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Appendix A: Community Engagement
Appendix B: SB 1000 Environmental Justice Analysis
Appendix C: Evacuation Scenario Analysis
Appendix D: GHG Inventory and Forecast Methodology

What is this symbol?

The “Wings” serve a metaphorical and functional purpose within the General Plan Update document. They represent a future of prosperity and freedom of forward mobility for our city. The functional aspect of this icon is detailed below.

This icon indicates more information is available on the web. By selecting this icon you will be directed to the indicated item’s respective website or query.
Vision and Guiding Principles

Envision Palmdale 2045 presents the community's vision for Palmdale for the next two decades. This chapter provides an overview of the community's values and guiding principles for the future, which are woven throughout the General Plan and create the framework for Palmdale 2045.
Introduction

Through stakeholder focus groups, community workshops, pop-up events, online community surveys, and meetings with the General Plan Advisory Committee (GPAC), the community explored how individuals envision the future of Palmdale, what makes it unique and special, and what things residents and businesses would like to change. Building on nearly four years of community input, this chapter summarizes a series of high-level visioning themes and a list of guiding principles or community values organized under each of those themes.
Vision Statement

“Palmdale is a thriving, safe, socially, and economically diverse community where people of all ages live and work in harmony. Palmdale offers affordable living, high quality jobs and educational opportunities in a beautiful high desert setting.”

Vision Themes and Guiding Principles

Described on the following spread are values and direction for Palmdale 2045, set forth by the Palmdale community that chart a course for the future of the City. Vision themes paint a picture of what Palmdale will look like in the future, serving as a foundation for policies and implementation actions. While guiding principles provide further details on a vision theme and serve as a framework for future decision making. Together, the vision themes and guiding principles establish the basis for each element of Palmdale 2045, reflecting the unique needs and priorities for Palmdale residents. Through an extensive community engagement process, the vision themes and guiding principles were vetted by the community; initially prepared with input from the Palmdale General Plan Advisory Committee (GPAC), community members, and later confirmed by the Planning Commission and City Council.
### Vision Themes and Guiding Principles

#### A Unified and Welcoming Community That We’re Proud to Live In
- Respect and promote diversity within Palmdale
- Promote Palmdale’s positive reputation in the region
- Boost community beautification
- Offer opportunities for youth to stay in Palmdale – jobs, housing, education
- Enhance partnerships with surrounding communities in the Antelope Valley

#### Active and Vibrant Downtown
- Create a vibrant and active downtown environment
- Improve the appearance of Palmdale Boulevard
- Encourage and foster local businesses
- Provide space for community gathering and events
- Increase opportunities for entertainment and/or shopping
- Address displacement issues

#### Diverse and High-Quality Job Options
- Provide job training for Palmdale residents in key industries
- Connect residents with job opportunities in aerospace and other emerging sectors
- Encourage telecommuting within Palmdale
- Promote diverse entry-level and mid-level jobs in Palmdale

#### Diverse and Resilient Local Economy
- Retain and support aerospace industry presence in Palmdale
- Leverage economic opportunities from an expanded transportation center and potential passenger air service at Palmdale Regional Airport
- Attract new sustainable employers and industries to Palmdale
- Maintain and enhance smart city technology in Palmdale to support local businesses and telecommuting
- Support local small businesses

#### Safe, Healthy Place to Live and Work
- Improve neighborhood safety
- Address crime and safety concerns
- Improve access to parks and open space
- Support local foster youth and those experiencing homelessness
- Foster active living with improvements to the pedestrian environment
- Prioritize walking, biking, and access to local and regional transit
- Promote living and working in Palmdale and reducing commute times

#### High Quality Medical and Mental Healthcare
- Improve access to and promote quality healthcare services and facilities in Palmdale
- Attract physicians to Palmdale
- Maintain Palmdale Regional Hospital and encourage continued expansion of services and facilities
HOUSING OPTIONS FOR RESIDENTS AT DIFFERENT STAGES OF LIFE AND ABILITY

- Create and preserve affordable housing for residents of Palmdale
- Increase supply and diversity of housing to support different types of households including seniors, young adults, families, empty nesters, individuals or families with special needs, and multigenerational families
- Maintain the City’s quiet and safe neighborhoods
- Maintain rural and semi-rural neighborhoods in Palmdale
- Connect new development to public transit and open space or public parks

HIGH QUALITY AND ACCESSIBLE EDUCATIONAL OPPORTUNITIES

- Promote and expand higher educational opportunities in Palmdale
- Develop additional trade school training and apprentice programs
- Promote opportunities for high-quality childcare and early education
- Expand partnerships and programs with public schools, local government, and major employers within Palmdale

PALMDALE’S BEAUTIFUL NATURAL SETTING

- Maintain safe and convenient access to open space and trails
- Improve connectivity, beautify trails, and open space
- Expand and improve public parks to meet the needs of current and future residents
- Preserve existing mountain views
- Preserve access to a dark night sky
- Maintain high air quality

FOREFRONT OF TRANSPORTATION INNOVATIONS

- Leverage transportation investments in Palmdale
- Build on High-Speed Rail opportunities
- Bring air service to Palmdale Regional Airport
- Improve local transit

GENERAL PLAN IMPLEMENTATION

- Establish metrics for tracking General Plan implementation
- Regular review and update of General Plan goals and policies
- Promote and expand higher educational opportunities in Palmdale
- Develop additional trade school training and apprentice programs
- Promote opportunities for high-quality childcare and early education
- Expand partnerships and programs with public schools, local government, and major employers within Palmdale

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- Leverage transportation investments in Palmdale
- Build on High-Speed Rail opportunities
- Bring air service to Palmdale Regional Airport
- Improve local transit

- Establish metrics for tracking General Plan implementation
- Regular review and update of General Plan goals and policies
History and Profile

Palmdale’s history, regional setting, and demographic makeup play a key role in understanding key issues, opportunities, and the community’s vision. This chapter provides a brief overview of Palmdale’s history and community profile.
City of Palmdale Profile

Location and Planning Boundaries

Palmdale is located in northern Los Angeles County situated in the Antelope Valley region of Southern California, approximately 60-miles driving distance from downtown Los Angeles, as shown in Figure 2.1. The Planning Area for the 2045 General Plan includes land within Palmdale City Limits, Sphere of Influence (SOI), and several unincorporated Los Angeles County areas. Together, these areas measure a total of 129,032 acres (or 201.6 square miles) as shown in Figure 2.2.

Palmdale City Limits covers 68,019 acres (or 106.3 square miles), making it one of the largest cities (in terms of land area) in the United States. The Sphere of Influence (SOI), or area outside the City’s limits but within its legal planning area, adds another 44,241 acres (or 69.1 square miles). Included in the SOI, City of Palmdale has four distinct unincorporated County Islands within the Planning area which total 16,772 acres (or 26.2 square miles).

Sphere of Influence

The Sphere of Influence (SOI) is the “probable physical boundaries and service area” of a city, as defined by the State General Plan Guidelines. Within these areas the City of Palmdale has power to affect developments, though formal authority is limited. Palmdale’s Sphere of Influence spans 69 square miles and includes the County Islands mentioned in the previous section as well as land to the south near the Little Rock Creek Wash and San Gabriel Mountain range, as well as a small area to the west near Leona Valley.

Unincorporated County Islands

The four incorporated County Islands areas including the area located east of Plant 42, currently owned by Los Angeles World Airports (LAWA) measuring 16,381 acres (or 25.6 square miles); Desert View Highlands which is recognized as a census-designated place, entirely developed with residential homes, commercial uses, and two elementary schools, spanning 273 acres; a small area north of Avenue Q and east of 3rd Street East that encompasses a mobile home park and vacant land; and 118 acres of duplexes, light industrial, and vacant parcels in an area bounded by East Avenue Q, Sierra Highway, 10th Street East, and East Avenue P-8.

1. City land surrounding a pocket of County land is commonly referred to as a County Island.
Figure 2.2  City of Palmdale and its Sphere of Influence

Legend:
- City Boundary
- Sphere of Influence
- California Aqueduct
- Major Highway/Arterials
- Railroad
- Water Body
- Park

Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.

Produced by Rami + Associates
March 2019
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City Structure

Palmdale is an auto-oriented city, where many of the key destinations are located near major thoroughfares and highways.

The City is vertically bisected by State Route 14 (SR-14), a regional highway connecting the Mojave Desert to the Los Angeles Basin, and the Union Pacific Railroad, which runs parallel to Sierra Highway. The City’s major employment centers are clustered along SR-14 including the Antelope Valley Mall, Palmdale Auto Mall, and Palmdale Regional Medical Center, while Plant 42 is conveniently accessed off Avenue M, east of SR-14.
Outside of Sphere of Influence

The City’s namesake thoroughfare, Palmdale Boulevard, is home to much of the City’s local retail, office, service-related businesses, and City government offices. Palmdale Boulevard is designated as State Route 138.

The overwhelming majority of land in Palmdale is currently vacant. Development in Palmdale consists primarily of single-family residential neighborhoods clustered north and south of Palmdale Boulevard and to the west of SR-14. Developed neighborhoods include single family residential, some multifamily complexes, places of worship, parks, and public schools.
A Brief History of Palmdale

Distant Past

Thousands of years ago, the Antelope Valley was a major trade route for Native Americans traveling from Arizona and New Mexico to California’s coast.

1800’s–Early 1900’s

Modern settlement of Palmdale began in the mid-1800s fueled by the gold rush, cattle ranching, arrival of stagecoaches, and completion of the Southern Pacific Railroad line in 1876. Serious population growth did not occur until the California aqueduct was completed in 1913, which attracted a substantial number of farmers.
1960’s

Palmdale became the first community in the Antelope Valley to incorporate, in 1962, with the incorporation of 1,300 acres of land around the present-day civic center.

By 1965 the new city had annexed 20 square miles of land and industry was thriving. Many investors purchased large quantities of land, including the 17,750 acres purchased by the Los Angeles Airports Division.

2000’s

Since 2000, a voter-approved tax has funded major park and recreation expansions, including the Palmdale Amphitheater, two new pools, other recreation buildings, satellite library and DryTown Water Park. Downtown revitalization efforts included hundreds of new senior housing units, a new senior center, and expanded open space. A third high school was established in 2003, Knight High School. A Los Angeles County sheriff station opened in July 2006, the largest in Los Angeles County. Two additional fire stations have been built, one on the east side and one on the west side of town.

1980’s–1990’s

The 1980s and 1990s were the decades that really started to define Palmdale’s transformation. Newly constructed affordable, single-family housing caused a dramatic spike in population. The City, like its northern neighbor Lancaster, became a bedroom community for those employed in the Los Angeles basin. In 1980, Palmdale’s population was 12,227. By 1990, it had grown to 68,842. In 1991, the Palmdale Auto Center (today known as the Palmdale Auto Mall) and the Antelope Valley Mall opened, which drew regional visitors and employed hundreds of local workers.

In the 1990s a dramatic increase in families moving to Palmdale from the Los Angeles basin had unanticipated consequences as crime notably worsened. In response, the multifamily zoning code explicitly discouraged middle density housing (to discourage lower-income residents), in lieu of large single-family dwellings. Due to the lack of affordable middle housing options (townhomes, apartments, duplexes, etc.), many large single-family homes are rented on a by-room basis.
Palmdale Today

The City’s growth pattern over the last twenty years has brought together expanding residential communities, a large-scale aerospace industry, warehouse and logistics related businesses, and manufacturing companies. Despite growth and denser development in some areas of the City, the landscape also includes urban sprawl and rural communities. The City’s recent shift to district elections has signaled the importance of recognizing the unique needs and priorities of each of the five voting districts across Palmdale.

While Palmdale retains some elements of its early agricultural past, its economic base is primarily supported by aerospace and defense industries. The City is at a critical juncture in its history; having been hard hit by the Great Recession of 2007-2009, the City has begun to recover and has the potential to capitalize upon certain opportunities that could change its economic trajectory. Major transformative projects anticipated to occur over the next two decades include the planned California High Speed Rail connecting Palmdale to the rest of the State, the Brightline West train from Las Vegas to Palmdale, and the potential start of commercial air service to the new Palmdale Airport. At a time when land elsewhere in Southern California is becoming increasingly scarce, Palmdale may also be well-positioned to capture an increasing share of regional growth.
The 2020 Census estimated a population of 169,450 for the City of Palmdale. Collectively, the population of Antelope Valley (including the City of Lancaster and surrounding unincorporated communities) exceeds half a million residents.

The residents of Palmdale make-up a culturally rich and diverse population. While English is the most common language spoken, more than 47% of residents speak a language other than English at home. Spanish is a widely used first or second language.

To capture the local social fabric of the City, the following community profile was developed with data from the 2020 American Community Survey. The data below provides a snapshot of the City today and identifies key considerations for the General Plan goals and policies.
Chapter 3

Process and Community Engagement

This chapter provides an overview of the Palmdale 2045 General Plan Update process and descriptions of the extensive community engagement that took place between 2019 and 2022.
General Plan Update Process

The General Plan update occurred over a four-year effort between early 2019 and late 2022. The General Plan update process included six major phases, as illustrated in Figure 3.1: 1) Discovery; 2) Visioning; 3) Alternatives; 4) Preferred Alternative and Policy Development; 5) Plan Development; and 6) Review and Adoption. Each phase of the process included community engagement activities, which are described below.

The following is a summary of the phases:

1. **Discovery.** During this phase, the General Plan Team conducted extensive analysis of existing conditions in the City. This resulted in a series of technical background reports on various topics including land use and urban form, housing conditions and needs, public health and equity, transportation and mobility, natural and manmade hazards, and military readiness and aviation, among others.

2. **Visioning.** This phase of the project involved extensive community engagement. The purpose was to confirm the issues and opportunities facing the City now and, in the future, and to identify opportunities for positive change. The result was a concise list of “vision themes” and guiding principles to achieve the vision for the future.

3. **Alternatives.** This phase began the process of comprehensively updating the City’s land use map, which identifies future intended land uses for every parcel of land across the City. Since the land use map had not been comprehensively examined in several years, and the City spans just over 106 square miles, this phase took a significant amount of time. It began with an iterative design charrette among the General Plan Team and led to three alternatives—or options—for the community to review and provide feedback.
4. **Preferred Alternative and Policy Development.** This critical phase involved two separate components. The first was to create a preferred land use map depicting the future of Palmdale based on community and decisionmaker feedback in phase three. The second part of this phase was the development of the General Plan policies. This phase included six topic-specific meetings with the General Plan Advisory Committee (GPAC; see information on the following pages) and the public on important General Plan topics. The result of this effort was a preferred land use designation map and policy frameworks that were used to help craft the updated General Plan.

5. **Plan Development.** During this phase, the General Plan Team prepared the various chapters of the General Plan. This phase involved many meetings between various City departments and the consultant team. The final product was the Draft General Plan for public review. This phase also involved the preparation of the Public Draft Program Environmental Impact Report (PEIR), completed pursuant to the California Environmental Quality Act (CEQA). Both documents—the Draft General Plan and the Draft PEIR—were released for public review and comment.

6. **Review and Adoption.** The final phase of work was the review and adoption of the General Plan. This phase involved community workshops on the Draft General Plan and Draft PEIR, and public hearings. The final product is the Final General Plan and the Final PEIR.
Community Engagement

Central to the updated Palmdale General Plan (Palmdale 2045) was an extensive community engagement process. The sections below outline the engagement process and activities that took place between 2019 and 2022. A detailed report is included in Appendix A.

Engagement Objectives

At the beginning of the General Plan update process, the General Plan Team developed a Public Participation Plan, which outlined the types and timing of engagement activities. The Plan also identified the overall objective of the engagement program. These objectives are listed adjacent to the right:

- INFORM AND EDUCATE THE COMMUNITY ABOUT THE GENERAL PLAN PROCESS.
- ACHIEVE HIGH LEVELS OF PARTICIPATION FROM THE PALMDALE COMMUNITY.
- ENGAGE RESIDENTS AND BUSINESSES FOR THE LONG TERM.
- ENGAGE A DIVERSE CROSS SECTION OF THE COMMUNITY.

Summary of Engagement Activities

Palmdale 2045’s vision was developed through community engagement. In-person interactions at traditional and pop-up workshop events, newsletters, and a variety of online activities, took place over the course of the four-year Plan update process. The diversity of activities was based on the recognition that each person might want to participate in the process in a different way.

It is important to note that the COVID-19 Pandemic occurred during the update process. From 2019 through March 2020, all General Plan activities were held both in-person and online. In response to State and local public health guidance regarding the COVID-19 virus, all engagement activities were held virtually from March 2020 through August 2021. While final community engagement activities were held in-person from July-September 2022.

These activities are described on the following page. A detailed overview of all engagement activities can be found in Appendix A.

Engaging with the Spanish-Speaking Community

An important component of the engagement process was to seek participation from Spanish-speaking populations in Palmdale and those underrepresented in local government. As detailed in Appendix A, all meetings welcomed translation requests (made in advance to the City), all surveys were provided in hard copy format and in Spanish, and separate discussions with Spanish speakers, seniors, and others without internet access took place throughout the Plan update process. Additionally, all surveys and meeting outreach materials were available in both English and Spanish.
Outreach Activities
At the onset of the process, the City spent considerable time and effort informing residents in Palmdale about the General Plan Update. As the list below indicates, every resident received notification about the General Plan, and information about the project was distributed widely through multiple channels throughout the entire process. Announcements were publicized in bilingual (Spanish/English) format.

A summary of the methods used to inform the public about the process is below:
• A project website (www.Palmdale2045.org) that was updated regularly to provide information on the project throughout the process.
• Beginning March 2020, virtual meetings recorded and available for viewing on Palmdale 2045 YouTube channel.
• An email database created for the Plan update that had over 1,500 subscribers. Email blasts were sent regularly during the process to inform the community about upcoming engagement activities. These emails were also sent to many other distribution lists through homeowners’ associations (HOAs), religious organizations, and school district offices, among others.
• Posting on the City’s existing social media platforms.
• Palmdale Minute weekly video segments in English and Spanish.
• Announcements and interviews on Spanish radio.
• Auto Mall electronic billboards.
• Print advertisements in Palmdale Connections Magazine (multiple times throughout the General Plan Update process)
• Flyers were posted at City Hall and banners were displayed throughout town.
• Paper copies of all surveys were circulated at public facilities and provided at key locations like SAVES and the Palmdale Transportation Center, among others.

Project Website
The project website (www.palmdale2045.org) was the primary forum to provide project updates, links to online meetings and surveys, meeting results, and documents to the public. The website also included a sign-up for a community database. The database was used to inform interested residents, businesses, and other stakeholders, providing information about General Plan Update activities, including upcoming meetings, availability of materials for review, and other information.
Community Workshops
Community workshops were held at four key points in the process. These are described below:

Workshop #1.
On Saturday, August 24, 2019, and Tuesday, August 27, 2019, the City of Palmdale hosted the first series of community workshops for the General Plan Update. This workshop focused on identifying what makes Palmdale unique, developing a shared vision for the General Plan Update, and reviewing issues and opportunities. The same materials were presented at both in-person meetings and available in Spanish with live simultaneous translation.

Workshop #2.
On Saturday, August 8, 2020, from 9:30-11:30 am the General Plan Team presented a detailed overview of the three land use alternatives put forth in the virtual workshop + survey. The presentation included live polls and discussion between members of the community and the General Plan Team. Between July 15 - August 23, 2020, an online survey with an accompanying Briefing Book that detailed the preferred land use alternative for the City’s General Plan update was available for public review and completion. The online platform invited feedback on the preferred land use alternative which ultimately became the City’s updated General Plan Land Use Map. The survey and briefing book were available 24-hours a day, 7-days a week. Paper copies were also distributed throughout the City. In addition, a YouTube recording of the virtual workshop was available for public view on the Palmdale 2045 YouTube channel following the live meeting on February 4, 2021.

The City of Palmdale held an EIR Scoping Meeting on June 30, 2021, from 5:30 to 6:30pm to provide an additional opportunity for input on the scope and content of the EIR. The EIR Notice of Preparation (NOP) was open for public comment through July 23, 2021, on the project website and on CEQAnet. In addition, a YouTube recording of the virtual scoping meeting was available for public view on the Palmdale 2045 YouTube channel following the live meeting.

Workshop #3.
On Thursday, February 4, 2021, from 5:00-7:00 pm the General Plan Team presented a detailed overview of the preferred land use alternative described in the online Briefing Book and survey. The presentation included live polls and discussions between the General Plan Team and community. Between January 13-February 17, 2021, an online survey with an accompanying Briefing Book that detailed the preferred land use alternative for the City’s General Plan update was available for public review and completion. The online platform invited feedback on the preferred land use alternative which ultimately became the City’s updated General Plan Land Use Map. The survey and briefing book were available 24-hours a day, 7-days a week. Paper copies were also distributed throughout the City. In addition, a YouTube recording of the virtual workshop was available for public view on the Palmdale 2045 YouTube channel following the live meeting on February 4, 2021.

Workshop #4.
On Wednesday, August 10, 2022, the City of Palmdale hosted the final workshop and open house to present the community with the Public Draft General Plan document - Palmdale 2045. The open house included interactive stations covering various elements of the General Plan, an overview presentation, and printed copies of the draft document for attendees to review. Approximately 35 community members—in addition to City staff and policy makers—attended the event. Spanish interpretation was provided. The meeting formally began with an introduction by City Staff, followed by a presentation by the General Plan Consultant Team. The presentation provided an overview of the key components of the General Plan including contents of each of the required elements.
Pop-up workshops
Pop-up workshops are held at popular events, utilizing similar materials to those from Community Workshops, and provided an opportunity to spread awareness for the General Plan update and engage even more residents in the General Plan Update.

Pop-up Workshop Series #1:
Between September and November 2019, the City of Palmdale held five pop-up workshops that included activities to identify what makes Palmdale unique, develop a shared vision for the General Plan Update, and review issues and opportunities. Across all events, approximately 500 people visited the City’s General Plan booth.

Pop-up Workshop Series #2:
Between July and August 2020, City of Palmdale Staff conducted nine pop-up workshops at popular destinations around the City to spread awareness of the General Plan Update and to receive feedback on the land use alternatives. Due to the ongoing COVID-19 pandemic and health crisis, the pop-up workshops did not include an interactive activity, and were focused on spreading awareness for the virtual engagement activities.
Community Surveys

Community Survey (Survey #1).
The City of Palmdale hosted an online “icebreaker” survey to inform residents of the ongoing General Plan Update, collect feedback related to daily life in Palmdale, and demographics information. The survey was available in English and Spanish on the Palmdale General Plan Update website (www.Palmdale2045.org) from April 2019 to August 2019. The survey had a total of 762 responses (nearly all in English).

Land Use Alternatives Survey (Survey #2).
Survey #2 was in conjunction with the second workshop, which described three land use alternatives and sought direction from the community. The survey was developed using StoryMap, an online survey software. The survey was available 24 hours a day, 7 days a week from July 15 – August 13, 2020, in both English and Spanish. A total of 418 surveys were collected (409 English and 9 Spanish), an average of 76 surveys submitted per week.

Preferred Land Use Alternative Survey (Survey #3).
Between January 13 and February 17, 2021, the City of Palmdale hosted a third online survey with an accompanying Briefing Book that detailed the preferred land use alternative for the City’s General Plan update. The online survey invited feedback on the preferred land use alternative, which ultimately became the City’s updated General Plan Land Use Map. The survey and accompanying briefing book were available 24-hours a day, 7-days a week. A total of 207 surveys were collected (201 English and 6 Spanish), with an average of approximately 41 surveys submitted per week.

General Plan Advisory Committee (GPAC)
Throughout the General Plan Update process, the team met with a 13-member advisory committee appointed by Palmdale City Council. The committee was comprised of residents who met to collaborate and provide community insight throughout the General Plan Update process. Virtual GPAC Meetings were live streamed to YouTube and included links to provide feedback and public comment.

- GPAC #1: June 5, 2019 | Introduction
- GPAC #2: September 11, 2019 | Existing conditions and community priorities
- GPAC #3: November 13, 2019 | Planning overview and guiding principles
- GPAC #4: December 11, 2019 | Housing existing conditions
- GPAC #5: January 15, 2020 | Land use alternatives existing conditions
- GPAC #5 Part 2: February 19, 2020 | Prepare draft land use alternatives
- GPAC #6: May 20, 2020 | Economic development existing conditions
- GPAC #7: July 29, 2020 | Three land use alternatives review
- GPAC #8: September 23, 2020 | Parks, open space, and conservation existing conditions
- GPAC #9: October 28, 2020 | Health and equity existing conditions
- GPAC #10: January 13, 2021 | Preferred land use alternative review
- GPAC #11: February 24, 2021 | Transportation existing conditions
- GPAC #12 Joint Workshop: June 17, 2021 | Safety policy framework review
- GPAC #13 Joint Workshop: June 30, 2021 | Climate, sustainability, and resilience policy framework review
- GPAC #14: Joint Workshop: July 15, 2021 | Land use and housing policy framework review
- GPAC #15 Joint Workshop: July 28, 2021 | Mobility policy framework review
- GPAC #16 Joint Workshop: August 5, 2021 | Military readiness and economic development policy framework review
- GPAC #17 Joint Workshop: August 11, 2021 | Health, equity, parks, and open space policy framework review
- GPAC #18 July 28, 2022 | Public Draft General Plan
Small Group Input
Throughout the General Plan Update process, the team met with small groups of stakeholders including business owners, local employees and residents, non-profit organization representatives, and religious organization representatives, among others. Below are brief descriptions of the input sought at these meetings.

Stakeholder Focus Group Series #1.
On March 6th and 7th 2019, the General Plan Team conducted five stakeholder group meetings with Palmdale industry leaders, educational entities, faith-based organizations, and community-based organizations about issues and opportunities for the Palmdale General Plan Update. The General Plan Team also separately met with elected officials.

Economic Development Focus Group.
The General Plan Team conducted a similar focus group meeting on March 6, 2019, regarding economic development in Palmdale.

Stakeholder Focus Group Series #2.
In July 2020, the General Plan Team conducted nine stakeholder group meetings with Palmdale industry leaders, educational entities, faith-based organizations, and community-based organizations to receive input on the three Palmdale General Plan Update land use alternatives.

Stakeholder Focus Group Series #3.
On February 8, 2021, the General Plan Team conducted three stakeholder focus group meetings with Palmdale industry leaders, educational entities, faith-based organizations, and community-based organizations to receive input on the Palmdale General Plan Update preferred land use alternative.

Decision Maker Updates
Throughout the General Plan Update process several meetings took place to update decision makers and receive input and direction. Separate meetings were held for review and consideration of the Housing Element, which are detailed in the Housing Element.

Phase One | December 2019.
The phase one briefing to City Council and Planning Commission included an overview of the project status, existing conditions, community engagement, and the draft vision and guiding principles.
- Planning Commission presentation: December 12, 2019
- City Council presentation: December 17, 2019

Phase Two | September 2020.
The results from a series of community engagement events on three land use alternatives was presented to City Council and Planning Commission in September 2020. Following direction from both decision-making bodies, the General Plan Team revised the three concepts into one preferred map, referred to as the “preferred land use alternative.”
- Planning Commission presentation: September 10, 2020
- City Council presentation: September 15, 2020

Phase Three | March 2021.
The preferred alternative received community feedback and direction, which was presented to City Council and Planning Commission in March 2021. Decision-makers provided additional direction and endorsed the preferred land use map.
- Planning Commission presentation: March 11, 2021
- City Council presentation: March 16, 2021

Phase Four | August 2021.
The phase four briefing to decision makers included an overview of the draft General Plan policy direction and a progress report since the last update.
- Planning Commission presentation: August 12, 2021
- City Council presentation: August 17, 2021
Plan Overview

This chapter provides an overview of the Palmdale 2045 General Plan, including the General Plan Update process, provides information on statutory requirements of the General Plan and how the document can be used.
Overview

In late 2018, the City of Palmdale initiated a multi-year effort to update their General Plan (Palmdale 2045) and conduct the environmental review in accordance with the California Environmental Quality Act (CEQA).

The goal of Palmdale 2045 is to provide decision-makers, City staff, and the community with a General Plan that aligns with community values and is responsive to market opportunities. The General Plan update is an opportunity for the City to position itself for success over the next 20-plus years by responding to anticipated changes, capitalizing on regional infrastructure investments, and recent State legislation. This General Plan offers the City a roadmap to identify strategies for enhancing community character and quality of life, expanding economic development opportunities, managing growth, addressing impacts of climate change, and improving outcomes for public health and sustainability.

This chapter sets the stage for the General Plan by outlining the regulatory requirements of General Plans, describing the organization of the General Plan, and providing information on how to use the General Plan.

What is a General Plan?

A General Plan is a city policy document required by state law (Government Code Section 65300-65303.4) that provides a “long term, comprehensive, integrated, internally consistent and compatible statement” of goals and policies that reflect local conditions and community vision. The law requires that a General Plan address the following nine mandatory subject areas, or “elements:”

**Land use.**
The land use element identifies the location and intensity of land uses throughout the City.

**Circulation.**
This element plans for the transportation system including roadways, transit, bicycle, and pedestrian facilities; it can also address sewer, gas, water, and other infrastructure conveyance systems.

**Conservation.**
This element guides the use and conservation of natural resources such as soils, wildlife, water, energy, and historic resources.

**Open Space.**
The open space element identifies parks and open space throughout the City.

**Housing.**
The housing element seeks to accommodate housing needs for all incomes, groups with disabilities, and unhoused populations.

**Noise.**
This element seeks to limit the community’s exposure to excessive noise.

**Air Quality.**
This element addresses topics related to regional and local air quality.

**Safety.**
The safety element seeks to reduce the risk of death, injuries, property damage, and economic and social dislocation from natural and human-made hazards.

**Environmental Justice.**
This element identifies disadvantaged communities within the City and seeks to promote resident engagement in the process, mitigate unique or compounded health risks, and identify priority improvements and needs.

General Plan elements may be combined in any way a jurisdiction deems appropriate and additional topics may be added to help guide a city into the future. This General Plan addresses the following optional topics either as stand-alone elements or incorporated in other elements: community design; economic development; military compatibility; parks; natural and cultural resources; infrastructure and community facilities; sustainability and climate action and implementation.
Role of the General Plan

Palmdale 2045 meets the legal requirements and introduces additional discretionary elements that the City has deemed appropriate. These discretionary topics are integrated within the body of the General Plan and/or as stand-alone chapters. Topics addressed include community design and land use; arts and culture; parks; infrastructure and community facilities; and economic development. To start the General Plan planning process, an Existing Conditions Report was prepared to collect and analyze data on current planning issues in the City and should be referenced for additional background. This report is available under separate cover.

Purpose

The purpose of Palmdale 2045 is to serve as the blueprint for the City’s vision. The General Plan is the primary legal document that identifies and guides long-term growth, development, and decision-making in the City. The process is strongly anchored in community input and articulates specific steps to guide future land use and planning. The information contained in the individual sections or Elements that comprise this General Plan will shape the physical development of the City. As such, Palmdale 2045 will serve to inform residents, developers, decision-makers, and other cities of the ground rules for development within the City.
General Plan Structure

The General Plan document is organized in 16 chapters as described below:

**Chapter 1: Vision and Guiding Principles**
This chapter sets the Vision and Guiding Principles for what the City of Palmdale is striving to become and provides a framework for how it will get there. The vision is intended to be realized over the course of the next 20 years and is intended to be guided, well-planned, phased growth and development. It is expected that the Vision will help guide decisions relating to new development and updates of the City's various plans and ordinances.

**Chapter 2: History and Profile**
This chapter provides a brief history of Palmdale, its regional setting, and demographic makeup. These factors play an important part in understanding the key issues and opportunities, and the community’s vision for the future.

**Chapter 3: Process and Community Engagement**
Community engagement was a critical component of preparing Palmdale 2045. As such, this chapter provides an overview of the General Plan process and engagement activities that took place over the course of the General Plan Update.

**Chapter 4: Plan Overview**
This chapter provides an overview of the General Plan including General Plan organization and structure, statutory requirements, and how to use the document.

**Chapter 5: Land Use and Community Design**
This chapter presents the approach to land use and community design providing clear parameters for future development and change in the City. It includes an overview of existing land use, development patterns, and urban form in Palmdale. This element contains the General Plan land use designations, the land use designations map, and goals and policies describing the community’s preferences and priorities for the character and appearance of the City.

**Chapter 6: Circulation and Mobility**
This chapter summarizes existing transportation in Palmdale and goals and policies addressing future transportation, considering the local roadway system, transit system, bicycle facilities, goods and movement infrastructure, and parking, and air transit facilities.

**Chapter 7: Economic Development**
This chapter presents a summary of existing economic and market conditions, including goals and policies related to fiscal health, business attraction and retention, and jobs and workforce development. It also addresses opportunities for the City to achieve a jobs-housing balance, economic growth, and fiscal stability.

**Chapter 8: Military Compatibility**
This chapter provides an overview of Palmdale’s military and aviation facilities creating goals and policies to guide military readiness activities, community safety, and economic development.

**Chapter 9: Equitable and Healthy Communities**
This chapter provides an overview of health challenges and opportunities in Palmdale including identification of disadvantaged communities, access to healthy goods, disease prevention, safe and healthy housing, and physical activity opportunities. It includes goals and policies that address equity, access and creating healthy communities.

**Chapter 10: Parks, Recreation, and Open Space**
This chapter provides an overview of Palmdale’s parks, trails, open spaces, and other recreation areas. It plans for future open space needs, access, funding, and maintenance.

**Chapter 11: Conservation**
This chapter provides an overview of natural and cultural resources in Palmdale including protected plant and animal species, significant ecological resources and ecosystems, and water resources, among others.

**Chapter 12: Public Facilities, Services, and Infrastructure**
This chapter identifies existing public utilities including water, wastewater, stormwater, electrical, telecommunication, and natural gas conveyance facilities.
Chapter 13: Safety
This chapter presents the vision for reducing the potential risks resulting from natural and environmental hazards such as earthquakes, floods, fire, and extreme weather. In addition to natural hazards, this element also addresses police and fire services and emergency evacuation. The element contains goals and policies that will help guide the City’s decisions related to new development and the risks to the health, safety, and welfare of its residents.

Chapter 14: Sustainability, Climate Action, and Resilience
This chapter discusses sustainability challenges and opportunities in Palmdale. It provides greenhouse gas reduction strategies and climate actions that the City should be taking to ensure the City remains resilient. This chapter also serves as the City’s Climate Action Plan.

Chapter 15: Air Quality
This chapter provides an overview of protecting, maintaining, and enhancing air quality within Palmdale.

Chapter 16: Noise
This chapter addresses the community’s approach for minimizing noise levels in the City and contributing to a higher quality of life. The element analyzes and quantifies existing and future noise levels. It includes maps summarizing the results and presents goals and policies for managing exposure to excessive noise, including enforcement of noise standards, land use planning, site design, and innovative building technology.

Housing (under a separate cover)
The 6th Cycle Housing Element (2021-29) assesses current and projected housing needs and establishes policies and programs for improving housing and providing adequate housing for all income levels. The housing element is required to be updated every eight years.

Appendices
In addition to the required and optional General Plan elements listed above, Palmdale 2045 includes three appendices that cover the following topics.

Appendix A: Community Engagement.
Community engagement is a cornerstone of Palmdale 2045; therefore, a separate appendix is provided with an overview of the activities, direction, and input from community members. A brief description of community engagement is also provided in Chapter 3.

Appendix B: SB 1000 Environmental Justice Analysis.
Palmdale is home to census tracts that are subject to additional environmental justice analysis, per California Senate Bill 1000 (SB 1000). This analysis is detailed in a separate appendix and covered in the Equitable and Healthy Communities Element (Chapter 9).

Appendix C: Evacuation Scenario Analysis.
Recent legislation—Senate Bill 99 and Assembly Bill 747—requires cities to identify residential developments in hazard areas that do not have at least two emergency evacuation routes and 2) evaluate evacuation route safety under a range of emergency scenarios. This appendix provides the detailed methodology and analysis pertaining the SB 99 and AB 747 requirements. A brief summary of these results are provided in Chapter 13.

Appendix D: GHG Inventory and Forecast Methodology.
This appendix contains the 2017 baseline inventory for greenhouse gases and the methodology for the 2045 forecast. It also contains detailed greenhouse gas reductions that the City can achieve by implementing the mitigation strategies and actions in the CAP (Chapter 14).
How to Use the General Plan

Each element of the General Plan is organized with the following sections:

Statutory Requirements
A short explanation of the mandatory state requirements for each element – what must be addressed in the section to be certified as a legally binding document.

Relevant Plans and Documents
A list of applicable and relevant City and regional documents and plans.

Context
A summary of the issues facing the community. The issues serve as background for the goals and policies and are derived from the Existing Conditions Report prepared as part of this General Plan update.
Desired Outcomes, Indicators, and Targets

Outcomes, indicators, and targets are provided to track progress of the General Plan implementation over time.

Goals and Policies

The following section includes goals and policies for the Parks, Recreation, and Open Space Element. Goals and policies are followed by implementation actions.

Desired Outcomes, Indicators, and Targets

Goals and Policies

The following section includes goals and policies for the Parks, Recreation, and Open Space Element. Goals and policies are followed by implementation actions.

Goals and Policies

Each element contains goals and policies responding to the key issues associated with achieving the community’s vision and are intended to provide clear direction in how the City will implement the overall vision of this plan. In addition, General Plan policies are supported by complementary policies across elements. As such, policy implementation should be considered a package that is interwoven throughout the General Plan. Together, the General Plan language creates a hierarchy of goals and policies that will be mandated, encouraged, or allowed by the City over the next 20 years.
**Goals:** Overall statement describing the envisioned end state for the community. Goals are broad in both purpose and aim but are designed specifically to establish directions and outcomes.

The following is an example of a goal:

**Goal LUD-1**
Complete Neighborhoods where residents can reach daily amenities, local retail, services, parks, and public facilities within a short 20-minute walk.

**Policies:** Specific position statements that support the achievement of goals and serve as guides to the City Council, Planning Commission, other City commissions and boards. City staff also use the policies when reviewing development proposals and making other decisions. Policies seek to achieve the goals by mandating, encouraging, or permitting certain actions. Certain policies are critical and must be implemented. Thus, compliance with the policy or action is mandatory. Language used to describe this intent includes will, must, require, prohibit, conduct, maintain, and implement. Other policies are strongly encouraged by the City, but total implementation may not be possible; thus, compliance is not mandatory. Language used to describe this intent includes should, may, encourage, consider, explore, allow, discourage, and promote.

The following are examples of policies in the Palmdale General Plan Land Use and Community Design Element:

**LUD-1.1 Balanced Land Uses.** Maintain a balanced land use pattern to support a broad range of housing choices, retail businesses, employment opportunities, educational and cultural institutions, entertainment spaces, and other supportive uses and within long-established Indio neighborhoods and new growth areas.

**LUD-1.2 New Complete Neighborhoods.** Facilitate the construction of new mixed-use neighborhoods that are well connected to services, transit, amenities, public buildings, and parks and recreational facilities.

**LUD-1.3 Access to Amenities.** Strive to create development patterns such that the majority of residents are within twenty minutes or less walking distance of a variety of neighborhood-serving uses in Village Centers, such as parks, grocery stores, restaurants, places of worship, cafes, dry cleaners, laundromats, banks, hair care, pharmacies, civic uses, and similar uses.

**LUD-1.4 Specific Plan Facilities.** Ensure specific plans are implemented with timely construction of supportive commercial uses and parks to support new residential uses.

**LUD-1.5 Multimodal Connectivity.** Promote walking to services, biking and transit use by requiring a high level of connectivity for pedestrians, bicycles, and vehicles in major developments (except where existing development or natural features prohibit connectivity). Seek to improve walk, bike, and transit travel within existing complete neighborhoods.

**LUD-1.6 Walkable Blocks.** Create communities that address the needs of multiple age groups and physical abilities through short, walkable block lengths. Use grid-like or a modified grid street networks in newly developed areas (except where topography necessitates another street network layout).
Implementation Actions

Each element contains actions necessary to implement the adopted goals and policies and the time frame for their completion. Responsible entities are also noted.

Updated Subdivision Design Guidelines. Review and update regulations applicable to subdivision projects as needed, including connectivity standards, sidewalk standards, green infrastructure standards, etc.

Correlating Goals | Action | Timeframe | Responsibility
---|---|---|---
LUD-20, 23, 24 | Updated Subdivision Design Guidelines. Review and update as needed regulations applicable to subdivision projects, including connectivity standards, sidewalk standards, green infrastructure standards, etc., as needed. | | Economic and Community Development Department

Maps, Diagrams & Graphics

The General Plan is supported by a variety of maps, diagrams, and illustrations, which supplement the text in each element. Graphics are incorporated into the General Plan to delineate land use and circulation patterns, community focal points, open space and recreation facilities, biological and cultural resources, and areas requiring special consideration or study. Important or significant environmental resource and hazard areas are also mapped, as well as public and quasi-public facilities. These official maps carry equal authority to the goals and policies of the General Plan.
Plan Implementation & Maintenance

The Palmdale 2045 General Plan will be implemented over an extended period (20+ years, with a time horizon of 2045). During this time, the long-range planning efforts for Palmdale will continue using the goals and policies as a guide. However, a General Plan is a living document, and presents the outcomes desired by the community based on current goals and local conditions. As the City grows and changes, it may become necessary to amend specific policies and implementation actions as economic and demographic conditions change and while new ideas about growth and conservation are formed.

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 years.

As part of this annual review, the City will consider progress in the context of the indicators presented within this General Plan. Similarly, each year, the Planning Commission must review the Capital Improvements Program to ensure the planned infrastructure investments are consistent with this General Plan. State Law also encourages annual reviews of implementation actions and recommends that the entire General Plan be thoroughly reviewed every five years to ensure it is still consistent with the community’s goals.
Any part of a General Plan may be amended to accommodate changing conditions. Property owners, developers, the Planning Commission, the City Council, or City staff may propose amendments. The Planning Commission and the City Council must review any proposed changes at public hearings and the potential of environmental impacts must be evaluated in accordance with the California Environmental Quality Act.

Community members, neighborhood groups and local organizations are encouraged to get involved in the on-going planning efforts of the City and to participate in the implementation of the General Plan. By active, thoughtful involvement, residents can be part of the process of shaping and growing Palmdale to make it an active, prosperous, and welcoming City place to live, work, and raise a family.
Chapter 5

Land Use and Community Design

This Element provides a long-term vision, goals, and policies for Palmdale over the next 20 to 30 years. The overall focus is on how to accommodate change and growth in the city, while preserving and enhancing the features and attributes that make it such a desirable place to live. The future of Palmdale is dependent on the mix of residential, commercial, employment, and industrial uses which provide the foundation for a fiscally healthy community; as well as the design and quality of buildings, streets, and public spaces, which make Palmdale an attractive and highly livable place for its residents.
Statutory Requirements

This Element has been prepared to meet State General Plan law (Government Code Section 65302(a)) which requires that a city’s General Plan include:

“...a land use element which designates the proposed general distribution and general location and extent of uses of the land for housing, business, industry, and open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, public buildings and grounds, solid waste disposal facilities and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan.”

This required land use element has the broadest scope of all the required elements of a general plan, regulating how land in the city is to be used in the future. Topics covered include land use designations, goals and policies that address preservation and enhancement of existing neighborhoods, development of new neighborhoods with varied housing opportunities, and new areas for employment, shopping, and mixed-use development.

In addition to addressing statutory requirements for land use, this Element addresses community design, introducing community character and built environment as critical components of Palmdale’s urban form. While not required by statute, community design is one of the fundamental components of this General Plan, since understanding the built environment and its characteristics – the location and design of our homes, stores, parks, offices, and the way that we interact with these various places in the public realm – is vital to strengthening quality of life. Setting the appropriate design parameters for future change and redevelopment is critical to realizing the community’s vision.
Multi-Family and Mixed-Use Design Standards (2022)
Palmdale’s Multi-Family and Mixed-Use Design Standards present guidelines for a wide range of housing opportunities that will help facilitate housing for people of all ages, incomes, and backgrounds while enhancing Palmdale’s high desert setting.

East Avenue Q Complete Streets Project (2022)
The Palmdale East Avenue Q Complete Streets Project is a multimodal corridor study that provides transportation and land use recommendations for a 1.4-mile segment of East Avenue Q from Sierra Highway to 20th Street East. Recommendations are aligned with the City’s General Plan Update and are geared toward improving walking and biking conditions for people of all ages and abilities, as well as improving the comfort and safety of active transportation in high desert weather.

Palmdale Freeway and Roadway Landscape Design Guidelines (2021)
The document ensures that the design and appearance of City’s major landscape plantings, hardscape materials, signage and artwork are cohesive throughout the city and related to the local geography, unique features of the Mojave Desert, and the City’s cultural history and future.

Public Art Master Plan (2020)
Finalized in 2020, the Palmdale Public Art Master Plan sets forth a vision and key goals to expand artwork on City property and within the public realm throughout Palmdale. The Plan includes a summary of key recommendations and a strategic approach to funding, managing, and reviewing local public art projects that will celebrate Palmdale’s identity, expand economic opportunities, and encourage multidisciplinary collaboration.
**Antelope Valley Area Plan (2015)**
This area plan covers nearly all of the unincorporated lands in Los Angeles County, north of the City of Los Angeles itself. It is a vision for developing the Antelope Valley, specifying countywide goals to the region, and aligning the planning process. Primary objectives include preserving rural character, reducing greenhouse gases, managing growth, developing multimodal circulation networks, conservation of open spaces and other ecological resources, developing away from natural hazards, and enhancing public services.

**Avenue S Corridor Plan (2010)**
The Avenue S Corridor Plan was prepared to respond to its prominent location as a gateway to the city, the presence of high volumes of traffic, and the historical significance of the route taken by the first settlers of Palmdale. The Plan's objectives are to create a cohesive neighborhood with orderly development, provide for adequate circulation and infrastructure, protect the public from seismic and other hazards, and enhance the streetscape through landscaping and design standards.

**Downtown Revitalization Plan (1995-2005)**
Begun in 1995, the Revitalization Plan outlines challenges in planning, circulation, parking, rehabilitation and upgrading of buildings and their facades, public safety, preserving historic buildings, and attracting the proper mix of business to make downtown a desirable place for residents and visitors to patronize. The Plan supported the overall economic health of the City but has been absorbed into updated zoning and this Chapter’s goals and policies.

**Specific Plans**
Seven adopted Specific Plans are currently guiding the future development of many thousands of acres within Palmdale, including the Palmdale Transit Area Specific Plan. Several of these Plans have been essentially completed (and thus dissolved), some are in preliminary stages, and others have seen virtually no development. Currently active Specific Plans are further described in the following section and in Table 5.2 and mapped in Figure 5.1.
Context

Existing Land Use

The City of Palmdale is situated in northern Los Angeles County, in the Antelope Valley region of Southern California, nestled against the San Gabriel Mountains. It is roughly 60 miles (or just over one hour) driving distance from downtown Los Angeles. This proximity has attracted many families looking for affordable ownership housing within commute distance of major employment centers in Los Angeles.

The Planning Area for this 2045 General Plan Update includes the land within the City Limits, the Sphere of Influence (SOI), and several unincorporated Los Angeles County 'islands.' Originally a modest community concentrated around the confluence of Sierra Highway, Palmdale Boulevard, and the railroad, the City has expanded dramatically through multiple annexations, presently stretching over 21 miles from east to west and 10 miles from north to south. Today the Planning Area measures 106,634 acres total (166.6 square miles). Approximately two-thirds of the Planning Area is undeveloped (62% vacant and 5% natural/conservation).

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<td>378</td>
<td>0.9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106,636</td>
<td>100%</td>
<td>63,859</td>
<td>100.0%</td>
<td>42,773</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: City of Palmdale GIS Data, L.A. County Assessor’s Data 2019

Residential Uses
Residential uses occupy just under 1/7th of the Planning Area (13.4%, or 14,315 acres), with the vast majority of this being single-family detached housing, which represents 98% of the total number of residential parcels. Residential uses are mostly clustered in a wide band traversing the city from upper northwest down to the south and east. Historically, residential land uses were concentrated in the core area bounded by East Avenue Q, East Avenue S, 47th Street East, and SR-14 (Antelope Valley Freeway). This area continues to contain the highest diversity of residential development types, including apartments, townhomes, mobile home parks, and medium-lot single family detached homes. Since the 1980s, residential development grew outward from the core, migrating eastward, southward, and northwestward. Today, the most common zoning is R-1-7,000 which results in residential parcels that measure 7,000 square feet arranged in generally curvilinear street patterns at an average density of one to five units per acre.

There are 10 mobile home parks currently within the Planning Area, occupying 650 acres and accounting for an estimated 1,350 units. Most of these are located along the eastern extent of East Avenue R.

