the CV Link fund which manages grant funding for construction of the CV Link.

As the recognized transportation planning agency with the Riverside County Transportation Commission (RCTC), it is the responsibility of CVAG to identify and prioritize transportation projects in the Coachella Valley. This is accomplished through the Transportation Project Prioritization Study (TPPS). The TPPS serves as a methodological way to provide CVAG direction in determining funding for regional arterials by prioritizing the eligible study segments. The TPPS uses distinct evaluation criteria and scores to form a ranking list of the regionally significant roadway segments for the nine municipalities and the County of Riverside in the Coachella Valley area. The ranking list is used to determine which roadways have the greatest need evaluated from current conditions and is used in funding decisions.

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APPENDIX 4.1:

CALIFORNIA OFFICE OF TRAFFIC SAFETY COLLISION RANKING RESULTS

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Agency	Year	County	Group	Population (Avg)	DVMT
Cathedral City	2016	RIVERSIDE COUNTY	C	54296	611254

TYPE OF COLLISION	VICTIMS KILLED & INJURED	OTS RANKING
Total Fatal and Injury	156	99/104
Alcohol Involved	27	65/104
Had Been Drinking Driver < 21	0	90/104
Had Been Drinking Driver 21 – 34	5	95/104
Motorcycles	13	76/104
Pedestrians	9	90/104
Pedestrians < 15	1	63/104
Pedestrians 65+	0	96/104
Bicyclists	7	91/104
Bicyclists < 15	2	41/104
Composite	90	96/104

TYPE OF COLLISION	FATAL & INJURY COLLISIONS	OTS RANKING
Speed Related	28	99/104
Nighttime (9:00pm – 2:59am)	17	91/104
Hit and Run	13	83/104

TYPE OF ARRESTS	ARRESTS	% RATE	OTS RANKING*
DUI Arrests	143		66/104

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