Commercial Uses
Commercial, office, and other retail uses account for a limited amount of the land in the City at approximately 1.5% percent of land area. Commercial uses are generally concentrated along Palmdale Boulevard, Rancho Vista Boulevard, and in other isolated clusters. Most commercial uses in the city are retail and services, office/medical office, and auto sales/services. The oldest commercial activity is developed along Palmdale Boulevard and Sierra Highway and is defined by more community and local-serving businesses. Subsequent residential growth generated a need for more shopping areas, which led to the establishment of centers at 47th Street East and Avenue S, 25th Street East and Avenue S, 5th Street West and Palmdale Boulevard, 47th Street East and Avenue R, and others. Most of these are 10 to 20 acres in size, characterized by large surface parking lots. The most significant single commercial area is the 127-acre Antelope Valley (AV) Mall, located at 10th Street West and Rancho Vista Boulevard. The AV Mall contains over 1.5 million square feet of enclosed commercial mall space, plus additional outbuildings.
Industrial, Extraction and Agricultural Uses
Intensive job-producing uses such as industrial, extraction, and manufacturing account for 11.6% of the total Planning Area, due largely in part to Plant 42, which covers nearly 5,000 acres by itself. Palmdale’s largest industries in terms of both land and jobs are manufacturing, defense, and aerospace. Industrial, extraction, and agriculture uses occupy over 12,000 acres within the Planning Area. Another major use in the city is mineral extraction, with half a dozen sand and gravel mining operations present along the Little Rock Wash. There are also concrete and asphalt batching operations nearby. Agricultural uses are present to the east of Plant 42, sprawling across the County Island owned by Los Angeles World Airports, covering just under 5,000 acres. Other large-format employment uses are found west and south of Plant 42.

Public/Institutional Uses
Civic and governmental uses, public facilities such as schools and libraries, and private institutions such as places of worship and private clubs account for about 1.5% of the Planning Area, or almost 300 total parcels. These public-serving and institutional uses are focused in the heart of the city and distributed throughout the residential neighborhoods, with over 50 places of worship, one hospital, over 40 public schools, a dozen private schools, and more than a hundred governmental facilities (such as libraries, maintenance yards, City offices, fire/sheriff stations, flood control facilities, landfill, and other similar uses). The City of Palmdale has 19 community parks totaling around 360 acres, fewer than the City’s target parks ratio of 5 acres per 1,000 residents.

Development History
In August 1962, the township of Palmdale officially became the City of Palmdale with the incorporation of 1,300 acres of land around the present-day civic center. By 1965 the new City had annexed 20 square miles of land and industry was thriving. Many investors purchased large quantities of land, including the 17,750 acres purchased by the Los Angeles Airports Division. The 1980s and 1990s were the decades that really started to define Palmdale’s transformation. Newly constructed affordable, single-family housing caused a dramatic spike in the population. The city, like its northern neighbor Lancaster, became a bedroom community for those employed in Los Angeles. In 1980, Palmdale’s population was 12,227. By 1990, it had grown to 68,842. In 1991, the Palmdale Auto Mall and the Antelope Valley Mall opened. In the 1990s, the City of Palmdale annexed the Ritter Ranch and City Ranch areas, but in 1997 the Ritter Ranch developer filed for a Chapter 11 Bankruptcy.

As of the 2020 census, the population was 169,450, the sixth most populous in Los Angeles County. Palmdale is one of the largest cities in the United States that is not currently served by either an Interstate Freeway or a U.S. Highway. A lot of families moved to the City of Palmdale from Los Angeles in the 1990s, and this growth had consequences as crime worsened notably. In response, the multifamily zoning code explicitly discouraged middle density housing (to discourage lower-income residents), in lieu of large single-family dwellings. Now many of these big homes with 4 to 6-bedrooms are shared group homes.

The recession of the late 2000’s caused the housing bubble to burst and several of these fast-moving, residentially focused Specific Plan projects were abandoned. Currently, some of these entitled projects are picking up steam again. Today, abundant undeveloped land and relatively inexpensive housing have made the Antelope Valley one of the fastest-growing areas in Southern California.

In the past decades, a voter-approved tax has funded major park and recreation expansions, including the Palmdale Amphitheater, two new pools, other recreation buildings, and DryTown Water Park. Downtown revitalization efforts included hundreds of new senior housing units, a new senior center, and expanded open space. A third high school was established in 2003, Pete Knight High School. A Los Angeles County sheriff station opened in July 2006, the largest in Los Angeles County. Two additional fire stations have been built, one to the east of SR-14 and one on the west side of town.

Further growth is anticipated as a multimodal rail station for the California High-Speed Rail and the Brightline West high-speed rail service to Las Vegas is planned in the heart of the City of Palmdale. Additionally, employment at Plant 42 is expected to expand in the coming decades, further adding demand for housing and services.
The city has had varying degrees of success with the predicted development patterns as stated in the 1993 General Plan:

1. Considerable numbers of entry-level single-family housing units were built east of 47th Street during the past two decades. However, many vacant parcels remain, and most of these new subdivisions were not built with a coherent or connected pattern, resulting in walled-off neighborhoods at great distance from retail and services.

2. The Barrel Springs area was mostly developed with single-family subdivisions, though the area south of Pearblossom Hwy remains rural residential. Five hundred acres were entitled under the Foothill Ranch Specific Plan but remains unbuilt at present.

3. After a delay of many years, the Avenue S extension/bridge has been completed. Infrastructure provision by private developers in this area has been inconsistent.

4. Approximately 1,500 units have been developed under the City Ranch Specific Plan, in addition to an elementary school and two parks. Another 1,400 acres is unbuilt, with only several hundred acres entitled.

5. The City has annexed small portions of unincorporated Los Angeles County land, primarily because of the City Ranch and Foothill Ranch Specific Plans, and a small area around Avenue P-8 and 10th Street East. Yet 0.6 square miles of unincorporated County Islands remain (in addition to 25.6 square miles of LAWA owned property).

6. Infill has been a challenge, as most of the new development has ‘leap-frogged’ outwards.
“County Islands” (SB 244)

The General Plan land use element is required to:

1) identify unincorporated disadvantaged communities; a ‘disadvantaged community’ is defined as a place that meets the following criteria: 1) contains 10 or more dwelling units in close proximity to one another; 2) is either within a city SOI, is an island within a city boundary, or is geographically isolated and has existed for more than 50 years; and 3) has a median household income that is 80 percent or less than the statewide median household income.

2) analyze the water, wastewater, stormwater, and fire protection infrastructure needs; and,

3) identify funding alternatives for extension of these services.

The City of Palmdale contains three potential County Islands; each is discussed below, and relevant SB 244 requirements are reviewed:

**Los Angeles World Airports Property**
This massive County Island measures a total of 16,381 acres. Located east of Plant 42, the land is owned by Los Angeles World Airports (LAWA), originally intended as an airport expansion.
- Not a disadvantaged community; contains 0 dwelling units

**Desert View Highlands**
This County Island contains 768 parcels, 225 parcel acres, and 273 total acres. It is a recognized census-designated place, with an estimated population of 2,514 as of 2017.
- Not a disadvantaged community; median household income is $72,776 (94% of Statewide median of $77,358)

**Telstar Mobile Home Park**
This miniature island contains just two parcels and 2.3 acres and is home to 30 mobile home units.
- Qualifies as a disadvantaged community; median household income is 41% of Statewide median
- No service deficiencies:
  - Water: Palmdale Water District
  - Wastewater: Los Angeles County owned and operated sewer
  - Stormwater: Los Angeles County Flood Control District
  - Fire: Los Angeles County Fire Department

**Area bounded by East Avenue Q/Sierra Highway/10th Street East/East Avenue P-8**
This small island contains 148 parcels and 118 total acres, with a mix of residential, light industrial, and vacant parcels.
- Qualifies as a disadvantaged community; median household income is 71% of Statewide median
- Infrastructure is fully provisioned – no further action required.
  - Water: Palmdale Water District
  - Wastewater: LACSD District 20
  - Stormwater: Los Angeles County Flood Control District
  - Fire: Los Angeles County Fire Department
Community Design

Community design refers to what somebody sees and experiences when spending time on Palmdale’s streets, or in its commercial districts and public spaces. Community design is impacted by a number of factors, including landscaping and greenery; public art; the location, scale, and architectural character of homes, stores, parks, offices, and other spaces; and how easily one can travel between destinations. Quality community design can enhance one’s quality of life. Beautiful, well-designed, pedestrian-scale buildings, streets, and public spaces can increase one’s civic pride, improve community safety, strengthen connections to local arts and culture, and make Palmdale a more attractive place to live, visit, and work.

Accessibility, connectivity, and the quality of the pedestrian environment are important characteristics of community design. Walkable neighborhoods with sidewalks and street trees often enjoy economic benefits, including higher property values, increased private investment, and tourism. Residents in walkable neighborhoods typically engage in more physical activity than residents in neighborhoods with low walkability, which leads to improved public health outcomes. The General Plan seeks to improve pedestrian connections throughout the community, as well as bicycle and public transit connections, to ensure Palmdale is an accessible, connected community for all.

Existing Specific Plans

About one-quarter of the land within the City limits is designated “Specific Plan” by the General Plan, (about 15% of the land within the Planning Area overall). The following table describes the size and development program of each of the seven active Specific Plans. Four Specific Plans are being rescinded as a part of this General Plan; two that are fully built out, Joshua Hills Specific Plan and Hillside Residential Specific Plan; and two others that are not fully built out, Palmdale Trade and Commerce Center Specific Plan and Foothill Ranch Specific Plan. In addition, the Palmdale Business Park Center Specific Plan is no longer considered economically viable. A new specific plan is being proposed in its place, though it will not cover the entire Palmdale Business Park Center area.

Of all the entitled Specific Plan growth, roughly 8,000 units and 2.5 million square feet have been built. Much of the entitled growth from Specific Plans has not been constructed - over 12,500 units and 9 million square feet of non-residential remain unbuilt.

<table>
<thead>
<tr>
<th>Plan Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antelope Valley Business Park</td>
<td>120 acres of industrial, business park, and commercial uses.</td>
</tr>
<tr>
<td>Antelope Valley Auto Center</td>
<td>78 acres of regional auto sales and leasing centers.</td>
</tr>
<tr>
<td>Anaverde Nuevo (formerly known as City Ranch)</td>
<td>1,985 acres of residential (5,200 units), commercial (42 acres), recreational/park, conserved natural open space, and community uses.</td>
</tr>
<tr>
<td>Lockheed Plant 10</td>
<td>674 acres allowing a total of 2,180,000 square feet of industrial, manufacturing, warehouse, and office uses</td>
</tr>
<tr>
<td>Palmdale Transit Area Specific Plan</td>
<td>Mix of single/multifamily residential (2,000 dwelling units), neighborhood commercial, office, and park.</td>
</tr>
<tr>
<td>Ritter Ranch</td>
<td>Over 10,000 acres with 7,200 units (842 multifamily), 73 acres commercial, 95 acres parks, school/public facilities, open space.</td>
</tr>
<tr>
<td>Rancho Vista</td>
<td>1,379 acres of residential, commercial, and recreational uses.</td>
</tr>
</tbody>
</table>
Figure 5.1
Specific Plans

City Boundary
Sphere of Influence
Major Highway/Arterial
Railroad
Waterbody/Aqueduct

Antelope Valley Auto Center Specific Plan (SP-16)
Antelope Valley Business Park Specific Plan (SP-9)
Anaverde Nuevo Specific Plan (SP-2)
Lockheed Specific Plan (SP-11)
Rancho Vista Specific Plan
Ritter Ranch Specific Plan (SP-3)
Palmdale Transit Area Specific Plan (PTASP)

Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.
Produced by Raimi + Associates
May 2022

Updated 5/19/22
Key Issues and Opportunities

Transit-oriented opportunities.
Palmdale is experiencing a unique point in its history; several long-range major transportation improvements including the multimodal transit station are planned, which will make travel to Palmdale faster and more efficient. This provides the opportunity for new jobs, housing, and regular visitors to Palmdale. The City has begun leveraging these improvements through the planned development of downtown Palmdale. These improvements coupled with the City’s proximity to both the Los Angeles basin and the High Desert provide tremendous opportunities for an infusion into the local economy.

Educational Opportunities
Another challenge is the mismatch between available jobs and residents, leading to a daily exodus down to the Los Angeles basin for work. Palmdale today does not have a four-year college. Higher education opportunities are provided by Antelope Valley College Palmdale Center campus, as well as several extension centers for private higher education and vocational institutions.

Growth and the vast scale of the city
Large swaths of the city do not have existing infrastructure leading to development constraints. Isolated suburban communities and topography have led to a discontinuous circulation pattern that creates challenges for pedestrians and non-motorized forms of travel. The scattered pattern of development creates difficulties for the City in terms of efficient provision of municipal services, parks, and capital facilities. This dispersed pattern also makes it more challenging to create a sense of community cohesion, and the viability of commercial retail uses is affected by the presence of large vacant tracts of land and a lack of compact residential neighborhoods.

Neighborhood centers and gathering places
Palmdale has a tremendous opportunity to improve its neighborhoods by expanding or diversifying existing commercial centers so that they are cohesive, functional, and create a sense of community. The City will encourage and facilitate the evolution of its commercial areas toward greater pedestrian-oriented shopping environments. In these areas, there are opportunities to provide greater interest and immediate access by pedestrians, while parking can be minimized visually and physically. These gathering places could also be better integrated into their surroundings.

Housing options
Single-family housing is abundant, but other housing types are lacking due to limiting development regulations. Over 80 percent of existing residential units in the city are single-family.
Where We Want to Be in the Future

Land Use Desired Outcomes and Targets

The following desired outcomes and metrics were identified to help the City of Palmdale track progress toward creating a place that builds on its best qualities and continues to improve and grow over time. This follows the Plan’s Vision and Guiding Principles.

**OUTCOME:** Attract more jobs to promote Palmdale as a complete city.

**KPI:**
- Jobs/housing balance.

**TARGET:**
- Reach a 1 to 1 balance. The GPU 2045 projections call for 22,000 new homes and 26,750 new jobs to move the city closer to a 1 to 1 ratio.

**OUTCOME:** Continue to expand Palmdale’s aerospace industry to attract skilled employment and achieve the associated fiscal benefits.

**KPI:**
- Square footage of airport/military industrial uses.

**TARGET:**
- Continued expansion of aerospace industrial and supportive industrial uses (per the 2045 Growth Projections).

**OUTCOME:** Attract new types of economic activity to buttress Palmdale against a downturn in any particular industry or sector.

**KPI:**
- Diversity of employment use.

**TARGET:**
- Increased diversity in the types of jobs and employers.

**OUTCOME:** Leverage the predicted strong market demand for medical office, remote work, educational space, aerospace support, start-up space, etc.

**KPI:**
- Square footage of office uses.

**TARGET:**
- Substantial growth of office uses, especially medical offices (per the 2045 Growth Projections).

**OUTCOME:** To diversify the City’s housing stock, provide more housing options, and specifically address the previous gap in allowed housing densities (between 16.1 and 30 dwelling units per acre), which functionally limit development of rental housing/apartments.

**KPI:**
- Increase the number of multifamily housing units.

**TARGET:**
- Increasing multifamily housing units as a share of all residential development by 2045.

**OUTCOME:** Take advantage of new transit investments by locating enough new residential units at moderate densities in and around the area, and to generate vibrancy and a sense of place.

**KPI:**
- New housing units in the Palmdale Transit Area Specific Plan.

**TARGET:**
- Achieve the residential growth projections for the PTASP by 2045.

**OUTCOME:** Establish new and strengthen existing Village Centers at the heart of 20-minute neighborhoods to increase availability of daily services, provide convenient multimodal access to amenities and offer the potential to reduce Vehicle Miles Traveled.

**Rationale:**
- Walkability/proximity to services in Village Centers. A Complete Neighborhood is one where residents can reach community amenities (e.g., grocery stores and retail), public facilities (e.g., parks and community centers) and services (e.g., health care and childcare) within a 20-minute walk.

**TARGET:**
- Increase the number of existing homes that are located in a “20-minute neighborhood.”
Growth Projections

Growth projections refer to the amount of development likely to have occurred by the end of the General Plan horizon in 2045. Growth projections account for both the existing development that will remain as well as new development expected to occur between the date of General Plan adoption (2022) and 2045. These growth projections are based on an understanding of historic, current, and projected demographic and economic conditions in the city. Actual growth of the city through the year 2045 will be dependent on a variety of factors, including economic and demographic trends, developer interest, and potential hazards.

New development between now and 2045 will be consistent with regulations in the updated Zoning Ordinance, which shall follow adoption of Palmdale 2045 to ensure consistency between both regulatory documents. In addition, many of the future land uses in the city are already determined by the various Specific Plans that are in place.

How Does Our Plan Get Us There?
The Land Use and Design Element establishes the citywide pattern, scale, and character of residential, office, industrial, retail and services, recreation, public, and all other land uses throughout the City of Palmdale through the 2045 General Plan horizon. It anticipates and aims to preserve and grow a range of housing types for different income levels throughout the city, to ensure that all residents, present and future, have opportunities to live in Palmdale. The Land Use and Design Element simultaneously supports existing commercial and industrial land uses and provides opportunities for new industries in a manner that is compatible with city character and minimizes impacts on residents. Finally, the Land Use and Design Element provides guidance to create a pedestrian-friendly public realm – including sidewalks, streets, and other public spaces – that simultaneously beautify the community and help improve pedestrian, bicycle, and transit connectivity throughout the city. The strategies below articulate how this Plan will achieve desired land use outcomes.

Table 5.3

<table>
<thead>
<tr>
<th></th>
<th>Housing Units</th>
<th>Households</th>
<th>Population</th>
<th>Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2022</strong></td>
<td>47,358</td>
<td>46,150</td>
<td>167,398</td>
<td>46,008</td>
</tr>
<tr>
<td><strong>2045</strong></td>
<td>69,360</td>
<td>66,500</td>
<td>219,298</td>
<td>72,724</td>
</tr>
<tr>
<td><strong>Increase</strong></td>
<td>+22,003</td>
<td>+20,350</td>
<td>+51,900</td>
<td>+26,716</td>
</tr>
</tbody>
</table>

2045 Growth Projections
A Complete City with Complete Neighborhoods

The key concept underlying future land use and development in Palmdale is the achievement of a “Complete City” with a series of “Complete Neighborhoods” within. A Complete City contains a mix of places and connected uses that support and foster community, economic sustainability, and healthy living at all stages of life.

A Complete City is formed by combining these basic elements:

- Complete neighborhoods with diverse housing options at various price points
- Village Centers that provide everyday amenities and services and at frequent intervals
- Vibrant Downtown and entertainment district(s)
- Access to quality local jobs
- Access to affordable healthy food and health services
- Quality public/private education options
- Access and connections to recreation/parks
- Affordable and reliable public transportation choices and access to adequate parking
- Multimodal streets that allow for safe and comfortable walking, biking, and driving

The critical components of a complete neighborhood are housing options, convenient access to amenities, access to parks and recreation, and a mix of transportation options. Any new major developments should be designed as neighborhoods containing an appropriate mix of all these uses, and existing neighborhoods should be retrofitted with these uses and options as redevelopment occurs over time.

Example of a Complete Neighborhood

![Figure 5.2 Areas to Focus Investment and Infill Growth](image)

Legend:
- City Boundary
- Sphere of Influence
- Infill Growth Focus Areas
- Parks
- California Aqueduct
- Vacant Land
- Occupied Land
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Focused Land Use and Design Strategies

In addition to the central concept articulated on the following page, this Plan articulates several other key strategies to help balance future growth and development with the preservation and enhancement of the City’s best existing features:

Strategic, long-term land use vision
This Plan sets forth an overall intentional and proactive vision for where to grow and how, based on a long dialogue with the community. This vision includes purposefully expanding the supply of housing types affordable to different income levels and household compositions that promote a high quality of life for all residents by introducing several new middle-density residential land use designations.

Focusing development in areas with existing infrastructure
Due to the rapid pace of development and annexations in the past, certain areas of the city lack adequate infrastructure. Therefore, this Plan strives to attract infill development over leapfrog or sprawl development. Building inward will help strengthen existing gathering places and reduce the distance needed to travel for work or shopping. Forming assessment districts to finance public improvements may be appropriate for commercial/industrial developments in areas lacking utilities.

Creating many centers of activity (“Village Centers”)
This General Plan supports active, mixed-use neighborhood places of gathering and community identity (which are characterized as Village Centers in this Plan) and promotes walkable mixed-use corridors and centers that serve adjacent residential areas. New development must prioritize interaction within and between neighborhoods and provide additional links between community facilities and the neighborhoods they serve. Existing neighborhood access to the retail, services, schools, and employment that support the daily life of residents will be enhanced. To accomplish this goal of cohesive and functional neighborhoods, planning and design will extend beyond the boundaries of each individual subdivision. Changes to the zoning code will help enable mixed-use infill and redevelopment of underutilized properties.

Improving connectivity and focusing on access for all modes of transportation.
In many subdivisions, streets start and stop in a disjointed fashion, blocking through-access between neighborhoods. Houses are cut off from adjacent neighborhoods, adjacent subdivisions, schools, and parks by block walls. Public safety vehicles have limited visibility of residential streets. In response, this plan establishes a hierarchy of where/how particular modes should be prioritized. Not every street will serve every mode; but every mode should have a way of making connections. Many suburban neighborhoods may benefit from design features to reduce speeding and improve connections to a local park. Finally, the Plan identifies capital improvement projects that support the vision of walkable mixed-use environments, improving mobility within neighborhoods and access to open spaces and institutions.

Supporting amenities on both sides of State Route-14.
The lack of particular services, amenities, or businesses across the city is a concern that must be addressed. This General Plan supports creating Village Centers in neighborhoods across the city, as well as additional amenities (parks, medical districts, etc.). Residents, employees, and visitors will enjoy quality amenities and have convenient access to services, jobs, civic facilities, and transit throughout Palmdale.
Desired City Structure and Development Pattern

City Framework
Neighborhoods, districts, and corridors are the fundamental components of all cities. Mapping these components of a city help to provide an understanding of how people live, shop, work, play, and get around in their communities.

**Neighborhoods** are the basic building block of great cities. At their core, neighborhoods are the places where we live and are typically mostly residential. A neighborhood should mix a variety of residential types within a walkable network of green streets and parks, well-connected to parks, schools, and neighborhood centers to serve daily shopping needs.

**Districts** are areas of the city that are functionally specialized with supportive uses without being rigorously regulated to a single use, such as a shopping center. One of the best examples of a district are downtowns in which retail specialization has occurred in concert with supporting residential, office, and institutional uses. Districts play an important role in a city since they are typically the primary retail and entertainment areas and provide jobs and economic development opportunities.

**Corridors** are both the separators of neighborhoods and districts and the viaducts by which people move throughout town. Corridors take many shapes and forms and, as a primary component of the public realm, also serve different transportation and placemaking purposes. In some cases, such as Palmdale Boulevard, corridors have more permeable edges and are readily accessed from the adjacent neighborhoods and districts. In cases where corridors have very high connectivity to surrounding areas, corridors function as “to” places in which people gather and congregate, which is the vision for the East Avenue Q corridor, as a prototypical Main Street. In other cases, such as along the edges of the newer master planned communities or with conventional arterials, corridors have limited connectivity to the adjacent areas and serve primarily to move cars. In these limited-access cases, corridors serve primarily as “through” places and a great emphasis is put on efficient automobile operations.

These components of cities can be further defined to convey the type of place or use as is shown in Figure 5.3, Overall City Framework. The design of districts, neighborhoods, and corridors can actively shape the creation of a town with great accessibility and connectivity.

The City of Palmdale is organized around a long central corridor with a vision for future transit-oriented development anchoring the Downtown, a series of major commercial nodes distributed across town, Village Centers, and one dominant industrial employment district that is buffered from sensitive uses by light industrial employment areas.

The major physical elements of the City’s structure are as follows:
- A centrally located historic Downtown with entertainment uses, a civic center, and public parks.
- An emerging midrise mixed-use residential and employment district near the high-speed rail station.
- A healthy mix of large and small commercial and (eventually) mixed-use developments stretching along the Palmdale Boulevard corridor, with greater activity at key nodes.
- Moderate and mixed-density housing (such as low-rise walkups, townhouses, and courtyard apartments) focused near transit in the Downtown, and on both sides of Palmdale Boulevard.
- Two Education Districts meant to foster a mix of educational type-uses in a campus-like setting, building off the Palmdale Antelope Valley College campus and Palmdale High School.
- Three Health and Wellness Districts (one existing and two new) designed to attract hospital / medical office / medical research uses in tandem with supporting retail and housing or lodging.
- Gradually evolving regional Antelope Valley Mall, and an emerging regional commercial area around the intersection of Palmdale Boulevard and 47th Street East.
- Band of light industrial, film-related, or similar transitional employment uses around Plant 42 that buffer the military uses from residential neighborhoods.
- Over a dozen “Village Centers” and Multi-Use Nodes dispersed in various locations across the city with a mix of neighborhood retail or commercial uses along with residential uses.
Land Use Designations

Land use designations indicate the intended use of each parcel of land in the city. They are developed to provide both a vision of the organization of uses in the city and a flexible structure to allow for changes in economic conditions and community vision. The General Plan includes 27 land use designations, described below, mapped in Figure 5.5, and summarized in Table 5.4.

The uses allowed and standards for development intensity (dwelling units per acre for residential development and floor area ratio for nonresidential development) are specified for each designation. Permitted residential density could be less than the stated minimum on a case-by-case basis if certain findings are made as outlined in the zoning code.

Designations Overview

There are several broad categories of land use designations. Residential designations define the predominantly residential areas of the city and range from single family homes to multifamily housing. Nonresidential designations provide locations for retail, office, and industrial uses. Mixed use designations provide areas for a range of residential or commercial uses in a vertical or horizontal pattern. Public designations identify a range of public facilities such as schools, parks, and City and publicly owned uses. Finally, special designations include unique districts that serve a particular objective or that fall under the direction of an adopted Specific Plan.

Residential
There are nine residential designations that cover the range of housing types expected in Palmdale. Two designations specifically address the “missing middle” density ranges in the city (housing types that include townhomes, 2-3 story walkups, courtyard style multiple-family residential buildings, etc.).

Commercial and Industrial
Seven commercial, employment and industrial designs allow a range of commercial and industrial uses at a variety of scales. The Neighborhood Commercial and Regional Commercial designations support commercial uses at the neighborhood and regional scale, respectively. The Visitor Commercial designation supports retail, entertainment, and hotels to serve the needs of visitors and highway traffic. The Employment Flex designation covers job-producing uses including offices, medical, research and development and light industrial uses. The Mineral Resource Extraction designation is limited to specific areas where heavy mining activities occur.

Mixed-Use Designations
Three mixed-use designations allow for a mix of commercial and residential uses, integrated either in a building (vertical mixed-use) or on the same parcel (horizontal mixed-use). These mixed-use designations cover a range of densities.

Public Designations
Five designations cover parks, schools, public/government facilities, utility facilities, the aqueduct, and open space/natural uses.

Special Areas
- **Medical Flex Designation:** This designation allows uses that are supportive of health and wellness of the Palmdale community. Allowed uses include medical facilities and offices, supportive research and development uses, and ancillary retail/services.
- **Educational Flex Designation:** This designation is intended to support development of educational uses including higher education, vocational training, and satellite campuses. Supportive retail, office and limited housing is also allowed.
- **Specific Plan Designation:** This designation covers the existing adopted Specific Plans in the City. Each Specific Plan document provides more detail about allowed uses, densities, and other development regulations.
**Relationship with the Zoning Ordinance**

These land use designations are compatible with the Zoning Ordinance. While the guidance in General Plan land use designations is broad, the zoning districts include specific allowances, prohibitions of uses (including conditional uses), and dimensional requirements, such as building setbacks, parking standards, and building heights. Land use designations and zoning districts must be compatible but need not be the same. Where the documents differ, the General Plan takes precedence. Note that the maximum density of any land use designation may be in accordance with the density bonus provisions of the California Government Code.

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**Figure 5.4 Understanding Density and Floor Area Ratio**

**Understanding Density**

State law requires that General Plan land use designations provide a measurement of the maximum development intensity allowed within each designation. The three generally accepted metrics are dwelling units per acre, floor area ratio, and persons per square mile.

**Dwelling Units per Acre- DU/AC**

The term density is used for residential uses and refers to the population and development capacity of residential land. Density within the General Plan is described in terms of dwelling units per net acre of land (du/ac), exclusive of existing and proposed streets and rights-of-way.

**Floor Area Ratio- FAR**

Development intensity, which applies to nonresidential and mixed uses, refers to the extent of development on a parcel of land or lot. Floor area ratio is used in the General Plan as a measure of non-residential or mixed-use development intensity.

Floor area ratio (FAR) expresses the intensity of use on the lot. The FAR represents the ratio between the total gross floor area of all buildings on a lot and the total land area of that lot. For example, a 20,000 square foot building on a 40,000 square foot lot yields a FAR of 0.5. A 0.5 FAR describes a single-story building that covers half of the lot, a two-story building covering approximately one-quarter of the lot, or a four-story building covering one-eighth of the lot.

These FAR calculations and gross floor area do not consider the square footage of any parking facilities (including but not limited to parking structures, surface parking, or underground parking) or other structures not designed for human occupation. Additionally, “Lot,” as used here, may encompass multiple legal parcels which are planned as a cohesive development (e.g. mixed-use with townhomes and commercial development which may require subdivisions into separate legal parcels for financing and separate ownership).

**Population per Square Mile- Persons/sq mi**

A simplistic estimate of the number of total inhabitants in a square mile of a given land use designation, derived from known averages of building type occupancies. These provisions are intended to be descriptive and not inflexible limits.
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<table>
<thead>
<tr>
<th>Land Use Designation</th>
<th>Description and Uses Allowed</th>
<th>Density/Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RESIDENTIAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equestrian Residential (ER)</td>
<td>Rural single-family dwellings with parcels at least 2.5 acres or larger. Animal keeping allowed.</td>
<td>Up to 0.4 units per acre</td>
</tr>
<tr>
<td>Low Density Residential (LDR)</td>
<td>Detached single-family dwellings. Appropriate as a transition between rural and suburban areas.</td>
<td>Up to 1 unit per acre</td>
</tr>
<tr>
<td>Single Family Residential 1 (SFR1)</td>
<td>Detached single-family dwellings in a semi-rural environment. Animal keeping allowed.</td>
<td>Up to 2 units per acre</td>
</tr>
<tr>
<td>Single Family Residential 2 (SFR2)</td>
<td>Single-family dwellings located generally between the valley floor and steeper hillside areas.</td>
<td>Up to 4.4 units per acre</td>
</tr>
<tr>
<td>Single Family Residential 3 (SFR3)</td>
<td>Detached single-family dwellings on standard 7,000 square foot minimum lot size are typical.</td>
<td>Up to 6 units per acre</td>
</tr>
<tr>
<td>Residential Neighborhood 1 (RN1)</td>
<td>Intended for a low-density mix of attached and detached residential dwelling units.</td>
<td>Up to 10 units per acre</td>
</tr>
<tr>
<td>Residential Neighborhood 2 (RN2)</td>
<td>Intended for grouped housing such as townhouses, condominiums, apartments with on-site recreation and open space.</td>
<td>10 to 20 units per acre</td>
</tr>
<tr>
<td>Residential Neighborhood 3 (RN3)</td>
<td>Intended for “missing middle” or middle-density housing such as walkups, garden apartments, and rowhouses.</td>
<td>20 to 30 units per acre</td>
</tr>
<tr>
<td>Residential Neighborhood 4 (RN4)</td>
<td>Intended as a high-intensity, walkable neighborhood with a variety of types of housing, predominantly multifamily.</td>
<td>30 to 50 units per acre</td>
</tr>
<tr>
<td><strong>MIXED-USE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed-Use 1 (MU1)</td>
<td>Intended to create a low-intensity concentration of commercial businesses and civic amenities mixed with single and multifamily housing.</td>
<td>Up to 20 du/acre Max Commercial FAR: 0.35</td>
</tr>
<tr>
<td>Mixed-Use 2 (MU2)</td>
<td>Intended to create a low/medium-intensity concentration of commercial businesses and civic amenities mixed with multifamily housing.</td>
<td>20 to 30 du/acre Max Commercial FAR: 2.0</td>
</tr>
<tr>
<td>Mixed-Use 3 (MU3)</td>
<td>Intended to create a medium-intensity concentration of businesses and amenities mixed with multifamily housing along major corridors.</td>
<td>30 to 50 du/acre Max Commercial FAR: 3.0</td>
</tr>
<tr>
<td><strong>NON-RESIDENTIAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional Commercial (RC)</td>
<td>Accommodates retail and service uses attracting consumers from a regional market area, and film uses within the LA County secondary zone.</td>
<td>Up to 1.0 FAR (up to 30 du/acre at A.V. Mall)*</td>
</tr>
<tr>
<td>Neighborhood Commercial (NC)</td>
<td>Convenience-type retail and services designed to serve daily needs of the immediate neighborhood.</td>
<td>Up to 0.5 FAR</td>
</tr>
<tr>
<td>Visitor Commercial (VC)</td>
<td>Intended to accommodate a diverse mix of businesses that primarily serve visitors or that provide niche/specialty goods and services.</td>
<td>Up to 1.5 (2.0 for lodging)</td>
</tr>
<tr>
<td>Aerospace Industrial (AI)</td>
<td>Intended to support the current and future operations of USAF Plant 42 and the proposed Palmdale Regional Airport.</td>
<td>Up to 0.5 FAR</td>
</tr>
<tr>
<td>Industrial (IND)</td>
<td>Permits a variety of industrial uses, including manufacturing and assembly of products and goods, warehousing, distribution, and similar uses.</td>
<td>Up to 0.5 FAR</td>
</tr>
<tr>
<td>Employment Flex (EMPFX)</td>
<td>Transition zone intended to permit mixed development of lighter industrial uses and more intensive service, retail, and commercial uses.</td>
<td>Up to 1.0 FAR</td>
</tr>
<tr>
<td>Health and Wellness (HW)</td>
<td>Intended to accommodate a medical-oriented campus, supported by appropriate commercial and lodging uses.</td>
<td>30 to 50 du/acre Up to 2.0 FAR</td>
</tr>
<tr>
<td>Educational Flex (EDFX)</td>
<td>Intended to primarily attract a mix of educational type uses like trade schools, public and private higher education facilities, and satellite campuses.</td>
<td>10 to 30 du/acre Maximum FAR: 2.0</td>
</tr>
<tr>
<td>Mineral Resource Extraction (MRE)</td>
<td>Permits extraction and processing of mineral resources, including sand, gravel, and granite.</td>
<td>Up to 0.25 FAR</td>
</tr>
<tr>
<td><strong>SPECIAL/PUBLIC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Space (OS)</td>
<td>Reserved land for both natural and active open space uses.</td>
<td>Up to 0.01</td>
</tr>
<tr>
<td>Public Facilities (PF)</td>
<td>Land utilized for various types of public facilities, including schools, parks, libraries, hospitals, public safety and governmental facilities, sewer and water treatment plants, aqueduct, and landfills.</td>
<td>Up to 1.0 FAR</td>
</tr>
<tr>
<td>Civic (C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School (S)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Park (P)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities (U)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Plans (SP)</td>
<td>For areas with adopted specific plans.</td>
<td>Varies</td>
</tr>
</tbody>
</table>

Public and quasi-public uses may also be located within other land use designations as established by the underlying zoning. See pages 107–137 for detailed design and character guidance for all land use designations. * Up to 30 du/ac also applies to the property south of Palmdale Boulevard between SR-14 and Division Street with a comprehensive development plan.
Figure 5.5
General Plan Land Use Designations

- Equestrian Residential
- Low Density Residential
- Single Family Residential 1
- Single Family Residential 2
- Single Family Residential 3
- Residential Neighborhood 1
- Residential Neighborhood 2
- Residential Neighborhood 3
- Residential Neighborhood 4
- Mixed Use 1
- Mixed Use 2
- Mixed Use 3
- Employment Flex
- Neighborhood Commercial
- Visitor Commercial
- Regional Commercial
- Health and Wellness
- Educational Flex
- Industrial
- Aerospace Industrial
- Mineral Resource Extraction
- Open Space
- Public Facility-Park
- Public Facility-School
- Public Facility-Civic
- Utilities
- Specific Plan
- City Boundary
- Sphere of Influence
- Major Highway/Arterial
- Railroad
- Water Body/Aqueduct

Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.
Adopted by the City Council
9/21/2022
## Goals and Policies

The following section includes goals and policies for the Land Use and Design Element. Goals and policies are followed by implementation actions. Land use-related policies are also woven throughout the General Plan, including in the Circulation and Mobility, Public Facilities, Services, and Infrastructure, and Equitable and Healthy Communities chapters, among others.

### CITYWIDE FRAMEWORK

**Goal LUD-1**

Complete Neighborhoods where residents can reach daily amenities, local retail, services, parks, and public facilities within a short 20-minute walk.

<table>
<thead>
<tr>
<th>LUD-1.1 Balanced Land Uses.</th>
<th>Maintain a balanced land use pattern to support a broad range of housing choices, retail businesses, employment opportunities, educational and cultural institutions, entertainment spaces, and other supportive uses within long-established Palmdale neighborhoods and new growth areas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LUD-1.2 New Complete Neighborhoods.</td>
<td>Facilitate the construction of new mixed-use neighborhoods that are well connected to services, transit, amenities, public buildings, and parks and recreational facilities.</td>
</tr>
<tr>
<td>LUD-1.3 Access to Amenities.</td>
<td>Strive to create development patterns such that the majority of residents are within twenty minutes or less walking distance of a variety of neighborhood-serving uses in Village Centers, such as parks, grocery stores, restaurants, places of worship, cafes, dry cleaners, laundromats, banks, hair care, pharmacies, civic uses, and similar uses.</td>
</tr>
<tr>
<td>LUD-1.4 Specific Plan Facilities.</td>
<td>Ensure Specific Plans are implemented with timely construction of supportive commercial uses and parks to support new residential uses.</td>
</tr>
<tr>
<td>LUD-1.5 Multimodal Connectivity.</td>
<td>Promote walking to services, biking and transit use by requiring a high level of connectivity for pedestrians, bicycles, and vehicles in major developments (except where existing development or natural features prohibit connectivity). Seek to improve walk, bike, and transit travel within existing complete neighborhoods.</td>
</tr>
<tr>
<td>LUD-1.6 Walkable Blocks.</td>
<td>Create communities that address the needs of multiple age groups and physical abilities through short, walkable block lengths. Use grid-like or a modified grid street networks in newly developed areas (except where topography necessitates another street network layout).</td>
</tr>
</tbody>
</table>
Goal LUD-2
A City that supports and encourages new growth in the developed urban core.

LUD-2.1 Focused Growth. Direct future growth to areas closer to the center of town, which can accommodate development based upon topography, environmental factors, and availability of existing infrastructure.

LUD-2.2 Preferred Development Patterns. In considering requests to amend the Land Use Map, encourage proposals for development in those areas which are functionally connected to developed portions of the city, have available infrastructure, and do not have significant topographic or jurisdictional barriers, or other similar constraints.

LUD-2.3 Discouraged Development Patterns. In considering requests to amend the Land Use Map, discourage proposals for development in those areas which are functionally separated from developed portions of the city by lack of infrastructure, expanses of vacant land, significant topographic or jurisdictional barriers, or other similar constraints.

Goal LUD-3
A City with high-quality services and facilities in all neighborhoods.

LUD-3.1 Planned Future Uses. Develop multiple educational districts, multiple medical districts, a new passenger airport, a new high-speed rail facility, and abundant new parks and trails.

LUD-3.2 Accessible Mix of Commercial Uses. Strive to provide goods and services within a short walking distance (twenty minutes or less) of all residents through mixed-use Village Centers and Neighborhood/Regional Commercial uses. Establish neighborhood services by requiring new Village Centers when developing Specific Plan areas.

LUD-3.3 Services and Amenities for Families. Promote opportunities for new childcare and pre-Kindergarten facilities in Village Centers and encourage these supporting uses through the Educational Flex designation.

LUD-3.4 Expansion of Public Facilities. Maintain and expand public facilities and services to better support the community, including schools, libraries, utilities, and recreational spaces.

LUD-3.5 Infrastructure Capacity and Service. Ensure that there will be adequate water and wastewater system capacity to meet projected demand by continuing to oversee the development of adequate and dependable public services and facilities to support both existing and future development.

LUD-3.6 Infrastructure Funding and Programs. Continue to implement comprehensive water and wastewater management programs and ensure that future developments pay their fair share for any infrastructure improvements demand necessary.
Figure 5.6  Commercial and Mixed-Use Areas within Village Centers
DESIGN AND CHARACTER

Goal LUD-4
High-quality architecture and site design in the renovation and construction of all buildings.

LUD-4.1 Quality Construction. Use simple, urban building forms made with permanent materials with high-quality detailing that stands the test of time.

LUD-4.2 Massing Techniques. Use building organization and massing to derive scale and articulation rather than surface ornamentation.

LUD-4.3 Long-Lasting Building Materials. Convey façade articulation through the strength, depth, and permanence of building materials. Thinner cladding materials, such as stucco, masonry veneers, and wood or simulated wood, may be used when finished to appear as durable and authentic as the materials they simulate.

LUD-4.4 Façade Increments. Articulate residential building façades with smaller-scale increments than office and industrial building facades.

LUD-4.5 Attractive Building Entrances. Use visual and physical design cues within the design of a building and within building entries to emphasize the building entrance and connections to public spaces and public pathways/networks.

LUD-4.6 Urban Design in the Core. Require four-sided architecture - all facades of a building are designed with quality, care, and visual interest - in the urban core (primarily RN3, RN4 and MU3). Encourage four-sided architecture in other areas.

LUD-4.7 Iconic Architecture. Allow iconic and memorable building designs, particularly on larger non-residential properties.

LUD-4.8 Environmental Design. Design sites and buildings adjacent to natural areas with transparent design elements. Employ bird-safe design near habitat areas or migratory routes.

LUD-4.9 Public Streetscapes. Create pedestrian-oriented streetscapes by establishing unified street tree planting, sidewalk dimensions and maintenance, pedestrian amenities, and high-quality building frontages in all new development.
Goal LUD-5
All new major development in the city is designed to support high-quality neighborhoods.

LUD-5.1 New Complete Neighborhoods. Require new development to provide multiple amenities, a beautiful public realm, and be consistent with the City’s vision for complete neighborhoods.

LUD-5.2 Walkability of New Neighborhoods. Require all new neighborhoods to be pedestrian friendly by including features, such as short blocks, wide sidewalks, shaded streets, buildings that define and are oriented to streets or public spaces, traffic-calming features, convenient pedestrian street crossings, and safe streets designed for pedestrians, cyclists, and vehicles.

LUD-5.3 Public Services in New Neighborhoods. Require new developments to be designed for and provided with adequate public services and infrastructure. Require that these public facilities and services be provided concurrently with development to ensure a high quality of life for residents.

LUD-5.4 Access to Retail/Services. Strive for a high level of connectivity of residents to neighborhood services through site design, open space linkages, and bicycle facilities. Plan for 90 percent of residents (except for in rural residential designations) to be within a twenty minute walking distance of retail and neighborhood services.

LUD-5.5 Trail Networks. Provide new trails systems that connect to the regional system.

LUD-5.6 Character of New Housing. Provide a diversity of architectural styles; avoid entire blocks or neighborhoods with identical housing styles.

LUD-5.7 Natural Topography. To the greatest extent feasible, preserve natural topographic features during the planning and development process. Utilize physical advantages of the site to minimize visual impacts.

LUD-5.8 Transfer of Development. Require clustered single family and multifamily development in less constrained areas, transferring density from areas constrained by seismic, drainage, rights-of-way, or other conditions based on technical studies.
Goal LUD-6
Pedestrian-oriented, human-scale and well-landscaped streets and civic spaces.

LUD-6.1 Diversity of Housing Styles. Strongly encourage new subdivisions and master planned projects to include a diversity of housing types and architecture styles, where possible.

LUD-6.2 Primary Entries. Require new homes to provide a primary entryway and windows facing the street.

LUD-6.3 Integrated Pedestrian Circulation. For construction of new small-scale housing and minor subdivision projects, design site plans that provide amenities and integrated networks for walking and bicycling.

LUD-6.4 Recreational Spaces. Improve existing parks and public spaces throughout the city to provide beautiful, comfortable, and inviting gathering spaces.

LUD-6.5 Amenities and Gathering Spaces. Encourage new development to incorporate public plazas, seating, drinking fountains, and gathering places, especially in prominent locations and areas of pedestrian activity.

LUD-6.6 Ongoing Maintenance. Require project developers to establish mechanisms, such as a Community Facilities District, to adequately maintain new parks, recreational facilities, and infrastructure.

Goal LUD-7
Neighborhoods and streets that are safe and welcoming.

LUD-7.1 Safety Programs. Promote Business and Neighborhood Watch programs, in addition to collaborations between residents and law enforcement, to help maintain a clean and safe environment.

LUD-7.2 Crime Prevention. Use Crime Prevention through Environmental Design strategies (CPTED) in new and existing development to improve public safety, including the following:
- Active public space
- Building design to promote “eyes on the street”
- Clear delineation between private and public space
- Natural access control between public and private space
- Maintenance of public places
- Removal or repair of vandalism or broken property

LUD-7.3 Partnerships. Encourage regional partnerships that support the coordination of public safety awareness and crime prevention.

LUD-7.4 Lighting Improvements. Improve lighting and nighttime security across all City neighborhoods to prevent crime and increase safety.

LUD-7.5 Graffiti Removal. Encourage the creation of a graffiti prevention team to remove graffiti from public property (including parks, street signs, sidewalks, etc.) or property adjacent to public rights-of-way.

Goal LUD-8
A place that encourages and supports its local arts and community culture.

LUD-8.1 Arts and Cultural Programming. Expand arts and cultural programming in public spaces, building off the existing Public Art Master Plan.

LUD-8.2 Arts and Gathering Spaces. Encourage new development, especially along Palmdale Boulevard and Avenue Q to incorporate public art in public plazas, seating, and gathering spaces along or near these corridors.

LUD-8.3 Art Priorities. Prioritize art funds from CIP projects to major public gathering spaces, such as parks, public plazas, and along major corridors such as East Avenue Q and Palmdale Boulevard.

LUD-8.4 Art Spaces. Actively encourage affordable arts spaces through use classifications in the zoning code and streamlined permitting in the Light Industrial and Employment Flex zones.
Key Districts and Centers

The City of Palmdale is comprised of numerous key sub-areas/districts, including:
- Village Centers + Multi-Use Nodes
- Downtown/PTASP District
- Palmdale Boulevard Corridor
- Medical Centers/Districts
- Education Districts
- Air Force Plant 42
- Antelope Valley Mall

Relevant design guidelines, goals, and policies for each area are described below.

Village Centers and Multi-Use Nodes
An activity center is a place with easy, convenient access to everyday amenities (e.g., grocery stores, restaurants, coffee shops, hair salons, banks, healthcare, pharmacy), that is focused on community meeting spaces and parks/plazas and is well served by a mix of transportation options (walk, bike, bus, bike share).

Palmdale features two main types of activity centers: Village Centers, which are intended to offer a mix of residential uses and daily goods and services within residential neighborhoods in a mixed-use setting, and Multi-Use Nodes. As illustrated in Figure 5.7, Village Centers allow for the creation of “complete neighborhoods” where residents can access the commercial and public uses through multiple modes of travel and are connected to the larger pedestrian and bicycle network, publicly accessible plazas or courtyards. These smaller centers consist of a variety of land use designations including Mixed-Use 1 (MU1), Mixed-Use 2 (MU2), and Neighborhood Commercial (NC). Village Centers are identified at locations:
- Columbia Way (Avenue M) and 60th Street West
- R. Lee Emery (Avenue N) and 50th Street West
- Rancho Vista Boulevard and Town Center Drive
- Rancho Vista Boulevard and 30th Street West
- Ranch Center Drive and Elizabeth Lake Road
- Avenue S and Tierra Subida Ave
- Avenue P and 10th Street East
- Avenue Q and 30th Street East
- Avenue S and 25th Street East
- Avenue S and 70th Street East
- Avenue S and Ranch Center Drive

Multi-Use Nodes are made up primarily of commercial uses at higher intensities than the Village Centers and offer a mix of uses that attract patrons from across the City and the region, and serve varying needs based on location. Multi-Use Nodes are implemented through a variety of land use designations including Mixed-Use 2 (MU2), Mixed-Use 3 (MU3), Regional Commercial (RC), Neighborhood Commercial (NC), and Visitor Commercial (VC) and are found at the following five locations:
- Avenue M and Challenger Way
- Sierra Highway and Avenue S
- Palmdale Boulevard and 47th Street East
- Avenue S and 47th Street East
- Fort Tejon Road and Pearblossom Highway
Goal LUD-9
Thriving, active Village Centers and Multi-Use Centers at regular intervals outside of the city core.

LUD-9.1 Activity Centers. Support a network of vibrant Village Centers that are mixed-use activity centers located throughout the City’s residential areas to create 20-minute neighborhoods, implemented through new mixed-use land use designations, which provide a mix of residential uses and daily goods/services.

LUD-9.2 Distinct Character. Encourage design strategies that enhance a unique identity for each of the Village Centers.

LUD-9.3 Gathering Places. Require the introduction of new public gathering places in Village Centers such as publicly accessible plazas or courtyards.

LUD-9.4 Contextual Transitions. Ensure that developments create appropriate transitions to existing residential neighborhoods by placing two-to-three story residential over ground floor retail/services toward arterial streets and lower scaled housing abutting existing residences.

LUD-9.5 Mobility Connections. Seek to improve walk, bike, and transit access to Village Centers by connecting to the larger/regional pedestrian and bicycle networks.

Examples of a “Village Center;” low-scale gathering places with ground-floor businesses, frequent entrances, and pedestrian amenities
Figure 5.7 Illustrative Example of Village Center Development

A. Two-to-three story residential over ground floor retail or services.

B. Alley-loaded townhouses (two-to-three stories) abutting existing residential neighborhoods.

C. New public plazas and gathering spaces.

D. New public gathering places.
**Goal LUD-10**  
Growth of a transit-oriented community near high-speed rail that combines high-quality mixed-use development, a Downtown ‘feel’, office employment, affordable housing, and improved mobility.

**LUD-10.1 Mix of Destinations.** Develop mixed-use retail, residential and office buildings in the vicinity of the future multimodal high speed rail station to establish the area as a regional and local destination.

**LUD-10.2 Places for the Community.** Develop community gathering spaces including plazas and neighborhood parks near the future multimodal transit station, in order to evolve the relocated Palmdale Transportation Center into an attractive and unique transit gateway.

**LUD-10.3 Transit-Supportive Densities.** Support minimum development densities/intensities in the PTASP area to promote sufficient development that allows active placemaking.

**LUD-10.4 Station Access.** Enhance transit and pedestrian linkages to surrounding areas to create a multi-modal transit and pedestrian-oriented center.

**LUD-10.5 Avenue Q Revitalization.** Reinforce Avenue Q with development patterns that create a “Main Street” environment. Design the buildings facing Avenue Q (and to a lesser extent 6th Street East and 3rd Street East) to reflect the vision for a new “Main Street” – active uses, street-oriented entrances, tall floor-to-ceiling heights, reduced setbacks (unless adjacent to a plaza or park).

**LUD-10.6 Pedestrian-Oriented Design.** Implement urban design guidelines and features that encourage pedestrian activity and reduce automobile use.

**LUD-10.7 Local Employers within PTASP.** Continue to provide assistance to support small locally owned businesses and develop a mechanism to support building upkeep and maintenance, signage, and façade improvements for businesses in the PTASP area.
Palmdale Boulevard Corridor
Most of the commercial development in Palmdale occurred in the 90s and early 2000s along the City’s namesake corridor. Both large and smaller-scale projects have been constructed to serve regional and neighborhood commercial needs along Palmdale Boulevard. These rapidly built commercial developments with abundant surface parking offer opportunities for low-scale residential infill and retail renovations over time.

Goal LUD-11
An activated and attractive Palmdale Boulevard.

**LUD-11.1 Street Ownership Reclamation.** Consider pursuing a long-term take-over of the public right-of-way (ROW) from Caltrans.

**LUD-11.2 Critical Place-making Intersections.** Strengthen and enliven existing portions of the corridor as pedestrian-oriented community anchors with a mix of civic, commercial, and residential uses, particularly at the intersections with 10th, 20th, and 25th Streets.

**LUD-11.3 New Nodes.** Create new places for recreation and gathering along Palmdale Boulevard by supporting new nodes of neighborhood-serving mixed-use activity at 40th and 47th Streets East.

**LUD-11.4 Corridor Mixed-Use.** Revitalize and activate existing commercial shopping centers along the corridor by allowing residential uses in the Mixed-Use 1 and Mixed-Use 2 designations, and by adopting development standards that promote reduced setbacks, stronger pedestrian orientation, high transparency, and architectural detail, and “park-once” behavior.

**LUD-11.5 Urban Canopy.** Require new development or major additions to existing development to provide street trees at regular intervals (average spacing of no less than 40 feet, not counting driveways) along the property frontage facing Palmdale Boulevard and cross-streets (if on a corner).

**LUD-11.6 No Truck Route.** Develop an alternative route for trucks to use in place of Palmdale Boulevard between East 50th Street and SR-14, in order to eventually remove the truck route designation currently in place, which would eliminate heavy thru truck traffic along the Boulevard.
LUD-11.7 Palmdale Boulevard Design Guidelines. Design for active, park-once mixed-use and shopping environments by encouraging adherence to the following guidance:

- Locate attached middle-density housing near existing residential uses and seek to integrate it into this context.
- Buildings should be placed at the edge of the primary sidewalk in order to provide interest and immediate access by pedestrians.
- Parking should be located behind the buildings.
- Where appropriate, building setbacks should be flexible to accommodate the need for pedestrian-oriented commercial uses.
- Facades should be activated with frequent building entrances for residential and commercial spaces.
- Mid-block paseos should be added where feasible to provide pedestrian connections from sidewalks along the edge or exterior of a site to parking within the interior of the block.

Figure 5.8 Example Mixed-Use Redevelopment of Commercial Uses Fronting Palmdale Boulevard
Health and Wellness District
Palmdale currently features a key regional medical facility that serves residents and others in the Antelope Valley, and market assessments identified health care and related services/research as a key economic opportunity for the city moving forward. Therefore, this General Plan explicitly demarcates certain areas preferentially for hospital and health-oriented uses. Found in three distinct locations across the city as shown in Figure 5.9, the Medical Flex designation supports a mix of public and private medical, health, and wellness uses in a mix with smaller amounts of lodging, offices, and retail.

Goal LUD-12
A total of three Health and Wellness-oriented Districts.

LUD-12.1 Flexible Medical-Oriented Vision. Allow and encourage a mix of public and private medical, health, and wellness uses including emergency medical facilities, medical supportive offices, healthcare clinics and pharmacies, and ancillary retail and services.

LUD-12.2 Regional Hospital. Support the expansion of the existing Palmdale Regional Medical Center (Palmdale Boulevard and 10th Street West) through City investments/improvements and regulatory changes.

LUD-12.3 New Districts. Facilitate the creation of two new health and wellness districts:
• Along Palmdale Boulevard and 40th/45th Streets East
• Adjacent to Kaiser Permanente (East Avenue S and 45th Street East)

LUD-12.4 Health and Wellness District Guidelines. Enable creation of comprehensive medical districts by encouraging adherence to the following guidance:
• Buildings should be located near or at the sidewalk to shape the district’s edges and streetscapes.
• Developments must include open space areas for congregating and socializing, ideally framed by buildings with storefronts or lobbies.
• Joining several blocks together as a campus environment with pedestrian-only spaces and pathways connecting buildings to one another and to surrounding streets is encouraged.
• Buildings should be arranged to form a street wall when surrounding internal parking, with liner uses/buildings that activate the edges of the district. The pedestrian experience should still be supported in the interior of larger blocks.
• Building entrances should always be accessed directly from the sidewalk, via shopfronts or forecourts/lobbies.
Figure 5.9 Areas designated as Health and Wellness District

Figure 5.10 Illustrative Example of Health and Wellness District Development

Palmdale Boulevard & 10th Street West

A Mix of uses including medical, office, R&D/laboratory, retail and housing.
B Public gathering spaces and plazas.
C New medical research facility to support Palmdale Regional Medical Center.
D Outdoor gathering space.
**Education Districts**
The city has an opportunity to strengthen its educational sector by designating key locations as preferred destinations for higher-education facilities along with uses that complement this primary objective. Palmdale desires to build upon existing major educational facilities as well as attract a significant new private facility. Additional two- and four-year secondary institutions would promote youth and offer greater job opportunities locally. In addition, an area for potential jobs growth in the city is around schools, academies, and universities. To that end, the Education District designation supports a mix of education uses such as trade schools, public and private higher education facilities, and satellite campuses, along with supportive retail, office, and housing in a campus-like setting. There are two education districts identified, one near the The Antelope Valley College Palmdale Center and Palmdale High School, the other near Palmdale Boulevard and 47th Street.

### Goal LUD-13
Emergence of new education-focused districts along Palmdale Boulevard.

**LUD-13.1 Educational Focus.** Attract a mix of educational uses like trade schools, public and private higher education facilities, and satellite campuses in the Educational Flex land use designation.

**LUD-13.2 Appropriate Secondary Uses.** Allow and encourage supportive retail, offices, and housing. This may include student or teacher housing, group housing, administrative or research offices, restaurants/cafes, boutiques, banks, personal services, and similar uses.

**LUD-13.3 New Institution.** Seek to attract a new major higher education institution (such as a nursing school or technical/vocational academy).

**LUD-13.4 Locations.** Encourage the formation of two education districts:
- Near Antelope Valley College Palmdale Center and Palmdale High School (Palmdale Boulevard and 25th Street East); and,
- In the vacant area on the northwest corner of Palmdale Boulevard and 47th Street East.

**LUD-13.5 District Design.** Develop an attractive campus-like setting, prioritizing pedestrian and bicycle mobility and providing public open spaces at regular intervals.

**LUD-13.6 Educational District Design Guidelines.** Enable the creation of uniquely walkable and active educational centers by encouraging adherence to the following guidance:
- Prioritize how educational and supportive uses integrate with the surrounding neighborhood.
- Education Districts should be anchored with major academic institutions to create vibrant, mixed-use destinations.
- The district should be configured in an urban format of walkable blocks, attractive streetscapes, and buildings close the sidewalk edge, though there may be a row of surface parking and landscaping between the buildings and the sidewalk.
- District streets should be connected to neighborhood streets to provide convenient access for nearby residents as well as motorists dropping off students.
- Parks and athletic facilities should be accessible and usable by the public.
Figure 5.11  Illustrative Example of Educational Flex District Development

Palmdale Boulevard & 25th Street East

A: Mix of educational uses in a campus environment.
B: Outdoor collaboration space and flexible plaza space.
C: Public plazas or gathering spaces.
D: Podium residential with educational or office uses on the ground floor.

Figure 5.12  Areas designated as Educational Flex

Legend:
- Ed. Flex
- Palmdale Boulevard & 25th Street East

Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.
Produced by Raimi + Associates May 2022

Updated 5/19/22

Major Highway/Arterial
Water Body/Aqueduct
Railroad
Sphere of Influence
City Boundary

A

B

C

D
USAF Plant 42 (Aerospace)
Palmdale is home to U.S. Air Force Plant 42, one of the premier aeronautical development and production installation in the nation. Plant 42 is used primarily as a production flight test installation by the United States Air Force (USAF). Edwards Air Force Base (EAFB), located approximately 30 miles north of Plant 42, is a supporting unit to the Supported Command, Air Force Life Cycle Management Center, Wright-Patterson AFB, Ohio, to provide operating support to the Common Area portion of Air Force Plant 42. The presence of these military installations offers benefits for the City by providing high-tech jobs and community investment opportunities. However, it is important to monitor for potential land use conflicts that could have negative impacts on military readiness activities, community safety, and economic development. See Military Compatibility Element for additional detail and policies.

Goal LUD-14
Facilitate employment growth through expanded operations onsite and by preserving the buffer between Air Force Plant 42 and the rest of the city.

LUD-14.1 Safeguarding Plant Operations. Support continued growth of Plant 42 operations in the Aerospace Industrial land use district. Maintain sufficient land to accommodate a wide variety of industrial uses to meet military and community needs.

LUD-14.2 Adjacent Use Compatibility. Continue to buffer this area from adjacent, non-compatible residential and commercial uses.

LUD-14.3 Limited Non-Industrial Uses. Prevent non-industrial uses from locating in the Aerospace Industrial area (aside from uses that directly support Plant 42 or airport operations).

LUD-14.4 Accident Prevention. Avoid residential uses greater than one dwelling unit per acre in the Accident Prevention Zones (APZs).

LUD-14.5 Circulation and Access. Maintain vehicular infrastructure and improve circulation to accommodate the unique demands of aerospace workplaces.
Figure 5.13  Areas designated as Aerospace Industrial
Antelope Valley Mall
The Antelope Valley Mall was opened in 1990, built in an era of more abundant and less expensive land, and less traffic congestion. At over 1.5 million square feet in size, it was and still remains the primary regional mall in the valley. However, the concept of retrofitting single-use (retail) malls has been gaining traction in recent years. Larger malls at certain points in their lifespans will likely diversify uses to include more full-service dining, grocery and other daily retail, entertainment uses, or residential apartments. This evolution into a place of more mixed-use character will also support enhanced pedestrian friendliness, more compact buildings, and attractive public spaces serving residents, workers, and visitors.

Goal LUD-15
Allow for Antelope Valley Mall to gradually evolve from a single-use center into a mixed-use community gathering place.

LUD-15.1 Destination Land Uses. Allow a diverse range of retail, dining, and entertainment establishments of any size that help create a destination for Antelope Valley residents and visitors.

LUD-15.2 Residential Land Uses. Allow a broad range of low to medium-density residential at the Antelope Valley Mall as a part of a comprehensive development plan prepared for the mall property. Proposed residential uses on this site are subject to the following standards:
- Any proposal to introduce housing in the Mall site must be accompanied by a comprehensive development plan that provides details on phasing, connectivity, mobility, wayfinding, and other key programmatic and urban design components.
- Avoid locating new residential uses within 500 feet of SR-14 right-of-way.

LUD-15.3 Coordinated Evolution. Work with the Mall operator and property owners to effectuate long-term redevelopment of existing retail into new, higher-density developments such as multistory retail or mixed-use retail with office or residential above. Actively solicit new employment uses, with a focus on office, medical, film, and related uses.

LUD-15.4 Regional Mall Design Guidelines. Guide the redevelopment of big-box retail into more urban, mixed-use formats by encouraging adherence to the following guidance:
- Arrange mixed-use buildings, liner-type buildings, and other active frontages to form an occasional street wall when surrounding an internal parking lot or structure.
- Ensure active frontages and pedestrian-oriented design for any redevelopment of commercial uses at the mall, to eliminate unsightly blank walls and facades.
- Setbacks to internal streets should be less than setbacks to external/arterial streets.
- Major internal drives should include sidewalks on both sides, detailed and landscaped as small streets.
- Building entrances should be accessed directly from the sidewalk, and sidewalks in front of major shops should be as wide as possible. Awnings should be utilized to provide shade for pedestrians.
Employment Areas

The City has made significant strides in increasing and diversifying its local employment base since its early days as an exclusively residential community. Growth in employment is strongly desired to balance out the jobs/housing ratio, and to offer economic advancement to residents of Palmdale. These areas are identified below in Figure 5.14. The City currently hosts a broad range of job-producing activities, and the goals and policies in this section seek to continue to support these activities while minimizing incompatibilities and allowing for new, innovative job types and professions to flourish.

Goal LUD-16
Increased job opportunities in Palmdale through expanded flex, light industrial, production/distribution/repair (PDR), and creative/flex land uses.

LUD-16.1 Healthy Balance of Jobs. Strive for a ratio of at least 1 job per employed resident (which effectively means growing jobs faster than housing during the Plan timeframe).

LUD-16.2 Employment Diversity. Support a diverse mix of light industrial, information, film, makerspace, boutique food/wine/beer processing, local food, and technology uses to provide jobs and tax revenues for the community by allowing emerging economic uses and industries within the Mixed-Use and Employment designations.

LUD-16.3 Flexible Designation. Diversify the City’s economic base by expanding the number of facilities on land designated as Employment Flex to accommodate film, technology, food/light manufacturing, and service tenants.

LUD-16.4 Makerspaces. Encourage collaborative workspaces with tools for the design, prototyping, and creation of manufactured products for sale.

LUD-16.5 Home Businesses. Support home businesses that meet City planning and permitting requirements and create jobs and opportunities for entrepreneurship.

LUD-16.6 Increased Employment. Recruit employment uses between Avenue Q and Avenue P/Rancho Vista Boulevard.

LUD-16.7 Industrial Incentives. Promote establishment of incentives for new light industrial development in Palmdale including the use of local, state, and federal programs.

LUD-16.8 Emerging Technology. Support new technologies that may increase business opportunities in the city, such as autonomous vehicles.
Goal LUD-17
Facilitation of industrial areas that support and buffer Plant 42 while maintaining compatibility with adjacent non-industrial uses.

LUD-17.1 Retention of Businesses. Minimize land use compatibility conflicts that discourage attraction and retention of production, distribution, and service and repair businesses in areas zoned for industrial use.

LUD-17.2 Infrastructure Master Planning. Encourage master planning and infrastructure funding districts within industrial areas to ensure adequate and comprehensive provision of infrastructure and efficient, attractive designs, through cohesive planning of larger development projects.

LUD-17.3 Industrial Development Standards. Adopt development standards for industrial uses near residential uses, to ensure compatibility and aesthetically pleasing views from adjacent rights of way, including but not limited to standards for screening of outdoor storage, locations of loading and refuse disposal areas, height, bulk, impervious surface area, architectural enhancement, landscaping, and other measures as deemed appropriate.

Figure 5.14 Areas designated as Industrial
**Goal LUD-18**
Attraction and stimulation of new employment uses through flexible land use regulations and supportive policies/actions.

LUD-18.1 Flexible Standards. Establish flexible development standards in the Employment Flex designation that allow industrial uses to make building improvements and change with market conditions. Incentivize growth of office and commercial spaces suitable and affordable for local businesses through development requirements.

LUD-18.2 Middle-Income Employment. Expand a core area of light industrial and service uses that provide middle-income jobs for Palmdale residents.

LUD-18.3 Residential Adjacencies. Buffer heavy industrial uses and light industrial uses, such as general services, light manufacturing, and storage uses from residential neighborhoods.

LUD-18.4 Parking Requirements. Adjust zoning and parking requirements as necessary to ensure reinvestment can occur in buildings while maintaining industrial uses.

LUD-18.5 Parcel Aggregation. Encourage lot assembly to allow businesses to grow and expand.
Goal LUD-19
Mineral resource extraction constrained to its present location while maintaining compatibility with neighboring uses.

LUD-19.1 On-Site Processing. The use of imported raw materials should be avoided and only materials available on-site should be processed.

LUD-19.2 Focused Land Use District. Ancillary uses should be only those typically associated with extraction and/or processing of on-site materials, including uses such as paver and precast concrete facilities.

LUD-19.3 Nuisance Control. Ensure that measures to control noise, dust and erosion/sedimentation are applied to on-going mining activities.

LUD-19.4 Screening. To the extent feasible, require screening of equipment, stockpiles, or waste piles from public view.

LUD-19.5 Mining Site Access. Evaluate truck access to and from the site in order to reduce impacts generated by truck traffic, such as road deterioration, noise, and safety concerns, which affect nearby residents.

LUD-19.6 Reclamation Fund. Establish a use-based mechanism for mining operators to begin contributing to a reclamation fund annually to be used after operations cease.

Figure 5.16 Areas designated as Mineral Resource Extraction
New Residential Neighborhoods

The City of Palmdale stretches across thousands of acres, and significant portions of the undeveloped areas are covered by adopted Specific Plans. Therefore, it is critical to ensure that as new neighborhoods and master planned communities are developed, the desired approaches to placemaking, community design, and mobility are followed. These include policies for creating regular Village Centers or other activity centers, strong connections to parks and open space, and implementation of public facilities in a timely manner.

**Goal LUD-20**
Modified and existing Specific Plans strive to relate to and integrate with adjacent existing and future land uses.

<table>
<thead>
<tr>
<th>LUD-20.1 Revised Specific Plans. When modifications to an adopted Specific Plan are proposed, require the plans to adhere to the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide connections to regional trails and natural open spaces for all residential units.</td>
</tr>
<tr>
<td>• Create protections for western Joshua trees and other critical desert species.</td>
</tr>
<tr>
<td>• Review compliance with the City’s Hillside Ordinance for viewshed protection.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LUD-20.3 Planned Developments. Encourage the creation of new Village Centers in Planned Development (PD) areas, including:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Anaverde Nuevo Specific Plan</td>
</tr>
<tr>
<td>• Ritter Ranch Specific Plan</td>
</tr>
<tr>
<td>• Rancho Vista Specific Plan</td>
</tr>
</tbody>
</table>

**Goal LUD-21**
New Specific Plans are implemented through development of new neighborhoods that are connected, sustainable, diverse, and clustered.

<table>
<thead>
<tr>
<th>LUD-21.1 Timing of Community/Retail Uses. Require development of commercial uses and amenities during key phases of buildout of residential portions of a Specific Plan.</th>
</tr>
</thead>
</table>

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<thead>
<tr>
<th>LUD-21.2 Clustered Development. Require rural neighborhoods and clustered development in steeper and topographically constrained areas and use these development types to preserve significant natural amenities.</th>
</tr>
</thead>
</table>

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<thead>
<tr>
<th>LUD-21.3 Respecting Natural Ridges. Avoid grading or siting of dwelling units on the north facing side of Ritter Ridge or other major ridgelines.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>LUD-21.4 Greenbelt Concept. Strive to create an undeveloped or natural greenbelt around the city comprised of natural areas, parks, open space, and agricultural/utility lands.</th>
</tr>
</thead>
</table>
EXISTING NEIGHBORHOOD IMPROVEMENTS

Goal LUD-22
Neighborhoods with a range of housing opportunities that allow people of all ages, abilities, socio-economic status, and family size to live in Palmdale.

LUD-22.1 Mixed-Density Residential. Promote residential infill development, where appropriate, as indicated by the mixed-density Residential Neighborhood land use designations (RN1, RN2, RN3, RN4).

LUD-22.2 Infill Priority. Maximize opportunities for residential development through infill and redevelopment of vacant parcels by facilitating parcel aggregation and streamlining permit processing for infill applications.

LUD-22.3 Distributed Higher Density. Permit a range of residential densities and housing types throughout the city rather than concentrating higher densities in limited areas.

LUD-22.4 Transit-Oriented Density. Direct the location of senior and multifamily housing to areas accessible to public transportation, supportive commercial uses, and community facilities.

LUD-22.5 Varying Housing Types. Encourage and allow a variety of housing types developed at a range of densities to serve varying household types, including, but not limited to, single-family attached and detached, accessory dwelling units, multifamily apartments, townhomes, duplexes, triplexes, quadplexes, and condominiums.

LUD-22.6 Special Needs Housing. Facilitate housing for special needs groups, including the developmentally disabled, and non-traditional family groups by allowing a diverse range of housing configurations that are Americans with Disabilities Act (ADA) compliant and flexible.

LUD-22.7 Senior Housing. Promote development of housing types that support multi-generational households, senior housing, and opportunities for seniors to age in place.
**Goal LUD-23**
Improve walkability and connectivity in existing neighborhoods, through increased permeability and access through large blocks.

**LUD-23.1 Connections to Existing Neighborhoods.** Provide pedestrian/bicycle connections to trails and open space where appropriate and indicated in past planning efforts.

**LUD-23.2 Multimodal Streets.** According to the General Plan street hierarchy, require key boulevards and neighborhood connectors to be (re)designed, constructed, and operated as multimodal streets, not wide, high-speed streets.

**LUD-23.3 Connectivity Enhancements.** Introduce new public trail systems that connect to the regional system through Capital Improvement Projects, private development projects and city/regional parks improvements.

**LUD-23.4 Quarter-Mile Radius.** Work toward a goal of having 90 percent of residents living within twenty minutes walking distance of a dedicated park, school, or multi-use trail.
Goal LUD-24
Maintain the character of rural areas.

LUD-24.1 Appropriate Densities. Avoid designating land for higher density uses where prevailing existing development patterns are rural residential with lot sizes of one acre or more.

LUD-24.2 Commercial Developments. Permit neighborhood commercial development within rural areas to serve the needs of these areas, provided that such projects include safe, logical, and functional access from the adjacent neighborhoods for pedestrian and equestrian users.

LUD-24.3 Septic Requirements. Enforce Los Angeles County standards and requirements regarding septic systems.

LUD-24.4 Avenue S and SR-14. Require that development near the intersection of Avenue S and SR-14 is complementary to Lake Palmdale, surrounding hillside, and mountain views by minimizing building heights and viewshed impacts; and is consistent with sound water quality management practices by providing a minimum 100-foot setback from the historical high-water mark of Lake Palmdale and meeting other relevant environmental standards.

LUD-24.5 Landfill Buffer. Provide a 1,000-foot buffer between Antelope Valley Landfill operations and residential developments.

LUD-24.6 Potential Annexation. Consider annexation as a last resort option and only as a logical extension of the City boundaries as neighboring properties are annexed and adjacent properties are developed. Before initiating annexation, evaluate the fiscal, infrastructural and land use impacts of proposed annexations to the City, as well as the desires of inhabitants within the areas to be annexed.
Figure 5.18 Areas designated as Rural/Equestrian Residential and Low Density Residential
# Implementation Actions

The table below identifies programs, policy updates, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s land use vision and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Corresponding Goals</th>
<th>Description</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Goals</td>
<td><strong>Zoning Code Updates.</strong> Complete a comprehensive update to the citywide zoning code.</td>
<td>IN PROCESS</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>LUD-22, 23</td>
<td><strong>Dissolved Specific Plans.</strong> Council will formally dissolve five Specific Plans that are being eliminated through updated GPLU designations (Joshua Hills, Hillside Residential, Palmdale Trade and Commerce Center, Foothill Ranch, and Palmdale Business Park).</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>LUD-20, 23, 24</td>
<td><strong>Updated Subdivision Design Guidelines.</strong> Review and update as needed regulations applicable to subdivision projects, including connectivity standards, sidewalk standards, green infrastructure standards, etc., as needed.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>LUD-1, 2, 5, 10</td>
<td><strong>Infill Incentives.</strong> Develop incentives for development that is close to existing residents and municipal services/utilities.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>Corresponding Goals</td>
<td>Description</td>
<td>Timeframe</td>
<td>Responsible Department</td>
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<tr>
<td>LUD-2, 4</td>
<td><strong>Development Fact Sheets.</strong> Create and promote a series of one-page fact sheets about permitting, zoning, building, and development requirements and questions (such as ADUs or other new regulations).</td>
<td>=</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>LUD-1, 5</td>
<td><strong>Identify/Fund Green Zones.</strong> Seek support and funding from regional agencies (e.g. SCAG) to accelerate development in identified infill zones. See SJVCOG program ‘Green Means Go.’</td>
<td>=</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>LUD-1, 3, 5, 10</td>
<td><strong>Key Corridor Infrastructure.</strong> Pursue funding for sewer, water, drainage, streets, and other infrastructure upgrades to support higher density development especially along key commercial/mixed-use corridors.</td>
<td>--&gt;</td>
<td>Public Works</td>
</tr>
<tr>
<td>LUD-2, 21</td>
<td><strong>Greenfield Plan Checklist.</strong> Prepare a checklist that new development in non-infill areas must conduct, including an evacuation analysis and fire prevention standards.</td>
<td>=</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>LUD-6, 9, 10</td>
<td><strong>Avenue Q.</strong> Redesign Avenue Q to create a “Main Street” and to complement the adjacent high-speed rail station.</td>
<td>=</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>LUD-6, 10</td>
<td><strong>Active Ground Floors.</strong> Enforce active frontage requirements for any new or renovated public-facing building facades in the PTASP. Consider similar requirements for other avenues/corridors to improve eyes on the street and ground-floor interest.</td>
<td>--&gt;</td>
<td>All Departments</td>
</tr>
<tr>
<td>LUD-2, 3, 5</td>
<td><strong>Future Area Plans.</strong> Identify future corridors or districts that require area/specific planning efforts.</td>
<td>=</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>Corresponding Goals</td>
<td>Description</td>
<td>Timeframe</td>
<td>Responsible Department</td>
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<tr>
<td>LUD-8</td>
<td><strong>Assess Public Art Fund Implementation.</strong> Review on an annual basis the funds collected, and public art produced through the Public Art Fund program. Assess the outcomes and make recommendations for changes to City Council as necessary and update the five-year Public Art Work Plan when relevant.</td>
<td>-</td>
<td>Economic and Community Development, Parks and Recreation, and Public Art Commission</td>
</tr>
<tr>
<td>LUD-4, 5, 6, 7</td>
<td><strong>Placemaking Program.</strong> Implement recommended street improvements including sidewalk widening, street trees, street furniture and lighting installations in Downtown and along Palmdale Boulevard.</td>
<td>-</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>LUD-22, 23, 24</td>
<td><strong>Light Pollution Guidelines.</strong> Adopt guidelines for outdoor lighting located in proximity to wildlife and natural areas in order to minimize light pollution.</td>
<td>-</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>LUD-20, 23</td>
<td><strong>Trail Signage Program.</strong> Undertake a comprehensive project to provide wayfinding/signage leading from neighborhood streets, commercial centers, and community parks to wilderness areas and mountain/hillside trails.</td>
<td>-</td>
<td>Parks and Recreation</td>
</tr>
<tr>
<td>LUD-1, 2, 3</td>
<td><strong>Core Service Areas.</strong> Prioritize capital spending in neighborhoods that promote active transportation, mixed-use support improvements to core service areas.</td>
<td>-</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>All Goals</td>
<td><strong>General Plan Review.</strong> Review the General Plan on a five-year cycle, including a review of individual elements and community programs.</td>
<td>-</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>All Goals</td>
<td><strong>Development Fees.</strong> Continuously update citywide development impact fees for infrastructure, affordable housing, other community benefits, and long-range planning, as economic conditions dictate.</td>
<td>-</td>
<td>All City Departments</td>
</tr>
<tr>
<td>LUD-3, 24</td>
<td><strong>Rural Mobility Improvements.</strong> Improve the condition of unpaved streets in rural areas.</td>
<td>-</td>
<td>Public Works</td>
</tr>
</tbody>
</table>
Detailed Land Use Designations

Rural Single Family Residential (LDR, ER)

Both the Low Density Residential and Equestrian designations allow for the same character (look and feel) for the public realm, building character, connectivity, and parking. The features that apply to the two lowest density single family residential designations include:

**Building Character**
Buildings are set back from the road on all sides. Homes in these designations have large yards, with notable setbacks, ample landscaping, and predominantly natural ground cover. Development is characterized by a naturalistic, landscaped setting. Clustering to preserve significant natural landforms is allowed though may not be desirable in areas already developed with a regular/grid street network.

**Public Realm**
- Light pollution should be kept to a minimum.
- Fencing standards apply when visible from the public ROW. Landscaping/green screening is strongly encouraged in addition to or in lieu of fences.
- Few public parks are currently located in these areas. Existing parks in the vicinity should be connected to the surrounding parts of the community through multi-use trails and greenways.
- Sidewalk and curb and gutter improvements are generally required for new development (unless the remainder of the street/block is already developed but unpaved). Streets and lighting of a more rural character may be appropriate to some projects.

**Connectivity**
“Blocks” defined by paved public roads through this environment are large, up to one mile in length, though they are usually transected by other roads regularly at every quarter- or eighth-mile (these are typically unpaved). Some dead-end roads may be warranted to preserve natural features, but where possible, a more connected and grid-like street pattern is preferred.

**Parking**
Parking occurs in driveways, side yards, or garages that are set back considerably from the street.

Other Characteristics
Detailed on the following pages are descriptions, intended physical character, and key features that are distinct for the Low Density Residential and Equestrian Residential designations in Palmdale.
Description and Intended Physical Character
This place type is intended for detached single-family dwellings in a suburban/semi-rural environment, at approximately 2 dwelling units per acre. The SFR-1 designation is appropriate to outlying valley areas where large lot subdivisions are desired. Parcel sizes are around 20,000 square feet. These areas are mostly along the edges of developed suburban residential areas, often in lower hillside areas where inclines are present but topography is lacking significant slope constraints.

Key Features
Primary Land Uses
• Single-Family Residential
• Equestrian and animal-keeping activities per Zoning Code

Secondary Land Uses
• Community assembly uses such as places of worship, schools, and public facilities, which are determined to be compatible with and oriented toward serving the needs of these neighborhoods.
• Equestrian and animal keeping, as a conditional use per Zoning Code

Allowed Height
• 35 feet

Allowed Density and Intensity
• Up to 2 du/ac
• FAR: n/a

Appropriate Building Types
• Ranch-style, detached houses
Low Density Residential (LDR)

Description and Intended Physical Character
This place type is intended for mixed rural/suburban single-family residential uses, at 1 dwelling unit per acre. The Low Density Residential designation is appropriate for hillside areas and as a transition between rural and suburban areas and in keeping with the County of Los Angeles land use designations within the Sphere of Influence. Parcel sizes are commonly 1 acre (or larger), and unpaved roads may be occasionally present. These areas are mostly outside of the City Limits (but within the Sphere of Influence) and are intended to serve as the edge of the urbanized city.

Key Features
Primary Land Uses
• Single-Family Residential
• Equestrian and animal-keeping activities per Zoning Code

Secondary Land Uses
• Community assembly uses such as places of worship, schools, and public facilities, day care centers, and agricultural uses, which are determined to be compatible with and oriented toward serving the needs of these neighborhoods.

Allowed Height
• 35 feet

Allowed Density and Intensity
• Up to 1 du/ac
• FAR: n/a

Appropriate Building Types
• Rural ranch housing
• Large lot detached houses
Single Family Residential (SFR1, SFR2, SFR3)

The three Single Family Residential designations allow for the same character (look and feel) for the public realm, building character, connectivity, and parking. The features that apply to the three Single Family Residential designations include:

**Building Character**
Buildings are set back at regular, consistent distances from the street. Properties have small to large yards (depending on lot size) with predominantly xeriscape ground cover. Clustering to preserve significant natural landforms (or steep slopes) is allowed and encouraged. The main residential entrance should be located within the front façade and accessed directly from the street.

**Public Realm**
- Sidewalks (minimum of six feet) should be provided on both sides of the street.
- Residential streets should encourage slow, safe driving speeds, with traffic calming elements, bicycle lanes and/or curbside parking, as per the Neighborhood Street classification outlined within the Mobility Element.
- Street trees and streetlights should be provided at semi-frequent intervals (though light pollution should be minimized).
- Landscaping/green screening is strongly encouraged in addition to or in lieu of fences, though fencing standards apply when visible from the public right-of-way.
- Existing parks in the vicinity should be connected to the surrounding parts of the community through multi-use trails and greenways.
- New developments should provide neighborhood or community parks, per requirements outlined in the Parks and Recreation Element. Residences should be connected to existing parks, nearby natural areas, and recreational trails through multi-use greenways.

**Connectivity**
The street network should be reasonably well connected with block lengths varying between 400 and 800 feet in most cases. Larger blocks or dead-end streets may be permitted where natural elements such as waterways, hills, or sensitive habitats warrant compromise. Emphasis is on pedestrian and bicycle circulation with appropriate traffic calming features. Where feasible, dead-end roads and cul-de-sacs should be connected via bicycle/pedestrian pathways.

**Parking**
In addition to garages and driveways, parking is also allowed within interior side yards of larger properties.

**Other Characteristics**
Detailed on the following pages are descriptions, intended physical character, and key features that are distinct for the Single-Family Residential designations in Palmdale.
Single-Family Residential 1 (SFR1)

Description and Intended Physical Character
This place type is intended for detached single-family dwellings in a suburban/semi-rural environment, at approximately 2 dwelling units per acre. The SFR-1 designation is appropriate to outlying valley areas where large lot subdivisions are desired. Parcel sizes are around 20,000 square feet. These areas are mostly along the edges of developed suburban residential areas, often in lower hillside areas where inclines are present but topography is lacking significant slope constraints.

Key Features
Primary Land Uses
• Single-family residential
• Parks and recreation use

Secondary Land Uses
• Community assembly uses such as places of worship, schools, and public facilities, which are determined to be compatible with and oriented toward serving the needs of these neighborhoods.
• Equestrian and animal keeping, as a conditional use per Zoning Code

Allowed Height
• 35 feet

Allowed Density and Intensity
• Up to 2 du/ac
• FAR: n/a

Appropriate Building Types
• Ranch-style, detached houses

Single-Family Residential 2 (SFR2)

Description and Intended Physical Character
This place type is intended for detached single-family dwellings in a suburban environment, at up to 4.4 dwelling units per acre. The SFR-2 designation is intended for the areas between the valley floor and steeper hillside areas (having less than 10 percent slope). Parcel sizes range from 10,000 to 15,000 square feet. These areas are mostly along the edges of developed suburban residential areas.

Key Features
Primary Land Uses
• Single-family residential
• Parks and recreation

Secondary Land Uses
• Community assembly uses such as places of worship, schools, and public facilities, which are determined to be compatible with and oriented toward serving the needs of these neighborhoods.
• Equestrian and animal keeping, as a conditional use per Zoning Code

Allowed Height
• 35 feet

Allowed Density and Intensity
• Up to 4.4 du/ac
• FAR: n/a

Appropriate Building Types
• Detached houses
Single-Family Residential 3 (SFR3)

Description and Intended Physical Character
This place type is intended for detached single-family subdivisions containing the City’s standard 7,000 square foot minimum lot size (approximately 6 dwelling units per acre). The SFR-3 designation is appropriate in areas with minimal topography, and these places serve as a lower intensity, family-living environment but are still well connected to surrounding neighborhoods and retail areas. These areas constitute most of the City’s developed residential neighborhoods.

Key Features
Primary Land Uses
• Single-family residential
• Parks and recreation use

Secondary Land Uses
• Community assembly uses such as places of worship, schools, and public facilities, which are determined to be compatible with and oriented toward serving the needs of these neighborhoods.

Allowed Height
• 35 feet

Allowed Density and Intensity
• Up to 6 du/ac
• FAR: n/a

Appropriate Building Types
• Ranch-style, detached houses
Residential Neighborhood (RN1, RN2, RN3, RN4)

The four Residential Neighborhood designations have many similarities. They allow for the same character (look and feel) for the public realm, building character, connectivity, and parking. The features that apply to the four Residential Neighborhood designations include:

**Building Character**
Single-family residential buildings should be set back at regular distances from the street, while multifamily residential buildings should be located at or near the front property line. Attached properties tend to have small lots, with small individual or larger shared/common yards, and a mix of landscaping and hardscape. The main entrance to the building should be located within the front façade, accessed directly from the street. High-quality private frontages, such as porches, dooryards, and forecourts create a comfortable living environment for neighborhood residents.

**Public Realm**
- Sidewalks and curb and gutter improvements are required on both sides of the street. Residential streets should encourage slow, safe driving speeds, with traffic calming elements, bicycle lanes and/or curbside parking, as per the Neighborhood Street classification outlined within the Mobility Element.
- Street trees and streetlights should be provided at frequent intervals.
- Sidewalks (minimum of six feet) should be on both sides of the street in all areas.
- Mini parks and neighborhood parks should be integrated into new neighborhoods, within a twenty-minute walk distance of at least 90 percent of the dwelling units. When possible, these areas should be connected to nearby natural areas and recreational trails through multi-use greenways.

**Connectivity**
- The street network should be well connected with block lengths varying between 250 and 500 feet in most cases. Residential streets should be as narrow as practical to encourage slow, safe driving speeds, with curb adjacent parking on both sides.
- Within neighborhoods, automobiles are balanced with safety of walking and bicycling residents. Dead-end roads or cul-de-sacs are generally not permitted (unless necessitated by natural barriers or with city approval). Pedestrian and bicycles must be permitted to pass-through any vehicular dead ends.

**Parking**
Parking is curb adjacent, in garages integrated into front facades, at the rear of the building accessed through a driveway or preferably in alley-loaded garages. When possible, individual garages face alleys and secondary streets rather than primary streets.

Other Characteristics
Detailed on the following pages are descriptions, intended physical character, and key features that are distinct for the Residential Neighborhood designations in Palmdale.
Residential Neighborhood 1 (RN1)

Description and Intended Physical Character
This place type is intended for a low-density mix of attached and detached residential dwelling units allowing up to 10 dwelling units per acre. The RN1 designation is appropriate in residential areas within a short distance of employment and retail areas. Parcel sizes are approximately 4,500 square feet for detached single-family units with a minimum parcel size of 10,000 square feet for attached single-family or multifamily developments, unless otherwise specified in a planned development project that contains a variety of lot sizes, housing types, and public amenities. The RN1 designation is reserved for areas which are or will be served by adequate infrastructure and services needed to support this level of development.

Key Features

Primary Land Uses
- Single-family residential (attached and detached)
- Rowhouses
- Multifamily residential
- Manufactured housing (as permitted by zoning)

Secondary Land Uses
- Community assembly uses such as places of worship, schools, and public facilities, which are determined to be compatible with and oriented toward serving the needs of these neighborhoods.

Allowed Height
- 35 feet

Allowed Density and Intensity
- Up to 10 du/ac
- FAR: n/a

Appropriate Building Types
- Small lot detached houses
- Duplexes and low-rise attached houses
- Multiplexes (triplex/fourplex)
- Mobile home/manufactured housing (as permitted by zoning)
Description and Intended Physical Character
This place type is intended for grouped housing such as small-lot single-family residential, townhouses, condominiums, apartments with on-site recreation and open space with established minimum densities. The RN2 designation is appropriate in existing residential neighborhood areas or planned developments within a short distance of Village Centers. The RN2 designation is reserved for areas which are or will be served by adequate infrastructure and services needed to support this level of development.

Key Features

Primary Land Uses
- Single-family residential (detached and attached)
- Multifamily residential
- Manufactured housing, as permitted by zoning

Secondary Land Uses
- Community assembly uses such as places of worship, schools, and public facilities, which are determined to be compatible with and oriented toward serving the needs of these neighborhoods.

Allowed Height
- 40 feet

Allowed Density and Intensity
- 10 (minimum) to 20 du/ac (maximum)

Appropriate Building Types
- Small lot detached houses
- Duplexes and multiplexes (triplex/fourplex)
- Rowhouses
- Courtyard apartments and low-rise walkups
- Mobile home/manufactured housing (as permitted by zoning)
Residential Neighborhood 3 (RN3)

Description and Intended Physical Character
This place type is intended for “missing middle” or middle-density housing such as walkups, garden apartments, and rowhouses up to 30 dwelling units per acre. The RN3 designation is appropriate in existing residential neighborhoods or planned developments within a short distance of Village Centers. The RN3 designation is reserved for areas which are or will be served by adequate infrastructure and services needed to support this level of development. These neighborhoods provide a transition in scale and intensity between lower-intensity residential neighborhoods and more dense neighborhoods or mixed-use areas.

Key Features

Primary Land Uses
- Attached single-family residential
- Multifamily residential

Secondary Land Uses
- Community assembly uses such as places of worship, schools, and public facilities, which are determined to be compatible with and oriented toward serving the needs of these neighborhoods.

Allowed Height
- 50 feet

Allowed Density and Intensity
- 20 (minimum) to 30 (maximum) du/ac
- FAR: n/a

Appropriate Building Types
- Multiplexes (triplex/fourplex)
- Rowhouses
- Garden and courtyard housing
- Low-rise walkups
Description and Intended Physical Character
This place type is intended as a high-intensity, walkable neighborhood with multifamily residential uses up to 50 dwelling units per acre. RN4 areas are near commercial, civic and recreational uses in Downtown Palmdale, near Avenue Q, and the future multimodal transit station. These areas are compact and therefore allow a larger number of residents to live near one another, within easy walking distance of parks, schools, shops, transit, and employment. These neighborhoods also act as a buffer between lower-intensity residential neighborhoods and intense mixed-use areas.

Key Features
Primary Land Uses
- Multifamily residential

Secondary Land Uses
- Community assembly uses such as places of worship, schools, and public facilities, which are determined to be compatible with and oriented toward serving the needs of these neighborhoods.

Allowed Height
- 60 feet

Allowed Density and Intensity
- 30 (minimum) to 50 (maximum) du/ac
- FAR: n/a

Appropriate Building Types
- Garden and courtyard apartments
- Rowhouses
- Mid-rise apartments
Mixed-Use (MU1, MU2, MU3)

The three mixed-use designations allow for the same character (look and feel) for the public realm, building character, connectivity, and parking. The features that apply to the three mixed-use designations include:

**Character**

**Building Character**
Buildings are located at or near the front property line, set back at a minimal distance from the street (except publicly accessible open spaces). Side and rear setbacks are minimal with increased setbacks from single family residential designations. Properties have common yards and a mix of landscaping and hardscape. Block faces have primarily continuous frontage. Buildings should face public streets (either the primary roadway or new internal streets) with attractive and transparent shopfronts designed to display merchandise, dining rooms, patios, and signage to passers-by. Building entrances are direct from the sidewalk, via shopfronts, arcades, galleries and forecourts for shops and restaurants, and via stoops, dooryards, or porches for residences.

**Public Realm**
- Internal streets should be designed for both pedestrians and vehicles with comfortable sidewalks and vehicle lanes. Sidewalks (recommended 15 feet wide, including landscaping) are required in all Mixed-Use areas.
- Facades should be activated with frequent building entrances for residential lobbies and ground-floor commercial spaces.
- Street trees, streetlights, seating, and other amenities should be provided at frequent intervals.
- Open spaces take the form of plazas and greens, and/or greenway connections to nearby parks.

**Connectivity**
- Blocks are subdivided into smaller human-scaled blocks around 250 to 400 feet long by internal streets that include sidewalks on at least one side. In existing commercial centers, blocks may be larger, up to 800 feet long, but any redevelopment should seek to decrease overall block sizes.
- Mid-block paseos are recommended in both new and existing developments to provide pedestrian connections from the streets to parking facilities within the blocks.

**Parking**
New buildings with parking facing the primary street are not allowed. Parking is provided to the rear or sides of buildings, or in some cases, no parking is required (if provided through a shared garage or on-street). Vehicles should access parking by alleys or driveways on side streets.

**Other Characteristics**
Detailed on the following pages are descriptions, intended physical character, and key features that are distinct for the mixed-use designations in Palmdale.
**Description and Intended Physical Character**
MU1 is intended to create a low-intensity concentration of commercial businesses and civic amenities mixed with single and multifamily housing. This place type is located along Palmdale Boulevard between 10th Street East and 35th Street East and is intended to foster a pedestrian friendly environment in a walkable, Main Street format. This character encourages people to shop, dine, and socialize in downtown Palmdale. The pedestrian environment in this area should be attractive and visually interesting to encourage visitors to explore and circulate in and around the retail venues. Ground floors are primarily retail and service-oriented to provide a comfortable, walkable environment for shoppers and diners. This designation permits both horizontal and vertical mixed-use developments. This designation also carries forward the intent of the City’s Downtown Revitalization Plan.

**Key Features**

- **Primary Land Uses**
  - Single-family residential (attached)
  - Multifamily residential
  - Retail/services
  - Professional/medical office

- **Secondary Land Uses**
  - Civic uses
  - Community assembly

- **Allowed Height**
  - 45 feet

- **Allowed Density and Intensity**
  - Up to 20 du/ac
  - Maximum Commercial FAR: 0.35 (no limit for certain zero-lot line developments)

- **Appropriate Building Types**
  - Rowhouses
  - Low-rise walkups
  - Stand-alone commercial
  - Block-form low-rise mixed-use buildings
Description and Intended Physical Character
This place type is focused on key nodes of moderate mixed-use activity along the City’s major corridors, primarily Palmdale Boulevard, Avenue R, Avenue S, and Rancho Vista Boulevard. The built environment is composed of horizontal and vertical mixed-use developments at low/medium-intensities. MU2 encompasses many existing commercial centers that are envisioned to evolve into concentrations of commercial businesses and civic amenities mixed with multifamily housing located within convenient walking or biking distance of nearby neighborhoods. The ground floor in this place type is primarily retail, medical office, and service-oriented to provide a comfortable, walkable environment. Gathering places such as small parks and shaded plazas activate the public realm in this place type.

Key Features
Primary Land Uses
• Single-family residential (attached)
• Multifamily residential
• Retail/services
• Bars/restaurants
• Professional/medical offices

Secondary Land Uses
• Civic uses
• Community assembly

Allowed Height
• 55 feet

Allowed Density and Intensity
• 20 (minimum) to 30 (maximum) du/ac
• Maximum Commercial FAR: 2.0

Appropriate Building Types
• Rowhouses
• Multiplex (triplex/fourplex)
• Garden/courtyard apartments, low-rise walkups
• Stand-alone commercial
• Block-form low-rise mixed-use buildings
Mixed-Use 3 (MU3)

Description and Intended Physical Character
Outside of the Palmdale Transit Area Specific Plan area, this is the densest place type. This place type is intended to create a high-intensity concentration of commercial businesses and civic amenities mixed with multifamily housing along major corridors and/or near major transit. MU3 areas provide employment, shopping, and living in a horizontal or vertical mixed-use format. Ground floors are primarily office, light research and development, and retail with housing above or behind. This place type provides a space where residents can meet and greet one another while enjoying the life of their town. This designation permits both horizontal and vertical mixed-use developments. This place type is located at key nodes including near the future Education District on Palmdale Boulevard and 47th Street East, along East Avenue Q, and Rancho Vista Boulevard.

Key Features
Primary Land Uses
• Multifamily residential
• Retail/services
• Bars/restaurants
• Professional/medical offices

Secondary Land Uses
• Research and development
• Civic uses
• Community assembly

Allowed Height
• 65 feet

Allowed Density and Intensity
• 30 (minimum) to 50 (maximum) du/ac
• Maximum Commercial FAR: 3.0

Appropriate Building Types
• Rowhouses
• Low-rise walkups
• Stand-alone commercial
• Block-form low-rise mixed-use buildings
Commercial (RC, NC, VC)

The three commercial land use designations allow for the same character (look and feel) for the public realm, building character, connectivity, and parking. The features that apply to the three commercial designations include:

**Look and Feel**
Depending on context, retail is either in a walkable, neighborhood-serving format, or a more regional, auto-oriented retail format. Buildings are set back varied distances from the street. Buildings may also have minimal side setbacks. Site design should be sensitive to adjacent residential uses; side and rear setbacks may be minimal when adjacent to other commercial/industrial uses but should be larger when adjacent to residential uses. Buildings should be arranged to form a reasonable street wall when surrounding an internal parking lot. Buildings should face public streets (the primary roadway and/or new internal streets) with attractive and transparent shopfronts designed to display merchandise, dining rooms, patios, and signage to passers-by. Building entrances are direct from the sidewalk, via shopfronts, arcades, galleries, and forecourts. Buildings define their frontages with lobbies or active spaces and offer awnings that provide shade for pedestrians.

**Public Realm**
- New internal streets should be designed for pedestrians and vehicles with very wide sidewalks on both sides of internal streets and along internal building frontages and vehicle lanes that are 10 feet wide in most cases.
- Streets along major roadways may be wider but should be designed to be comfortable and safe for pedestrians and cyclists while also accommodating the needs of vehicles.
- Street trees, street lights, seating, and other amenities should be provided along sidewalks and building fronts.
- Open spaces take the form of plazas/greens and should be flanked by active ground floor retail or restaurant uses.

**Connectivity**
- Block length will depend on context and type of commercial center. Regional Commercial and Visitor Commercial blocks may be large (1600’ long) but the site design of regional centers should consider pedestrian needs and provide safe, comfortable internal circulation for non-auto users.
- Neighborhood Commercial blocks may be moderately large (800’ long) but any longer blocks should be subdivided by sidewalks, pathways, greenways, or mid-block paseos to provide pedestrian connections from the street to parking facilities and businesses within.

**Parking**
Parking occurs in surface lots, structures, or to the side of buildings where possible, and is screened from public view. Vehicular access is provided to parking lots via private streets.

**Other Characteristics**
Detailed on the following pages are descriptions, intended physical character, and key features that are distinct for the commercial designations in Palmdale.
Description and Intended Physical Character
This place type is intended to accommodate commercial/retail and service uses attracting consumers from a regional market area. RC areas provide access to long-term goods and services (in contrast to convenience goods) such as big box retail and regional mall. The uses allowed in this designation will provide a unique amenity to all residents of Palmdale and an important revenue source for the city. Areas with the RC designation are situated near SR-14 and Rancho Vista Boulevard, at Pearblossom Highway and Fort Tejon, at Avenue Q and 50th Street East, and others. RC developments typically occupy many acres, although individual businesses may be on smaller parcels.

Key Features

Primary Land Uses
- Regional retail/services
- Entertainment
- Food retail/bars
- Professional/medical offices

Secondary Land Uses
- Lodging
- Film production/studio (permitted only within secondary L.A. County zone)
- Small/light distribution, “last mile” services
- Multifamily residential (permitted only on the Antelope Valley Mall site and the property south of Palmdale Boulevard between SR-14 and Division Street with a comprehensive development plan)

Allowed Height
- 55 feet

Allowed Density and Intensity
- FAR: up to 1.0
- Du/ac: up to 30 (permitted only on the Antelope Valley Mall site and the property south of Palmdale Boulevard between SR-14 and Division Street with a comprehensive development plan)

Appropriate Building Types
- Standalone commercial
- Big box retail
- Block-form low-rise buildings
Neighborhood Commercial (NC)

Description and Intended Physical Character
This place type is intended to foster convenience-type retail, neighborhood offices and service activities that serve the daily needs of the immediate neighborhood. NC areas are located in Village Centers, near residential neighborhoods to serve the short-term needs of residents. Neighborhood Commercial development is occasionally found on small corner parcels (a few acres) but more often in slightly larger configurations (five to ten acres in size). This designation includes supermarkets, restaurants, apparel stores, small hardware stores, banks, offices, and similar uses. This designation also provides gathering places for the residents of surrounding neighborhoods and are ideal locations for local transit stops (such as bus stations, carsharing pods, or park and ride lots).

Key Features
Primary Land Uses
• Neighborhood-serving retail/services/office
• Entertainment

Secondary Land Uses
• Civic uses
• Minor auto service uses
• Community assembly

Allowed Height
• 35 feet

Allowed Density and Intensity
• FAR: up to 0.5
• Du/ac: n/a

Appropriate Building Types
• Standalone commercial
• Attached low-rise commercial buildings in walkable ‘main street’ format
• Block form low-rise buildings
Description and Intended Physical Character
This place type is intended to accommodate a diverse mix of businesses that primarily serve visitors to Palmdale or that provide niche/specialty goods and services. Typical VC uses include hotels, long-term stay hotels, convenience retail, professional and medical offices, service uses, brewpubs, microbreweries and wineries with incidental food services, and similar uses that are aimed largely at commuting workers and other highway traffic. Uses may be more intense than in NC or RC areas.

Key Features
Primary Land Uses
• Lodging
• Food retail/entertainment
• Regional-serving retail
• Brewpub/microbrewery/winery with incidental food service

Secondary Land Uses
• Neighborhood-serving retail/services
• Commercial uses
• Professional/medical offices
• Film production/studio

Allowed Height
• 65 feet (85 feet for hotels/lodging)

Allowed Density and Intensity
• Du/ac: n/a
• FAR: up to 1.5 (2.0 for hotels/lodging)

Appropriate Building Types
• Stand-alone commercial
• Big box retail
• Block form low-rise buildings
• Midrise and high-rise hotel block buildings
Health and Wellness (HW)

Character

Building Character
Buildings are located near or at the sidewalk to shape the streetscapes and to frame public open space. Several blocks should be designed as a campus environment with pedestrian-only spaces and pathways connecting buildings to one another and to surrounding streets. Generally, the Medical Flex designation is expressed as individual or block form buildings that are configured in a semi-urban office environment with modest setbacks. Buildings should be arranged to form a reasonable street wall when surrounding an internal parking lot or structure, with liner uses/buildings that activate the edges of the district. There may be large parking lots within internal blocks, but the pedestrian experience should still be supported in the interior of a larger block. Building entrances are direct from the sidewalk, via shopfronts or forecourts. Buildings define their frontages with lobbies or transparent, active spaces.

Public Realm
- Major internal drives should include sidewalks (minimum of eight feet including landscaping) on both sides, detailed as small streets.
- Streets/sidewalks should be connected to primary building entrances for lodging and commercial spaces.
- Street trees, street lights, seating, and other amenities should be provided along sidewalks and building fronts.
- Open spaces take the form of mini-parks, linear greenways, or plazas/greens.

Connectivity
Medical Flex blocks may be large (1200’ long) but the internal site design should consider pedestrian needs and provide safe, comfortable internal circulation for non-auto users. These larger blocks should be subdivided by sidewalks, pathways, greenways, or mid-block paseos to provide pedestrian connections from the streets to parking facilities and businesses within the blocks. Streets flanking the blocks and the drives that transect them should connect to neighborhood streets to provide convenient access for nearby residents as well as motorists. Connecting residential streets (for vehicles) to other types of development should be avoided. This tends to increase vehicle trips in front of houses and increases citizens concerns for safety.

Parking
Parking occurs in surface lots or structures, where possible screened from public view.
Health and Wellness (HW)

Description and Intended Physical Character
This place type is intended to accommodate a medical-oriented campus with a focus on medical/hospital uses, supported by appropriate commercial and lodging uses and open space areas for congregating and socializing. The envisioned mix of uses is a large hospital or medical office as the anchor, enlivened by part-time residents and access to a limited set of daily goods and services. The Health and Wellness designation is applied to the Palmdale Regional Medical Center environs, around the Kaiser Permanente facility on Avenue S, and a future medical district on Palmdale Boulevard and 40th Street.

Key Features

Primary Land Uses
• Hospital
• Medical/professional offices
• Assisted living/congregate care

Secondary Land Uses
• Supportive retail/services
• Educational uses
• Food retail
• Lodging
• Workforce housing
• Senior housing

Allowed Height
• 85 feet

Allowed Density and Intensity
• FAR: up to 2.0
• Du/ac: 30 to 50

Appropriate Building Types
• Standalone commercial
• Low-rise and high-rise medical buildings
• Block form mixed-use buildings
Educational Flex (EDFX)

**Character**

Buildings should support the vision for a campus-like setting, providing regular public open spaces in between, and orient active facades toward public areas and pathways. Buildings are configured in an urban format of walkable blocks, attractive streetscapes, and buildings close the sidewalk edge (it may be advised to hold a corner or a key portion of a street frontages while setting back significantly on other sides/frontages). There may be a row of surface parking and landscaping between the buildings and the sidewalk, typical of office or business parks. Rear setbacks depend on adjacent uses and context but may not need to be overly large. Buildings should be arranged to form a reasonable street wall when surrounding an internal parking lot or structure. Building entrances are direct from the sidewalk. Buildings define their frontages with lobbies or active spaces and offer awnings that provide shade for pedestrians.

**Public Realm**

- New internal streets should be designed for pedestrians and vehicles with comfortable sidewalks and vehicle lanes that are 10 feet wide in most cases.
- To attract a large educational institution to this designation, it may be appropriate for several blocks to be joined together as a campus environment with pedestrian-only paths that connect to the streets of the surrounding development and adjacent neighborhoods.
- Street trees, street lights, seating, and other amenities should be provided along sidewalks and building fronts.
- Open spaces take the form of fields, community parks, and plazas/greens.

**Connectivity**

Blocks should be about 400 to 600 feet in length. Internal pedestrian and bicycle mobility (and transit access) should be prioritized equally to automobile access. Mid-block paseos are recommended to provide pedestrian connections from the streets to parking facilities within the blocks. Conversion to slow or shared streets within campuses is strongly encouraged. Major district streets should connect to nearby neighborhood streets to provide convenient access for residents as well as motorists.

**Parking**

Parking occurs in surface lots or structures. Parking may be used as a buffer between high-traffic arterials and educational buildings.
Description and Intended Physical Character
This place type is intended to primarily attract a mix of educational type uses like trade schools, public and private higher education facilities, and satellite campuses, while permitting supporting uses such as services and housing. This designation is targeted in two key locations along Palmdale Boulevard, with a vision of major academic institutions anchoring vibrant, walkable, mixed-use destinations, creating an attractive campus setting.

Key Features
Primary Land Uses
• Education-related uses

Secondary Land Uses
• Supportive Retail/Services
• Support Offices
• Multifamily Residential (conditional)

Allowed Height
• 75 feet

Allowed Density and Intensity
• FAR: up to 2.0
• Du/ac: up to 30

Appropriate Building Types
• Block form low-rise educational and mixed-use buildings
• Rowhouses
• Garden/courtyard apartments and low-rise walkups
Industrial and Employment (AI, IND, EMPFX)

The three industrial land use designations allow for the same character (look and feel) for the public realm, building character, connectivity, and parking. The features that apply to the three industrial designations include:

**Character**

Buildings may be set back from the street with appropriate landscaping to provide an attractive visual buffer (front setbacks may vary). Buildings may have minimal side setbacks. Rear setbacks depend upon adjacent uses and context, and buffering should be provided for any intense industrial use.

Aerospace Industrial building character and placement is subordinate to the function of aerospace research and development. Comfortable and direct pedestrian access should be provided between parking lots and primary building entrances. Amenities for employees such as gathering spaces, outdoor plazas, or patios, should be provided. While in some areas, particularly in order to attract a large employer, it may be appropriate for several blocks to be joined together as a campus environment with pedestrian-only spaces and pathways connecting buildings to one another and to surrounding streets.

**Public Realm**

- Major internal drives should include sidewalks (minimum of eight feet including landscaping) on at least one side.
- Street widths may vary, with some wider streets to accommodate truck traffic and high traffic volumes, where applicable.
- Open spaces take the form of linear greenways, or plazas.
- Within multi-building complexes or campuses – whether designed for large users or as a multi-tenant industrial development – the major drives should be designed as narrow streets, defined by rows of “street trees” to project the image of high-quality business addresses.

**Connectivity**

Industrial areas are often characterized by larger blocks, at a scale that would not be appropriate for commercial and residential uses. Blocks – as defined by public streets – may be exceptionally large, up to 1,600 feet long to accommodate the large buildings, truck loading and outdoor storage functions required for such industrial districts. Pedestrian paseos are recommended to help facilitate walking and biking to work when appropriate. Any future development of the Regional Airport should be designed with regular access to/from a major City street.

**Parking**

Parking occurs in surface lots or structures. Where possible, employee parking lots should also be located beside or behind buildings rather than in front. To support large office uses, some blocks may be devoted entirely to parking. Loading areas should be screened from view from public rights-of-way.

Other Characteristics

Detailed on the following pages are descriptions, intended physical character, and key features that are distinct for the industrial designations in Palmdale.
Aerospace Industrial (AI)

**Description and Intended Physical Character**
This place type is intended to support the current and future operations of USAF Plant 42. It permits public and private airfields and support facilities, aerospace-related industries, transportation-related industries, and commercial facilities necessary to serve military/commercial air traffic. The AI designation areas allows many uses (such as intensive manufacturing, production, repair, and distribution) that are not suitable adjacent to other sensitive uses. This area is not intended for low-employment uses such as warehousing and logistics - the aerospace-oriented uses allowed in this designation comprise a unique and valuable source of employment for the City and therefore certain standards (such as Airport Protection Zones) apply to adjacent development to ensure that the viability of the aerospace industry is maintained – see Military Compatibility Element for additional details.

**Key Features**

**Primary Land Uses**
- Aerospace-related heavy manufacturing/processing and research and development
- Airfields and airports

**Secondary Land Uses**
- Light/Medium Industrial/PDR
- Supportive retail/services/office

**Allowed Height**
- 75 feet

**Allowed Density and Intensity**
- FAR: up to 0.5
- Du/ac: n/a

**Appropriate Building Types**
- Any building necessary to support aerospace operations
**Industrial (IND)**

### Description and Intended Physical Character

This place type is intended to permit a variety of industrial uses that provide employment and services for residents and businesses. Within this designation, while a range of industrial intensities and uses are permitted, some may not be suitable adjacent to other sensitive uses or housing (such as heavy manufacturing or production), and others may be located adjacent without any issue (such as distribution, storage, research and development, etc.). In general, this designation is oriented toward lower intensity industrial operations with a mix of uses and building scales that are compatible with the surrounding area. Where possible, more intense industrial uses should be physically separated from residential areas by natural or manufactured barriers.

### Key Features

**Primary Land Uses**
- Medium and heavy intensity industrial activities (as allowed per Zoning)
- Light industrial
- Production, distribution and repair uses
- Film production/sound stage studio

**Secondary Land Uses**
- Research and development
- Ancillary commercial
- Auto service
- Flex/makerspace
- Self-storage (all types)

### Allowed Height
- 50 feet

### Allowed Density and Intensity
- FAR: up to 0.5
- Du/ac: n/a

### Appropriate Building Types
- Standalone commercial/industrial
- Low-rise industrial/flex
- Block form warehouse/studio buildings
Employment Flex (EMPFX)

Description and Intended Physical Character
This place type is intended to permit mixed-use development of lighter industrial uses and more intensive service, retail, and commercial uses. It is a transition zone that allows a mix of businesses that provide a wide variety of employment-generating activity, including office, industrial and light manufacturing, research and development, and supportive commercial. EMPFX areas are typically situated close to major arterials or freeways. The uses allowed in this designation will support job generation, focusing on fabrication, research, distribution, and similar operations conducted primarily indoors.

Key Features

Primary Land Uses
- Research and development
- Flex/makerspace
- Light industrial
- Professional/medical offices
- Film production/sound stage studio

Secondary Land Uses
- Production, Distribution and Repair uses
- Supportive Retail/Services
- Auto Service
- Breweries/distilleries/wineries
- Self-storage (indoor only)

Allowed Height
- 50 feet

Allowed Density and Intensity
- Du/ac: n/a
- FAR: up to 1.0

Appropriate Building Types
- Standalone industrial warehouses
- Block form low-rise buildings
Public and Special Uses (MRE, PF, OS, UT, SP)

Special and public land uses include fewer building, character, public realm and parking features as compared to other land use designation categories. In many cases these uses have few buildings, little to no public access or are regulated by other planning documents (i.e., Specific Plan). In many instances, these features are considered on a case by case basis.

**Character**

Building Character
N/A

Public Realm
N/A

Connectivity
N/A

Parking
N/A

Other Characteristics
The following sections include descriptions and intended physical character for land uses that are specialized and or public.
Description and Intended Physical Character
This place type is intended to permit extraction and processing of mineral resources, including sand, gravel, and decomposed granite. This designation is limited to areas designated by the State Division of Mines and Geology as Mineral Resource Zone 2 areas, or where significant mineral resources occur and the extraction of which is determined to be beneficial. Operations within this place type are subject to all applicable policies, ordinances, and laws regulating traffic impacts, air and water quality, and land use compatibility.

Key Features
Primary Land Uses
• Mineral Extraction and Processing
• Concrete Batching

Secondary Land Uses
• Ancillary uses allowed on the site should be only those uses normally associated with extraction and/or processing of on-site materials.

Allowed Height
• 100 feet

Allowed Density and Intensity
• Du/ac: n/a
• FAR: up to 0.25

Appropriate Building Types
• Low-rise industrial buildings
**Public Facility (PF-Parks, PF-School, PF-Civic)**

**Description**
This designation includes the City’s public and private schools, higher learning and other institutional uses, parks, recreation uses, amphitheaters, community centers, and other similar uses.

**Key Features**
**Primary Land Uses**
- Public or private schools
- Civic building or offices including community centers
- Public or private parks
- Recreation buildings including public pools

**Secondary Land Uses**
- n/a

**Allowed Density and Intensity**
- 1.0 FAR

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**Open Space (OS)**

**Description**
This designation includes the City’s public and private open space and golf courses and support structures.

**Key Features**
**Primary Land Uses**
- Open space
- Golf courses
- Cemeteries

**Secondary Land Uses**
- n/a

**Allowed Density and Intensity**
- 0.01 FAR
Utilities (UT)

Description
This place type is intended to permit above ground utilities and utility rights-of-way. Utilities may include electrical substations, transmission lines, water storage tanks, and supportive buildings and structures.

Key Features
Primary Land Uses
- Utility station
- Utility rights-of-way

Secondary Land Uses
- Supportive structures
- Utility administration buildings

Specific Plan (SP)

Description
This designation applies to areas that have existing adopted Specific Plans. Each Specific Plan regulates the intended physical character, key features, and look and feel within those areas. These plans also indicate allowed density and intensity, height, and building types. Reference the applicable Specific Plan for more details.
Chapter 6

Circulation and Mobility

The Circulation and Mobility Element presents the approach to transportation, addressing access and mobility within the city. The chapter provides a roadway classification system, corresponding cross-sections, and recommended future networks for motor vehicles, walking, biking, riding transit, and the movement of freight. Goals, policies, and actions provide a framework for advancing health and safety, access to services and opportunities, sustainability, and economic vitality through transportation.
Statutory Requirements

Circulation and mobility are required General Plan topics per Government Code Section 65302(b) which requires:

“A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes…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 in a manner that is suitable to the rural, suburban, or urban context of the general plan…”

In addition to the requirements above, this Circulation and Mobility Element also addresses the following statutory requirements which affect the goals and policies outlined in this Element.

Complete Streets Act
The California Complete Streets Act of 2008 (AB 1358) was signed into law on September 30, 2008. Beginning January 1, 2011, AB 1358 required circulation elements to address the transportation system from a multimodal perspective. The Complete Streets Act also requires circulation elements to consider the multiple users of the transportation system, including children, adults, seniors, and people with disabilities.

Global Warming Solutions Act
The Global Warming Solutions Act (AB 32) was signed into law on September 27, 2006. AB 32 established a comprehensive program to reduce greenhouse gas emissions to combat climate change. This bill required the California Air Resources Board (CARB) to develop regulations to reduce greenhouse gas emissions to 1990 levels by 2020. On January 1, 2012, the greenhouse gas rules and market mechanisms, adopted by CARB, took effect, and became legally enforceable.

Sustainable Communities and Climate Protection Act
The Sustainable Communities and Climate Protection Act, or Senate Bill (SB) 375, provides incentives for cities and developers to bring housing and jobs closer together and to improve public transit. The goal is to reduce the number and length of automobile commuting trips, which will help to meet the statewide targets for reducing greenhouse gas emissions set by AB 32. SB 375 requires each Metropolitan Planning Organization to add a broader vision for growth, called a Sustainable Communities Strategy (SCS), to its transportation plan. The SCS must lay out a plan to meet the region’s transportation, housing, economic, and environmental needs in a way that enables the area to lower greenhouse gas emissions. The SCS should integrate transportation, land-use, and housing policies to plan for achieving the emissions target for their region. The Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) and SCS were adopted in 2016.

- The City of Palmdale will incorporate components to comply with SB 375 by incorporating components into the General Plan. Applicable components of the SCS include:
  - Support transit-oriented development.
  - Support infill housing development and redevelopment.
  - Support mixed-use development that improves community walkability.
  - Promote land use patterns that encourage the use of alternatives to single-occupant automobile use.
  - Apply Transportation System Management (TSM) and complete streets practices to arterials to maximize efficiency.
  - Improve modes through enhanced service, frequency, convenience, and choices.
  - Expand and enhance Transportation Demand Management (TDM) practices to reduce barriers to alternative travel modes and attract commuters away from single occupant vehicle travel.

Senate Bill 743 – California Environmental Quality Act (CEQA) Changes
On September 27, 2013, SB 743 was signed into State law. A key element of this law is the potential elimination or deemphasizing of auto delay, level of service (LOS), and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts. According to the legislative intent contained in SB 743, these changes to current practice were necessary to, “More appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.”
SB 743 requires impacts to transportation network performance to be viewed through a filter that promotes the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and the diversification of land uses. Some alternative metrics were identified in the law, including vehicle miles traveled (VMT) or automobile trip generation rates. SB 743 does not prevent a city or county from continuing to analyze delay or LOS as part of other plans (i.e., the general plan), studies, or ongoing network monitoring, but these metrics may no longer constitute the sole basis for determining CEQA impacts once SB 743 is ratified into CEQA guidelines.

Assembly Bill 43 – Traffic Safety
On October 8, 2021, Assembly Bill (AB) 43 was signed into State law. The bill allows traffic engineers to consider people walking and biking when establishing speed limits. Previously, engineers were required to use the 85th-percentile speed to set speed limits. AB 43 removes this requirement for most roadways, although engineers can still use it as one criterion to consider. AB 43 also allows cities in California to lower speed limits in 5 mile per hour (mph) increments and reduces the need to conduct as many traffic surveys as previously required.
Active Transportation

The City of Palmdale was awarded grant funding in 2015 to initiate a citywide Active Transportation Plan covering specific recommendations for Complete Streets, Bicycle Transportation, and Safe Routes to School (SRTS). The opportunities identified for each of the topics in the plans which were finalized in 2018, but were not formerly adopted, are summarized below:

**Complete Streets**
- Focus on design to improve community health, safety, and economic vitality
- Provide safe and convenient access for a variety of mobility types
- Develop a circulation network that enables travel to and from destinations in a safe and efficient manner
- Provide mobility for multiple modes of transportation
- Reduce vehicle emissions from increased use of alternative transportation modes

**Bicycle Transportation**
- Develop a comprehensive bikeway network, that services the full spectrum of bicycle rider types
- Plan bikeways that will complement the SRTS access for schools located within the City of Palmdale
- Facilitate the provision of quality bicycle support facilities at public and private sites/buildings throughout the community
- Apply new technologies and innovative treatments on appropriate roads and bikeways
- Provide secure bicycle storage facilities where bicyclists connect with other forms of transportation
- Develop and enhance multimodal opportunities for bicyclists to connect with other forms of transportation
- Encourage and support comprehensive bicycle safety and education awareness programs for bicyclists and motorists
- Ensure that ongoing maintenance keeps bicycle facilities in good repair

**Safe Routes to School**
- Make it easier and safer for students to walk and bicycle to school
- Increase the active mode share for student travel

Parking Policies

Off-street parking policies ensure that facilities are properly designed and maintained to facilitate safety and efficiency. The City’s guidelines for off-street parking facilities identify the number of spaces required, applicable use of parking spaces, design and loading standards, sharing between uses, parking for bicycles, and exceptions based on City approval.

The City’s existing parking policies are intended to achieve the following:
- Facilitate the intended use of properties
- Reduce traffic congestion and safety concerns
- Protect neighborhoods from the effects of vehicular noise and traffic
- Assure maneuverability of emergency vehicles
- Provide a positive visual experience

Street Maintenance

Street maintenance policies and procedures were written for the Public Works Maintenance Division to make sure that City rights-of-way are maintained properly and provide safe walking areas for the public.

The City’s existing street maintenance policies are intended to achieve the following:
- Conduct a detailed inspection twice per year, in the spring and fall, to ensure proper maintenance of public improvements.
- Maintain an accurate record of inspections and document how the inspections took place
- Note any conditions needing correction and any citizen complaints
- Monitor any conditions that may be hazardous to pedestrians

Relevant Plans & Documents
Key Projects

California High Speed Rail
The California High-Speed Rail Authority (CHSRA) is responsible for planning, designing, building and operation of a high-speed rail system that will connect the mega-regions of the state. The CHSRA is also committed to completing the environmental review for all project segments (Merced/San Francisco—Los Angeles/Anaheim) by 2022. No schedule has been established for completing construction of the high-speed rail line sections between Bakersfield and Palmdale or between Palmdale and Los Angeles Union Station. Due to Palmdale’s location along the corridor, linking the Central Valley and Los Angeles basin, accommodation of future high-speed rail is a consideration of this element. To accommodate the HSR station, the Palmdale Transportation Center would be relocated south of the existing location to between Avenue Q and Palmdale Boulevard.

High Desert Corridor
The High Desert Corridor (HDC) is a proposed project to create a high-capacity connection between SR-14 in Palmdale and I-15 in Victorville, which would be implemented after the General Plan horizon year. The HDC project would also include bicycle facilities, extending 36 miles along the corridor from US 395 in Adelanto to 20th Street East, providing a bike route connection to the Palmdale Transportation Center. Some of the right-of-way required for the project may also accommodate an HOV lane in each direction, plus a high-speed passenger rail line.

Brightline West Connection to Las Vegas
The proposed high-speed rail feeder service would be modeled on the Brightline service currently operating in Florida between Fort Lauderdale and Miami. The high-speed rail feeder may be built within the HDC right-of-way, primarily within the highway median. The stop serving Brightline West would be at the Palmdale Multimodal Rail Station to be located south of the existing Palmdale Transportation Center between Avenue Q and Palmdale Boulevard. The initial Southern California station is proposed to be in Victorville and intends to add stations and provide connections to Metrolink and future California High-Speed Rail.
Antelope Valley Line Study
The Los Angeles County Metropolitan Transportation Authority (Metro) is a member agency of the Southern California Regional Rail Authority (SCRRA). Metro, in collaboration with SCRRA, is studying potential opportunities to add more rail service from Lancaster and Palmdale to Los Angeles. The Antelope Valley Line Study has two objectives: to look at increasing the frequency of the Metrolink service; and to develop a phased and prioritized approach for capital improvements based on benefits, costs and impacts in Los Angeles County. The average speed for this line is approximately 40 miles per hour, and passenger rail travel time between Palmdale and Los Angeles Union Station is approximately two hours. The Antelope Valley Line is currently Metrolink’s third busiest line with approximately 7,000 passengers per weekday. The line is facing a variety of service challenges due to its aging infrastructure, which was constructed through mountainous terrain with single track in many areas.

The final report identifies rail infrastructure projects needed to deliver the track capacity necessary for increased service levels, including potential double-tracking of portions of the line that are currently single track, extension of passing sidings, additional platforms at stations, and improved signaling systems. Adding late night train service, more frequent service and bidirectional service are some of the recommendations likely to move forward toward implementation.
Context

Roadway Conditions

Palmdale relies heavily on arterial roadways to move travelers throughout the community. The network has primarily been developed around a suburban grid system in which arterials are spaced approximately every mile and secondary arterials are spaced every half-mile between major arterials. This arterial network separating neighborhood streets limits connectivity for intracity multimodal travel and contributes to a high vehicle speed environment. Many residential areas are designed as suburban subdivisions with cul-de-sacs, circuitous streets, and lack of porous access. This contributes to long, inefficient travel distances between residential neighborhoods to access collector and arterial streets, making it especially challenging and time consuming for people walking, biking, and taking transit to connect to destinations like school, stores, and work.

Pedestrian Conditions

Existing pedestrian network conditions and environmental factors can make walking in the city uncomfortable. Much of the City’s 106 square miles consist of vacant land, making it unfeasible to reach destinations by foot across most of the city outside of the central core. Sidewalk coverage is inconsistent across neighborhoods. Many sidewalks lack tree cover and shade, detracting from the comfort of walking in inclement weather. Signalized intersections along arterials are often spaced far apart, presenting pedestrians with limited opportunities for safe crossing.

Bicycle Conditions

The City of Palmdale bicycle network is anchored by a 4.7-mile Class I bicycle path along Sierra Highway from Technology Drive, continuing north into Lancaster. While it provides a regional link, this facility is disconnected from communities outside of central Palmdale. Other facilities are largely absent across the city, though dedicated bicycle lanes are present along 5th Street East and along east-west arterials including but not exclusive to segments of East Avenue R, East Avenue Q, and East Avenue S. Arterials in Palmdale are a necessary component of a connected, citywide bicycle network, but because these roads are currently designed to support high speed vehicle traffic, bicycle facilities must be carefully designed to create a safer environment and distance people on bikes from fast moving vehicles.
Transit Conditions

Public transit within Palmdale is designed to serve intra-county and local travel needs. AVTA systemwide ridership is relatively low compared to other transit systems in the region. The low ridership is partly attributed to infrequent service—headways for most routes operating within Palmdale are between 30 to 60 minutes, making transit unviable for most trips. The existing transit system also mostly caters to limited regional commute patterns rather than supporting travel within the city. Though key activity centers are served by bus transit, it is difficult to get to and from these locations, and to connect to other destinations in Palmdale.

The City is undergoing a station area planning process in partnership with the CHSRA around the high-speed rail multimodal station near downtown Palmdale. Targeted transit investments will still need to address local connectivity to expand access and provide a practical mode choice for more people. Much of the city’s transit service is on 10th Street West, Palmdale Boulevard, Avenue R, and Avenue S, and investments in more frequent and convenient transit services on these existing corridors should be prioritized.

Commute Patterns

Most residents drive to work, and many have long commutes. A vast majority of Palmdale residents (91.4%) commute to work by motor vehicle, of which 76% drive alone. Approximately one third of commuters have a travel time to work of more than one hour, with many traveling several hours to the Los Angeles basin daily. Less than five percent of these long-distance commuters travel to work by public transit.

Safety Trends

Considering historical crash trends throughout the city and the primary factors that contribute to collisions are critical for understanding behaviors on the current roadway network, and for guiding recommendations to promote safe facilities for all modes of travel. More than three-fourths of vehicle-involved collisions that occurred in Palmdale in recent years took place on the Local Roadway Network (LRN). The LRN is made up of principal and minor arterials, collectors, and local roads, as opposed to regional roads like SR-14 and SR-138.

Unsafe speed and failure to yield properly are the most common crash factors in vehicle-involved collisions on both the local and regional roadway network. Active transportation-involved crashes involve a pedestrian or a person riding a bicycle. About two-thirds of active transportation-involved collisions in the city involve pedestrians walking or crossing a street. The primary casual factors of collisions involving pedestrians or people riding bicycles include a pedestrian outside of a marked crosswalk or sidewalk, or a vehicle operating on the wrong side of the road.
Goods Movement

Goods within, and passing through, Palmdale move via truck and the Union Pacific Railroad. Designated truck routes prioritize automobile and heavy vehicle usage. Commercial vehicles with a manufacturer’s gross vehicle weight rating of 10,000 or more must use designated truck routes within city limits, as designated in the Palmdale Municipal Code, unless they are making pickups or deliveries of goods, wares, or merchandise to or from a building, or for delivering materials to support construction.

Aviation

**Palmdale Regional Airport**

Palmdale Regional Airport (PMD) began civilian operations in 1971. During the 1990s, commercial airlines operated out of the airport, but in late 2008, passenger service was suspended at the facility due to low volume.

SR-14, about three miles west of the airport, provides regional access. As PMD has no scheduled commercial air service, there are no rental car facilities at the airport, and no private operators provide ground transportation services to the airport. The Palmdale Transportation Center (PTC), the proposed site of a future California High-Speed Rail station, is located approximately two miles southwest of the airport. The PTC provides connections with the local public transit provider, AVTA, but no AVTA routes currently serve the airport. Several transportation improvements near the airport are currently in the planning phase, study phase or are under construction.

The City owns approximately 600 acres of land north and west of the Plant 42 perimeter, a portion of which is proposed to be developed into an air terminal facility. The property extends between Sierra Highway to the west and 15th Street East to the east, and between East Avenue M (Columbia Way) to the north and Avenue M-12 to the south. If the City and the United States Air Force reach an agreement for access to the runways on Plant 42, the City has the opportunity to develop access routes from the new air terminal facility to the runways.
Context

Status quo roadway classification frameworks do not meet Palmdale’s evolving needs for a more multimodal network. The following sections provide a new approach with street typologies and modal networks that are more responsive to local transportation needs and context.

Street Typologies

State of California General Plan Guidelines and federal funding eligibility both require the City to maintain functional street classification systems and are summarized below. However, these external classification systems are oriented toward vehicle operations and do not address local circulation and street design needs, so a local system is recommended to establish local multimodal network priorities.

Federal and State Functional Classification System

The Federal Highway Administration (FHWA) identifies functional classification as a key item in transportation data. Streets and highways are grouped into classes according to the service they provide. The California Road System (CRS) maps display functional classification which is used in determining Federal funding to maintain the roads.

The federal classifications included in the CRS maps are:
- Interstate
- Other Freeway or Expressway
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local

Functional classification is required by the FHWA for projects receiving federal funds. This system is primarily auto centric and does not take into consideration local context, land use, or built form. This does not preclude cities from further defining their roadway classification systems for management purposes. However, it is recommended that a direct correlation be made to the CRS classification in a City’s functional classification system.

Roadway Classifications

This section of the Mobility Element describes the classifications of Palmdale’s roadways, including designated corridors that support active transportation. It also specifies truck routes and transit priority corridors.

The Palmdale Roadway Classification presents an enhancement to the functional FHWA and CRS classification that is more focused on the scale and connective role of each street within Palmdale’s roadway network, organized into the following street types: Regional, Crosstown, Connector and Neighborhood streets. These street types are described in detail below and this approach to local roadway classifications will inform future roadway improvements by defining typical characteristics, design elements and multimodal network functions for each category. These should be applied to new and reconfigured streets to balance the needs of all travel modes more effectively. Definitions of street types consider surrounding land uses and anticipated traffic levels, and designate priority levels for different travel modes. In sum, they represent a hierarchical network linked to typical design standards.

Table 6.1 on the following page presents an overview of each street type category with additional details and example cross sections that illustrate the potential variety within each category. To ensure that Palmdale remains eligible for federal transportation funds, applicable FHWA terminology is included. Additional information about transit and active transportation priority corridors follows in the Priority Corridors section, and details about bicycle facilities and design considerations are presented in the Modal Networks section.

Table 6.2 presents a more detailed summary of specific Roadway Link Right-of-Way Dedication Requirements with corresponding mid-block street cross-sections.
### Palmdale Roadway Classification Summary Table

<table>
<thead>
<tr>
<th>Characteristic Area</th>
<th>Categorization</th>
<th>Typical Street Right-of-Way Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional</td>
<td>Palmdale Street Type</td>
<td>Section A: 120' minimum right-of-way</td>
</tr>
<tr>
<td></td>
<td>Crosstown</td>
<td>Section B: 90' minimum right-of-way</td>
</tr>
<tr>
<td></td>
<td>Connector</td>
<td>Section C: 60' minimum right-of-way</td>
</tr>
<tr>
<td></td>
<td>Neighborhood</td>
<td>Section D: 48' minimum right-of-way</td>
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<tr>
<td></td>
<td></td>
<td>Section E: 48' minimum right-of-way</td>
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<tr>
<td></td>
<td></td>
<td>Section F: 48' minimum right-of-way</td>
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<tr>
<td></td>
<td></td>
<td>Section G: 48' minimum right-of-way</td>
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<tr>
<td></td>
<td></td>
<td>Section H: 108' minimum right-of-way</td>
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<tr>
<td></td>
<td></td>
<td>Section I: 132' minimum right-of-way</td>
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<tr>
<td></td>
<td></td>
<td>Section J: 168' minimum right-of-way</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Section K: Not to scale.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Section L: This table only shows cross-sections at mid-block locations. Additional right-of-way may be required at intersections to accommodate turn lanes. Not to scale. Based medians may be required as determined by the City Engineer/City Traffic Engineer. Installation of speed humps shall be in accordance with PDC 10.04.390 Chapter 12. Bike lanes, buffers, paths, etc. may be updated through a master plan of bike and trail.</td>
</tr>
<tr>
<td>Roadway Link</td>
<td>From/To</td>
<td>Cross-Section ID—See Figure 6.1</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>70th St West</td>
<td>Columbia Way (Ave M)/R. Lee Ermey Ave (Ave N)</td>
<td>C</td>
</tr>
<tr>
<td>65th St West</td>
<td>Columbia Way (Ave M)/R. Lee Ermey Ave (Ave N)</td>
<td>C</td>
</tr>
<tr>
<td>60th St West</td>
<td>Columbia Way (Ave M)/R. Lee Ermey Ave (Ave N)</td>
<td>B</td>
</tr>
<tr>
<td>Godde Hill Road</td>
<td>R. Lee Ermey Ave (Ave N)/Elizabeth Lake Rd</td>
<td>C</td>
</tr>
<tr>
<td>55th St West</td>
<td>Columbia Way (Ave M)/R. Lee Ermey Ave (Ave N)</td>
<td>C</td>
</tr>
<tr>
<td>45th St West</td>
<td>Columbia Way (Ave M)/Ave N-8</td>
<td>C</td>
</tr>
<tr>
<td>Bolz Ranch Road</td>
<td>Ave N-8/Towncenter Drive</td>
<td>C</td>
</tr>
<tr>
<td>Ranch Center Dr</td>
<td>Elizabeth Lake Rd/Ritter Ranch Rd</td>
<td>B</td>
</tr>
<tr>
<td>30th St West</td>
<td>Columbia Way (Ave M)/Bulldog Ave (Ave P-8)</td>
<td>B</td>
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<tr>
<td>25th St West</td>
<td>Ave O/Rancho Vista Bl (Ave P)</td>
<td>B</td>
</tr>
<tr>
<td>Highland Street (25th St W)</td>
<td>Rancho Vista Bl (Ave P)/Ave P-8</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Ave P-8/Elizabeth Lake Rd</td>
<td>B</td>
</tr>
<tr>
<td>20th St West</td>
<td>Columbia Way (Ave M)/Ave O-8</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Ave O-8/Elizabeth Lake Rd</td>
<td>C</td>
</tr>
<tr>
<td>15th St West</td>
<td>Columbia Way (Ave M)/R. Lee Ermey Ave (Ave N)</td>
<td>B</td>
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<tr>
<td></td>
<td>R. Lee Ermey Ave (Ave N)/Ave O</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Ave O/Rancho Vista Bl (Ave P)</td>
<td>B</td>
</tr>
<tr>
<td>Summerwind Drive</td>
<td>Rancho Vista Bl (Ave P)/Ave P-8</td>
<td>C</td>
</tr>
<tr>
<td>10th St West</td>
<td>Columbia Way (Ave M)/Palmdale Blvd</td>
<td>A</td>
</tr>
<tr>
<td>Tierra Subida Ave</td>
<td>Palmdale Blvd/Ave S</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Ave S/Barrel Springs Rd</td>
<td>C</td>
</tr>
<tr>
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<td>Technology Drive/Palmdale Blvd</td>
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### Roadway Link

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<td>Avenue S-8</td>
<td>40th St E/Fort Tejon Rd (State Route 138)</td>
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<td>Barrel Springs Rd</td>
<td>Tierra Subida Ave/25th St E</td>
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<td>Pearblossom Hwy (State Route 138)</td>
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*Where applicable, size, type and location of medians may be determined at the time of development based upon existing and approved development, access control, and circulation needs.*

### Regional

Regional streets provide the principal network for regional travel connecting Palmdale to other communities. These have limited commercial frontages and may overlap with existing or planned designated truck routes. These include portions of Sierra Highway, 10th Street West and Pearblossom Highway.

A typical Regional street is 100-136 feet wide, with 95-120 feet curb to curb, which may include a median or center lane as applicable. Some may have sidewalks on one side of the street where there is commercial or industrial frontage, and vacant land on the other. Most existing Regional streets have several wide vehicle lanes in each direction, and several also currently support bicycle facilities, such as Sierra Highway and 10th Street West Bikeways on Regional streets should be designed with maximum separation from vehicles, whether by a physical buffer or grade separation. Intersections with separate or multiple right turn lanes should incorporate dedicated bike phasing, as opposed to reverting to a floating bike lane in between vehicular travel lanes. Wide outside travel lanes can be reconfigured to provide dedicated space for protected bicycle facilities (Class IV) and adjacent vacant land can be used to build Class I bicycle paths to add further separation between people who bike and high-speed, high-volume vehicular and truck traffic. An example cross section for a Regional street is illustrated in Figure 6.3.

### Figure 6.3 Typical Cross Section of Regional Street with Bicycle Treatments
Crosstown

Crosstown streets provide the principal network for citywide travel by all modes, including walking, bicycling, transit, and automobiles. Most commercial land uses in Palmdale are accessed directly via Crosstown streets. Crosstown streets should have a minimum of 8-foot sidewalks to accommodate pedestrian travel and other activities. Additional width is necessary to accommodate the sidewalk furniture zone on commercial corridors to support vibrant commercial use with minimal setback on commercial lots. Bicycle facilities on Crosstown streets should be dedicated bicycle lanes with a buffer. Crosstown streets also make up most of the transit priority corridor network.

A typical Crosstown street is 90 to 114 feet wide, with 88 to 98 feet curb to curb, which may include a median or center lane as applicable and a minimum of 8-foot sidewalks on both sides.

Most existing Crosstown streets have several wide vehicle lanes in each direction and sidewalks on both sides of the street. For Crosstown streets that carry high frequency transit lines and are part of the bicycle network, the existing vehicle lanes should be reallocated to provide dedicated space for other modes. Travel lanes adjacent to bicycle facilities may serve as flexible transit priority lanes, which can accommodate mixed traffic in the near-term, and include treatments like a dedicated transit lane, queue jumps, or updated signal timing to accommodate higher frequency transit and reduce travel time for buses in the future. Bus bulbs with boarding islands can be installed between the bike lane and transit priority/mixed traffic lane on corridors with bicycle facilities. An example cross section for a Crosstown street is illustrated in Figure 6.4.

Some Crosstown streets, such as 40th Street East, do not carry high-frequency transit and have a different existing lane configuration. For these streets that are part of the bicycle network and do not require dedicated transit lanes, the existing right-of-way should be reallocated to include protected bicycle lanes, wider sidewalks, and landscaped buffers to improve the pedestrian environment. An example cross section for a Crosstown street without transit is illustrated Figure 6.5.
Palmdale Boulevard is a unique Crosstown street because it functions as the primary commercial corridor through Palmdale and carries all modes and is currently part of Caltrans right-of-way. Its curb-to-curb dimensions are similar to other Crosstown streets with transit service as illustrated in Figure 6.4, and the same multimodal facilities and street geometry should be part of the Palmdale Boulevard cross section. Compared to other Crosstown streets, Palmdale Boulevard already features wider sidewalks, which are essential to the pedestrian activity and spatial needs on a vibrant commercial corridor, and foster walkability and comfortable transit access. Pedestrian and bicycle modes should be accommodated along with additional pedestrian improvements at intersections and flexible transit lanes to promote a vibrant main street environment while continuing to accommodate vehicle traffic operations within Palmdale’s commercial core. The width of Palmdale Boulevard varies, and design details will need to be customized at specific locations.

The recommended cross sections and widths illustrated above appropriately address multimodal needs on Crosstown streets and can be adjusted to fit within the range of total right-of-way on the existing built out roadway network. Future Crosstown streets that are built with previously identified maximum right-of-way widths should allocate the additional space to sidewalks, landscaped buffers, and protected bicycle facilities.

**Connector**

Connector streets provide connections for all modes of travel between neighborhoods and activity centers and provide direct access to land uses while linking Crosstown and Neighborhood streets. Connector streets tend to have fewer driveways, higher speed limits, and more signalized intersections than Neighborhood streets. Connector streets are also an essential component of the citywide bicycle network.

A typical Connector street in Palmdale is 66 to 94 feet, with 46 to 76 feet curb to curb, median or center lane as applicable and sidewalks on both sides of the street. All Connector streets should include buffered bike lanes on both sides of the street, and the existing outside vehicle lanes should be reallocated to provide dedicated bicycle lanes. An example recommended cross section for a Connector street is illustrated in Figure 6.6.
The recommended cross sections and widths illustrated above appropriately address multimodal needs on Connector streets and can be adjusted to fit within the range of total right-of-way on the existing built out roadway network. Future Connector streets that are built with previously identified maximum right-of-way widths should keep the total width of vehicle travel lanes consistent with the illustration above and allocate the additional space to sidewalks, landscaped buffers, and protected bicycle facilities. These maximum width streets may accommodate on-street parking and parking-buffered bicycle lanes on both sides of the street. An example maximum width cross section with these elements is illustrated in Figure 6.7.
Neighborhood streets are found mostly in residential neighborhoods and provide access to adjacent land uses, typically housing. Neighborhood streets should be designed to accommodate automobiles traveling at lower speeds. Traffic calming elements such as bulb outs, alternating chicanes, landscaping, and on-street residential parking should be incorporated. These streets prioritize pedestrians traveling on sidewalks. Bicycle facilities on neighborhood streets may include shared travel lanes, which are described in more detail in the Modal Networks section below.

A typical Neighborhood street is 30 to 64 feet wide, with 30 to 40 feet curb to curb and a 12 foot strip that includes a sidewalk and landscaping on both sides, with the exception of alleys. Most Neighborhood streets have two wide vehicle lanes that can accommodate informal on-street parking lanes. Existing Neighborhood streets present an opportunity to expand the citywide bicycle network with bicycle boulevards that include traffic calming elements, such as a chicane on one side and on-street parking on the other side. An example cross section for a short residential Neighborhood street is illustrated in Figure 6.8. This configuration accommodates residential parking, and traffic calming elements to mitigate high speed cut through traffic.

The recommended cross sections and widths illustrated above appropriately address multimodal needs on Neighborhood streets and can be adjusted to fit within the range of total right-of-way on the existing built out roadway network. Future Neighborhood streets that are built with previously identified maximum right-of-way widths should keep the total width of vehicle travel lanes consistent with the illustrations above and allocate the additional space to wider sidewalks, landscaping, and buffered bicycle facilities to support active modes. These maximum street widths may accommodate on-street parking and dedicated bicycle lanes on both sides of the street. An example maximum width cross section with these elements is illustrated in Figure 6.9.
Modal Networks

Pedestrian Facilities
A well-connected and comfortable pedestrian network enhances access for all travelers. When designed to accommodate all ages and abilities, it can help to increase walking as a means of transportation. Though no spatial data is available to provide a comprehensive assessment of pedestrian facilities, spatial imagery of existing conditions shows sidewalk coverage varies between neighborhoods. Complete sidewalk networks are more commonly found in residential neighborhoods south of the city’s central core and northeast of the California Aqueduct compared to residential areas north of Palmdale Boulevard. These variations were likely the result of independent guidelines applied by housing developers. Along major thoroughfares, gaps in the sidewalk network are primarily adjacent to undeveloped land, suggesting the need to prioritize infill development.

Expansion of the sidewalk network will coincide with future development and changes in land use. In addition to closing gaps, adding more signalized intersections and midblock crossings along major thoroughfares can help to create more crossing opportunities, reduce the distance between crossings, and improve pedestrian circulation. Planting street trees to calm traffic and provide shade and protection from the Antelope Valley’s hot weather also creates a more comfortable experience for the most vulnerable pedestrians, namely seniors, youth, and people with disabilities.

Bicycle Facilities
A comprehensive, safe, and well-connected bicycle network can help to encourage more local trips by bike and reduce the mode share of vehicle trips. When well designed, it can also encourage people to use active modes to get to where they need to go, contribute to healthier ways of living, reduce traffic, and reduce the need for more costly roadway improvement projects. The sections below describe the different classifications of bicycle facilities that make up a complete bicycle network, each of which provide a different level of separation and protection from vehicle traffic. Figure 6.10 describes and illustrates the four facility classifications, presented in order from most protected and separated from vehicles to least protected.
Additional detail about each facility classification is presented below and on the following pages, and the existing and planned network for Palmdale is illustrated in Figure 6.11.

### Multi-Use Paths (Class I)
Class I bikeways are multi-use bicycle paths or paved trails that provide separate, exclusive right-of-way for bicycling, walking, and other non-motorized uses. Class I separated paths should be placed along routes that have few driveways and intersections and be properly separated from the roadway with few vehicle crossing points. Multi-use paths are the lowest stress facilities as they are physically separated from motor vehicle traffic. One example of an existing Class I bicycle facility in Palmdale is on Sierra Highway between Columbia Way/Avenue M and Technology Drive.
Bicycle Lane (Class II)
Class II bicycle lanes are striped, preferential on-street bicycle lanes for one-way bicycle travel. Some bicycle lanes include striped buffers that add a few feet of separation between the bicycle lane and traffic lane or parking aisle. These facilities are important for the overall bikeway network because they provide a designated space for riders along the roadway. One example of an existing Class II bicycle facility in Palmdale is on 5th Street East between Avenue R and Avenue S.

Bicycle Route/Sharrow (Class III)
Class III bicycle routes, often marked with sharrows, are signed routes where people riding bicycles share a travel lane with people driving. Because they are mixed-flow facilities, Class III bicycle routes are only appropriate on low-volume streets with slow travel speeds. Class III facilities may be configured with just shared-lane markings to reinforce the legitimacy of bicycle traffic on the street or as “bicycle boulevards” where roads are augmented with traffic calming measures such as bulb outs and chicanes to slow traffic.

Separated Bikeway (Class IV)
Class IV separated bikeways, also known as cycle tracks, are on-street facilities that are physically separated from motor vehicle traffic with vertical barriers, such as bollards, landscaping, raised medians, or parking aisles. Separated bikeways provide extra separation between people riding bicycles and moving vehicles. Separated bikeways are recommended on high-volume, high-speed roadways. Palmdale currently does not have Class IV bicycle routes.
Proposed Bicycle Network

Most proposed bicycle facilities are recommended on Crosstown streets, like Avenue R and Avenue S, to provide people on bicycles with easy connectivity to community destinations. Crosstown streets see some of the highest speed limits within Palmdale, so it will be necessary for bicycle facilities to be designed beyond the minimum standard for Class II bicycle lanes. Like Regional streets, Crosstown streets are also adjacent to residential and commercial land uses, and where many severe and fatal bicycle- and pedestrian-involved collisions have occurred in the past. Improvements may include updated signal timing to prioritize people biking, striped lanes, buffers, and vertically separated facilities are critical to support a safe and inviting environment for bicyclists.

Bicycle facilities on Regional Streets, which in some cases overlap with designated truck routes as seen on Sierra Highway and 47th Street East, must be designed with maximum separation from vehicles as these are higher-volume, high-speed streets, and Class I or Class IV facilities are most appropriate on these streets. This can be achieved with physical buffers or grade separation. In some cases, dirt paths abutting vacant land along streets like 10th Street West can be upgraded to support Class I paths.

Bicycle facilities are also recommended on all Connector streets, such as 25th Street East and Avenue R-8, to connect residential neighborhoods with local activity centers found on Crosstown and Regional streets. Where existing right-of-way allows, facilities on Connector streets should be buffered bicycle lanes or standard Class II bicycle lanes. Sharrows should be reserved only for low-volume, low-speed roadways and are most appropriate on Neighborhood streets with traffic calming treatments.
Figure 6.11
Existing and Planned Bicycle Network Map

City Boundary
Sphere of Influence
Major Arterials
Major Highway/Arterial
Railroad

Transit Center
California Aqueduct
Water Body
Park

Existing Bikeways
Proposed Bikeways

Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.
Produced by Nelson\Nygaard
March 2019
Figure 6.12

Existing and Planned Transit Network Map

- City Boundary
- Sphere of Influence
- Major Arterials
- Major Highway/Arterial
- Railroad
- Transit Center
- California Aqueduct
- Water Body
- Park
- Proposed High Frequency Transit Corridors
- Existing Lower Frequency AVTA Routes (>30 min)
- Existing AVTA Microtransit Ride Service Area

Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.

Produced by Nelson\Nygaard
March 2019
Transit Service
Public transit plays an increasingly important role in the transportation network in Palmdale. Future improvements to the transit network build from existing higher-frequency transit routes. Proposed improvements also align with expected changes in land use and increased investment in local transit centers, rail stations, transit-oriented development (TOD) priority areas, and regional high-capacity transit.

Existing AVTA transit routes and the planned priority transit network are illustrated on Figure 6.12. These include lower frequency transit routes and proposed high frequency transit corridors, which are primarily located on Crosstown streets and currently support higher frequency transit service (30-minute headways or less). Proposed high frequency transit corridors are concentrated in the city’s core to emphasize the need for targeted investments for local-serving transit. It includes streets abutting future commercial and residential developments where demand for high frequency transit service is expected—these include streets like Avenue Q west of 10th Street East, Avenue R, Avenue S and 40th Street East.

Improvements should increase the frequency of existing service and extend frequent service where feasible. Improvements may include the installation of transit priority lanes, transit signal priority and queue jumps, enhanced transit stop amenities and station area improvements, or other transit speed and reliability treatments. Some segments are not currently served by AVTA but are extensions of corridors with transit service. The City should work with AVTA to adjust and increase service on these corridors to align with future development.

Transit agencies are leveraging the technology of ride-hailing platforms to provide on-demand transit services known as microtransit. Microtransit has the potential to fill gaps in existing transit networks by creating dynamic and flexible on-demand service to accommodate passengers taking short trips. Transit agencies often integrate microtransit services within the existing fixed-route network where rail or traditional fixed-route service may not be efficient to allow passengers to seamlessly transfer between various mobility services. Riders can use a mobile app or website to schedule and pay for trips.

Launched in September 2020, AVTA’s On-Request Microtransit Ride Service Pilot Program offers an on-request ride service that connects passengers to and from the rural communities of Lake Los Angeles, Pearblossom, Littlerock, and Sun Village with the rest of AVTA’s local transit system. Fares for this service are the same as AVTA’s local transit system. Microtransit ridership gradually increased between September 2020 to June 2021 during the pilot. Where feasible, supplementary on-demand transit services may be considered to better connect neighborhoods on the eastern and western fringes of the city to the larger AVTA system.
Truck
The Mobility Element identifies designated truck routes to accommodate the regional circulation needs of large trucks, while discouraging truck travel through residential areas, and avoiding cut through traffic by trucks passing Palmdale. The designated truck route network is illustrated in Figure 6.13. Restrictions on truck access would not apply to small delivery vehicles. Should the City need to adjust, add, or remove a designated truck route to accommodate future land use changes, the California Vehicle Code provides a legal framework to establish, enforce, and revise truck routes within local jurisdictions. It also grants authority to cities to prohibit trucks on other streets through ordinance or within a General Plan update. Where feasible, local commercial deliveries should be encouraged to take the shortest route possible from a designated truck route and utilize off-peak travel hours.

Vehicles that weigh more than the 10,000-pound threshold must use the following truck routes:
- 10th Street West from Rancho Vista Blvd / Avenue P to Columbia Way (Avenue M)
- Sierra Highway from SR-14 to Columbia Way (Avenue M)
- 50th Street East from Palmdale Boulevard to Avenue L
- Columbia Way (Avenue M) from 70th St West to 90th Street East
- Rancho Vista Blvd / Avenue P from 10th Street West to 90th Street East
- City Ranch Road, Rayburn Road, and Avenue R from the Palmdale Landfill to Sierra Highway
- Avenue S from Tierra Subida Avenue to Sierra Highway
- Pearblossom Highway from Sierra Highway to Fort Tejon Road (State Route 138)
- Avenue T from Fort Tejon Road (State Route 138) to 90th Street East
- Palmdale Boulevard from SR-14 to 90th Street East
- SR-14 through city limits
- Tierra Subida Avenue from Avenue S to Rayburn Road
- Fort Tejon Road (State Route 138) from 75th Street East to 47th Street East
- 47th Street East (State Route 138) from Fort Tejon Road to Palmdale Blvd
- 90th Street East from Avenue T to Avenue L

Commercial vehicles can still use local streets when making deliveries or picking up goods from local businesses. Restrictions on truck access do not apply to small delivery vehicles.

Performance Standards
Since adoption of the previous General Plan, Senate Bill 743 (SB 743), has shifted focus of transportation analysis under the California Environmental Quality Act (CEQA) statewide from level of service (LOS), as measured by roadway capacity and vehicle delay, to vehicle miles traveled (VMT). VMT provides an estimate of the amount and distance driven by vehicle to reach a destination.

SB 743 calls for the City of Palmdale to establish VMT-based thresholds of significance for CEQA analysis, which may be defined in transportation analysis guidelines. SB 743 does not preclude using LOS for local traffic operations analysis, but LOS may no longer be used as a metric for evaluating a project’s potential transportation impacts under CEQA. Local transportation analysis guidelines can define development review requirements and transportation analysis to support planned growth and address traffic operations needs while prioritizing safety and comfort for people walking, biking, and taking transit. These guidelines may identify different expectations for intersection delays and corridor travel times within areas that include mixed-use and commercial development, and on corridors that are part of the LA County Congestion Management Program (CMP) network.
The following desired outcomes and metrics were identified to help the City of Palmdale track progress toward creating a safer and more accessible transportation system. This process follows the City of Palmdale’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

### Desired Outcomes, Indicators, and Targets

The outcomes below were identified to help the City of Palmdale track progress toward creating a safer and more accessible transportation system. This process follows the City of Palmdale’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

#### Top Key Outcomes

**OUTCOME:** Reduce severe injuries and fatal collisions on the City’s roadway network

KPI’s:
- Annual severe injuries and fatalities for people walking, riding bikes, and in vehicles using Statewide Integrated Traffic Records System (SWITRS)
- Number of intersections and number of miles of the future high injury network that are redesigned to improve safety

**TARGET:** Downward trend of severe injuries and fatal collisions

**OUTCOME:** Reduce vehicle miles traveled (VMT) per capita and per employee

KPI’s:
- Percentage decrease in VMT per capita

**TARGETS:**
- Decrease average distance or frequency of home-based drive-alone trips

KPI:
- Percentage decrease in VMT per employee

**TARGET:**
- Decrease average distance or frequency of commute and work-based drive-alone trips

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**OUTCOME:** More equitable and reliable access to public amenities, services, and opportunities

KPI:
- Percentage of residents within a 20-minute walk/or bike ride of a park, recreation center, or multi-use trail

**TARGET:**
- Upward trend of residents with access to parks and recreation without a vehicle

---

KPI’s:
- Percentage of residents within a 15-minute transit ride of a grocery store
- Percentage of residents within a 15-minute transit ride of essential social services

**TARGET:**
- Upward trend of residents with access to neighborhood commercial areas without a vehicle

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KPI:
- Percentage of K-12 and College students who walk, ride, or roll to school

**TARGET:**
- Upward trend of students with active transportation access to school

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KPI:
- Percentage of commuters who drive alone

**TARGET:**
- Downward trend in drive-alone commute mode share

---

**OUTCOME:** Increase share of trips in the city made by walking, biking, transit, and shared rides

KPI:
- Average daily transit boardings

**TARGETS:**
- Upward trend in average daily transit ridership

---

KPI:
- Percentage of people who walk, ride, or roll to school or work

**TARGET:**
- Upward trend in active transportation trips

---

KPI:
- Percentage of commuters who drive alone

**TARGET:**
- Downward trend in drive-alone commute mode share

---

KPI:
- Percent reduction in GHG emissions

**TARGET:**
- Upward trend in local Air Quality Index

---

OUTCOME: Increase quality of life and economic competitiveness

KPI:
- Average commute time

**TARGET:**
- Downward trend in average commute time

---

KPI:
- Percent reduction in GHG emissions

**TARGET:**
- Upward trend in local Air Quality Index

---
Goals and Policies

The following section includes goals and policies for the Circulation and Mobility Element. Goals and policies are followed by implementation actions. Policies related to circulation and mobility are woven throughout the General Plan, including in the Land Use and Community Design Element, Equitable and Healthy Communities Element, and Public Facilities, Services, and Infrastructure Element, among others.

CIRCULATION AND MOBILITY

Goal CM-1
Build and maintain a transportation system that is safe and comfortable for travelers of all modes regardless of age or ability.

CM-1.1 Roadway design. Design and maintain the public right-of-way through a complete streets approach that facilitates safe, comfortable, and efficient travel for all roadway users.

CM-1.2 Modal conflicts. Use a systemic safety approach to proactively identify opportunities to improve safety where conflicts between users exist.

CM-1.3 Network gaps. Identify and program mitigation measures for gaps and deficiencies in the transportation system to accommodate each major transportation mode.

CM-1.4 Speed management. Include speed reducing elements along local and connector roadways and within all new private development projects.

CM-1.5 Railroad crossings. Implement grade separation at railroad crossings where feasible.
Goal CM-2
Build and maintain a transportation system that accommodates future growth and maintains transportation networks for all modes.

CM-2.1 Roadway classification. Classify streets based on their modal purpose and land use context.

CM-2.2 Multimodal travel. Prioritize safety, operations, and comfort for active and transit modes on streets that have been identified as part of the multimodal network.

CM-2.3 Intersection Design. Prioritize safety and mobility for non-motorized modes in all intersection designs.

CM-2.4 Network connectivity. Prioritize multimodal infrastructure that connects existing development with future infill development areas (i.e., gap closure projects).

CM-2.5 Multimodal comfort. Prioritize quality of multimodal facilities with respect to a user’s experience of stress, connectivity, and safety for streets with a non-automobile priority, and ensure the appropriate balance with vehicular operations.

CM-2.6 Managing truck travel. Review the truck route network periodically and update as necessary to minimize impacts on residential neighborhoods while accommodating needs of commercial/industrial uses.

CM-2.7 Travel demand forecasting. Develop and maintain a traffic demand model based upon the designated network, using existing and projected levels to inform land use decisions.

CM-2.8 Growth management. Ensure that the cumulative and regional impacts of new development on the circulation system are mitigated to the extent feasible, concurrent with development. Concurrent shall mean that required facilities are installed as needed during various stages of development.
**Goal CM-3**
Build and maintain a transportation system that provides affordable, equitable, and efficient access to employment centers and essential services.

**CM-3.1 Transit reliability.** Make public transit a convenient and reliable option for daily trip making on a local and regional basis.

**CM-3.2 Transit access.** Encourage investments and Capital Projects that reduce first/last-mile barriers to transit stops.

**CM-3.3 Access to employment.** Encourage investments and Capital Projects that improve the safety and multimodal options for access to high quality jobs.

**CM-3.4 Transit coordination.** Work with AVTA to enhance the deployment of fixed-route and flex-route transit services, including increased frequency and service spans.

**CM-3.5 Regional rail.** Work with Metrolink to increase the frequency of on-peak services and later service hours.

**CM-3.6 Transit information.** Work with transit providers to improve the delivery of transit service availability and real-time information in an easy, dependable, and accessible means.

**CM-3.7 Commute trip reduction.** Work with large employers to implement programs that expand access to non-drive alone commute options for all commuters, including hourly staff and contract workers.

**CM-3.8 Multimodal Station.** Maximize access to downtown via transit and other modes through the Palmdale Transportation Center and future relocation to accommodate a station for high-speed rail.

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**Goal CM-4**
Build and maintain a transportation system that enhances quality of life and public health.

**CM-4.1 Access to essential services.** Prioritize investments that improve access to healthcare and social services.

**CM-4.2 Access to healthy foods.** Improve mobility in neighborhoods with limited access to healthy food sources.

**CM-4.3 Access to parks and open space.** Prioritize investments that expand access to Palmdale’s parks and trails and support physical activity.

**CM-4.4 Neighborhood streets.** Create neighborhood streets that unify neighborhoods, reduce vehicle speeds, reduce barriers for people walking, biking, and riding transit, and provide connectivity to connector and regional routes.

**CM-4.5 Active friendly design.** Design multimodal facilities to a standard that will increase physical activity.

**CM-4.6 Lighting.** Provide human scale lighting along pedestrian thoroughfares, in commercial districts, on trails, and at transit stops.
Goal CM-5
Build and maintain a transportation system that fosters a more active and vibrant downtown.

**CM-5.1 Public space.** Encourage wider sidewalks and plazas on downtown streets to enhance placemaking, improve public safety, and support local businesses.

**CM-5.2 Parking supply.** Promote and support creative and flexible approaches to parking, including maximizing use of existing public supply and sharing between uses to create a “park once environment.”

**CM-5.3 Walkability.** Enhance the safety and comfort of existing pedestrian street crossings and reduce the distance between crossings.

**CM-5.4 Streetscaping.** Implement streetscape design that improves the pedestrian environment and appearance of downtown corridors.

**CM-5.5 Secure bicycle parking.** Install secure short- and long-term bicycle parking near key destinations, civic buildings, and transit facilities.

**CM-5.6 Reduced parking minimums.** Study reducing minimum on-site parking requirements for new development in districts of the City that can support shared parking between land uses and achieve parking demand reductions through transit and multimodal improvements.

**CM-5.7 Compact development.** Encourage the development of a healthy mix of land uses within proximity to promote internal capture, shared-parking, and de-emphasize the need for single-occupant vehicular travel.

**CM-5.8 Context sensitive development.** Balance development intensity and roadway capacity.

Goal CM-6
Build and maintain a transportation system that leverages the City’s natural setting and reduces impacts to the environment.

**CM-6.1 Vehicle miles traveled.** Prioritize transportation investments and strategies that create opportunities for residents to reduce Vehicle Miles Traveled.

**CM-6.2 Multimodal development.** Encourage the development of dense, mixed-use, pedestrian-oriented land uses that link affordable housing options to daily needs.

**CM-6.3 Transportation demand management.** Promote trip reduction strategies, including telecommuting, through land-use decisions and TDM programming strategies.

**CM-6.4 Commute trip reduction.** Require TDM Plans for major employers, as defined by the Air Quality Management District.

**CM-6.5 Landscaping.** Incorporate appropriate landscaping elements as part of roadway projects.
Goal CM-7
Proactively prepare for the future, ensuring that implementation of transportation innovations and regional projects align with the City’s vision.

CM-7.1 Emerging mobility. Support new and emerging mobility innovations that are focused on improving equitable distribution of mobility services.

CM-7.2 New roadway standards. Develop roadway standards that allow for emerging technologies and practices in the transportation industry to be incorporated in the future with minimal conflict.

CM-7.3 Interagency coordination. Coordinate with regional and State agencies to best leverage future roadway, rail, and aviation projects and funding opportunities for the benefit of Palmdale residents and businesses.

CM-7.4 Mobility partnerships. Seek strategic partnerships to pilot shared and emerging mobility options that meet the needs of Palmdale residents, workers, and visitors.

CM-7.5 Curb management. Identify the highest and best use of curb space and repurpose as appropriate (i.e., on-street parking, pick-up, drop-off zones, outdoor dining, etc.).

CM-7.6 Futureproofing. Consider how new projects will accommodate emerging technologies like autonomous and connected vehicles.

CM-7.7 High-speed rail. Consider the location of a future California High Speed Rail station and right-of-way in long term planning efforts and investment prioritization.

CM-7.8 Local coordination. Coordinate with neighboring jurisdictions to enhance integration of mobility networks.

Goal CM-8
Maintain the purpose and need of the essential functions of the City’s transportation system.

CM-8.1 Capital improvements. Improve the existing street network based upon Figure 6.2, through implementation of the Capital Improvement Program and through requirements placed upon new development approvals.

CM-8.2 Preservation. Implement mobility network illustrated in Figure 6.2 to protect existing neighborhoods and/or significant environmental resources, wherever feasible.

CM-8.3 Right-of-way. Ensure that right-of-way is reserved wherever possible to implement the mobility network illustrated in Figure 6.2.

CM-8.4 Private streets. Adopt standards for use of private streets and require assurance of long-term maintenance for all private streets constructed within the city.

CM-8.5 Residential development. Require residential developments to contribute toward City programs to reduce vehicle trips.
### Implementation Actions

The table below identifies programs, policy updates, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s vision and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4–7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goals</th>
<th>Description</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM-1, CM-2, CM-4</td>
<td><strong>Complete Streets Plan.</strong> Revise the Draft Complete Streets Plan to be consistent with General Plan direction for adoption.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-1</td>
<td><strong>Bicycle Plan.</strong> Revise the Draft Palmdale Bicycle Transportation Plan to be consistent with General Plan direction for adoption.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-1, CM-2, CM-4, CM-6, CM-7</td>
<td><strong>Complete Street Design Guidelines.</strong> Develop street design guidelines to ensure that appropriate street types and design elements are implemented.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-1, CM-2, CM-4</td>
<td><strong>Safe Routes Plan.</strong> Revise the Safe Routes to School Plan to be consistent with General Plan direction and provide additional strategies for safe and comfortable access of vulnerable travelers including consideration of Seniors in collaboration with relevant advocacy and expert groups.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-1, CM-2, CM-5</td>
<td><strong>Vision Zero Policy.</strong> Develop and adopt a Vision Zero policy and action plan that seeks to eliminate traffic fatalities and severe injuries across the transportation network.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-1, CM-2, CM-5</td>
<td><strong>Local Road Safety Plan.</strong> Complete and regularly update a Local Road Safety Plan (LRSP) that identifies a High Injury Network (HIN) and location-specific improvements.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Description</td>
<td>Timeframe</td>
<td>Responsible Department</td>
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<tr>
<td>CM-1</td>
<td><strong>Safe Rail Crossings.</strong> Work with Union Pacific Railroad to increase surface street access across the railroad tracks while minimizing impacts on rail service.</td>
<td>![bar_chart]</td>
<td>Public Works and Union Pacific Railroad</td>
</tr>
<tr>
<td>CM-2, CM-6</td>
<td><strong>TDM Program.</strong> Establish a Travel Demand Management Program to identify programmatic and infrastructure solutions for traffic operations to balance vehicle delay and efficient travel via other modes.</td>
<td>![bar_chart]</td>
<td>Public Works</td>
</tr>
<tr>
<td>CM-2, CM-5, CM-8</td>
<td><strong>Local transportation analysis guidelines for development.</strong> Establish development review guidelines that define transportation analysis and site design requirements to address multimodal access needs, connections to the surrounding street and mobility network, and right-sizes the roadway to the context of the development and its surroundings. Local transportation analysis guidelines can address traffic operations and multimodal access questions outside of the environmental review process.</td>
<td>![bar_chart]</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-2, CM-3, CM-6, CM-8</td>
<td><strong>Transportation management for large developments.</strong> Establish transportation analysis guidelines, access management guidelines, and a local mobility impact mitigation program for large developments to construct or fund multimodal improvements, implement congestion management strategies, or contribute to ITS projects in correlation with traffic impact analysis. Transportation management guidelines and programs may be defined within the local transportation guidelines.</td>
<td>![bar_chart]</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-2, CM-6, CM-8</td>
<td><strong>VMT-based transportation analysis policy and mitigations for environmental review.</strong> Establish and adopt local thresholds of significance for transportation analysis within environmental review and develop a mitigation program to support an overall decrease in VMT. The VMT-based thresholds of significance and mitigations may be defined within the local transportation guidelines.</td>
<td>![bar_chart]</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-1, CM-4, CM-5</td>
<td><strong>Neighborhood speed management.</strong> Create and implement a neighborhood speed management program that deploys traffic calming measures that allow for human activation of residential streets</td>
<td>![bar_chart]</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Description</td>
<td>Timeframe</td>
<td>Responsible Department</td>
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<tr>
<td>CM-5</td>
<td><strong>Al Fresco program.</strong> Create a permanent program that reallocates excess public right-of-way and off-street parking for the use of local restaurants and cultural programming, building off the City’s temporary Al Fresco program.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>CM-6, CM-7, CM-8</td>
<td><strong>Frontage improvement program.</strong> Create a program that allows for development to phase frontage improvements for the current context and use while also being flexible to accommodate future growth without an additional cost to the City.</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>CM-7</td>
<td><strong>Emerging mobility guideline.</strong> Develop an emerging mobility guideline that explicitly addresses equitable access to resources and services and is not exclusive to specific service providers, as well as establishes a framework through which new technologies can be assessed and compared fairly.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-7</td>
<td><strong>Emerging mobility provider standards.</strong> Develop comprehensive regulations and standards for shared and micromobility services that require distribution of data to the City upon request.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>CM-7</td>
<td><strong>Passenger air service.</strong> Engage with partners and key employers to bring scheduled passenger air service to Palmdale Regional Airport.</td>
<td></td>
<td>Economic and Community Development and LAWA, U.S. Airforce</td>
</tr>
<tr>
<td>CM-3, CM-7</td>
<td><strong>Regional expressways.</strong> Engage with partners on the feasibility and future construction of the High Desert Corridor (HDC).</td>
<td></td>
<td>Economic and Community Development, Caltrans, Metro and Public Works</td>
</tr>
<tr>
<td>CM-8</td>
<td><strong>Private street standards.</strong> Develop standards for use of private streets, where appropriate; private streets, other than driveways and alleyways typically associated with multi-family development, should be constructed to City standards for public rights-of-way, and should be used only for gated communities.</td>
<td></td>
<td>Public Works</td>
</tr>
</tbody>
</table>
Construction of Hotel in Palmdale
The purpose of the Economic Development Element is to establish policies essential to the economic success of the City of Palmdale and its residents. This Element provides policy direction and metrics to grow and diversify the City’s economy and promote fiscal sustainability by attracting new businesses and residents, retaining, and nurturing existing industries, and expanding workforce development opportunities.

Topics addressed in this chapter include jobs and workforce development, housing and community amenities, transportation and infrastructure investment and fiscal health.
Statutory Requirements

The State of California does not require a city’s General Plan to include an Economic Development Element, however this chapter is consistent with Section 65503 of the State of California Government Code that allows jurisdictions to adopt additional elements that relate to economic development.
City of Palmdale Strategic Plan (2019/2020):
The Strategic Plan provides a guiding vision and principles for the health and well-being of the City’s assets and resident’s experiences. Key focus areas include public safety, fiscal health, infrastructure, and community culture. In 2020, the City adapted the Strategic Plan as the Renaissance Plan to address the COVID-19 pandemic and its impact on City resources and residents through providing more specific objectives that directly combat the negative effects of the pandemic in the community and maximizing the efficiencies around City service delivery.

Ten-year Capital Improvement Plan:
The City of Palmdale’s Ten-Year Capital Improvement Plan (CIP) identifies proposed capital projects that advance the goals and policies of the elements in the General Plan. The CIP is updated annually.

Palmdale Transit Area Specific Plan (October 2020):
This specific plan outlines the City’s vision for the area around the future multi-modal high speed rail station which capitalizes on the future arrival of high-speed rail to Palmdale. The plan details zoning, infrastructure improvements, and urban design guidelines around the future multimodal station.
Palmdale EIFD Infrastructure Financing Plan (November 2021):

The City of Palmdale, in partnership with the County of Los Angeles, has established an Enhanced Infrastructure Financing District (EIFD) in boundaries of the City of Palmdale and unincorporated Los Angeles County. The purpose of this district is to create a funding mechanism that can facilitate the construction of public infrastructure improvements in this area. A portion of the property tax increment that the City of Palmdale and the County of Los Angeles receive would be specifically restricted to pay for the infrastructure projects listed in the Infrastructure Financing Plan (IFP) at an estimated $177 million. These investments will spur new job creation, unlock new housing development, and support regional and local transportation projects benefiting Palmdale residents and businesses alike.

Figure 7.1 EIFD Proposed Districts (2021)

- Area A: Aerospace Corridor
- Area B: Palmdale Commercial Centers
- Area C: Las Colinas
Existing Context

Demographic trends are used as indicators to help predict future growth patterns and identify opportunities and challenges for cities. This section provides a brief overview of the City of Palmdale’s demographic profile and highlights areas of opportunity and challenges for the City and its residents moving forward. Please note that the demographic and economic data reflect pre-COVID trends and does not analyze the impacts of COVID-19.

Population Growth

The City of Palmdale outpaced Los Angeles (L.A.) County in growth over the last two decades. Palmdale’s population grew 1.5 percent annually between 1998-2018 as compared to 0.5 percent in L.A. County, also contributing to a 1.1 percent increase in household growth. However, Palmdale’s growth has been markedly slower since the Great Recession, increasing only 4 percent overall growth between 2010-2018 as compared to 32 percent between 2000-2010. The Southern California Association of Governments (SCAG) projects Palmdale to continue outpacing L.A. County population growth, though at a slower rate than historical trends at 1.0 percent per annum. Additionally, SCAG projects household growth (35%) will outpace population growth (26%) by 2040, suggesting household size will decrease.

Demographic Characteristics

Palmdale’s population is relatively young, with a median age of 31.3 compared to 36 years for L.A. County and has more family households with children under the age of 18. Though the age population distribution differs from L.A. County, Palmdale has a similar racial and ethnic makeup to the County. Approximately 54 percent of Palmdale’s population identifies as Hispanic or Latino of any race with 27 percent White residents and 11 percent Black residents. However, Palmdale’s Asian population differs slightly from L.A. County with only 3 percent Asian residents as compared to 13 percent in the County.

Households in Palmdale have a lower median income than households in L.A. County. Palmdale’s median household income is $56,700 as compared to $61,015 for L.A. County overall. The City also has a higher percentage of middle-income earning residents with 32 percent of residents making between $50,000 and $99,999 annually, compared to only 28 percent in L.A. County. Though there is a large population of middle-income residents in the City, income is not distributed evenly across racial and ethnic groups. White and Asian households – who make up only 30 percent of the City’s total population – have a median household income of $83,000 and $74,150, respectively. While Hispanic/Latino and Black residents have median household incomes of $54,480 and $53,700, respectively.

In summary, the above socio-demographic data provides more context for the economic opportunities and challenges highlighted in the next section that inform the economic development goals and policies at the end of this chapter.
Opportunities and Challenges

The following section builds on socio-demographic data, economic and development trends, and fiscal health data to highlight economic opportunities and challenges that will impact the City’s economy and residents moving forward.

Housing

Lower housing costs have supported homeownership in the City, yet the limited development of new housing units, particularly multi-family units, has led to a lack of housing diversity.

Palmdale has a long history of lower-cost housing, as compared to the Los Angeles basin, which is affordable to middle class households. As of November 2021, the median sale price for a single-family home in Palmdale ($475,000) was 82 percent lower than the median sale price in L.A. County ($865,000), making Palmdale and the Antelope Valley one of the last areas in L.A. County where a household making the median wage can afford to purchase a home. Consequently, homeownership is higher than elsewhere in L.A. County with 64 percent of Palmdale households living in owner-occupied units as compared to 46 percent county wide.

Historically, the relative affordability of single-family homes has meant that developers have not invested in other housing types. Today, only 15 percent of housing units are multifamily and townhome options, compared to 49 percent county wide, with most new multifamily units being largely restricted to subsidized affordable products. This lack of housing diversity limits the appeal of Palmdale for certain workers in the aerospace and other manufacturing industries, seeking market rate multifamily options.

Jobs and Workforce

The Manufacturing sector remains the top sector, however there is a need for more diverse job options that better connect with resident’s skills.

Palmdale continues to attract employers that support jobs for middle income households in the City. Notably, a greater share of Palmdale residents is middle-income compared to L.A. County, with 32 percent making between $50,000 and $99,999 annually compared to 28 percent for the County. A main contributor to middle and higher paying jobs in the City is largely due to the presence of a strong manufacturing sector mostly represented by aerospace manufacturers. Employment in the City relies heavily on the manufacturing sector representing 23.5% of total jobs followed by retail trade & accommodations (18%) and healthcare (16%). This poses a risk to the City’s economy as the manufacturing sector is fueled by government defense contracts that are more vulnerable to the political climate and Federal policy decisions.

\[\text{Data Source: OnTheMap, 2019}\]
More diverse job options will protect Palmdale’s economy from cyclical economic shocks and provide more options for residents that are commuting outside the City for job opportunities. Today, 86 percent of Palmdale residents work outside the City of Palmdale\textsuperscript{10}, suggesting a mismatch between residents’ skills and jobs available. In addition, Palmdale’s jobs to housing ratio is significantly lower than L.A. County with only 0.56 jobs per household, compared to 1.11 for the County. Bringing more diverse job options to Palmdale will support job opportunities for residents who are currently commuting outside the City to make a living. There are opportunities to attract firms that are part of the supply chain of existing industries, such as suppliers and manufacturers for the aerospace and defense industries, as well as regional firms in the fastest growing industries that require new land for expansion, such as film production and post-production.

Attraction of film, media and entertainment uses, particularly sound stages and post-production facilities, which are a City priority, are less likely to be an outcome of speculative real estate development in the near term, but a function of targeted business attraction, local incentives and clear articulation of Palmdale’s value proposition and long history of location-based film production.

The “Studio Zone” or “Thirty Mile Zone (TMZ)” refers to the areas within a 30-mile radius of the intersection of West Beverly Boulevard and North La Cienega Boulevard in Los Angeles. An additional “Secondary Zone” extends 10 miles beyond the TMZ. These zones cover collective bargaining agreements with entertainment industry union workers. As illustrated in Figure 7.2, over half of the City of Palmdale falls within the Secondary Studio Zone. While Palmdale is located in the secondary ‘Thirty Mile Zone’ for film production, current labor and regulatory policies and relatively long travel time from central Los Angeles are challenges to overcome in the near term.

The City of Palmdale benefits from several location-based federal programs which can attract new employers to the City. The City of Palmdale’s Foreign Trade Zone (Zone #191) encourages more international commerce, allowing companies to delay the payment of duty and federal excise taxes. Additionally, the City of Palmdale has six designated Federal Opportunity Zones (OZs) along Palmdale Boulevard, including around the future High-Speed Rail station. OZs allow investors to defer and reduce capital gains payments by investing in qualified real estate development and business expansion opportunities within an OZ.

Disconnect between residents’ skills and available job opportunities in Palmdale remains a challenge due to lower educational attainment. Only 15 percent of Palmdale’s residents have a bachelor’s degree, which is lower than L.A. County’s 31 percent. The high share of Palmdale residents with only a high school education does not effectively match the higher earning employment opportunities currently offered in Palmdale through aerospace manufacturing. Antelope Valley College and others continue to address this mismatch by providing resources to align resident’s skills with employer needs through training programs and other vocational courses. The City of Palmdale also partners with America’s Job Center of California, operated by JVS SoCal, to help employers and job seekers find the resources they need to match residents with the right positions. Additionally, attracting a 4-year university to the City will better optimize these current programs and resources, by supporting residents with more opportunities to attain a bachelor’s degree to align with employer workforce needs.

\textsuperscript{10} Data Source: OnTheMap
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Regional Connectivity

Palmdale’s current transportation options are dependable and will be complemented by proposed rail and air infrastructure projects.

Palmdale is connected through several transportation options to nearby cities in the Antelope Valley region and to other parts of Los Angeles County. SR-14 is the main state highway connecting residents, workers, and goods to the Antelope Valley and destinations beyond. Beyond road traffic, residents and workers have access to the Antelope Valley Transit Authority (AVTA) Commuter and Bus Service, and Metrolink, all of which are easily accessible at the Palmdale Transportation Center.

Proposed improvements include the California High-Speed Rail, which would include a new multi-modal station in the future Downtown Area. The proposed station will bring both economic and community benefits to Palmdale residents and workers as a catalyst for new economic investments. The future multi-modal High-Speed rail station will also provide connection to Las Vegas through the Brightline West rail. In addition to California High-Speed rail investments, the City is also actively exploring options for commercial adjacent to Plant 42. This will connect residents and workers with other regional airports and hubs for work and leisure.

Development

Palmdale has large amounts of undeveloped and underdeveloped land available for development, but a lack of infrastructure, low market rents and sales prices limit short-term development feasibility of many uses.

One of Palmdale’s greatest assets is the availability of raw land for development. Per the Land Use Existing Conditions Report, there is over 66,000 acres of vacant land in Palmdale representing 62 percent of the City’s land area. This contrasts sharply to the built-out remainder of Los Angeles County, offering space to accommodate future employment and residential growth for the region.

However, there are several barriers to development in the City. In many cases, the achievable rents or sales prices, which are lower than the Los Angeles Basin, are not high enough to justify new construction; while land is cheaper, the cost of materials and labor are similar county wide. This is true for many uses including most housing typologies. Single family home construction demonstrates this fact with little new construction taking place since the Great Recession in 2008. Sales prices initially declined by 45 percent post-recession and have only recently surpassed pre-Recession levels, compressing the profitability of new development. This has resulted in limited new housing production and slowing population growth. The recovery of single-family home prices should enable more widespread development going forward. Additionally, moderate appreciation of rents, from 2021 levels should render lower density multifamily, such as three-story garden-style rental apartments with surface parking, feasible in the near term. Further appreciation in rents combined with investments in amenities around the future downtown, could support even higher density residential development with midrise structures, over the mid to long term.

Additionally, much of the raw land in the City lacks horizontal infrastructure (utilities such as water, sewer, paved roads), creating high upfront costs to development. Lack of utilities and water infrastructure on industrial land has limited the growth of this type of use, which, despite vacancy rates below two percent, only added 120,000 square feet of new industrial space between 2010 and 2018. Nevertheless, the City and L.A. County recently passed resolutions in 2021 to jointly form an Enhanced Infrastructure Financing District (EIFD) to finance approximately $177 million in infrastructure improvements around the City, which will help unlock the development potential of many vacant industrial parcels. Opportunities for capturing more light industrial development is high in the near term given the prevailing low vacancy and rents that could support new development. With the availability of land with high quality infrastructure and access to amenities, Palmdale can attract more Research and Development (R&D)/flex industrial uses in the mid to long term as rents appreciate and the City’s competitive position is enhanced.
The Palmdale City Council recently approved an amendment to the municipal code to comply with the California Endangered Species Act, specifically related to the treatment of western Joshua trees. Future development will need to comply with these new regulations and guidelines, including additional permitting requirements and necessary coordination between the City and State in the case of relocation or removal of an onsite western Joshua tree.

For some uses, current market demand and regulatory forces are larger factors affecting future development in the City. Medical office is currently financially feasible given current construction costs and rents in the Antelope Valley, but a historically slow population growth after the Great Recession has slowed development.

Anticipated residential growth will drive demand for new medical space in the future.

All land uses could see financial benefit from locating in one of the City’s OZs if a project meets federal investment qualifications. When paired with other efforts, such as administrative and regulatory changes to zoning approvals and infrastructure investment, this program can meaningfully increase development feasibility.

In general, Palmdale is positioned to realize most development typologies envisioned in the General Plan as the Palmdale real estate market matures through 2045 and the City undertakes necessary infrastructure investments.

Fiscal Health

The City’s fiscal health is strong, but there is a need to diversify the tax base to minimize the City’s vulnerability to future economic shocks.

The City of Palmdale remains best in class among peer cities (Lancaster, Santa Clarita, and Victorville) in terms of overall fiscal health. Palmdale’s revenue per capita ranks at the top across its peer cities though it has lower General Fund revenues, with only 50 percent of all revenue going toward this discretionary funding source. Like its peer cities, Palmdale is reliant on Property and Sales and Use Tax, which, as of 2018, had notably failed to fully recover to pre-recession highs prior to 2008. To minimize future fiscal shocks to the City’s General Fund and recover from the COVID-19 pandemic, the City should seek to diversify the tax revenue base to include higher distributions of other tax revenue, such as increasing the Transient Occupancy Tax (TOT) and identifying opportunities to create more special assessment districts that dedicate funding streams for infrastructure maintenance.
Desired Outcomes, Indicators, and Targets

The following desired outcomes and metrics were identified to help the City of Palmdale track progress toward creating a more diverse and equitable economy.

**Top Key Outcomes**

**OUTCOME:** Foster a job market that sustains a high standard of living for workers with diverse skill sets

**KPI:**
- Distribution of jobs by industry sector

**TARGET:**
- Meet or exceed growth in new quality jobs relative to Los Angeles County

**OUTCOME:** Create educational pathways for Palmdale residents to fully access future economic opportunities

**KPI:**
- Annual increase in percentage of residents with an Associate degree

**TARGET:**
- Increased number of residents completing at least an Associate degree comparable to County-wide levels

**OUTCOME:** Build a downtown core in the City where residents and businesses can participate and celebrate in the City’s economic prosperity

**KPI:**
- Number of completed units (office, retail and industrial) in the downtown core

**TARGET:**
- Advancement of development targets identified in the Palmdale Transit Area Specific Plan

**OUTCOME:** Ensure that all residents and workers have access to safe and affordable housing

**KPI:**
- Percentage of affordable housing units that are multi-family

**TARGET:**
- Increased share of affordable multi-family units comparable to County-wide levels

**OUTCOME:** Provide access to economic opportunities and resources for residents and workers through transportation options

**KPI:**
- Passenger ridership (local transit and flights)

**TARGET:**
- Increased number of residents using non-auto transportation modes comparable to County-wide levels

**OUTCOME:** Promote a City environment that attracts and leverages new development to diversify the tax base

**KPI:**
- Distribution of tax revenue

**TARGET:**
- Increase (inflation adjusted) in per equivalent dwelling unit (EDU) revenues every five years; increase in per EDU share of non-sales tax revenues every year

*KPI = Key Performance Indicator*

11. Data source: OnTheMap
12. Data source: Census American Community Survey
13. Data source: City of Palmdale Building Permits
14. Data source: Census American Community Survey
15. Data source: Various transit agencies (i.e., AVTA, Metrolink, LAWA)
16. Data source: City of Palmdale Comprehensive Financial Reports (CAFRs)
Goals and Policies

The following section includes goals and policies for the Economic Development Element based on the economic opportunities and challenges presented in the section above. The purpose of the goals and policies is to identify how the City can advance economic growth in the following areas.

**JOBS AND WORKFORCE**

**Goal ED-1**
Preserve the existing economic base of high-quality jobs in the City.

**ED-1.1 Attract manufacturing employers.** Attract supply chain employers for the manufacturing and defense industries to strengthen Palmdale’s economic viability and competitiveness within these sectors.

**ED-1.2 Employee serving amenities.** Encourage the development of business and employee serving amenities (i.e., retail, dining, hospitality) proximate to existing districts.

**Goal ED-2**
Attract diverse and high-quality job options that contribute to the City’s economic growth by diversifying the economic base.

**ED-2.1 Attract high growth industries.** Target economic activities from high growth industries, including film, media and entertainment production, and clean technologies, to diversify Palmdale’s economic base.

**ED-2.2 Smart City technology.** Maintain and enhance smart city technology in Palmdale to support local businesses and growth of telecommuting.

**ED-2.3 Foreign Trade Zone.** Position the existing Foreign Trade Zone designations to attract export-oriented employers.

**Goal ED-3**
Support the workforce pipeline to match residents with jobs through high-quality and accessible educational opportunities.

**ED-3.1 Higher education.** Promote and expand higher educational opportunities in Palmdale.

**ED-3.2 Workforce training.** Support additional trade school training and apprenticeship programs for key growth industries for youth and local workforce.

**ED-3.3 Childcare and early education.** Promote opportunities for affordable, high-quality childcare and workforce-related early education.

**ED-3.4 Workforce programs.** Expand partnerships and workforce programs with public schools, vocational schools, community colleges, and major employers within Palmdale.

**ED-3.5 Job matching.** Connect residents with job opportunities in aerospace and other emerging sectors.
**HOUSING AND COMMUNITY OWNERSHIP**

**Goal ED-4**
Activate a vibrant downtown that fosters a sense of local community and business ownership.

**Goal ED-5**
Diversify housing options for residents at different stages of life and ability, to continue making Palmdale an affordable place to live.

**ED-4.1 Active downtown.** Create a vibrant and active downtown environment, leveraging the Palmdale Transit Area Specific Plan to focus development.

**ED-4.2 Community gathering.** Leverage development to provide space for community gathering and events.

**ED-4.3 Entertainment and retail.** Increase opportunities for entertainment and/or shopping.

**ED-4.4 Local business.** Encourage and foster local businesses in Palmdale.

**ED-4.5 Local businesses in downtown.** Support local small businesses and legacy businesses to remain in or relocate to the downtown core.

**ED-5.1 Affordable housing preservation.** Encourage and preserve affordable housing for the residents of Palmdale.

**ED-5.2 Supply and diversity of housing.** Increase the supply and diversity of housing options to support different types of households including seniors, young adults, families, empty nesters, individuals or families with special needs, and multigenerational families.

**ED-5.3 Transit-oriented development.** Encourage transit-oriented development that meets community needs in the proposed downtown near the future multi-modal high speed rail station and at other transit nodes.

**ED-5.4 Displacement.** Address displacement issues due to redevelopment and large-scale capital projects.

**ED-5.5 Assembly of parcels.** Encourage assembly of small parcels via incentives to facilitate infill development.

**ECONOMIC DEVELOPMENT AND INFRASTRUCTURE**

**Goal ED-6**
Remain at the forefront of transportation innovations that connect residents and workers to the regional and national economy.

**ED-6.1 Transportation investments.** Support opportunities to bring more transportation investments such as a High-Speed rail station and opening commercial air services.

**ED-6.2 Infrastructure investment.** Prioritize infrastructure and development that unlocks economic investment around the City and increase usage of transportation facilities.

**ED-6.3 Neighborhood transportation connections.** Improve local transit and last mile connectivity between neighborhoods and regional transportation hubs/corridors.
Goal ED-7
Identify partnerships and resources to incentivize and implement sustainable development projects.

ED-7.1 Regional partnerships. Initiate and sustain multi-jurisdictional partnerships to leverage regional assets.

ED-7.2 Development review process. Encourage new development through simplifying the City’s development review processes and exploring opportunities to create incentives for new development.

ED-7.3 Expand and diversify tax base. Expand tax base and analyze opportunities to diversify tax revenues to reduce the reliance on Sales and Use tax.

ED-7.4 Infrastructure financing. Explore and implement creative infrastructure financing and delivery mechanisms such as Public Private Partnerships and Community Benefit programs.

ED-7.5 Opportunity zone. Support the viability of the City’s Opportunity Zones to expand existing businesses and attract new investment.
The table below identifies programs, policy updates, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s vision and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goals</th>
<th>Action</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Goals</td>
<td><strong>City Economic Development and Planning Capacity.</strong> Increase city staff capacity to advance economic development and planning policies and programs in Palmdale.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>ED-1, ED-7</td>
<td><strong>Regional Partnerships.</strong> Continue prioritization of multi-jurisdictional networks and partners, including the County of Los Angeles, LAEDC, and AV EDGE, to leverage regional support and assets that provide an economic development opportunity for the City. Key regional assets include Edwards Air Force Base, Mojave Air and Spaceport and Plant 42.</td>
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<td>Economic and Community Development</td>
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<tr>
<td>ED-1, ED-2</td>
<td><strong>Business Recruitment Strategy.</strong> Create and implement a business recruitment strategy to attract employers in target industries that offer high quality jobs and diversify the job base, including firms that are in aerospace and defense supply chain, advanced manufacturing, and film production and post-production.</td>
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<td>Economic and Community Development</td>
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<tr>
<td>Correlating Goals</td>
<td>Action</td>
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<tr>
<td><strong>Broadband Infrastructure.</strong> Create and implement an internet master plan to collaborate with providers to achieve high quality broadband infrastructure for the community and to reduce the digital divide faced by small businesses and low-income residents. Palmdale can also market this infrastructure to attract businesses with high network demands, such as digital content creators.</td>
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<td>Public Works</td>
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<tr>
<td><strong>Film Attraction Strategy.</strong> Develop an overall strategy to attract more film production companies to Palmdale. This includes working with film-related business organizations and the Antelope Valley Film Office to recruit more sound stages and post-production companies, along with focusing on advocacy for labor rules that make the Antelope Valley more attractive for production and post-production work.</td>
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<td>Economic and Community Development</td>
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<tr>
<td><strong>Educational Coordination.</strong> Continue collaborating with local schools and training facilities to create programs that support residents and workers seeking to continue their education beyond high school. This includes Antelope Valley Union High School District, Palmdale Aerospace Academy, and Antelope Valley College, including its corporate customized training programs, among others.</td>
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<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td><strong>Workforce Advisory Committee.</strong> Convene a regular meeting with a committee of local educational and industry professionals to advise the City on workforce development challenges to inform workforce initiative strategies, vocational training programs and apprenticeships to train residents for local job opportunities.</td>
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<td></td>
<td>City Manager’s Office and Economic and Community Development</td>
</tr>
<tr>
<td><strong>High-Quality Childcare.</strong> Partner with local community organizations and schools to strategize potential opportunities to provide more affordable, high-quality childcare services for the local workforce.</td>
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<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td><strong>Jobs Postings.</strong> Develop a job opportunities webpage to direct employers and residents to existing jobs resources, including the City’s ongoing collaboration with organizations, such as Antelope Valley America’s Job Centers of California, to provide a central space for local employers to promote job openings and connect with residents and workers.</td>
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<td></td>
<td>Economic and Community Development</td>
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<tr>
<td>Correlating Goals</td>
<td>Action</td>
<td>Timeframe</td>
<td>Responsibility</td>
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<tr>
<td>ED-1, ED-4, ED-6</td>
<td><strong>Downtown Palmdale.</strong> Implement the Palmdale Transit Area Specific Plan, including the recommended infrastructure, and approve development aligned with the plan’s design guidelines.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>ED-1, ED-2, ED-4, ED-7</td>
<td><strong>City Marketing Campaign.</strong> Collaborate with Visit Palmdale and other partners to develop a marketing campaign that creates a city brand and markets Palmdale’s unique advantages within the region using social media and traditional communication channels to attract businesses, tourism, and a wider diversity of residents.</td>
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<td>Economic and Community Development</td>
</tr>
<tr>
<td>ED-1, ED-4, ED-4, ED-5, ED-7</td>
<td><strong>Development Regulations and Incentives.</strong> Update development regulations and create incentives to encourage developers to deliver community amenities (e.g., community spaces, targeted retail, and entertainment offerings) and develop infill parcels.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>ED-5</td>
<td><strong>Explore locally controlled resources for affordable housing.</strong> Advance a regional strategy to evaluate feasible tools and policies that create the opportunity for more affordable housing in Palmdale.</td>
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<td>Economic and Community Development</td>
</tr>
<tr>
<td>ED-5, ED-7</td>
<td><strong>Zoning Regulations.</strong> Update zoning regulations to streamline the entitlement process, align with market needs, and promote economic development goals to support all development including diverse housing types and mixed-use districts in transportation nodes.</td>
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<td>Economic and Community Development</td>
</tr>
<tr>
<td>ED-5</td>
<td><strong>Anti-displacement Coordination.</strong> Work with community-based organizations to understand the needs of businesses and residents impacted by new development and support the development of anti-displacement programs and policies.</td>
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<td>Economic and Community Development</td>
</tr>
<tr>
<td>ED-5</td>
<td><strong>Commercial Air Service.</strong> Coordinate with appropriate agencies and authorities to initiate commercial air services in Palmdale.</td>
<td></td>
<td>Economic and Community Development and City Manager’s Office</td>
</tr>
<tr>
<td>ED-6</td>
<td><strong>Last Mile Infrastructure.</strong> Improve bicycle and pedestrian infrastructure to increase transit access for residents and workers.</td>
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<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Action</td>
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<tr>
<td>ED-7</td>
<td><strong>Hotel Development.</strong> Continue to approve new hotel developments to increase transient occupancy tax revenue.</td>
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<td>Economic and Community Development</td>
</tr>
<tr>
<td>ED-7</td>
<td><strong>Assessment Districts.</strong> Identify potential areas to create special assessment districts in the City to reduce the burden of financing infrastructure maintenance on the City’s General Fund.</td>
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<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>ED-2, ED-7</td>
<td><strong>EIFD Implementation.</strong> Prioritize economic development projects under the newly formed EIFD that will maximize economic benefits for Palmdale residents and the City, such as expanding development opportunities within the City’s Foreign Trade Zone and Opportunity Zones.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>ED-2, ED-7</td>
<td><strong>Opportunity Zone Strategy.</strong> Develop a strategy to attract investor developer interest to the City’s Opportunity Zones, which may include regulatory or administrative actions to reduce project approval times, targeted fee waivers, and development of a database of sites and businesses suitable for OZ investment.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
</tbody>
</table>
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Military Compatibility

Palmdale is home to US Air Force Plant 42, a premier military installation, testing and research, and manufacturing site. Plant 42 is an important asset for the City’s economy and its continued success and operations are of critical importance to the entire region. This chapter seeks to balance and protect the needs of Plant 42 and the overall community to promote a sustainable environment where both coexist successfully.
Statutory Requirements

While not mandated as a separate Element, military readiness activities are a required component of the General Plan. California Government Code Section 65302 (a)(2), states that the land use element: “shall consider the impact of new growth on military readiness activities carried out on military bases, installations, and operation and training areas, when proposing zoning ordinances or designating land uses covered by the General Plan for land, or other territory adjacent to military facilities, or underlying designated military aviation routes and airspace.” As military and associated operations are a cornerstone of the City of Palmdale’s identity and economy, the City has opted for a standalone General Plan Element to plan for continued safe operations of Plant 42.

In addition to the California Government Code, other State legislation relevant to military operations and compatibility include:

- **AB 1108** amended the California Environmental Quality Act (CEQA) to require military agency notification of proposed projects within two miles of installations or under training routes and special use airspace (SUA).
- **AB 2776** requires real estate disclosure for residences within airport influence areas.
- **SB 1462** expanded requirements for notification of the military when adopting or significantly amending a General Plan.
- **SB 1468** requires the General Plan Land Use Element to consider the impact of new growth on military readiness activities conducted on military bases, installations, and operating and training areas. It also defines open-space land to include areas adjacent to military installations, military training routes, and restricted airspace.
Air Installation Compatible Use Zone (AICUZ) Report—Air Force Plant 42

The Air Installation Compatible Use Zone Final Report (December 2011) documents aircraft operations at Plant 42 and reaffirms Air Force policy of assisting Federal, state, regional, and local officials in planning for the areas surrounding military installations. The report promotes compatible development within the AICUZ area of influence with the goal of protecting community health and Air Force operational capacity from the negative effects of incompatible land uses. The updated report replaces the preceding document from 2002 with 2010 activity levels, providing noise contours and compatible use guidelines for land use areas surrounding the installation.

Air Force installations includes Air Force Base, Air Base, Air Reserve Base, Air Guard Base, Air Force Station, Air Station, Air Reserve Station, or Air Guard Station, support sites, and other activities, and those facilities to which the Air Force, in overseas locations, has complete or partial access on a temporary or standby basis.

Instrument Flight Rules (IFR)\(^17\) are rules that govern the procedures of flight under instrument meteorological conditions.

Military Operating Areas (MOA)\(^18\) is airspace designated outside of Class A airspace, to separate or segregate certain nonhazardous military activities from Instrument Flight Rules traffic and to identify for Visual Flight Rules traffic where these activities are conducted.

Military Influence Area (MIA) is a geographic planning or regulatory area that can be defined jointly by local governments and neighboring military installations. The MIA covers the areas where military operations may impact local jurisdictions and, conversely, where local activities may affect the military’s ability to conduct its mission.

Visual Flight Rules (VFR)\(^19\) govern the procedures for conducting flight under visual conditions. The term “VFR” is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements. In addition, pilots and controllers use it to indicate type of flight plan.

Special Use Airspace (SUA)\(^20\) consists of that airspace wherein activities must be confined because of their nature, or wherein limitations are imposed upon aircraft operations that are not a part of those activities, or both.
Military Presence

The City of Palmdale is home to U.S. Air Force Plant 42 (Plant 42), one of the premier aeronautical development, test, and production installations in the nation. Plant 42 is used primarily as a production flight test installation by the United States Air Force (USAF). Edwards Air Force Base (EAFB), located approximately 30 miles north of Plant 42, provides command and control of the airfield complex.

Plant 42 covers approximately 6,130 acres\(^{21}\) and is bounded by Columbia Way/East Avenue M to the north, Rancho Vista Boulevard/East Avenue P to the south, SR-14 to the west, and 40th/50th Street East to the east. The facility is situated at an elevation of 2,543 feet above mean sea level. Mountainous terrain to the south and west reaches elevations more than 5,000 feet within approximately 10 miles of Plant 42. Immediately north of Plant 42 is a series of four military restricted airspace areas reaching Edwards AFB and extending to the northeast beyond China Lake. Figure 8.1 presents an aerial view of Plant 42.

Of the four USAF active plants located throughout the United States, Plant 42 is uniquely situated to fully support the newest and most advanced aerospace systems. Staffed by a mixture of civilian defense contractors and USAF personnel, Plant 42 provides industrial facilities for production, engineering, final assembly, modification, depot maintenance and flight testing of aerospace systems.

With approximately 12,000 employees\(^{22,23,24}\), Plant 42 is the second largest employer in the Antelope Valley (after Edwards AFB), providing significant economic thrust and adding to the economic base of the City of Palmdale. Aerospace is the largest industry and employer in the City. In addition to the direct employment of government personnel, Plant 42 employs contract civilians located both on and off the installation. The City of Palmdale provides housing, support services, and a range of community services to these employees.

**Figure 8.1** Plant 42 Aerial View

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\(^{21}\) United States Air Force
\(^{22}\) The total number of employees at Plant 42 fluctuates between 7,500 to over 12,000 depending on contracting and project needs for both Military personnel and other operators.
Plant 42 and Vicinity Composition

Plant 42 ownership responsibilities have been delegated to the Acquisition Environmental and Industrial Facilities Division through Air Force Material Command, based at Wright-Patterson AFB, Ohio. The site contains approximately 3.2 million square feet of industrial facilities. The industrial facilities serve primarily as manufacturing plants for the United States military and its military allies.

In addition to a non-operational regional airport, Plant 42 and the surrounding area is occupied by Department of Defense (DoD) contractors including Boeing, Lockheed Martin, and Northrop Grumman, NASA, Kinkisharyo, and Federal Aviation Administration (FAA)-controlled air route traffic control center, two aviation museums, and a 17,500 acre vacant parcel of land owned by Los Angeles World Airports (LAWA).

The Air Force leases space to these contractors on Plant 42 for military and aircraft development with use of the Plant 42 runways permitted through lease agreements. Contractors at Plant 42 either lease building space from the Air Force or own their own buildings. The plant includes multiple high bay buildings with airfield access and flyaway capability.

Plant 42 is categorized by Sites 1-10 with Site 7 further divided into west and east halves. As detailed in the following section, Sites 1, 2, 3, 4, 7W, 7E, and 8 are leased among three contractor operators, while Sites 5 and 6 are operated and maintained through the 412th Test Wing / Operating Location at Air Force Plant 42.

Sites 9 and 10 are outside Plant 42 boundaries. Site 9 is owned by Los Angeles World Airports (LAWA) and leased by NASA and Kinkisharyo, while Site 10 is owned and operated by Lockheed Martin (in addition to space leased within Plant 42). Lockheed Martin’s Site 10 is governed by a Specific Plan (Lockheed Plant 10 Palmdale).

Figure 8.2 illustrates the site plan of Plant 42 and vicinity as of April 2018.
Palmdale Regional Airport (PMD)
The Palmdale Regional Airport operated on and off through the late 1980s and early 2000s; however, passenger service was suspended in late 2008 for a wide range of reasons including low volumes. In 2013, ownership of the airport building was transferred to the City of Palmdale. The lease and Airport Joint Use Agreements expired on August 31, 2020.

The City of Palmdale also owns a 600-acre property northwest of USAF Plant 42 where a proposed air terminal is desired. The property bounds are Avenue M/Columbia Way on the north, Sierra Highway on the west and USAF Plant 42 to the south and east. Given the proximity to Plant 42 and the nature of research and development done on base, coordination and support from the aerospace sector will be vital to the success of passenger air service in Palmdale. As of 2022, the City is currently working with the Air Force to bring commercial air service back to Palmdale.

Los Angeles Air Route Traffic Control Center (ARTCC)
The FAA's Los Angeles ARTCC is located at the northeast corner of 25th Street East and Avenue P, adjacent to Blackbird Airpark. The Los Angeles ARTCC is one of 22 air route traffic control centers operated by the FAA. The center controls enroute air traffic over southern and central California, southwestern Nevada, southwestern Utah, western Arizona, and portions of the Pacific Ocean Air Defense Identification Zone, except for military airspace and lower-level airspace traffic that is controlled by local airport towers and Terminal Radar Approach Control Facilities (TRACON). TRACONS are terminal radar approach controls which manage traffic within a 30-to-50-nautical-mile radius from an airport. The Los Angeles ARTCC is the 10th busiest ARTCC in the United States—between January 1, 2017, and December 2017, the Los Angeles Center managed 2,255,026 aircraft operations.

Aviation Museum/Airpark
Blackbird Airpark and the adjacent Joe Davies Heritage Airpark (formerly Palmdale Plant 42 Heritage Airpark) display the SR-71, U-2, Century Series fighters and other aircraft that were designed, engineered, manufactured, and flight tested in the Antelope Valley. All aircraft have been carefully restored for public display. The two airparks are located at Avenue P and 25th Street East near the FAA's Los Angeles Air Regional Traffic Control Center and are free to the public.

Blackbird Airpark is an extension of the Air Force Flight Test Museum at Edwards AFB, while the City of Palmdale operate Joe Davies Heritage Airpark. Both museums are staffed by volunteer retirees who previously worked in the aerospace industry.
Los Angeles World Airports (LAWA) Land Holdings

LAWA is the airport authority that owns and operates Los Angeles International Airport (LAX) and Van Nuys Airport (VNY) for the City of Los Angeles. LAWA formerly owned and operated Palmdale Regional Airport (PMD), and currently provides oversight and operations for 17,500-acres of land immediately east of Plant 42. Strategic plans for the property are currently undefined.

This area is within unincorporated Los Angeles County and the City of Palmdale’s Sphere of Influence. In preparation for the possible annexation in the future, the General Plan designates these parcels as primarily Aerospace Industrial (see Chapter 5: Land Use and Community Design for further description).
Land Use Compatibility

The City and community of Palmdale encourage and support ongoing aerospace innovation and manufacturing at Plant 42. For the success and safety of residents, ongoing coordination between the US Air Force, Plant 42 operators, and City of Palmdale is imperative. Land use compatibility is a critical factor toward continued safe and efficient military operations at Plant 42. Any development or new construction that seriously impacts or hinders the military operating area’s function and viability is considered an incompatible land use. Planning to ensure that all future land uses are compatible is an overarching goal of this General Plan.

Military Influence Area

The Military Influence Area (MIA) covers areas where military operations may impact the local community and where the local community may impact military functions. Shown in Figure 8.3, the Military Influence Area (MIA) includes not only the military operations area, but also three safety zones extending from both ends of aircraft runways—the Clear Zone (CZ) and two Accident Potential Zones (APZs)—a high noise consideration zone (65 Dnl contours), and property owned by LAWA adjacent to Plant 42. These areas are described in greater detail below. The MIA requires further land use compatibility considerations and monitoring.

Incompatible land uses adjacent to the military installation can produce serious issues such as:

- Increased interference with air routes and communications through construction of cell towers, wind turbines, power lines, and other structures.
- Increased competition for, and interference with, data and communications frequencies.
- Displacement of threatened and endangered species in the remaining open space areas, including military ranges.
- Increased need to alter training and testing due to residential neighbors’ concerns about noise and safety from surrounding residents.
- More rapid depletion of critical ground or surface water supplies, water treatment capacity, and other necessary resources.
- Increased air emissions in areas that may have finite air emission thresholds.  

Areas around military airfields are exposed to the possibility of aircraft accidents. While the maintenance of aircraft and training of aircrews are rigorous, and military flights at Plant 42 are primarily for flight test and proficiency training, accidents do occur. Accidents of military aircraft differ from accidents of commercial air carriers and general aviation due to the variety of aircraft flown, the type of missions and the number of training flights. As such, every airport prepares an AICUZ Report that governs land uses to minimize impacts of an accidents.

27 Ibid
Clear Zones and Accident Potential Zones

The Plant 42 AICUZ Report (2011) identifies three basic types of constraints that affect or result from flight operations.

The first constraint involves areas identified by the FAA and DoD where height limitations on structures exist to prevent obstructions to air navigation.

The second constraint involves the potential effects arising from noise exposure resulting from aircraft overflight and ground engine runs. Refer to the Noise Element for further discussion.

The third constraint involves accident potential in areas near the runways based on past statistical analyses of past DoD aircraft accidents.

The DoD has identified three zones, described below, that have high relative potential for accidents - the **Clear Zone (CZ)**, the **Accident Potential Zone I (APZ I)**, and the **Accident Potential Zone II (APZ II)**. These zones are illustrated on Figure 8.3.

**Clear Zones**
Each end of runway has a CZ that starts at the runway threshold and extends outward 3,000 feet. The width of the CZ is based on the class of the runway. Of the three safety zones, the CZ has the highest potential for accidents (27 percent of the accidents studied). The Air Force has adopted a policy of acquiring property rights through purchase or easement to areas designated as CZs. All Clear Zones are located on Plant 42 owned property and consist of undeveloped land or air travel and testing supportive facilities.

**APZ II**
The APZ II extends from the outer end of the APZ I an additional 7,000 feet. This is an area having a lesser, but still significant potential for accidents (five percent of the accidents studied). The APZ II is 3,000 feet wide and 7,000 feet long beginning 8,000 feet from the runway endpoint along and centered on the extended runway centerline. Public assembly is prohibited in this zone, while single family detached and other residential types are permitted; however, density and other considerations apply.

A detailed list of allowed land use per accident potential zone (APZ), is included within Table 3-5 Land Use Compatibility, Noise Exposure, and Accident Potential of the AICUZ.

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Figure 8.3 illustrates the military influence area which includes the three APZ zones, the military operating zone, and areas which are subject to higher noise volumes. These areas are subject to Plant 42 coordination and should include greater scrutiny when reviewing proposed development projects.

As detailed in the Land Use Element, the land use plan indicates allowed uses for every parcel of land within the jurisdiction of the City of Palmdale and Sphere of Influence. Plant 42 land use compatibility was a key factor in preparing the final land use plan, which is consistent with the limitations set forth for the three zones. Figure 8.4 illustrates the land use plan compared to the three accident potential zones.

The purpose of the program is to promote compatible land development in the areas of increased noise exposure and accident potential from ongoing aircraft operations.

Three basic types of constraints are mentioned as affecting or resulting from flight operations:
- Height limitations on structures to prevent obstructions to air navigation
- Noise exposure resulting from aircraft overflight and ground engine runs
- Accident potential in areas near the runway

Plant 42 Coordination with the City of Palmdale

The City of Palmdale values the ongoing partnership with Plant 42. Both entities support the mission and goal of Plant 42, which is to safely and successfully further military operations, research, and development within Palmdale.

As the community evolves and changes over time, additional coordination between the City of Palmdale and Plant 42 may be needed.

Coordination activities may include:

**Development review**
Plant 42 representatives may be involved with reviewing individual development proposals within the City to provide feedback related to the safety and security of Plant 42.

**Key topic coordination**
Continued collaboration on topics of mutual importance related to employment, housing, transportation, and commercial development.

Other similar coordination efforts are detailed in the Implementation Action table in the following section.
Figure 8.4 General Plan Land Use with Accident Potential Zone (APZ) Overlay

- Clear Zone
- APZ I
- APZ II
- Equestrian Residential
- Low Density Residential
- Single Family Residential
- Mixed Use 1
- Mixed Use 2
- Single Family Residential 1
- Single Family Residential 2
- Single Family Residential 3
- Single Family Residential 4
- Residential Neighborhood 1
- Residential Neighborhood 2
- Residential Neighborhood 3
- Residential Neighborhood 4
- Employment Flex
- Neighborhood Commercial
- Visitor Commercial
- Regional Commercial
- Health and Wellness
- Educational Flex
- Industrial
- Aerospace Industrial
- Mineral Resource Extraction
- Specific Plan
- Open Space
- Public Facility-Park
- Public Facility-School
- Specific Plan
- Utilities
- City Boundary
- Sphere of Influence
- Major Highway/Arterial
- Railroad
- Water Body/Aqueduct
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Desired Outcomes, Indicators, and Targets

The following desired outcomes and metrics have been identified to help the City track progress toward reducing risks to the community while providing an employee base for Plant 42. This process follows the City’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

**Outcomes:**

- Create pathways for Palmdale residents to fully access current and future economic opportunities in the aerospace sector.
- Reduced risk to the Palmdale community because of Plant 42 operations.

**KPI:**

- Annual increase in percentage of residents with vocational training certificates in aerospace related fields.
- Annual increase in percentage of residents with a bachelor’s degree

**Target:**

- Increased number of residents employed in aerospace jobs within the City.
- Reduced number of residents within the APZs.

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KPI = Key Performance Indicator

29. Data source: Census Survey of Income and Program Participation (SIPP)
30. Data source: Census American Community Survey
31. “Lockheed Martin Skunkworks” by Alan Radecki, licensed under CC BY-SA 3.0
Goals and Policies

The following section includes goals and policies for the Military Compatibility Element. Goals and policies are followed by implementation actions. Additional military related policies are woven throughout the General Plan, including in the Land Use and Community Design, Circulation and Mobility, Economic Development, Public Facilities, Services and Infrastructure Elements.

LAND USE COMPATIBILITY

Goal MC-1
Compatible adjacent land uses that support continued operation of Plant 42.

MC-1.1 Aerospace compatible land uses. Maintain appropriate land use designations surrounding Plant 42 to limit incompatible uses and to ensure continued safe operation of airport activities.

MC-1.2 Land use buffers. Continue to buffer Plant 42 from adjacent, non-compatible residential and commercial uses by reviewing development applications in the Military Influence Area for potential conflicts.

MC-1.3 Non-industrial land uses. Limit non-industrial uses from locating in the Aerospace Industrial area (aside from uses that directly support Plant 42 or airport operations).

MC-1.4 Evaluate existing and future land uses. Use overlay maps of the Air Installation Compatibility Use Zones (AICUZ) noise contours and Air Force Land Use Compatibility Guidelines to evaluate existing and future land use proposals.

MC-1.5 Solar energy facility compatibility. Ensure that there is no potential conflict between the operational mission of Plant 42 and any proposed adjacent solar energy facilities.

MC-1.6 Influence area development. Prohibit development in the Military Influence Area that would restrict access to military facilities, physically obstruct any portion of the Military Operating Area, or pose a health or safety hazard to military personnel.

Goal MC-2
Mitigate and/or avoid encroachment of incompatible development into space utilized by Plant 42 air operations.

MC-2.1 APZ development review. Within the Accident Potential Zones (APZ), review all development proposals for hazards to aircraft in flight including uses that release into the air any substance such as:
• Steam, dust, or smoke, which could impair pilot visibility; uses that produce light emissions, glare, or distracting lights, which could interfere with pilot vision or be mistaken for airfield lighting; sources of electrical emissions, which could interfere with aircraft communications or navigation; and uses that could attract birds or waterfowl to the extent that they would pose a danger to aircraft operation in the vicinity of Plant 42.
• Require project applicants to notify Plant 42 and the City of any potential hazards, including but not limited to the above list.

MC-2.2 AICUZ consistency. Require all development to be consistent with DoD regulations as outlined in the Plant 42 AICUZ Report and comply with regulations which affect development in the Clear Zones/Accident Potential Zones.

MC-2.3 Aviation easement. Through the development review process, require that all new projects within the APZ’s of Plant 42 provide an aviation easement.
LIMIT NOISE IMPACTS

Goal MC-3
Protect residents from excessive noise and protect Plant 42 from noise complaints by preventing incompatible land uses from encroaching upon the site.

MC-3.1 Noise and overflight compliance. Ensure that all new land use proposals comply with the noise and overflight policies of the most recent AICUZ for Plant 42.

MC-3.2 Restrict new residential in APZs. Prohibit new residential zoning and new schools in the APZs.

MC-3.3 Restrict residential in high noise areas. Prohibit the redesignation of residential land within the 65-DBL noise contour and the overflight area to increased residential densities.

MC-3.4 Home occupant notification. Require homebuyer/renter notification or disclosure of aircraft noise for all new residential development located in an APZ, or east of Division Street and south of Technology Drive and north of Avenue Q and west of Sierra Highway.

MC-3.5 Noise reduction measures. New development within the 65 DBL noise contour area must adhere to the recommended noise level reductions incorporated into the design and construction.

MC-3.6 Avoid Noise Sensitive Uses. Discourage new noise sensitive development, such as places of worship, residential development, schools, and other similar uses, clustered adjacent to a noise zone.

MC-3.7 Noise Considerations Through Land Use Action. Through conditions of approval, require that any owner of developed or undeveloped property within the 65 CNEL noise contour that is seeking a land use action from the City, provide an aviation easement to the Los Angeles World Airports, the U.S. Air Force, and the City.

MC-3.8 Non-noise Sensitive Land Uses. Designate and permit land uses within the 65 CNEL contour that are primarily industrial, business park, commercial and recreational uses that are not noise sensitive; permit other uses only when it is found that no adverse noise impacts will result.
AEROSPACE GROWTH

Goal MC-4
Continued growth of Plant 42 operations in the Aerospace Industrial land use district.

MC-4.1 Land Supportive of Aerospace Industrial. Maintain sufficient land zoned for the Aerospace Industrial use to accommodate a wide variety of industrial, military, and supportive uses.

MC-4.2 Attract New Businesses. Encourage and recruit businesses that are affiliated with or are supportive of aerospace research and development.

MC-4.3 Land Supportive of Aerospace Industrial. Maintain and improve circulation to accommodate the unique demands of aerospace workplaces.

MC-4.4 Military Influence Area Coordination. Reference the Military Influence Area Map (Figure 8.3) to identify possible City actions in or near Plant 42 installations, operations areas, and/or military training routes and consult with Plant 42 for input, as appropriate.

MC-4.5 Legislation Support. Support State or Federal legislation that positively impacts existing and future operations at Plant 42 (e.g., changes to airspace, state tax incentives, encroachment, etc.). Similarly, oppose legislation that may have a detrimental impact.

Goal MC-5
Ensure that new development within the Risk of Adverse Impact on Military Operations and Readiness Area (RAIMORA) or Military Training Route (MTR) complies with Federal Aviation Regulations regarding height and obstructions.

MC-5.1 Height and Obstruction Ordinance Compliance. Ensure that City height and obstruction ordinances reflect current Air Force and FAA Federal Aviation Regulation (FAR) Part 77 requirements related to the RAIMORA zone covering the Restricted Airspace R2508 and the Nevada Test and Training Range and the Military Training Route.

MC-5.2 Notification for MTR Obstructions. For any proposed uses that could penetrate the Military Operating Area (MOA), a penetration means a physical obstruction from a structure or object, and/or a visual obstruction such as steam, dust, or smoke.

MC-5.3 New Construction Height Compliance. For the purposes of determining whether a project penetrates the defined floor elevation of the Military Operating Area (MOA), a penetration means a physical obstruction from a structure or object, and/or a visual obstruction such as steam, dust, or smoke.

MC-5.4 Tall Structure Review. Provide for special review recommendations on tall structures in the RAIMORA or MTR.

32 For the purposes of calculating height of new proposed structures, the height of all structures (including wind turbines) means the distance from ground to the top of the highest point of the structure. For wind turbines this means the highest point of the turbine blade in vertical position.
COORDINATION

Goal MC-6
Enhanced communications with City government and its residents.

MC-6.1 Plant 42 Disaster Preparation. Prepare residents in case of an industrial accident or release of hazardous materials at Plant 42; distribute instructions/information to the public on actions to take if an incident occurs.

MC-6.2 Plant 42 Public Education. Participate in Plant 42 public education programs regarding missions and impacts associated with military aviation operations to increase public awareness.

MC-6.3 Military Liaison. Designate a military liaison function within the City to exchange information between the City and Plant 42 on issues of mutual concern including, but not limited to:
- Early notification of development projects near Plant 42,
- Early notification to the City of potential changes in aircraft operations (flight patterns, operational tempo, etc.),
- Housing, recreation, and other issues related to Plant 42 personnel living in the City,
- Track legislative impacts to the area.

Goal MC-7
Coordinate future development and infrastructure improvements.

MC-7.1 Project Coordination with Plant 42. Notify and coordinate with Plant 42 on major capital improvement projects or infrastructure expansion plans within the MIA that may impact Plant 42 operations.

MC-7.2 Grant Coordination with Plant 42. Collaborate with Plant 42 to pursue grant funding for things like infrastructure that will collectively serve the needs of Plant 42 and the community.

MC-7.3 Coordination Airport Plans with Plant 42. Notify and coordinate with USAF Plant 42 on City-initiated improvements or expansion plans related to the development of passenger air service at the Palmdale Regional Airport (PMD).

MC-7.4 Affordable and Workforce Housing. Promote the availability and development of affordable and workforce housing in the City to meet the needs of military personnel and their dependents.

MC-7.5 Coordination with Plant 42. Review and respond to any proposals from the USAF or other military contractors in Plant 42 involving any intensification of operations, changes in flight patterns, and relocation or extension of runways that would potentially create safety or noise impacts for Palmdale residents.

MC 7.6 Interagency Land Use Coordination. Work with the County of Los Angeles, City of Lancaster and the military installations as needed to address any issues related to land use compatibility, safety, and operations.
# Implementation Actions

The table below identifies programs, policy updates, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s Military Compatibility objectives. Actions listed below are consistent with and implement this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goals</th>
<th>Description</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC-1</td>
<td><strong>Infrastructure Related Plan Review.</strong> Periodically review the zoning ordinance, subdivision ordinance, and other infrastructure plans to ensure they do not conflict with the continued viability of Plant 42. Incorporate AICUZ policies and guidelines into future specific plans within the City of Palmdale.</td>
<td>🏭</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>MC-3, MC-4</td>
<td><strong>Site-Specific Review.</strong> Continue a site-specific review process for noise sensitive uses (e.g., hospitals, housing) within the APZs or MIA to assess proposed noise level reduction techniques.</td>
<td>🏭</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>MC-6, MC-7</td>
<td><strong>Military Liaison.</strong> Create a Military Liaison position within City to coordinate directly with Plant 42 on issues of mutual concern.</td>
<td>🐒</td>
<td>City Manager’s Office and Economic and Community Development</td>
</tr>
<tr>
<td>MC-6, MC-7</td>
<td><strong>Coordination with Plant 42.</strong> Meet quarterly with Military operations and planning personnel to discuss Plant 42 and City mission and goals.</td>
<td>🏭</td>
<td>City Manager’s Office and Economic and Community Development</td>
</tr>
</tbody>
</table>
Chapter 9

Equitable and Healthy Communities

The Equitable and Healthy Communities Element of the Palmdale General Plan outlines the goals and policies related to public health, equity, and environmental justice in Palmdale.
Statutory Requirements

Senate Bill 1000: Planning for Healthy Communities Act

Senate Bill 1000 (SB 1000), or the Planning for Healthy Communities Act, requires jurisdictions with disadvantaged communities to develop an environmental justice element, or related environmental justice goals and policies, as part of their general plans. The goal of SB 1000 is to help identify and reduce risks in communities disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation. In doing so, SB 1000 offers an opportunity to address existing community health concerns and mitigate the impacts of future health issues.
Healthy Communities

Healthy communities are places that foster positive health outcomes for all who live, work, and play. Good nutrition, physical activity, and access to healthcare all influence health. However, health is also influenced by many other factors, including access to economic opportunities, safe and sanitary housing, high-quality education, and low exposure to pollution (see Figure 9.1). A city’s physical, social, and economic environments combine to make residents healthier and more resilient to long-term changes and short-term shocks. Palmdale is working toward becoming a healthy community through the policy, program, and design interventions in the physical environment outlined in the General Plan.

Figure 9.1  Example of Healthy Communities Components
Environmental Justice

Environmental justice is defined in California’s Government Code Section 65040.12(e) 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.” For decades, many low-income communities and communities of color have experienced a disproportionate burden of environmental pollution because of past discriminatory land use and environmental policies. Environmental justice seeks to rectify these past injustices by protecting all people from exposure to pollution, toxins, hazardous wastes, radioactive materials, and other environmental harms. This Equitable and Healthy Communities Element incorporates goals, policies, and actions to address disproportionate pollution burden, prioritize improvements that address the needs of disadvantaged communities, and protect Palmdale residents from environmental harm and risk.

Disadvantaged Communities

According to California’s Health and Safety Code (Section 39711), a “disadvantaged community” is defined as “a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.” The California Communities Environmental Health Screening Tool (CalEnviroScreen) is a screening methodology developed by the California Office of Environmental Health Hazard Assessment (OEHHA) that is used to identify disadvantaged communities burdened by multiple sources of pollution. The General Plan’s Public Health and Equity Existing Conditions Report utilized CalEnviroScreen version 3.0, the latest version at that time. Following the release of the Existing Conditions Report and before preparation of this element, OEHHA released CalEnviroScreen version 4.0, which includes updated data for all its component indicators as well as an additional pollution exposure indicator for children’s lead risk from housing. Thus, this Element utilizes data from both CalEnviroScreen versions 3.0 and 4.0 to screen for and identify disadvantaged communities in Palmdale. Appendix A: Health and Equity Analysis provides the summary of the analysis.

As part of the General Plan process, other screening tools and data sources were also used to identify health impacts on disadvantaged communities in the city. For instance, the California Healthy Places Index is a tool to understand the cumulative burden of social, economic, and environment conditions that may lead to unequal, inequitable, or disparate outcomes for a specific group of neighborhoods. This tool can be used to identify the top 25 percent highest scoring communities with less healthy community conditions, including housing, transportation, education, and poverty. Furthermore, the General Plan integrates data from the California Health Interview Survey and the County of Los Angeles’s Community Health Profiles. Both data sources provide detailed information at multiple geographic levels of chronic disease rates, life expectancy, and other major health indicators.

This section provides an overview of existing health, equity, and environmental justice conditions in Palmdale. The description includes an identification of disadvantaged communities in the city and the major health inequities affecting residents.

Pollution Burden and Disadvantaged Communities

Compared to the rest of California, and especially compared to the rest of Los Angeles County, Palmdale has a lower pollution burden. The city has less exposure to environmental pollution such as lower levels of fine particulate matter (PM 2.5) and fewer groundwater threats and cleanup sites. However, most neighborhoods east of SR-14 are identified as disadvantaged communities based on two of the State’s recommended screening methods, which includes CalEnviroScreen’s overall index scores and low-income areas with high pollution burden for at least one pollution indicator. A high pollution burden for a given pollution indicator is defined as scoring in the top 25% compared to all other census tracts in the state35. The low-income areas shown in Figure 9.2 were identified as disadvantaged communities because of the high proportion of low-income households exposed to high pollution burden, mostly from ozone and toxic releases from facilities, in comparison to the rest of California. In addition, a few low-income areas were found to also face a high relative pollution burden from lead risk in housing and air pollution-related traffic impacts. Table 9.1 provides a summary of the pollution burden in the city.

Table 9.1

<table>
<thead>
<tr>
<th>Pollutant Exposures</th>
<th>Are Low-Income Areas Impacted?</th>
<th>Additional Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air quality: ozone</td>
<td>Yes, all low-income areas in the city have a high pollution burden for ozone. Thus, all low-income areas can be considered “disadvantaged communities.”</td>
<td>The entire Antelope Valley basin has poor ozone levels, because of the region’s plentiful sunshine and the air pollution that blows in from the Los Angeles basin.</td>
</tr>
<tr>
<td>Air quality: particulate matter 2.5</td>
<td>No low-income areas in Palmdale scored in the top 25% for this indicator.</td>
<td>There is no high relative pollution burden for particulate matter 2.5 in the city.</td>
</tr>
<tr>
<td>Children’s lead risk from housing</td>
<td>Yes, four low-income census tracts scored in the top 25% for this indicator. Thus, these four low-income areas can be considered “disadvantaged communities.”</td>
<td>One additional census tract in the far northeast of the city scored in the top 25%, but this area is unpopulated.</td>
</tr>
<tr>
<td>Diesel particulate matter</td>
<td>No low-income areas in Palmdale scored in the top 25% for this indicator.</td>
<td>There is no high relative pollution burden for diesel particulate matter in the city.</td>
</tr>
<tr>
<td>Drinking water contaminants</td>
<td>No low-income areas in Palmdale scored in the top 25% for this indicator.</td>
<td>There is no high relative pollution burden for drinking water contaminants in the city.</td>
</tr>
<tr>
<td>Pesticide use</td>
<td>No low-income areas in Palmdale scored in the top 25% for this indicator.</td>
<td>One census tract in the far northeast of the city scored in the top 25%, but this area is unpopulated.</td>
</tr>
<tr>
<td>Toxic releases from facilities</td>
<td>Yes, all low-income areas in the city have a high pollution burden for toxic releases from facilities. Thus, all low-income areas can be considered “disadvantaged communities.”</td>
<td>Nearly all of Palmdale has high relative pollution burden for toxic releases from facilities, because of the nationally significant facilities in the city, such as Air Force Plant 42. (Plant 42)</td>
</tr>
<tr>
<td>Traffic impacts</td>
<td>Yes, one low-income census tract along SR-14 scored in the top 25% for this indicator. Thus, this low-income area can be considered a “disadvantaged community.”</td>
<td>Although there are a few other census tracts that scored in the top 25% for this indicator, they are not low-income areas.</td>
</tr>
</tbody>
</table>

### Pollutant Exposures

<table>
<thead>
<tr>
<th>Pollutant Exposures</th>
<th>Are Low-Income Areas Impacted?</th>
<th>Additional Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleanup sites</td>
<td>No low-income areas in Palmdale scored in the top 25% for this indicator.</td>
<td>There is no high relative pollution burden for cleanup sites in the city.</td>
</tr>
<tr>
<td>Groundwater threats</td>
<td>No low-income areas in Palmdale scored in the top 25% for this indicator.</td>
<td>There is no high relative pollution burden for groundwater threats in the city.</td>
</tr>
<tr>
<td>Hazardous waste generators and facilities</td>
<td>No low-income areas in Palmdale scored in the top 25% for this indicator.</td>
<td>Two census tracts in the city scored in the top 25%, but both are unpopulated areas owned by the LAWA or Plant 42.</td>
</tr>
<tr>
<td>Impaired water bodies</td>
<td>No low-income areas in Palmdale scored in the top 25% for this indicator.</td>
<td>There is no high relative pollution burden for impaired water bodies in the city.</td>
</tr>
<tr>
<td>Solid waste sites and facilities</td>
<td>No low-income areas in Palmdale scored in the top 25% for this indicator.</td>
<td>One census tract in the far west of the city scored in the top 25%, but this area is not low-income. Moreover, this indicator simply measures the presence of solid waste sites, such as the City’s landfill, rather than actual risk of harm from such a facility.</td>
</tr>
</tbody>
</table>

As a result of pollution from the Los Angeles basin and the plentiful sunshine, the entire Antelope Valley has high levels of ozone pollution with the annual average exceeding safe levels for vulnerable populations. Diesel emissions from high volume roadways and truck routes, such as Palmdale Boulevard and Pearblossom Highway, also contribute to the high level of urban ozone pollution in lower-income neighborhoods. Moreover, because of the nationally significant facilities in the city, such as Plant 42, there is a higher relative concentration of toxic chemicals released into the air than in the rest of the state. Therefore, this element prioritizes improvements that address the needs of these identified disadvantaged communities by reducing disproportionate pollution burden and promoting public health.
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Social Determinants of Health

In addition to the environmental pollution assessment, the General Plan conducted an analysis of existing public health conditions in Palmdale. This section includes topics related to the social determinants of health, such as housing, economic opportunity, and access to public facilities. Table 9.2 provides a list of all the public health issues considered as part of the public health assessment and identified by City staff, focus groups, stakeholder interviews, and the consultant team. This section provides a summary of the public health assessment, more details can be found within the Palmdale 2045 General Plan Public Health and Equity Existing Conditions Report.

Health Status
Life expectancy varies depending on place of residence, race and ethnicity, gender identity, sexual orientation, and place of birth, among other factors. On average, life expectancy in Palmdale is 78.5 years; nearly four years less than Los Angeles County’s life expectancy of 82.3 years. However, life expectancy within the city varies greatly by neighborhood; with some areas of central Palmdale having a life expectancy as low as 74.0 years, while areas of west Palmdale having a life expectancy of 84.0 years. There is no single cause for this disparity. Rather, it suggests that the average Palmdale resident faces a variety of physical, social, and economic conditions that negatively impact health status and life expectancy. Disparities in life expectancy underscore the importance of improving community health as a critical long-term goal.

Other indicators of health status can highlight a population’s risk factors and suggest policy priorities. For example, in 2018, 18.2% of adults in Palmdale had been diagnosed with asthma, which is significantly higher than the statewide adult asthma rate of 15.9%. Moreover, in 2018, 33.3% of adults in the city had been diagnosed with obesity, which is significantly higher than the corresponding statewide rate of 26.8%. Compared to countywide averages, Palmdale also has higher rates of several other chronic diseases including chronic obstructive respiratory disease (COPD), coronary heart disease, diabetes, and mental illness. Similar to the geographic disparities in life expectancy mentioned above, there are disproportionately higher rates of chronic diseases in the low-income communities and communities of color east of SR-14. Therefore, General Plan policies and actions to improve air quality and to equitably expand safe and convenient opportunities for physical activity can make a significant difference in improving the health of Palmdale residents.

Table 9.2

<table>
<thead>
<tr>
<th>Public Health Indicators</th>
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</thead>
<tbody>
<tr>
<td>Life expectancy</td>
</tr>
<tr>
<td>Obesity and overweight</td>
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<tr>
<td>Housing cost-burden</td>
</tr>
<tr>
<td>Heart disease</td>
</tr>
<tr>
<td>Youth physical activity levels</td>
</tr>
<tr>
<td>People experiencing homelessness</td>
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<tr>
<td>Chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>Mental health and substance abuse</td>
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<tr>
<td>High-volume roadways and truck routes</td>
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<tr>
<td>Lung cancer</td>
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<tr>
<td>Asthma</td>
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<tr>
<td>Food access</td>
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<tr>
<td>Stroke</td>
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<tr>
<td>Diabetes</td>
</tr>
<tr>
<td>Crime and public safety</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
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<tr>
<td>Access to healthcare</td>
</tr>
</tbody>
</table>

Access to Housing and Economic Opportunity

Compared to the rest of Los Angeles County, Palmdale has a comparatively affordable housing stock that provides residents with a greater degree of housing security and allows residents an opportunity to achieve homeownership, as evidenced by high homeownership rates. Additionally, the city is also home to some of the most innovative research and development in the aerospace industry with Plant 42, which provides economic opportunity and supplies high quality STEM jobs for the region.

Though housing costs are comparatively lower than the Los Angeles basin, costs are still exceedingly high based on household income for some Palmdale residents. Many low-income families and households of color face significant housing cost-burden, which forces families to choose between housing and other important expenses, such as healthcare, prescription medicines, and healthy food. As of 2017, nearly half of the population (48 percent) was under 200 percent of the Federal Poverty Level, which was 10 percent higher than the countywide poverty rate of 38 percent. Furthermore, multifamily affordable housing is challenging to develop because of rising development costs and a lack of existing infrastructure in certain areas of the city. Therefore, this General Plan provides the opportunity to promote an inclusive economic, educational, and housing strategy that focuses on expanding access to jobs with prevailing wages, strengthening trade schools and job training programs, and providing more affordable housing opportunities for residents of all ages in the city.

People Experiencing Homelessness

A close connection exists between rising housing costs and homelessness. According to the Centers for Disease Control and Prevention, people experiencing unsheltered homelessness are those who are sleeping outside or in places not meant for human habitation. In January 2020, the Los Angeles Homeless Services Authority reported 289 residents experiencing homelessness in Palmdale. Of those 289 residents, 241 were unsheltered and 48 were in an emergency shelter. Of the 241 unsheltered residents, about 29% lived in makeshift shelters, 27% lived in RVs or campers, and 20% lived on the street without a makeshift shelter. Of the 48 who were in an emergency shelter, all were counted at the winter emergency shelter operated by the Volunteers of America – Greater Los Angeles.

To prevent and combat homelessness in Palmdale, the Housing Authority of the City of Palmdale partners with The Salvation Army, South Antelope Valley Emergency Services (SAVES), Hope of the Antelope Valley, the County of Los Angeles, and other organizations to implement the Homeless Prevention and Rapid Rehousing Program (HPRRP). The HPRRP supports households who are at risk of experiencing homelessness by preventing episodes of being without housing. The program also assists individuals and families experiencing homelessness by providing relevant and accurate information that creates a path for them to no longer be without housing and creates housing opportunities that meet their needs.

Access to Public Facilities and Amenities (Healthy Food, Healthcare, Recreational Facilities)

Affordability, long distances to healthcare facilities, and limited transportation options pose significant barriers for the city’s large population of adults and children currently living at or below the poverty line. In fact, a quarter (25 percent) of adults in Palmdale report difficulty accessing health care. While a variety of health facilities exist, there is a shortage of healthcare providers to meet the demand. Palmdale has been federally designated as a health shortage area for primary care providers, particularly in areas east of SR-14 and south of Avenue Q. Additionally, almost the entire city is federally designated as a health shortage area for mental health providers. Federal regulations stipulate that a shortage of providers is based on a population-to-provider ratio. For primary care providers, the ratio is 3,500 to 1, while for mental health providers, the ratio is 9,000 to 1.

While various food stores exist in Palmdale, access to fresh produce and healthy food is limited in certain neighborhoods, especially along the southern and eastern boundaries of the city. At the time this General Plan was prepared, no Certified Farmers Markets are offered in Palmdale. Additionally, the high concentration of fast-food restaurants along Palmdale Boulevard, East Avenue S, and Rancho Vista Boulevard exacerbates poor access to healthy food for residents. A priority of Palmdale 2045 is to locate grocery stores and other healthy food retailers that sell affordable, high-quality fruits and vegetables in low-income neighborhoods to improve nutrition and health outcomes for Palmdale residents.

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Through the community engagement process, Palmdale residents identified an ongoing division between the eastern and western portions of the city. Residents also noted the feeling of inequitable distribution of public services, including quality schools, parks, and recreational programs that influence health and quality of life. Through the General Plan update process, careful consideration of future park priority areas where identified. A map of future park priority areas and parks to neighborhood distribution can be found in the Parks, Recreation, and Open Space Element. Moving forward, by partnering with local school districts, there are opportunities to leverage school sites to further access to recreational facilities and primary care providers.

**Tobacco Use**

The Centers for Disease Control and Prevention report smoking as the leading cause of preventable death in the United States. Though the effects of smoking are well-known and strong anti-smoking policies have reduced popularity since the mid-1990s, smoking is still prevalent in cities across the United States.

A 2015 Los Angeles County Health Survey found that 17% of Palmdale adults over age 18 smoke cigarettes, compared to 13% of adults in Los Angeles County. The report found that smoking prevalence varies across communities and cities, though the Antelope Valley reported among the highest percentage of smokers in the county.

The City of Palmdale has implemented measures to reduce smoking and limit secondhand smoke, most recently through the 2022 amendment to the City’s Smoking Ordinance, that further restricts smoking in public places. The Palmdale Municipal Code includes several smoking related regulations including regulation of smoking in enclosed public places, places of employment, separation of nonsmoking and smoking areas, and places where smoking is not regulated. The City has also targeted illegal cigarette and tobacco sales to minors with the help of state funding through the California Department of Justice’s Tobacco Grant Program. Ongoing efforts include coordination with the Palmdale Sheriff’s Department for retail sales enforcement, and anti-tobacco advertising aimed at discouraging use, especially among minors.

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45. Los Angeles County Department of Public Health, Los Angeles County Health Survey, 2015.
Community Engagement

Extensive community engagement was a key priority throughout the General Plan Update process. Activities and discussions took place over four years—and at every stage—to fully understand the key values and ideas residents have for the future of Palmdale. The City hosted 18 General Plan Advisory Committee (GPAC) meetings, 4 public workshops, 3 online surveys, 14 pop-up workshops, and dozens of small-group meetings that encouraged community members to collaborate with neighbors, prioritize outcomes, and participate in the land use map update, among others.

An important component of the engagement process was to seek participation from Spanish-speaking populations in Palmdale and those generally underrepresented in local government. Most meetings offered simultaneous Spanish translation, while all meetings welcomed translation requests (made in advance to the City), all surveys were provided in hard copy format and in Spanish, and separate discussions with Spanish speakers, seniors, and others without internet access took place throughout the General Plan update process.

Community input helped shape the content and strategies of the Equitable and Healthy Communities Element and highlighted important themes which are woven throughout the General Plan. The themes related to health, equity, and environmental justice included:

- A DESIRE FOR A MORE DIVERSE EMPLOYMENT BASE AND REDUCED RESIDENT COMMUTE TIMES.
- IMPROVED ACCESS TO HEALTHCARE FACILITIES AND SERVICES.
- AN IMPROVED PARKS AND OPEN SPACE SYSTEM WITH CONNECTIONS TO RESIDENTIAL NEIGHBORHOODS.
- EXPANDED AND SAFE TRANSPORTATION OPTIONS INCLUDING BIKE LANES, TRAILS, AND SIDEWALKS.
- A ROBUST AND HEALTHY FOOD SYSTEM.
- DIVERSE AND AFFORDABLE HOUSING OPTIONS THAT PROVIDE PATHWAYS TO ACHIEVE HOMEOWNERSHIP.

It is important to note that the COVID-19 Pandemic occurred during the update process. From 2019 through March 2020, all General Plan activities were held both in-person and online. In response to State and local public health guidance regarding the COVID-19 virus, all engagement activities—except for some pop-up events—were held virtually from March 2020 through the end of the update process.
The following desired outcomes and metrics have been identified to help the City of Palmdale track progress toward improving health and equity citywide. This process follows the City of Palmdale’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

**Desired Outcomes, Indicators, and Targets**

The following desired outcomes and metrics have been identified to help the City of Palmdale track progress toward improving health and equity citywide. This process follows the City of Palmdale’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

**Key Outcomes**

**OUTCOME:** An equitable local economy that provides career pathways and economic opportunities for existing residents, especially local youth.

**KPI:**
- Expanded economic opportunities for existing residents.

**TARGET:**
- Increase in the number of youths who participate in job training programs and are connected to employment opportunities in local industries.

**OUTCOME:** Improved health and quality of life, and lower rates of chronic diseases, among all residents.

**KPI:**
- Greater opportunities for physical activity.

**TARGET:**
- Increase in the proportion of residents living within a 20-minute walking distance from a dedicated public park, school, or multi-use trail.

**OUTCOME:** Diverse housing options including mixed-use and affordable options, for existing and future residents.

**KPI:**
- Diversified housing stock in Palmdale.

**TARGET:**
- Substantial increase in new multifamily housing units by 2045, 20% of which are affordable to families earning less than 80% of the area median income.

**OUTCOME:** Improved air quality for all residents.

**KPI:**
- Improved air quality with increased landscaping and trees.

**TARGET:**
- Expanded tree canopy, especially in disadvantaged communities.

**KPI:**
- Reduced exposure to toxic air pollution from industrial facilities.

**TARGETS:**
- Increase in the percentage of housing units, especially in disadvantaged communities, with air pollution reduction features and other measures that eliminate pollutants.
- Reduce smoking in public outdoor places in accordance with Ordinance No. 1580 and/or Ordinance No. 1571.

KPI = Key Performance Indicator
The following section includes goals and policies for the Equitable and Healthy Communities Element. Goals and policies are followed by implementation actions. Health, equity, and environmental justice policies are woven throughout the General Plan, including in the Circulation and Mobility, Public Facilities, Services, and Infrastructure, and Parks, Recreation, and Open Space elements, among others.

It is the overall goal of this Equitable and Healthy Communities (EHC) Element to ensure that goals, policies, and implementation actions that address the needs of Palmdale’s disadvantaged communities are given priority. While all goals, policies, and implementation actions of this Element apply to all residents, priority shall be given to those projects, programs, and resources that would fulfill the needs of residents living in disadvantaged communities.

**Goals and Policies**

**ECONOMIC OPPORTUNITY / EDUCATION PARITY**

**Goal EHC-1**
A City that promotes equitable access to economic opportunity for all residents.

- **EHC-1.1 Equitable investments.** Prioritize public infrastructure and facilities investments and develop incentives to promote private development investment in disadvantaged communities.
- **EHC-1.2 Community benefits agreements.** Develop a community benefits agreement for major private development projects, which may include affordable housing, job training funds, housing assistance, payment of parks and recreation fees or installation of amenities onsite and/or local hiring.
- **EHC-1.3 Equity impact assessments.** Regularly evaluate the impact of public infrastructure, facilities, and program investments, such as through equity impact assessments, to ensure equitable distribution of public resources across Palmdale.
- **EHC-1.4 Small business development.** Foster small business development with educational resources (e.g., funding sources, mentorship programs, etc.), permitting information, and services that can promote long term success in the city.
- **EHC-1.5 Small business funding.** Consider establishing funding for small business grants that prioritize low-income, women-owned, minority-owned, and/or LGBTQ-owned small businesses.
- **EHC-1.6 Career pathways.** Work with interested organizations and residents to create a youth job development partnership – connecting local businesses to youth for after school and summer work, volunteer positions, mentorship opportunities, and other skills development opportunities.
- **EHC-1.7 Services coordination.** Actively encourage the provision of public and private employment training, rental assistance, financial training, and other supportive services in multiple languages to enable households to be self-sufficient.
- **EHC-1.8 Internet Access.** Offer free high-speed Wi-Fi inside and outside of all City-owned facilities, especially in disadvantaged communities.
- **EHC-1.9 Bridging the digital divide.** Ensure all homes and businesses in the city have access to a fiber optic internet connection.
Goal EHC-2
A City with high-quality educational services and facilities in all neighborhoods, especially disadvantaged communities.

EHC-2.1 Education districts. Create two education districts in locations that are well-served by transit:
• Near Antelope Valley College Palmdale Center and Palmdale High School (Palmdale Boulevard and 25th Street East); and,
• In the vacant area on the northern side of Palmdale Boulevard and 47th Street East.

EHC-2.2 Educational uses. Attract a mix of educational uses such as public and private higher education facilities, satellite campuses, trade schools, along with supporting uses like retail and housing in the Educational Flex land use designation.

EHC-2.3 Higher education institution. Attract a new major higher education institution.

EHC-2.4 Access to public facilities. Maintain and expand access to education-related public facilities and services, including schools, libraries, and recreational spaces, to better support communities.

EHC-2.5 Daycare facilities. Promote opportunities for new affordable daycare, childcare, and pre-K facilities in Village Centers, and encourage these supporting uses in the Educational Flex land use designation.

COMMUNITY ENGAGEMENT
Goal EHC-3
A City that promotes meaningful and equitable engagement with all residents.

EHC-3.1 Strengthening community partnerships. Encourage continuous participation in City planning processes, especially targeting hard-to-reach populations, including developing partnerships with local community-based organizations and faith-based institutions to help facilitate conversations.

EHC-3.2 Communication and transparency. Regularly monitor key milestones of investments in disadvantaged communities and provide regular updates via City communication channels and networks.

EHC-3.3 Equity Committee. Consider the creation of a Palmdale Equity Committee to provide guidance on equity-related topics in City governance.

EHC-3.4 Youth Council. Create a Palmdale Youth Council to participate in City governance and share in decision-making around issues impacting youth.

EHC-3.5 Reduce barriers to participation. Address barriers to civic participation at all public meetings by scheduling them at times convenient for residents and by providing transportation options, childcare services, and healthy food options at meetings.

EHC-3.6 Language accessibility. Provide multilingual interpretation at all public meetings, translate all meeting materials into Spanish and, by request, into other spoken and visual languages.

EHC-3.7 Virtual participation. Continue to make public hearings and meetings available virtually to expand community participation.
ACCESS TO HEALTH CARE

Goal EHC-4
A City committed to supporting health equity and promoting access to high-quality health care.

EHC-4.1 Health and wellness districts. Create three health and wellness districts in locations that are well-served by transit:
• Around the Palmdale Regional Medical Center (Palmdale Boulevard and 10th Street West)
• Along Palmdale Boulevard and 40th/45th Streets East
• Adjacent to Kaiser Permanente (East Avenue S and 45th Street East)

EHC-4.2 Health and wellness uses. Allow and encourage a mix of public and private medical, health, and wellness uses including emergency medical facilities, medical and supportive retail, offices, healthcare clinics and pharmacies in the Health and Wellness land use designation.

EHC-4.3 Access to primary care. Encourage programs and practices that aim to increase access to primary healthcare, especially for low-income residents. Support partnerships with local health service providers, Los Angeles County Public Health Department, schools, and other community-based organizations to promote health, wellness, and preventative care.

EHC-4.4 Transit access to healthcare. Work with local transit agencies to ensure that bus routes provide transit service to health service facilities, especially from disadvantaged communities.

EHC-4.5 Subsidized medical transportation. Partner with local health systems and service providers to support Medicare and Medi-Cal recipients in accessing existing reimbursement programs for non-emergency medical transportation.

EHC-4.6 Health data monitoring. Collaborate with the County of Los Angeles to track health data and ensure the City has necessary health-related data to guide decision-making.

EHC-4.7 Community Health Profile. Partner with the Los Angeles County Department of Public Health to provide regular updates to Palmdale’s Community Health Profile, as needed.

EHC-4.8 Affordable healthcare options. Partner with the Los Angeles County Department of Public Health and other regional partners to provide residents with information on affordable and accessible healthcare services.
Goal EHC-5
A City committed to promoting access to high-quality mental health care and social services.

**EHC-5.1 Access to mental healthcare.** Collaborate with the County of Los Angeles and regional health organizations to improve access to mental healthcare, especially in disadvantaged communities.

**EHC-5.2 Community input.** Partner with the County and local health systems to gather community input on the city’s existing mental healthcare infrastructure to improve behavioral health services accordingly.

**EHC-5.3 Preventive mental healthcare.** Develop programs and services that improve wellbeing and help reduce stress and mental health issues, especially for vulnerable populations such as foster youth, at-risk youth, and older adults.

**EHC-5.4 Homeless services coordination.** Coordinate with the Los Angeles County Homeless Services Authority to help residents currently or at risk of experiencing homelessness to access education, facilities, and health services.

**EHC-5.5 Homelessness Coordinator.** Consider creating a dedicated City staff position to function as a liaison with the County and Palmdale residents currently or at risk of experiencing homelessness.

**EHC-5.6 Partnerships with local shelters.** Continue to partner with local shelters to provide cots for emergency shelter situations, including extreme heat and cold days.

**EHC-5.7 At-risk youth services.** Coordinate with the Los Angeles County Department of Children and Family Services to support programs for at-risk youth and parents of at-risk youth, such as parent training programs, health and mental health resources, and youth transition programs.

**EHC-5.8 Cooling centers.** Coordinate with local agencies and organizations to establish centralized cooling centers during extreme heat days, and provide transportation to these facilities for older adults, disabled individuals, and other residents who may have transportation barriers.
HOUSING

Goal EHC-6
Promote neighborhoods with a range of housing opportunities that provide housing opportunities for people of all ages, abilities, socio-economic status, family structure and size.

EHC-6.1 Transit-oriented housing.
Direct the location of senior and multi-family housing to high resource areas accessible to public transportation, supportive commercial uses, and community facilities.

EHC-6.2 Housing diversity.
Encourage a variety of housing types developed at a range of densities to serve varying household types, including, but not limited to, single-family attached and detached, accessory dwelling units, multi-family apartments, townhomes, duplexes, triplexes, quadplexes, and condominiums.

EHC-6.3 ADA compliant housing.
Facilitate housing for older adults, special needs groups, including the developmentally disabled, and non-traditional family groups by allowing a diverse range of housing configurations that are Americans with Disabilities Act (ADA) compliant and flexible.

EHC-6.4 Aging in place.
Promote development of housing types that support multi-generational households and opportunities to age in place.

EHC-6.5 Resource families.
Promote development of housing types that support resource families and meet the needs of foster youth and transition age youth.

EHC-6.6 Development review process.
Periodically lead a comprehensive review of all steps in the development approval process to identify the factors that impede a variety of new residential construction, including affordable housing.

EHC-6.7 Streamlining housing development.
Create a one-stop permitting shop that streamlines review of potential housing projects and makes it accessible and easy for applicants to get the answers they need.

EHC 6.8 Pre-application housing meetings.
Encourage pre-application meetings with department staff to review potential projects and ensure consistency with the General Plan vision.
Goal EHC-7
A City that preserves and expands its supply of affordable housing.

EHC-7.1 Affordable housing preservation. Preserve or replace units with expiring affordable housing subsidies.

EHC-7.2 Mobile home parks. Use regulatory and financial tools to make mobile home spaces permanently affordable.

EHC-7.3 Vacant and underutilized land. Identify vacant and underutilized land, including publicly owned land, suitable for affordable housing.

EHC-7.4 Affordability period. Require that all units developed under any of the City affordable housing programs remain affordable for the longest possible time or at least 30 years.

EHC-7.5 Affordable housing impact fee. Consider a program where new commercial and/or industrial developments pay a fee to fund affordable housing units.

EHC-7.6 Accessory dwelling units. Periodically update the City’s Accessory Dwelling Unit (ADU) ordinance to be consistent with State law. Consider providing permit ready ADU plans to residents.

EHC-7.7 Expedited permitting for affordable housing. Develop an expedited permitting program to support the creation of new affordable housing.

Goal EHC-8
A City that encourages the construction and maintenance of safe, sanitary, and health-promoting housing.

EHC-8.1 Housing rehabilitation. Consider a housing rehabilitation program that assists multi-family residential property owners in modernizing and maintaining units. For example, support efforts to upgrade affordable units with effective ventilation and insulation systems, and eliminate common home pollutants such as lead, asbestos, mold, and pests.

EHC-8.2 Code enforcement. Develop a community code enforcement partnership to ensure ongoing and effective health and safety code enforcement, with priority given to rental properties in disadvantaged communities.

EHC-8.3 Residential Rental Housing Inspection Program. Evaluate the existing Residential Rental Housing Inspection Program and develop measures to improve effectiveness.

EHC-8.4 Municipal code and healthy housing. Review, revise, and update the municipal and zoning code (as well as other relevant plans, procedures, regulations, guidelines, programs, and design manuals) as needed, to promote healthy housing quality. Regulations may include:
- Siting buildings to encourage walking and physical activity
- Designing internal staircases that are visually prominent and attractive
- Designing buildings to allow for high levels of natural light and air
- Limiting concentration of unhealthy uses in proximity to sensitive uses
- Providing safe linkages to parks, trails, schools, and recreation
- Providing on-site recreational facilities
- Using materials that are proven to avoid negative health impacts
Goal EHC-9
A City that proactively supports low-income residents who are housing insecure.

EHC-9.1 Renter education and assistance. Connect low-income residents to City, County, State, and non-profit resources that provide technical, legal, and financial assistance for renters facing eviction.

EHC-9.2 Tenant protections. Consider developing a tenant protections plan, which may include a rent stabilization policy, just cause eviction and harassment protections, tenant and landlord mediation programs, right of first refusal, rental assistance, tenant legal counseling, and a rent board to implement the program.

EHC-9.3 Fair housing. Strictly enforce fair housing laws to protect residents from housing discrimination.

EHC-9.4 Mortgage assistance resources. Connect low-income residents at risk of foreclosure to county, state, and non-profit homeowner assistance programs.

EHC-9.5 Rapid rehousing. Continue to support the Homeless Prevention and Rapid Rehousing Program to support households who are at risk of becoming unhoused.

EHC-9.6 Permanent supportive housing. Implement the U.S. Department of Housing and Urban Development’s Housing First program once permanent supportive housing is available in the city.

EHC-9.7 Limited-equity housing. Encourage resident controlled limited-equity ownership, such as limited-equity condominiums, limited-equity cooperatives, and community land trusts.

PHYSICAL ACTIVITY

Goal EHC-10
Encourage neighborhoods with a range of opportunities to exercise, including parks and recreational facilities.

EHC-10.1 Near-universal access to recreation. Work toward a goal of having 90 percent of residents living within a 20-minute walking distance of a dedicated park, school, or multi-use trail.

EHC-10.2 Access to open space. Plan for new parks and increase access to existing and future parks, trails, and open spaces, especially in disadvantaged communities.

EHC-10.3 Recreational programs. Prioritize investments in recreational programs that focus on physical activity.

EHC-10.4 Community partnerships. Partner with community-based organizations to improve access to recreational opportunities that promote physical activity across the city, particularly in park-poor neighborhoods.

EHC-10.5 Fee waivers. Consider fee waivers for low-income families, such as families with children who participate in the National School Lunch Program, so that all residents have access to the City’s recreational programming.
**Goal EHC-11**
Encourage neighborhoods that support safe pedestrian, bicycle, and public transit access for people of all ages, income levels, and cultural backgrounds.

**EHC-11.1 Near-universal walk access to retail and services.** Plan for 90 percent of residents (except for equestrian residential areas) to be within a 20-minute walking distance of a Village Center with retail and neighborhood services.

**EHC-11.2 Complete Streets investments.** Prioritize transportation system improvements that promote Complete Streets objectives, incorporate universal design principles, and encourage walking, biking, and transit use in disadvantaged communities.

**EHC-11.3 Improve connectivity.** Strive for a high level of connectivity of residents to Village Centers and neighborhood services through site design, open space linkages, and bicycle facilities. Integrate land use and transportation infrastructure to support a connected system of sidewalks, bikeways, greenways, and transit.

**EHC-11.4 Streetscape enhancements.** Enhance existing streetscapes to include greater sidewalk coverage, walkway connectivity, street trees and shade, street lighting, street crossing safety features, traffic calming measures, transit shelters, and other design elements, especially in disadvantaged communities.

**EHC-11.5 Safe routes for older adults.** Develop safe routes for aging adults, particularly routes to transit and shopping centers.
AIR QUALITY / RESPIRATORY HEALTH

Goal EHC-12
A City designed to improve air quality and reduce disparate health impacts.

EHC-12.1 Tree planting. Plant street trees, identified within the City’s plant palette, throughout Palmdale, and especially in disadvantaged communities. Plant trees to provide shade and screening, especially along south and west facing sides of buildings.

EHC-12.2 City vehicle fleet. Transition the City’s vehicle fleet to lower-emission fuel technologies.

EHC-12.3 Truck routes. Designate truck routes to avoid sensitive land uses, where feasible.

EHC-12.4 Sensitive land uses. Avoid siting schools, daycare facilities, playgrounds, older adult housing, and housing near land uses that produce localized air pollution (e.g., SR-14, SR-138, and Plant 42). For sensitive land uses that cannot be sited at least 500 feet away from sources of localized air pollution, potential design mitigation options include:
• Provide residential units with individual heating, ventilation, and air conditioning (HVAC) systems to allow adequate ventilation with windows closed.
• Locate air intake systems for HVAC systems as far away from existing air pollution sources as possible.
• Use High Efficiency Particulate Air (HEPA) air filters in the HVAC system and develop a maintenance plan to ensure the filtering system is properly maintained.
• Use sound walls, berms, and vegetation as physical barriers.
• Notify new potential home buyers of risks from air pollution.

EHC-12.5 Air quality monitoring. Develop a citywide air quality monitoring program to identify areas with high gas, oil, and toxic chemical emissions, in addition to tracking changes over time, identifying polluters, and analyzing potential interventions.

EHC-12.6 Air quality planning. Participate in air quality planning efforts with local, regional, and state agencies that improve local air quality to protect human health and minimize the disproportionate impacts on sensitive population groups.

EHC-12.7 Toxic air emissions. Coordinate with regional, state, and federal agencies, including the U.S. Environmental Protection Agency, as well as large aerospace and industrial employers to decrease toxic chemical emissions. Proactively explore potential partnerships and interventions to decrease potential exposure of residents to these chemicals.
Goal EHC-13
A City that strives to be a smoke-free community.

EHC-13.1 Smoke-free public space. Update the municipal code to require all City-owned public places, including outdoor facilities, to be smoke-free and vape-free to reduce exposure to second-hand smoke.

EHC-13.2 Smoke-free workplaces. Encourage employers to provide smoke-free and vape-free workplaces.

EHC-13.3 Smoke-free multifamily housing. Adopt an ordinance to transition all multi-family buildings into smoke-free and vape-free housing.

EHC-13.4 Smoking product retailers. Limit the sale of tobacco and other nicotine products in neighborhoods with a significant concentration of stores (e.g., multiple stores on the same block or intersection) and near child-sensitive areas, such as schools, parks, and daycare facilities. Consider distance requirements from sensitive uses.

EHC-13.5 Limit smoking advertisements. Encourage store owners to limit advertising for tobacco products.

EHC-13.6 Anti-smoking education. Coordinate with Los Angeles County Department of Public Health and local community partners to continue educational campaigns regarding anti-smoking measures.
**FOOD ACCESS**

**Goal EHC-14**

A City that provides safe and convenient access to affordable and high-quality fruits and vegetables.

EHC-14.1 Near-universal walk access to healthy food retailers. Work toward a goal of having 90 percent of residents living within a 20-minute walking distance of a grocery store, farmers market, community garden, or other healthy food retailer.

EHC-14.2 Farmers markets. Partner with organizations to bring one (or more) weekly Certified Farmers Markets to Palmdale. Encourage future farmers markets to accept CalFresh Electronic Benefit Transfer (EBT) cards; Women, Infants, and Children (WIC) benefits; and Senior Farmers’ Market Nutrition Program (SFMNP) benefits.

EHC-14.3 Grocery stores. Partner with developers and other stakeholders to bring full-service and affordable grocery stores to disadvantaged communities in Palmdale.

EHC-14.4 Corner store conversion. Utilize economic development incentives to encourage existing convenience stores, especially in disadvantaged communities, to expand inventory and to sell fresh, healthy foods such as produce. Assist convenience stores in modifying retail space with basic refrigeration and shelving to transform into economically viable healthy food retailers.

EHC-14.5 Other healthy food retail. Incentivize the location and expansion of new and existing small businesses that sell and/or serve healthy food options.

EHC-14.6 Fast food and liquor stores. Limit drive-through restaurants and off-sale alcohol beverage establishments—as defined in the municipal code—in neighborhoods with a significant concentration of stores (e.g., multiple stores on the same block or intersection) and child-sensitive areas, such as schools, parks, and childcare facilities.

EHC-14.7 Local food production. Strengthen the local economy by encouraging local food production, community gardens, and farmers markets on vacant or underutilized parcels.

EHC-14.8 Transit access to healthy food retailers. Improve ready access to healthy food retailers along key transit corridors and within transit-oriented developments. Work with local transit agencies to ensure that bus routes provide service from disadvantaged communities to healthy food retailers.

EHC-14.9. Food waste diversion. Partner with local grocery stores, restaurants, and other food retailers to divert food waste and donate extra food to local food banks, soup kitchens, and shelters.
Goal EHC-15
A City that encourages healthy eating habits for all residents.

EHC-15.1 Student nutrition education. Work with local school districts and other educational facilities to create or implement educational programs for children about healthy eating, such as edible schoolyards and healthy cooking classes.

EHC-15.2 Healthy food options. Require that City-funded events offering refreshments, also offer healthy food choices and water to participants.

EHC-15.3 Communications support. Help publicize small retailers and restaurants that sell and/or serve affordable and high-quality fruits and vegetables, including locally grown foods.

EHC-15.4 Nutrition education. Partner with the Los Angeles County Department of Public Health to develop food education programs, including culturally tailored messages, fruit and vegetable incentives, parenting skill classes, nutrition, and physical activity.

EHC-15.5 Gardening education. Partner with community-based organizations to provide gardening and composting classes citywide with an emphasis in disadvantaged communities.

CRIME AND PUBLIC SAFETY
Goal EHC-16
A City that improves public safety for all residents by reducing crime and injuries.

EHC-16.1 Pedestrian and bicyclist safety. Strive for a safe transportation system by making transportation improvements in areas with a high incidence of collisions, injuries, and death, especially for pedestrians and bicyclists. Street improvements may include the following:
• Marked crosswalks
• Bicycle lanes
• Traffic calming

EHC-16.2 Coordination with Sheriff’s Department. Continue to coordinate with Los Angeles County Sheriff’s Department for improvements to public safety.

EHC-16.3 Crime prevention through environmental design. Use Crime Prevention Through Environmental Design (CPTED) strategies in new and existing development to improve public safety, including the following:
• Active public space
• Building design to promote “eyes on the street”
• Maintenance of public places
• Removal or repair of vandalism or broken property

EHC-16.4 Public realm lighting. Improve lighting and nighttime security across all city neighborhoods to prevent crime and increase safety.

EHC-16.5 Graffiti prevention. Continue to support the graffiti prevention team to remove graffiti from public property (including parks, street signs, sidewalks) or property adjacent to public rights-of-way.
Implementation Actions

The table below identifies programs, policy updates, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s Equitable and Healthy Communities Element vision and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goals</th>
<th>Action</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>EHC-1</td>
<td><strong>Small business incubator.</strong> Explore public and private partnerships to develop a small business incubator for lower-income entrepreneurs.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>EHC-1</td>
<td><strong>Hiring apprentices.</strong> Develop apprenticeship utilization requirements for public infrastructure projects in Palmdale, focusing efforts on hiring apprentices who live in the city and experience significant barriers to employment.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>EHC-1</td>
<td><strong>Youth internships.</strong> Expand the City’s existing youth/teen internship program to all departments, with targeted recruitment of youth from disadvantaged communities.</td>
<td></td>
<td>City Manager’s Office</td>
</tr>
<tr>
<td>EHC-2</td>
<td><strong>Childcare business portal.</strong> Maintain an online portal and resources for childcare business development.</td>
<td></td>
<td>Economic and Community Development and Communications</td>
</tr>
<tr>
<td>EHC-2</td>
<td><strong>Childcare grants.</strong> Explore the provision of one-time grants for home childcare businesses for zoning permit applications, home improvements, and waving fines for businesses to legalize their family childcare homes.</td>
<td></td>
<td>Economic and Community Development and Neighborhood Services</td>
</tr>
<tr>
<td>EHC-3</td>
<td><strong>Dedicated equity staff person.</strong> Continue to fund dedicated staff position to advance equity initiatives and monitor equity-related outcomes throughout Palmdale.</td>
<td></td>
<td>City Manager’s Office</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Action</td>
<td>Timeframe</td>
<td>Responsible Department</td>
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<td>--------------------------------------------</td>
</tr>
<tr>
<td>EHC-3</td>
<td><strong>Hire multilingual staff.</strong> Hire staff who speak multiple languages, including Spanish.</td>
<td></td>
<td>City Manager’s Office</td>
</tr>
<tr>
<td>EHC-4</td>
<td><strong>School-Based Health Centers.</strong> Partner with the Palmdale School District, the Westside School District, and the Antelope Valley Union High School District to establish school-based health centers, especially in disadvantaged communities.</td>
<td></td>
<td>City Manager’s Office</td>
</tr>
<tr>
<td>EHC-5</td>
<td><strong>Mental Health Services.</strong> Partner with appropriate community partners such as, but not limited to, Palmdale Regional Medical Center, Antelope Valley Medical Center and Los Angeles County Mental Health to provide mental health resources to those in need.</td>
<td></td>
<td>City Manager’s Office</td>
</tr>
<tr>
<td>EHC-6</td>
<td><strong>Transit-oriented housing strategy.</strong> Develop a strategy to promote affordable housing in areas within a mile of the proposed California High-Speed Rail station.</td>
<td></td>
<td>Economic and Community Development and Neighborhood Services</td>
</tr>
<tr>
<td>EHC-6, EHC-7</td>
<td><strong>Affordable housing incentives.</strong> Develop a package of developer incentives to promote the construction of affordable housing.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>EHC-7</td>
<td><strong>Housing cost burden assessment.</strong> Assess the strength of affordable housing policies in each Housing Element update.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>EHC-8</td>
<td><strong>Lead removal.</strong> In cooperation with Los Angeles County and other regional agencies, establish a lead removal program for homes built before 1980.</td>
<td></td>
<td>Neighborhood Services</td>
</tr>
<tr>
<td>EHC-8</td>
<td><strong>Air filtration.</strong> Establish a program that provides incentives to property owners of existing multifamily residential buildings, especially those in disadvantaged communities, to install heating, ventilation, and air conditioning (HVAC) systems with High Efficiency Particulate Air (HEPA) filters for all units.</td>
<td></td>
<td>Neighborhood Services and Economic and Community Development</td>
</tr>
<tr>
<td>EHC-10</td>
<td><strong>Shared Use of Community Facilities.</strong> Develop an agreement with the Palmdale School District, the Westside School District, and the Antelope Valley Union High School District to allow city residents access to outdoor recreational areas during non-school hours.</td>
<td></td>
<td>Parks and Recreation and City Manager’s Office</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Action</td>
<td>Timeframe</td>
<td>Responsible Department</td>
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</tr>
<tr>
<td>EHC-10</td>
<td><strong>Open Space Partnerships.</strong> Develop public, private, and non-profit partnerships to develop and maintain parks, recreational facilities, and publicly accessible private open spaces in disadvantaged communities.</td>
<td></td>
<td>Parks and Recreation, Neighborhood Services and City Manager’s Office</td>
</tr>
<tr>
<td>EHC-11</td>
<td><strong>Safe Routes to School.</strong> Partner with local school districts and community-based organizations to adopt a Safe Routes to Schools plan.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>EHC-12</td>
<td><strong>Truck traffic rerouting.</strong> Partner with Caltrans to study the potential to re-route Palmdale Boulevard truck traffic to Pearblossom Highway and Avenue M (Columbia Way).</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>EHC-13</td>
<td><strong>Smoking product retailers.</strong> Update the zoning code to prohibit new tobacco/smoking product retailers, including the sale of vape products, within 1,000 feet of child-sensitive areas (e.g., schools, parks, libraries, and recreation centers) and 1,000 feet of another tobacco/smoking product retailer.</td>
<td></td>
<td>Economic and Community Development and Neighborhood Services</td>
</tr>
<tr>
<td>EHC-14</td>
<td><strong>Conditional uses.</strong> Update the zoning code to identify drive-through restaurants and convenience stores as conditional uses. Require conditional use review upon lease renewal or at point of business sale.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>EHC-14</td>
<td><strong>Drive-through restaurants.</strong> Update the zoning code to limit new drive-through restaurants within 1,000 feet of child-sensitive areas (e.g., schools, parks, libraries, and childcare facilities) and within 1,000 feet of another drive-through restaurant.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>EHC-14</td>
<td><strong>Off-sale alcohol beverage establishments.</strong> Update the zoning code to prohibit new off-sale alcohol beverage establishments, which sell alcohol for off-site consumption, within 1,000 feet of child-sensitive areas (e.g., schools, parks, libraries, and childcare facilities) and within 1,000 feet of another off-sale alcohol beverage establishment.</td>
<td></td>
<td>Economic and Community Development and Neighborhood Services</td>
</tr>
<tr>
<td>EHC-16</td>
<td><strong>Vision Zero.</strong> Adopt and implement a Vision Zero program that reduces vehicle related fatalities to zero.</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Action</td>
<td>Timeframe</td>
<td>Responsible Department</td>
</tr>
<tr>
<td>-------------------</td>
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<td>-----------------------</td>
</tr>
<tr>
<td>EHC-16</td>
<td>Traffic enforcement. Partner with the County Sheriff’s Department to enforce traffic safety near child-sensitive areas (e.g., schools, parks, libraries, and childcare facilities).</td>
<td></td>
<td>Neighborhood Services and Public Works</td>
</tr>
</tbody>
</table>
The purpose of the Parks, Recreation, and Open Space Element is to set goals, policies and actions related to the acquisition, management, and maintenance of parks and open space, and planning of recreational facilities and programs.
Statutory Requirements

Palmdale’s Parks, Recreation, and Open Space Element meets the State of California requirements for Open Space Elements as defined in Sections 65302(a) of the Government Code. The Open Space Element must contain goals and policies to protect and maintain undeveloped lands, natural resources, and recreation areas such as parks and trails.

Topics covered in this element include parks and open space access and services, trails, priority areas, funding mechanisms, and goals and policies for preserving and expanding parks, recreation, trails, and open space across the city.
Public Art Master Plan

Finalized in 2020, the Palmdale Public Art Master Plan sets forth a vision and key goals to expand artwork on City property and within the public realm throughout Palmdale. The Plan includes a summary of key recommendations and a strategic approach to funding, managing, and reviewing local public art projects that will celebrate Palmdale’s identity, expand economic opportunities, and encourage multidisciplinary collaboration.
Existing Context

The City’s Department of Parks and Recreation oversees the planning, acquisition, and programming of public parks and recreational opportunities in Palmdale. City parks and trails are maintained by the Department of Public Works, while limited City-owned open spaces are overseen by the Department of Parks and Recreation.

The sections below provide background and context for the Parks, Recreation, and Open Space goals and policies, which are provided at the end of this chapter.

Parkland

The City of Palmdale operates 19 parks, totaling 370 acres, which provide a variety of features for residents and visitors. Palmdale parks include active and passive leisure amenities like grassy areas, playgrounds, basketball courts, tennis courts, skateparks, walking paths, softball fields, sand volleyball courts, picnic tables, community rooms, pools, and public restrooms, among others. The City’s largest Park, Marie Kerr, has a variety of lighted sports facilities and outdoor fields, a picnic pavilion, barbeques, walking paths, and a public pool. Detailed descriptions of this park, and all others can be found in the Public Facilities and Open Space Existing Conditions Report.

Palmdale’s parks can be categorized as in fair to good condition, though the City prioritizes additional improvements to better serve the community. The City’s newest park, Rancho Vista Neighborhood Park, was completed in Summer 2022. This and other Palmdale parks are listed in Table 10.1 below. The distribution of existing parks is illustrated on Figure 10.1.

Parks Service and Access

The City of Palmdale has a parkland-to-population goal of 5.0 acres per 1,000 residents. The City’s current population of 169,450⁴⁷ and existing parkland of 351 acres result in approximately 45% of the current target for public parks. The City would need an additional 496 acres of parkland to meet the current parkland to resident ratio target.

Figure 10.2 illustrates the current distribution and access to public parks from residential neighborhoods as they stand today. While Palmdale’s overall parks acreage is below the target, walk access is relatively high. As shown on the map, most residential neighborhoods in the city’s core are within a 20-minute walk of a park.

Table 10.1

<table>
<thead>
<tr>
<th>#</th>
<th>Facility</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Anaverde Hills Park</td>
<td>6 acres</td>
</tr>
<tr>
<td>1</td>
<td>Arnie Quinones Park</td>
<td>10 acres, 3 developed</td>
</tr>
<tr>
<td>18</td>
<td>Domenic Massari Park</td>
<td>38 acres</td>
</tr>
<tr>
<td>9</td>
<td>Desert Sands Park</td>
<td>20 acres</td>
</tr>
<tr>
<td>4</td>
<td>Foothill Park</td>
<td>12 acres</td>
</tr>
<tr>
<td>15</td>
<td>Joshua Hills Park</td>
<td>4 acres</td>
</tr>
<tr>
<td>7</td>
<td>Manzanita Heights Park</td>
<td>4 acres</td>
</tr>
<tr>
<td>3</td>
<td>Marie Kerr Park</td>
<td>77 acres</td>
</tr>
<tr>
<td>12</td>
<td>Melville J. Coursen Park</td>
<td>5 acres</td>
</tr>
<tr>
<td>16</td>
<td>Palmdale Oasis Park</td>
<td>29 acres</td>
</tr>
<tr>
<td>6</td>
<td>Pelona Vista Park</td>
<td>76 acres</td>
</tr>
<tr>
<td>2</td>
<td>Rancho Vista Neighborhood Park*</td>
<td>4 acres</td>
</tr>
<tr>
<td>17</td>
<td>Sam Yellen Community Park*</td>
<td>25 acres, 12 developed</td>
</tr>
<tr>
<td>13</td>
<td>Tejon Equestrian Park</td>
<td>20 acres</td>
</tr>
<tr>
<td>14</td>
<td>William J. McAdam Park</td>
<td>19 acres</td>
</tr>
</tbody>
</table>

GREENWAYS

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Dr. Robert C. St. Clair Parkway</td>
<td>9 acres</td>
</tr>
<tr>
<td>19</td>
<td>Legacy Park</td>
<td>1 acre</td>
</tr>
<tr>
<td>11</td>
<td>Poncitlan Square</td>
<td>2 acres</td>
</tr>
</tbody>
</table>

SPECIAL USE PARKS

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<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>American Indian Little League Fields*</td>
<td>5 acres</td>
</tr>
<tr>
<td>20</td>
<td>Palmdale Pony League Baseball Fields**</td>
<td>5 acres</td>
</tr>
</tbody>
</table>

Total: 351 developed acres

*Property not owned by the City of Palmdale
**Property not owned by the City of Palmdale and not operational

⁴⁷ 2020 U.S. Census
Figure 10.1
Existing Parks, Recreation, Arts and Culture, and Trails

- City Boundary
- Sphere of influence
- Major Arterials
- Highway
- Railroad
- Existing Trails
- Water Body
- Existing Parks
- California Aqueduct
- Parks
- Recreation Facilities
- Trailheads
- Arts and Culture Facilities

Data Sources: UrbanFootprint, City of Palmdale GIS Data, World Terrain Base, 2015 Esri, USGS, NOAA
Produced by Raimi + Associates
April 2022
Figure 10.2
Current Park Access

Data Sources: City of Palmdale GIS, Urban Footprint, 2021.
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Planned and Proposed Parks
Several parcels of land, both publicly and privately owned, are planned for future park development. These parks will be constructed as Specific Plan development phases are completed – in the case of privately owned land – or as funds are available and public need arises – for publicly owned properties.

It is estimated that 27 parks are planned or anticipated across the city. Of these, 21 are attributed to two Specific Plans - Ritter Ranch Specific Plan and Anaverde Nuevo Specific Plan. The remaining six undeveloped park properties are owned by the City of Palmdale and located adjacent to the developed core of the city. Future parks are illustrated on Figure 10.3, along with priority areas that are discussed in the next section.

Future Park Priority Areas
Improving parks and open space access is critically important to the Palmdale community and decision-makers. This Element aims to increase park access and service across the city by strategically identifying future park priority areas in underserved neighborhoods. Figure 10.3 (Future Parks Priority Areas) and Figure 10.4 (Residential Neighborhoods Compared to Park Priority Areas) illustrate the distribution of existing parks to future residential land uses—based on the Land Use Map—and indicate where future parks are needed. The future park priority analysis considers areas that are or will contain higher density residential uses or development, and areas that are low-income and disproportionately affected by environmental pollution and other hazards (known as Disadvantaged Communities per SB 1000: see Equitable and Healthy Communities Element). While these priority areas are not exact locations of where future parks will occur, they indicate priority areas that should be examined as future development in these areas occurs.

48 High density residential refers to multifamily housing where population per square mile is higher as compared to single-family housing units.
Figure 10.3

Future Parks Priority Areas

- Existing Parks
- Future Parks
- Future Open Space
- California Aqueduct
- Water Body
- City Boundary
- Sphere of Influence
- Major Arterials
- Highways
- Railroads
- Key Access Routes

Trailheads:
1. Ritter Ranch Park
2. Joshua Hills Trail (not currently accessible)
3. Amargosa Creek Trail
4. Palmdale Hills Trail
5. Barrel Springs Trail

Future Parks:
1-18. Ritter Ranch Specific Plan
19-21. City Ranch Specific Plan
22. Palmdale History Park
23. Undeveloped Park
24. 60th St East & Avenue S8
25. Undeveloped Park
26. 70th St East & North of Avenue R
27. 72nd St East & Avenue R

Data Sources: Urban Footprint, City of Palmdale GIS Data, World Terrain Base, 2015 Esri, USGS, NOAA

Produced by Raimi + Associates

November 2021
Figure 10.4
Future Residential Neighborhoods Compared to Park Priority Areas

Key:
- City Boundary
- Sphere of Influence
- Major Arterials
- Highway
- Railroad
- Residential or Mixed Use
- Existing or Future Park
- Future Park Priority Area
- California Aqueduct
- Water Body

Data Sources: Urban Footprint, City of Palmdale GIS Data, World Terrain Base, 2015 Esri, USGS, NOAA
Produced by Raimi + Associates
April 2022
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Recreation Facilities

Existing Recreation Facilities
The City of Palmdale offers several recreation facilities including community centers, public pools, an outdoor amphitheater, playhouse, and waterpark, as listed in Table 10.2 below and shown on Figure 10.1. Many of these facilities are co-located, offering meeting and special event space, active and passive recreation space, aquatics, and arts and culture opportunities in proximity. Facilities typically include restrooms, vehicle and bicycle parking, and athletic fields or courts.

In addition to active and passive recreation space, the City operates a public waterpark and several public pools. All public pools are integrated into City parks; Marie Kerr, McAdams, Courson, and Palmdale Oasis.

The Palmdale City Library also offer community resources, meeting space, and recreational programming which is detailed further in the Public Facilities, Services, and Infrastructure Element of the General Plan.

<table>
<thead>
<tr>
<th>#</th>
<th>Facility</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Marie Kerr Pool, Community Building, Recreation Center, and Skate Park</td>
<td>39700 30th Street West</td>
</tr>
<tr>
<td>2</td>
<td>William J. McAdam Park Pool</td>
<td>38115 30th Street East</td>
</tr>
<tr>
<td>3</td>
<td>Best of the West Softball Complex</td>
<td>2723 W Rancho Vista Boulevard</td>
</tr>
<tr>
<td>4</td>
<td>Courson Pool</td>
<td>38226 10th Street East</td>
</tr>
<tr>
<td>5</td>
<td>Desert Sands Community Building</td>
<td>39117 3rd Street East</td>
</tr>
<tr>
<td>6</td>
<td>DryTown Water Park</td>
<td>3850 East Avenue S</td>
</tr>
<tr>
<td>7</td>
<td>Domenic Massari Park Chris O’Leary Skatepark</td>
<td>37716 55th Street East</td>
</tr>
<tr>
<td>8</td>
<td>Legacy Commons for Active Seniors</td>
<td>930 East Avenue Q-9</td>
</tr>
<tr>
<td>9</td>
<td>Joe Davies Heritage Airpark</td>
<td>2001 East Ave P</td>
</tr>
<tr>
<td>10</td>
<td>Palmdale Oasis Park Pool and Recreation Center</td>
<td>3850 East Avenue S</td>
</tr>
</tbody>
</table>

Planned Recreation Facility Improvements
Notable recreation facility upgrades or expansions that are currently funded include: expansion of the Marie Kerr Pool Deck, regular investments in maintaining DryTown water park and City pool infrastructure, McAdam Park sports field, restroom, playground and parking improvements, Courson Park irrigation, restroom and park amenity improvements, Yellen Phase II construction, Marie Kerr Park parking lot and playground expansion, Domenic Massari Park athletic field lighting expansion, Wi-Fi improvements at Desert Sands Park and Palmdale Amphitheater.

Shared Use Agreements
Several High School athletic facilities are utilized for local sports leagues and organizations after school hours. Shared access or shared use allows an existing recreation asset to be used by a larger subset of the Palmdale community, and to expose youth to High School campuses. The City of Palmdale encourages the ongoing shared access of recreational facilities, especially in neighborhoods where recreation amenities are lacking.
Parks and Recreation Funding

Existing parks and recreation facilities lack permanent funding sources to support ongoing maintenance and improvements. While a top City priority, funding for parks and recreation can prove challenging. In addition to the funding sources listed below, the City of Palmdale seeks additional special funding sources like state and federal grants, and the non-profit collaborations to finance parks and recreation facilities, improvements, and ongoing maintenance.

Park Maintenance and Recreation Improvement District
The City of Palmdale’s Park Maintenance and Recreation Improvement District provides funding for the installation, maintenance, and servicing of parks and recreation facilities until 2032. The Improvements District is financed by an annual assessment which is set by the City Engineer and approved by City Council.

Park Development Impact Fees
Park Development Impact fees are collected from development projects to mitigate the impacts associated with that development on the City’s existing park system. Fees go toward assisting with the development and rehabilitation of City parks and recreation facilities.

Arts and Culture

The City of Palmdale celebrates local arts and culture through its facilities, events, committees, and physical representations, among others. Listed below are some of the primary arts and culture resources in Palmdale.

Public Art Commission
Palmdale’s Public Art Commission provides recommendations to the City Council for the commission and acquisition of public art on City property, deaccession of artwork, acceptance of artwork gifts and loans, and proposals for memorials and murals on City-owned property.

Existing Arts and Culture Facilities
In addition to several private art galleries, studios, and schools, the City of Palmdale offers three public regional arts and cultural facilities. These include:

- **Palmdale Playhouse**: The Palmdale Playhouse is a community theater serving the Antelope Valley that offers all forms of art and music. The Playhouse offers touring performances, classes and workshops, recitals, and family friendly events year-round.

- **Palmdale Amphitheater**: The Palmdale Amphitheater is an outdoor event stage that offers live music, movie nights, and other events for families, residents, and visitors of the Antelope Valley.

- **Chimbole Cultural Center**: The Chimbole Cultural Center is a public facility that offers meeting rooms, banquet space, a commercial kitchen and stage, and other resources for the Palmdale community.

<table>
<thead>
<tr>
<th>#</th>
<th>Facility</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chimbole Cultural Center</td>
<td>38250 Sierra Highway</td>
</tr>
<tr>
<td>2</td>
<td>Palmdale Amphitheater (at Marie Kerr Park)</td>
<td>2723 Rancho Vista Boulevard</td>
</tr>
<tr>
<td>3</td>
<td>Palmdale Playhouse</td>
<td>38334 10th Street East</td>
</tr>
</tbody>
</table>
Open Space

Open Space is undeveloped land that is preserved from future development and typically accessible by the public for passive and active recreation. Palmdale has a plethora of undeveloped land, though most is not currently protected open space owned by a public agency for public recreation. In order to preserve hillsides and natural areas, and accommodate outdoor recreation, the City will need to earmark additional acres of open space either through acquisition, partnerships with open space conservancies, or as part of private development.

Existing and Future Open Space

The City of Palmdale contains 1,129 acres of open space, of which, 75 acres are outside the City limits in the Sphere of Influence area. Across the City, many acres of open space are owned by agencies or private individuals, these include private open space uses like cemeteries and golf courses. Within Palmdale, the County of Los Angeles and Mountains Recreation and Conservation Authority own and manage open spaces.

In addition to open space shown on the General Plan Land Use Map (Figure 5.18), several of the Specific Plans across Palmdale include dedicated Open Space. The Ritter Ranch Specific Plan area includes nearly 7,700 acres of preserved public open space within City limits, as indicated on Figure 10.3 Future Park Priority Areas. A portion of the Ritter Ranch open space is located outside City limits and managed by the Mountains Recreation and Conservation Authority, offering residents nearby access to scenic views and hiking trails.

Source: https://mrca.ca.gov/parks/park-listing/ritter-ranch/
Trails

Trails offer safe recreation options and alternative forms of travel throughout the City. While Palmdale has abundant undeveloped land, formal bicycle and pedestrian trails are fairly limited within City limits. As the community grows and develops, Palmdale has the desire to increase formalized trails, trailheads, signage, and improve access to residential neighborhoods.

Current trails include the Avenue S Bike Trail—a Class I bike path—which runs approximately 4.7 miles, with minor gaps, east to west along Avenue S from SR-14 to 45th Street East. The 1.5-mile Barrel Springs Trail also provides access to open space. Other trails include the Ritter Ridge and Joshua Ranch Loop that offer hikers and mountain bikers an 11-mile trail to enjoy and view wildlife. While the Sierra Highway Bike Trail, a Class 1 bike path, extends from the Lancaster Metrolink Station south to the Palmdale Transit Center, totalling nearly 7.5 miles. Table 10.4 lists the approximate location of each trail, which corresponds to Figure 10.1.

Future Trails

The City of Palmdale 2018 Draft Bicycle Transportation Plan prioritizes development of over 173 new miles of trails for biking, hiking, and horseback riding, dependent on the availability of future funding. These along with bike lanes, bikeways, bike routes and multi-use trails detailed in the Mobility Element, promote alternative modes of travel, and connect key destinations throughout the city. The trail system could be further expanded by formalizing trails in the foothills near Barrel Springs, as funding and acquisition of land allows.

Table 10.4

<table>
<thead>
<tr>
<th>Facility</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Amargosa Creek Trail</td>
<td>Elizabeth Lake Rd, 25th St W</td>
</tr>
<tr>
<td>6 Barrel Springs Trail</td>
<td>1300 E Barrel Springs Rd</td>
</tr>
<tr>
<td>2 Joshua Hills Trail</td>
<td>North of Pearblossom Highway and West of 25 Street East</td>
</tr>
<tr>
<td>5 Palmdale Hills Trail</td>
<td>E Barrel Springs Rd and Courson Ranch Rd</td>
</tr>
<tr>
<td>1 Ritter Ranch Park</td>
<td>4010 Elizabeth Lake Rd</td>
</tr>
<tr>
<td>3 Joshua Ranch Trail</td>
<td>Joshua Ranch Rd; West of the California Aqueduct</td>
</tr>
</tbody>
</table>

Source: https://www.alltrails.com/trail/us/california/ritter-ridge-joshua-ranch
The following tables include standards for various parks and amenities throughout Palmdale. These standards shall remain in place unless or until the City of Palmdale adopts a Parks Master Plan or similar document to include further detail and guidelines documentation for parks and recreation facilities and amenities.

### Table 10.5 Parks Standards

<table>
<thead>
<tr>
<th>Park Type</th>
<th>Typical Size</th>
<th>Typical Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini-Park</td>
<td>0-3 Acres</td>
<td>Tot lots, play areas and picnic areas</td>
</tr>
<tr>
<td>Neighborhood Park</td>
<td>3-7 Acres</td>
<td>Ballfields, picnic areas, tot lots, restrooms, playgrounds, basketball courts, tennis courts, volleyball courts, trails</td>
</tr>
<tr>
<td>Community Park (Including linear park, specialty parks, and nature parks)</td>
<td>5-50+ Acres</td>
<td>Includes features found in neighborhood parks plus pools, gymnasiums, amphitheaters, equestrian facilities, sports complexes, and other similar facilities</td>
</tr>
</tbody>
</table>

### Table 10.6 Recreation Facility Guidelines

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tot lots</td>
<td>1 per park</td>
</tr>
<tr>
<td>Picnic areas</td>
<td>1 per acre, which should be shaded by trees or a structure</td>
</tr>
<tr>
<td>Ballfields (softball, baseball, little league, soccer/football)</td>
<td>1 field/5,000 population</td>
</tr>
<tr>
<td>Courts (basketball courts, tennis courts, volleyball courts)</td>
<td>1 court/5,000 population</td>
</tr>
<tr>
<td>Swimming pools</td>
<td>1 pool/20,000 population</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>1 gymnasium/20,000 population</td>
</tr>
<tr>
<td>Stage/bandstand</td>
<td>1 stage or bandstand/50,000 population</td>
</tr>
<tr>
<td>Amphitheater</td>
<td>1 amphitheater/100,000 population</td>
</tr>
<tr>
<td>Equestrian center</td>
<td>1 equestrian center/150,000 population</td>
</tr>
<tr>
<td>Sports complex</td>
<td>1 sports complex/150,000 population</td>
</tr>
</tbody>
</table>

(Guidelines include all available facilities citywide, including those facilities provided on school sites or by private recreation providers)

### Table 10.7 Trails Standards

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>EASEMENTS</td>
<td>Typical width: 12 to 20 feet, unless adjacent to a bikeway. Easements for feeder trails can be as narrow as 8 feet</td>
</tr>
<tr>
<td>TRAIL TREAD</td>
<td>Minimum width: 10 feet for backbone trails, 6 feet for feeder trails</td>
</tr>
<tr>
<td>MINIMUM CLEARANCE FROM GRADE: 12 FEET</td>
<td></td>
</tr>
<tr>
<td>Vertical Grade:</td>
<td></td>
</tr>
<tr>
<td>0% to 5%</td>
<td>Optimum vertical grade</td>
</tr>
<tr>
<td>6% to 10%</td>
<td>Maximum grade for distanced over 500 feet</td>
</tr>
<tr>
<td>11% to 15%</td>
<td>Permitted vertical grade, limited to distances of 500 feet or less</td>
</tr>
<tr>
<td>16% to 20%</td>
<td>Vertical grade permitted only in extreme cases and for distances less than 100 feet</td>
</tr>
<tr>
<td>21% and above</td>
<td>Not permitted</td>
</tr>
</tbody>
</table>

CROSS SECTION SLOPES:

| 1% to 2% | Optimum cross section slope |
| 3%       | Permitted cross section slope |
| 4%       | Maximum cross section slope, and only as approved by City Engineer |
| 5% and above | Not permitted |

SIDE SLOPE CUTS AND FILLS:

| 2:1 grade maximum permitted |

TREAD SURFACING:

Decomposed granite or cinder (or other materials approved by the City), minimum depth of 6" after 90% compaction. At trail entrances, tread surface may be asphalt or other surface which facilitates wheelchair access

FENCING

Fencing not required within areas designated as open space. Fencing is required on all other trail segments. Fencing may consist of lodge pole pine, PVC or equivalent.
Desired Outcomes, Indicators, and Targets

The following desired outcomes and metrics have been identified to help the City of Palmdale track progress toward creating a more diverse and equitable economy. This process follows Palmdale 2045’s General Plan Vision and Guiding Principles document, which was informed by the GPAC, the Planning Commission and City Council.

### Top Key Outcomes

**OUTCOME: Provide more publicly accessible trails**

**KPI’s:**
- Increase in miles of trails
- Connections to existing neighborhoods

**TARGETS:**
- Increase miles of trails
- All new trails provide trailheads with basic amenities

**OUTCOME: Provide more public parkland and open space**

**KPI’s:**
- Increase in acres of parks and open space
- Connections to existing neighborhoods

**TARGETS:**
- 5.0 acres of parkland or open space per 1,000 residents
- 90% of residents are within 20-minute walk of park, trailhead, open space, or recreation facility

**OUTCOME: Expanded public recreation amenities and programs**

**KPI’s:**
- Participation in self-directed and organized public programs
- Equitable access to amenities and programs citywide
- Diversity of programs offered

**TARGETS:**
- Maximize program participation citywide
- Expand and create new programs reflective of current community needs
- Utilize community partners to grow recreational opportunities

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KPI = Key Performance Indicator
Goals and Policies

The following section includes goals and policies for the Parks, Recreation, and Open Space Element. Goals and policies are followed by implementation actions.

PARKS AND RECREATION

Goal PR-1
Provision of adequate park and recreation facilities to meet the needs of all existing and future residents.

PR-1.1 Parks and Recreation Master Plan. Prepare a Parks and Recreation Master Plan to address park conditions and needs, recreation programming, facilities, and funding opportunities. As a part of a Parks Master Plan, evaluate adopted park standards, including designations for type of parks and guidelines for the facilities to be developed in future parks.

PR-1.2 Park location. Ensure that park sites are located equitably, throughout the city, to maximize access to parks for residents within a 20-minute walking distance.

PR-1.3 Parks accessibility. Provide a variety of parks and recreational facilities accessible to all residents throughout the city, including community and neighborhood parks, to meet the needs of youth, adults, and senior citizens.

PR-1.4 Future parks priority areas. As feasible, work with the private development community to facilitate creation of parks in the future parks priority areas as indicated in Figure 10.3.

PR-1.5 Prioritize underserved areas. Prioritize development of new parks and recreation facilities in underserved areas of the city, encouraging access to free or low-cost recreation for all Palmdale residents.

PR-1.6 Expand park amenities. Encourage expansion of amenities at existing public parks.

PR-1.7 ADA Design. Incorporate all design features, required by the Americans with Disabilities Act, which improve access to parks and park facilities for citizens with different abilities and needs.

PR-1.8 School and park synergy. Co-locate schools and parks and partner with non-profit organizations to provide recreational opportunities that benefit both students and the public.

PR-1.9 Parkland incentives. Work with the private development community to incentivize creation of publicly accessible parkland either on-or-off-site.
Goal PR-2
Promote bicycling as an important mode of transportation and recreation in the City of Palmdale.

PR-2.1 Bikeway network. Encourage bicycle use by developing a comprehensive bikeway network for the city that meets access needs of all bicyclists.

PR-2.2 Bicycle safety. Increase the level of public safety for all bicyclists.

PR-2.3 Transportation modes to parks, schools, and recreation. Promote biking, walking, or taking public transit to public parks and recreation facilities.

PR-2.4 Sidewalks. Ensure connecting sidewalks are well maintained throughout the city.

Goal PR-3
Provide a broad range of recreational programs for all ages and activity levels to enrich the lives of residents.

PR-3.1 Recreation education. Collaborate with community partners to expand healthy, and educational recreation programs and services for youth and families.

PR-3.2 Culturally sensitive programming. Provide culturally sensitive programming at various recreation facilities to serve the city’s diverse population.

PR-3.3 Shared school amenities. Work with local school districts to make campus recreation amenities (such as open grassy areas, basketball courts, baseball fields, gymnasiums, among others) available to surrounding neighborhoods and local sports leagues or organizations during off-school hours.

PR-3.4 Arts and culture programming. Work with local schools, non-profits, local organizations, and artists to increase arts and culture programming (such as performing arts and theater, visual arts, youth, and senior programs) throughout Palmdale.
PARKLAND

Goal PR-4
Explore various means of acquiring parkland and seek creative and flexible techniques to accomplish park goals.

PR-4.1 Incorporate parkland. Wherever feasible, incorporate uses that increase the public benefit of park land, and are compatible with the goal of providing active recreation opportunities.

PR-4.2 Non-traditional parks. Consider non-traditional types of parks to extend the range of recreational opportunities available within the city, including linear parks, neighborhood parks, and remodeling vacant buildings for indoor activities, among others.

PR-4.3 Public input. Seek public input on locations for and amenities in new neighborhood and community parks.

PR-4.4 Recreation, cultural and artistic opportunities. Continue to work with public and private entities to provide opportunities for recreational, cultural, and artistic activities within the community.

PR-4.5 Park site considerations. Account for physical, land use, and cost considerations when evaluating future park sites for acquisition or dedication.

PR-4.6 Dual purpose recreation. Explore options to provide public recreation access (i.e., walking or picnicking) to utility and or drainage basin areas as safety permits.

Goal PR-5
Evaluate the need for establishing a funding mechanism for parks development and the need for satellite services.

PR-5.1 Park maintenance and improvements funding. Provide sufficient funding for maintenance and improvements for all parks.

PR-5.2 Park fees. Collect park fees and review this fee annually, to provide financing for improvement of parkland.

PR-5.3 Parks financing. Consider formation of a citywide public financing district to provide funding for design, acquisition, construction, and maintenance of parks throughout Palmdale.

PR-5.4 Parks planning. Continue to use the City’s Capital Improvement Program as the mechanism for short-term planning for acquisition of park land and construction of park and upgrades to existing facilities.

PR-5.5 Grant funding opportunities. Identify and pursue Quimby grant funding and other opportunities to finance future park development to meet parkland goals.
OPEN SPACE NETWORK

Goal PR-6
Provide a network of open space areas to provide for passive and active recreation opportunities, enhance the integrity of biological systems, and provide visual relief from the developed portions of the city.

- PR-6.1 Open Space network. Develop an open space network through preservation of corridors along fault zones, natural drainage courses and in hillside areas to connect with the large areas of open space designated on the General Plan Land Use Map.
- PR-6.2 Acquire natural open spaces. Work with private property owners, conservation agencies, and the County of Los Angeles to expand and acquire natural open spaces and hillsides on the periphery of the city.
- PR-6.3 Passive recreation use. Encourage the use of open space areas for passive recreation with access points, multi-use trails, and interpretive information.
- PR-6.4 Incentivize open space. Work with the private development community to incentivize new publicly accessible open space through land dedications, land swaps, or other means.

TRAILS NETWORK

Goal PR-7
Maintain a system of multi-use trails that provide connections to regional trails systems and residential neighborhoods.

- PR-7.1 Multi-use trails. Provide and maintain multi-use trails, for use by pedestrians, bicyclists, and equestrians, connecting to existing or currently planned multi-use trails.
- PR-7.2 Multi-use trail connections. Prioritize multi-use trail connections to existing neighborhoods, public parks, and public facilities based on the modal priority network in the Mobility Element.
- PR-7.3 Promote new multi-use trails. When feasible, consider adding multi-use paths near or within areas used for water retention, like the aqueduct, or below transmission lines, to increase local walking and biking routes.
- PR-7.4 Trail accessibility. To the extent feasible, ensure that trails are accessible to all residents and incorporate ADA design features.
- PR-7.5 Trail amenities and facilities. Provide trail support facilities, such as benches, trash cans and trail heads/staging areas, as needed throughout the multi-use trails network.
- PR-7.6 Trails acquisition. Explore various means of acquiring trail easements or rights-of-way and pursue all available funding sources to provide trail acquisition and construction.
- PR-7.7 Trail financing. To the extent feasible, use grant funding and private donations to finance trail construction.
- PR-7.8 Trails network adoption. Incorporate the citywide multi-purpose trail network adopted under the General Plan into the regional trail system.
OPEN SPACE PRESERVATION

Goal PR-8
Preserve significant natural and constructed open space areas that give the city its distinct form and identity.

PR-8.1 Greenbelt program. Establish a greenbelt program to create a network of open spaces on the city’s periphery.

PR-8.2 Varied open space features. Utilize a variety of features, including city entry points, landscaped arterial roadways, bikeways, equestrian paths, hiking trails, and park sites, to create an open space network.

PR-8.3 Open space linkages. Create a network of open space by creating linkages wherever possible, especially to and from residential neighborhoods.

PR-8.4 Open Space preservation through Hillside Management Ordinance. Implement the standards adopted under the City’s Hillside Management Ordinance for new development including clustering and density transfer of housing units, in order to maintain areas of scenic and other open space within hillside areas.

PR-8.5 Location and retain open spaces. Utilize the City’s discretionary land use approval process to locate and retain areas for use as open space through dedication or other legal means. Develop criteria and guidelines to identify areas that should be protected.

PR-8.6 Integrate natural hazards to open spaces. Integrate natural hazard areas, such as floodways, seismic fault zones, and unstable soils, among others into the open space network to ensure public health, safety and welfare while preserving open space.

PR-8.7 Open Space funding. Identify and utilize all available funding sources for acquisition and maintenance of open space areas for public benefit.

PR-8.8 Work to preserve Open Space. Cooperate with private and public entities whose goals are to preserve natural and constructed open space.

PR-8.9 Land Trust criteria. Develop criteria and guidelines to identify how to establish land trust open space locations.
# Implementation Actions

The table below identifies programs, coordination efforts, and other actions that will help implement the General Plan’s Parks, Recreation, and Open Space vision and policies. Programs listed below are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goals</th>
<th>Action</th>
<th>Timeframe</th>
<th>Department Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR-1, PR-4</td>
<td>Parks and Recreation Master Plan. Develop and implement a Parks and Recreation Master Plan to increase parkland and meet current and future parks and recreation needs. Every three years revisit and update (as needed) the Master Plan.</td>
<td>[[][][]]</td>
<td>Parks and Recreation and Public Works</td>
</tr>
</tbody>
</table>
| PR-5              | Parks Funding. Pursue long term funding sources and grants to fund park development and ongoing maintenance. | [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]
Conservation

This Element of the Palmdale General Plan outlines the goals and policies related to conservation of natural and cultural resources in Palmdale. A discussion of open space in Palmdale is included in Chapter 10: Parks, Recreation, and Open Space.
Statutory Requirements

The United States Federal Government and the State of California acknowledge the importance of preserving and enhancing existing natural and cultural resources within their jurisdictions. Per California Government Code 65302, a Conservation Element is required within a General Plan to describe the jurisdiction’s natural resources: land, water, ecosystem services and living resources, and the benefits that these resources provide to the community. The following regulations exist to protect valued community resources from degradation and extinction.

Federal Clean Water Act
The Federal Clean Water Act (FCWA) is the comprehensive federal law governing water quality and water pollution in the United States. The FCWA works to protect water resources by prohibiting unlawful discharge of any pollutant into local waterways and authorizing the United States Environmental Protection Agency (US EPA) to develop national water quality criteria for pollutants in surface water.

Tribal Consultation- Assembly Bill 52/Senate Bill 18
Assembly Bill (AB) 52 and Senate Bill (SB) 18 require tribal consultation to assure protection and preservation of natural resources and Native American historic, cultural, or sacred sites. Resources could potentially be lost or damaged if sites are not thoroughly investigated. Therefore, City consultation with local tribes will help ensure that cultural resources are preserved and mitigated through acceptable means.

Federal Endangered Species Act
The Endangered Species Act (ESA) provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The lead federal agencies for implementing ESA are the U.S. Fish and Wildlife Service (FWS) and the U.S. National Oceanic and Atmospheric Administration (NOAA) Fisheries Service. The FWS maintains a worldwide list of endangered species. Species include birds, insects, fish, reptiles, mammals, crustaceans, flowers, grasses, and trees. The law requires federal agencies, in consultation with the FWS and/or the NOAA Fisheries Service, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a “taking” of any listed species of endangered fish or wildlife. Likewise, import, export, interstate, and foreign commerce of listed species are all generally prohibited.

California Endangered Species Act
The California Endangered Species Act (CESA) is a state regulation focused on the conservation and protection of plants and animal species that are at risk of extinction. The CESA was enacted in 1970 and includes a formal designation system for threatened or endangered animals as well as limitations on development that may impact sensitive species. The California Department of Fish and Wildlife (CDFW) is the regulatory body responsible for overseeing the mandates and controls outlined within the CESA. Through the CESA, the CDFW oversees permit (Incidental Take Permit) processing and review for projects that may have potentially significant impacts to listed species.
Antelope Valley Integrated Regional Water Management Plan (2013)
The Antelope Valley Integrated Regional Water Management Plan (IRWMP) aims to coordinate and integrate existing water management planning efforts across the Antelope Valley into one comprehensive regional plan. The IRWMP is a collaborative document that serves to manage regional water resources and address competing water demands. The Plan outlines funding for existing agencies to support plans, programs, and projects that impact water management.

West Mojave Plan
The West Mojave Plan is a habitat conservation plan that acts as a comprehensive strategy to conserve the desert tortoise, Mohave ground squirrel, and over 100 sensitive plants, animals, and natural communities. It encompasses a 9.4 million acre planning area and applies to public and private land. Palmdale lies almost entirely within the jurisdiction of the West Mojave Plan, which provides for a streamlined program for complying with the requirements of the California and federal Endangered Species Acts.

Native Desert Vegetation Ordinance
The City of Palmdale has a native desert vegetation ordinance (Chapter 14.04 of the Palmdale Municipal Code) designed to protect western Joshua trees and California Juniper in the city. Western Joshua trees and California Junipers both provide a unique natural desert aesthetic to the community, which the City aims to maintain. The Ordinance was originally adopted in 1992 and was amended by Emergency Ordinance No. 1556 in 2020 in response to the California Fish and Game Commission’s vote to list the western Joshua tree as a candidate species under the CESA. Per the Ordinance, western Joshua trees and California Junipers trees shall not be removed from any parcel of land unless a permit has been obtained from the city. Furthermore, any development proposal on a parcel of land containing native desert vegetation requires a desert vegetation preservation plan prepared in compliance with the Palmdale Municipal Code. Listing of the western Joshua tree under the CESA gives that species additional legal protections, such that any take of the species (including removal of western Joshua tree or similar actions) requires a permit from CDFW.
Context

Natural Resources

Palmdale contains a diversity of natural communities and biotic habitats that differ greatly between the foothills in the western portion of the City and the flat desert in the east. There are a number of sensitive ecological habitats within the City that include: Big Rock Wash, Little Rock Wash, Ritter Ridge, Portal Ridge, and Alpine Butte. The City’s open space and natural areas supports a variety of plant and wildlife species, including species that are rare, threatened, or endangered. Protecting these species and their habitats remains a priority for the community and the City. In coordination with various resource agencies, the City will continue to manage the open spaces to protect sensitive ecological habitats and the species that occupy them.

Natural Communities

There are several different types of natural communities outside of the urbanized portions of Palmdale that can host a variety of protected plant and animal species. Many of the natural communities include varieties of shrub and scrub, chaparral, and grassland with some Juniper, western Joshua tree and riparian habitats. Table 11.1 lists the existing communities with their approximate acreage in Palmdale. Figure 11.1 shows where these various communities are located.

### Table 11.1 Palmdale Natural Communities

<table>
<thead>
<tr>
<th>Natural Community and Biotic Habitat</th>
<th>Total Acres</th>
<th>Percentages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Grassland</td>
<td>9,691</td>
<td>14.25</td>
</tr>
<tr>
<td>Mixed Chaparral</td>
<td>8,042</td>
<td>11.82</td>
</tr>
<tr>
<td>Desert Scrub</td>
<td>7,154</td>
<td>10.52</td>
</tr>
<tr>
<td>Sagebrush</td>
<td>5,891</td>
<td>8.66</td>
</tr>
<tr>
<td>Western Joshua Tree</td>
<td>4,351</td>
<td>6.40</td>
</tr>
<tr>
<td>Alkali Desert Scrub</td>
<td>3,369</td>
<td>4.95</td>
</tr>
<tr>
<td>Juniper</td>
<td>3,410</td>
<td>5.01</td>
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<tr>
<td>Montane Hardwood</td>
<td>1,062</td>
<td>1.56</td>
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<tr>
<td>Barren</td>
<td>536</td>
<td>0.79</td>
</tr>
<tr>
<td>Desert Wash</td>
<td>442</td>
<td>0.65</td>
</tr>
<tr>
<td>Lacustrine</td>
<td>323</td>
<td>0.48</td>
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<tr>
<td>Montane Chaparral</td>
<td>174</td>
<td>0.26</td>
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<tr>
<td>Desert Riparian</td>
<td>75</td>
<td>0.11</td>
</tr>
<tr>
<td>Bitterbrush</td>
<td>51</td>
<td>0.07</td>
</tr>
<tr>
<td>Chamise-Redshank Chaparral</td>
<td>45</td>
<td>0.07</td>
</tr>
<tr>
<td>Montane Riparian</td>
<td>44</td>
<td>0.06</td>
</tr>
<tr>
<td>Saline Emergent Wetland</td>
<td>40</td>
<td>0.06</td>
</tr>
<tr>
<td>Valley Foothill Riparian</td>
<td>29</td>
<td>0.04</td>
</tr>
<tr>
<td>Fresh Emergent Wetland</td>
<td>18</td>
<td>0.03</td>
</tr>
<tr>
<td>Coastal Scrub</td>
<td>4</td>
<td>0.01</td>
</tr>
<tr>
<td>Coastal Oak Woodland</td>
<td>3</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Agricultural</td>
<td>1,621</td>
<td>2.38</td>
</tr>
<tr>
<td>Urban</td>
<td>21,644</td>
<td>31.82</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>68,021</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Figure 11.1
Palmdale Natural Communities

<table>
<thead>
<tr>
<th>Natural Community Name</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkali Desert Scrub</td>
<td>6,606.43 ac</td>
</tr>
<tr>
<td>Annual Grassland</td>
<td>14,888.09 ac</td>
</tr>
<tr>
<td>Barren</td>
<td>1,027.03 ac</td>
</tr>
<tr>
<td>Bitterbrush</td>
<td>97.14 ac</td>
</tr>
<tr>
<td>Chamise-Redshank Chaparral</td>
<td>44.81 ac</td>
</tr>
<tr>
<td>Coastal Oak Woodland</td>
<td>2.67 ac</td>
</tr>
<tr>
<td>Coastal Scrub</td>
<td>3.78 ac</td>
</tr>
<tr>
<td>Deciduous Orchard</td>
<td>150.31 ac</td>
</tr>
<tr>
<td>Desert Riparian</td>
<td>161.90 ac</td>
</tr>
<tr>
<td>Desert Scrub</td>
<td>12,680.99 ac</td>
</tr>
<tr>
<td>Desert Wash</td>
<td>1,184.13 ac</td>
</tr>
<tr>
<td>Dryland Grain Crops</td>
<td>4.00 ac</td>
</tr>
<tr>
<td>Fresh Emergent Wetland</td>
<td>32.25 ac</td>
</tr>
<tr>
<td>Irrigated Hayfield</td>
<td>120.54 ac</td>
</tr>
<tr>
<td>Irrigated Row and Field Crops</td>
<td>6,232.38 ac</td>
</tr>
<tr>
<td>Western Joshua Tree</td>
<td>7,881.91 ac</td>
</tr>
<tr>
<td>Juniper</td>
<td>8,400.17 ac</td>
</tr>
<tr>
<td>Lacustrine</td>
<td>1,044.13 ac</td>
</tr>
<tr>
<td>Mixed Chaparral</td>
<td>13,156.03 ac</td>
</tr>
<tr>
<td>Montane Chaparral</td>
<td>185.63 ac</td>
</tr>
<tr>
<td>Montane Riparian</td>
<td>45.86 ac</td>
</tr>
<tr>
<td>Pasture</td>
<td>77.01 ac</td>
</tr>
<tr>
<td>Sagebrush</td>
<td>8,602.64 ac</td>
</tr>
<tr>
<td>Saline Emergent Wetland</td>
<td>40.03 ac</td>
</tr>
<tr>
<td>Urban</td>
<td>28,510.64 ac</td>
</tr>
<tr>
<td>Valley Foothill Riparian</td>
<td>48.84 ac</td>
</tr>
<tr>
<td>Barren</td>
<td>1,027.03 ac</td>
</tr>
<tr>
<td>Desert Wash</td>
<td>1,184.13 ac</td>
</tr>
<tr>
<td>Desert Scrub</td>
<td>12,680.99 ac</td>
</tr>
<tr>
<td>Irrigated Hayfield</td>
<td>120.54 ac</td>
</tr>
<tr>
<td>Montane Riparian</td>
<td>45.86 ac</td>
</tr>
<tr>
<td>Pasture</td>
<td>77.01 ac</td>
</tr>
<tr>
<td>Sagebrush</td>
<td>8,602.64 ac</td>
</tr>
<tr>
<td>Saline Emergent Wetland</td>
<td>40.03 ac</td>
</tr>
<tr>
<td>Urban</td>
<td>28,510.64 ac</td>
</tr>
<tr>
<td>Valley Foothill Riparian</td>
<td>48.84 ac</td>
</tr>
</tbody>
</table>
Figure 11.2
Western Mojave Habitat Conservation Plan Area

- Western Mojave Habitat Conservation Plan
- City of Palmdale Boundary
- Sphere of Influence

Other City Boundary
Major Highway/Arterial
Railroad

Data Sources: City of Palmdale GIS data, Los Angeles County, 2018.

Produced by Rizzo Consultants, Inc.
June 2019
Protected Wildlife Species
Palmade lies primarily within the jurisdiction of the Western Mojave Habitat Conservation Plan. The Plan boundaries are shown in Figure 11.2. As mentioned above, the Western Mojave Habitat Conservation Plan is focused on protecting sensitive species across the region. Wildlife plant and animal species that are native to California are also protected by the CDFW. Table 11.2 identifies protected wildlife species that are known to exist within Palmdale.

<table>
<thead>
<tr>
<th>Species</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell’s Sage Sparrow</td>
<td>Mixed chaparral habitat suitable for breeding and foraging exists in the City and it has been observed in this habitat just east of Ritter Canyon.</td>
</tr>
<tr>
<td>Burrowing Owl</td>
<td>Suitable sparse, dry habitat for breeding and foraging exists in the City and it has been observed in this habitat in various locations.</td>
</tr>
<tr>
<td>California Red-Legged Frog</td>
<td>A pond fed by artesian springs in the Ritter Ranch area provides suitable habitat for foraging and breeding adults have been observed.</td>
</tr>
<tr>
<td>Coast Horned Lizard</td>
<td>Suitable habitat for breeding and foraging exists and it has been observed in the scrub and grassland habitats of the western portion of the City.</td>
</tr>
<tr>
<td>Cooper’s Hawk</td>
<td>Likely nesting habitat of riparian forest exits in Amargosa Creek in the western portion of the City.</td>
</tr>
<tr>
<td>Ferruginous Hawk</td>
<td>Suitable habitat for foraging of desert scrub and juniper habitats exists and it has been observed in this habitat at the northwest end of Anaverde Valley in the western portion of the City.</td>
</tr>
<tr>
<td>Le Conte’s Thrasher</td>
<td>A desert resident which commonly nests in a dense spiny shrub or densely branched cactus in desert wash habitat. It has been observed in multiple locations throughout the City.</td>
</tr>
<tr>
<td>Least Bell’s Vireo</td>
<td>An endangered species which has been observed on the eastern edge of Una Lake in a habitat consisting of willow and mulefat scrub.</td>
</tr>
<tr>
<td>Loggerhead Shrike</td>
<td>Palmdale includes suitable habitat for foraging and nesting, including western Joshua trees, desert scrubs and washes. It has been observed perched on western Joshua trees northwest of U.S. Air Force Plant 42 and on powerlines southeast of Anaverde Valley.</td>
</tr>
<tr>
<td>Mohave Ground Squirrel</td>
<td>Restricted to the Mojave Desert, the open desert scrub and western Joshua tree woodland in the city provides suitable habitat for foraging and nesting.</td>
</tr>
<tr>
<td>Mountain Plover</td>
<td>Multiple observations have been reported in mowed agricultural fields, north of the Palmdale Airport. The short vegetation provides suitable habitat for foraging and nesting.</td>
</tr>
<tr>
<td>Northern California Legless Lizard</td>
<td>A disjunct Mojave Desert population exists in the city where the sandy soils provide suitable habitat for breeding and foraging.</td>
</tr>
<tr>
<td>San Joaquin Pocket Mouse</td>
<td>The fine-textured, sandy soils of the arid scrubland that exists within the City provide suitable breeding and foraging habitat.</td>
</tr>
<tr>
<td>Southern California Rufous- Crowned Sparrow</td>
<td>A resident of Southern California sparse mixed chaparral, which frequents relatively steep and rocky hillsides with grass and forb patches. It has been observed just southwest of Anaverde Valley and just South of Leona Valley.</td>
</tr>
<tr>
<td>Tricolored Blackbird</td>
<td>A candidate endangered species, it breeds and nests in colonies near open water with availability of protected nesting. Colonies have been observed at Lake Palmdale and Leona Valley Pond, which provide suitable habitat for breeding and foraging.</td>
</tr>
<tr>
<td>Two-Striped Gartersnake</td>
<td>Suitable habitat for foraging and breeding of dense riparian with permanent fresh water exists within the City. It has been observed along Amargosa Creek in the western portion of the City.</td>
</tr>
<tr>
<td>Wester Pond Turtle</td>
<td>Riparian habitat and open water within the city provide suitable habitat for foraging and breeding. There have been multiple observations in and along Amargosa Creek in the western portion of the City.</td>
</tr>
<tr>
<td>Short-joint Beavertail</td>
<td>A perennial stem succulent which blooms, April through June, is characteristic of the Juniper woodland, western Joshua tree woodland and Mojavean Desert Scrub natural communities within the city.</td>
</tr>
<tr>
<td>Slender Mariposa-Lily</td>
<td>A perennial bulbiferous herb found in chaparral, valley, and foothill grasslands, often on shaded canyons or grassy slopes. It has been found at the southeast end of Portal Ridge, near Leona Valley.</td>
</tr>
</tbody>
</table>

Source: California Natural Diversity Database, 2019
Significant Ecological Areas
The County of Los Angeles designates areas in which irreplaceable biological resources exist as Significant Ecological Areas (SEAs). There are a number of SEAs within the City of Palmdale. These areas contain some of the County’s most important biological resources for sustaining key species populations. Figure 11.3 depicts the SEAs within Palmdale and the surrounding area. These designated areas include Big Rock Wash, Little Rock Wash, Ritter Ridge, Portal Ridge, and Alpine Butte. Development in these areas must take steps to identify and protect significant species.
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Land Resources

Agriculture Lands
Agricultural lands are a rapidly disappearing natural resource. The state and federal government have made the preservation of agricultural resources a community priority. Within the Palmdale Planning Area, there are no significant agricultural lands. Surrounding Palmdale, agricultural lands exist to the east of the Plant 42, on lands which are almost entirely under Los Angeles County jurisdiction. Crops produced on this land are primarily non-food crops such as alfalfa, but also consist of pistachio, sod, onion, carrots, and tomatoes. This area is not classified by the California Department of Conservation as prime agricultural land and is not considered regionally significant.

Mineral Resources
Palmdale lies within the Palmdale Production Consumption region, which is a California Department of Conservation designated Mineral Resource Zone encompassing 1,103 square miles, including Palmdale and Lancaster. The mineral deposits within Palmdale are the Little Rock Fan and the Big Rock Creek Fan alluvial deposits. The Little Rock Fan is a 12 square mile area extending from the north flank of the San Gabriel Mountains for about 8 miles, which includes the Little Rock Wash floodplain and the fan area to the west. The Big Rock Creek Fan encompasses a 26 square mile area extending northward from the San Gabriel Mountains for 8 miles. Both mineral deposits are composed of about 60% fine to coarse sand and silt, overlain by about 40% pebbly gravel.

Sand and Gravel Mining widely occurs throughout Little Rock Wash (floodplain within the Little Rock Fan).

Active quarries exist in the following locations:
• Along 75th Street East, between East Avenue S and Palmdale Boulevard
• The area bordered by East Avenue T to the south, East Avenue S to the north, 70th Street East to the west, and 87th Street East to the east
• The region North of State Route -138, bordered by Little Rock Wash to the east, 62nd Street East to the west, and East Avenue T to the north

Soil and Erosion
Most of Palmdale’s soils consist of unconsolidated sedimentary deposits, sourced from granitic rocks in the San Gabriel Mountains. The floor of the Antelope Valley was at one point occupied by a large intermittent lake, which was the site for accumulation of fine-grained materials. During this time, precipitation events would result in the erosion of materials from the San Gabriel and Tehachapi Mountains, which formed the clay beds that currently underlie the Antelope Valley. The current upper soil levels of Palmdale are derived from the downslope erosion of soil and rock caused by wind and rain. These soils can be characterized as alkali with a low water holding capacity.
Cultural Resources

Historically, humans have inhabited the Western Mojave region for an estimated 5,000 years. Cultural groups known to have occupied the Antelope Valley before European contact include the Kitanemuk, Kawaiisu, Tatavium, and Serrano/Vanyume. As urbanization in Palmdale has increased, more cultural resources have been identified as site surveys have been conducted. Existing state laws ensure that cultural resources are preserved and mitigated through acceptable means.

Palmdale's modern history is recognized through several historical buildings and sites. There were two early settlements that existed within the geographic area, known as Harold and Palmenthal. These settlements were established in 1886 and existed at the crossing of the Southern Pacific Railroad tracks and Fort Tejon Road. The origins of these settlements can be traced to the families of German and Swiss descendants that moved westward, from the Midwest, towards California. Palmdale's earliest modern residents settled in its current location in 1899.

Palmdale has engaged in promoting awareness of existing cultural and historical resources, increasing awareness of Antelope Valley’s history, and creating community identity. The City's history is recognized through several historic buildings and sites. Some of these buildings and sites include Moore’s Hall, the Bank of Italy, Old Leona School house, and Old Palmdale Cemetery.

The City will continue to identify and protect cultural resources through application of federal, state, and local requirements. Coordination with local Native American tribes as required by recent changes in state law will be a critical component of the review of new development with the potential to affect Native American resources. The continued effort to preserve historic resources in the City and cultivate Palmdale's unique culture will help preserve culturally and historically significant areas.
Water Resources

Streams
Palmdale has three seasonal streams, Anaverde Creek, Amargosa Creek, and Little Rock Wash, and many smaller streams, as shown in Figure 11.4. Although Palmdale is considered dry, desert land; these streams will flow during rain and snow melt events in the surrounding mountains, and during the occasional local rainstorm. Amargosa Creek flows eastward, from the San Gabriel Mountains, through Leona Valley, then turning northward near the center of Palmdale terminating at Piute Pond and Rosamond Dry Lake to the north of Lancaster. Anaverde Creek flows from the San Gabriel Mountains, through the Anaverde Community, connecting with the Amargosa Creek near the center of Palmdale. Little Rock Wash begins at Little Rock Reservoir to the south of Palmdale and flows northward through Palmdale and Lancaster, terminating at the dry bed of Rosamond Lake (USGS 1984). The Amargosa and Anaverde Creeks provide riparian habitats for migrating birds and raptors.

Water Quality
The Palmdale Water District’s surface water is stored at Little Rock Creek Dam Reservoir and Lake Palmdale. Little Rock Dam Reservoir has a capacity of approximately 3,000-acre feet and is filled by natural runoff from the local San Gabriel Mountains. Water from Little Rock Reservoir is transferred to Palmdale Lake through an open channel connecting the two reservoirs. This local surface water supply has historically been of very high quality. The Palmdale Water District does not currently experience or foresee future issues with local surface water.
Desired Outcomes, Indicators, and Targets

The following desired outcomes and metrics were identified to help the City of Palmdale track progress toward conserving natural and cultural resources. This process follows the City of Palmdale’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

**Top Key Outcomes**

**OUTCOME:** Preservation of scenic and natural features

**KPI:**
- Preservation of scenic and natural features

**TARGET:**
- Acquisition of lands for open space preservation

**OUTCOME:** Minimize changes to surface runoff patterns and maintain water quality

**KPI:**
- Preservation of water runoff patterns and water quality

**TARGET:**
- New and existing development meet applicable NPDES standards

**OUTCOME:** Identify and protect historically significant resources

**KPI:**
- Maintain an up-to-date cultural sensitivity map

**TARGET:**
- Update the cultural sensitivity map as necessary to track cultural assets in Palmdale

**OUTCOME:** Awareness and preservation of historical, cultural, and paleontological resources

**KPI:**
- Protection for historical, cultural, paleontological, and archaeological resources

**TARGET:**
- Develop and adopt a cultural and/or historical resources protection ordinance

**OUTCOME:** Cultural programs that embrace cultural identities in the City

**KPI:**
- Promotion of cultural resources to the public

**TARGET:**
- Landmark designation plaques, directional signage, self-guided tours, school curriculum, programs, and events

**OUTCOME:** Phased transition of mining operations

**KPI:**
- Reclamation funding for mining operations

**TARGET:**
- Development of a reclamation fund for mining operators to contribute to annually to be used after operations cease

---

KPI = Key Performance Indicator
**Goals and Policies**

The following section includes goals and policies for the Conservation Element. Goals and policies are followed by implementation actions. Some related policies are woven throughout the General Plan, including in the Land Use and Community Design, Parks, Recreation, and Open Space, and Sustainability, Climate Action, and Resilience Elements.

### SENSITIVE HABITAT AND RESOURCES

**Goal CON-1**

Protect Significant Ecological Areas in and around the City, including, but not limited to, sensitive flora and fauna habitat areas.

- **CON-1.1 Endangered species protection.** Ensure local compliance with the California Endangered Species Act and the Federal Endangered Species Act (ESA).
- **CON-1.2 Joshua and Juniper trees.** Continue enforcing the City’s Native Vegetation Ordinance to protect western Joshua trees and Juniper trees.
- **CON-1.3 West Mojave Plan.** Comply with the required implementation of the West Mojave Plan for protection of desert tortoise and Mohave ground squirrel.
- **CON-1.4 Significant ecological areas.** Identify and preserve to the greatest extent feasible significant ecological areas (SEA’s) as shown in Figure 11.3. Areas to consider for open space preservation include, but are not limited to, Tejon Park, Barrel Springs Southern Trailhead, and the Una Lake area.
- **CON-1.5 Preserve ecological resource areas.** Preserve natural drainage courses and riparian areas where ecological resources exist in significant concentrations.
- **CON-1.6 Increase conservation areas.** Coordinate with state agencies to help achieve the goals of 30x30: to protect 30 percent of California’s land by 2030 by identifying optimal sites for land conservation.
- **CON-1.7 Wetland and floodplain areas.** Solicit and utilize all available sources of local, regional, state, and federal funds to acquire significant wetland areas and floodplains to minimize disturbance and prevent damage from erosion, turbidity, siltation, loss of wildlife and vegetation, or the destruction of the natural habitat.

**Goal CON-2**

Preserve designated natural hillsides and ridgelines in the Planning Area, to maintain the aesthetic character of the Antelope Valley.

- **CON-2.1 Hillside land management.** Establish a systematic approach to the management of land uses and development in hillside areas.
- **CON-2.2 Natural ridgelines.** Retain the integrity of the natural ridgelines of Ritter Ridge, Portal Ridge, Verde Ridge, the Ana Verde Hills, the Sierra Pelona Mountains, and the lower foothills of the San Gabriel Mountains.
- **CON-2.3 Density transfers.** Encourage density transfers where appropriate so that the density of development respects and is reflective of the natural terrain.
- **CON-2.4 Development in suitable locations.** Facilitate development in more suitable locations while retaining significant natural slopes and areas of environmental sensitivity as natural open space.
MINERAL RESOURCES

Goal CON-3
Plan for safe operations of mineral resource extraction areas and reduce unreasonable impacts.

CON-3.1 Reduce mineral resource extraction impacts. Reduce impacts to human and environmental health caused by mineral resource extraction including:
- Ground water contamination
- Removal or demise of sensitive Ecological Areas of flora and fauna
- Excessive noise or dust

CON-3.2 Land use buffers. Maintain buffers between mineral resource extraction areas and other sensitive land uses (i.e., residential, public, institutional, open space and parks, among others) to reduce unnecessary impacts while in operation.

Goal CON-4
Plan for mineral resource extraction site remediation and end users.

CON-4.1 Mining reclamation plan. Require mining operators to establish a reclamation plan that indicates end users when mining operations cease and how the transition to new uses shall be implemented.

CON-4.2 Reclamation fund. Establish a use-based mechanism for mining operators to begin contributing to a reclamation fund annually to be used after operations cease.

CON-4.3 Plan remediation and restoration of sites. Plan for remediation and restoration of extraction sites after operations cease, including adequate areas for groundwater recharge.

WATER RESOURCES

Goal CON-5
Protect the quality and quantity of local water resources.

CON-5.1 Ground water recharge. Ensure that ground water supplies are recharged and protect natural recharge areas such as the Little Rock and Big Rock Washes, and Amargosa and Anaverde Creeks from pollutants or other materials, which might degrade groundwater supplies.

CON-5.2 Groundwater protection. Ensure that no mineral resource recovery activities extend below the groundwater table.

CON-5.3 Regional monitoring cooperation. Cooperate with Los Angeles County Health Department and the Regional Water Quality Control Board in monitoring industrial and commercial uses utilizing hazardous or potentially polluting materials and fluids, to prevent their discharge into the groundwater aquifer.

CON-5.4 Flood control measures. Maximize groundwater recharge capabilities with flood control measures.
Goal CON-6
Minimize the impacts of urban development on groundwater supplies.

CON-6.1 Encourage natural recharge. Restrict building coverage and total impervious area in the vicinity of natural recharge areas.

CON-6.2 Reduce landscaping irrigation needs. Require the use of water conserving native or drought resistant plants and drip irrigation systems where feasible.

CON-6.3 Reduce street runoff. Design streets to incorporate vegetation, soil, and engineered systems to slow, filter, and cleanse stormwater runoff.

CON-6.4 New construction water conservation. Require water conserving appliances and plumbing fixtures in all new construction.

CON-6.5 Monitoring and coordination. Coordinate with local water agencies to monitor ground water levels, State water allocations and development approvals, to assure that development does not outpace long-term water availability.

Goal CON-7
Maintain and further the City’s commitment to long-term water management within the Antelope Valley by planning for the conservation and managed use of water resources, including groundwater, imported water, and reclaimed water.

CON-7.1 Reclaimed water irrigation. Assess and implement, when and where feasible, reclaimed water for landscape irrigation.

CON-7.2 Water run-off capture. Work with local water purveyors to assess the potential for capturing local run-off and utilization of imported water (water banking) for groundwater recharge within the Planning Area.

CON-7.3 Retain recharge areas. Through the land use planning process, ensure that important recharge areas are retained.

CON-7.4 Water management. Continue to seek out long-range water management techniques as new technology is developed.

CON-7.5 Implementation. Promote implementation of water reduction and recycling systems that are feasible and appropriate to the Planning Area.

CON-7.6 Water recycling. Encourage residents and businesses to recycle water where feasible, and where water recycling does not result in health and safety concerns.

CON-7.7 Water sources. Participate in regional efforts to retain imported water allocations and seek out other sources as they become available.
**HISTORIC AND CULTURAL RESOURCES**

**Goal CON-8**
Protect historical and culturally significant resources, which contribute to the community’s sense of history.

**CON-8.1 Historic landmark identification.** Identify and recognize historic landmarks from Palmdale’s past.

**CON-8.2 Cultural and historic buildings.** Identify and preserve unique cultural and historic buildings and features in order to enhance community character.

**CON-8.3 Identified landmarks.** Maintain, rehabilitate, and appropriately reuse identified landmarks where feasible.

**CON-8.4 Preservation in new development.** Require that new development preserve significant historic, paleontological, or archaeological resources.

**CON-8.5 Tribal consultation.** Conduct Native American consultation consistent with the applicable regulations when new development is proposed in potentially culturally sensitive areas.

**CON-8.6 Discovery coordination with Tribal groups.** When human remains suspected to be of Native American origin are discovered, coordinate with the Native American Heritage Commission and any local Native American groups to determine the most appropriate course of action.

**CON-8.7 Cooperation with preservation entities.** Cooperate with private and public entities whose goals are to protect and preserve historic landmarks and important cultural resources.

**CON-8.8 Recognition of local historic resources.** Promote respect and recognition of unique historical resources within the community by identifying significant cultural resources with landmark designation plaques, directional signage, self-guided tours, school curriculum, programs, and events.

**CON-8.9 Maintain cultural assets.** Discourage historic landmark properties from being altered in such a manner as to significantly reduce their cultural value to the community.

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**Goal CON-9**
Promote community design that reflects Palmdale’s history and preserves Palmdale’s cultural resources.

**CON-9.1 Design elements.** Promote use of design elements, which reflect the various periods of history and settlement in Palmdale.

**CON-9.2 Locally relevant community design.** Community design should reflect the community’s roots, rather than simulating historic periods or events, which did not occur in the Antelope Valley.

**CON-9.3 Locally appropriate landscape design.** Preserve the natural heritage of the region through landscape design by ensuring the local stock of native trees and vegetation is replenished and protected.
Implementation Actions

The table below identifies programs, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s Conservation Element goals and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goal</th>
<th>Action</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-7</td>
<td>Recycled Water. Investigate the potential for recycled water use and, as appropriate, develop and implement a water recycling plan.</td>
<td>\</td>
<td>Public Works</td>
</tr>
<tr>
<td>CON-8</td>
<td>Historic Preservation Ordinance. Develop an Historic Preservation Ordinance to protect local historic resources from the impacts of development.</td>
<td>\</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>CON-8</td>
<td>Municipal Code Review. Review the existing survey protocol and report/mapping requirements for the protection of paleontological and archeological resources within the Municipal Code to ensure that the most recent legislation and best practices are utilized.</td>
<td>____</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>CON-8</td>
<td>Historic Resource Assessment. Perform an updated assessment of historic resources of local importance and publish a list of these resources on the City webpage.</td>
<td>____</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>CON-8</td>
<td>Cultural Sensitivity Map. Develop and maintain a cultural sensitivity map. Require special studies/surveys to be prepared for any development proposals in areas reasonably suspected of containing cultural resources, or as indicated on the sensitivity map.</td>
<td>\</td>
<td>Economic and Community Development</td>
</tr>
</tbody>
</table>
Public Facilities, Services, and Infrastructure

This section of the Palmdale General Plan outlines the goals and policies related to public facilities, services, and infrastructure in Palmdale. Information on park facilities in the city can be found in Chapter 8: Parks, Recreation, and Open Space.
Statutory Requirements

Per California Government Code section 65302, a chapter on Public Facilities and Services has been included in the General Plan. The following federal and state regulations pertain to public facilities, infrastructure, and public services.

Federal Clean Water Act

The Federal Clean Water Act (FCWA) is the comprehensive federal law governing water quality and water pollution in the United States. The FCWA works to protect water resources by prohibiting unlawful discharge of any pollutant into local waterways and authorizing the United States Environmental Protection Agency (US EPA) to develop national water quality criteria for pollutants in surface water.
Relevant Plans & Documents

Palmdale Water District Urban Water Management Plan (2020)
The Palmdale Water District’s (PWD) 2020 Urban Water Management Plan (UWMP) projects water demand and supply for the district’s service area through the year 2045. The Plan is focused on identifying sources of water supply available to meet existing and future water needs and aims to diversify those sources to limit impacts on depleted water resources.

Los Angeles County Waterworks District No. 40 2020 Urban Water Management Plan (2020)
The Waterworks District No. 40 UWMP projects water demand and supplies through 2045, describes water supply reliability under a range of scenarios, provides a water shortage contingency plan, and describes various water demand management measures for the District service area.

Antelope Valley Integrated Water Management Plan (2019 Update)
The Integrated Water Management Plan (IWRM) provides a mechanism for: 1) coordinating, refining and integrating existing planning efforts within a comprehensive, regional context; 2) identifying specific regional and watershed-based priorities for implementation projects; and 3) providing funding support for the plans, programs, projects and priorities of existing agencies and stakeholders. The 2019 update complies with new State integrated planning requirements, improves the content, and enhances eligibility for future grant funding.

Recycled Water Facilities Master Plan (2015)
The Palmdale Recycled Water Authority (PRWA) adopted the Recycled Water Facilities Master Plan in 2015 to coordinate recycled water resources generated and used within the Palmdale area. The PRWA oversees recycled water planning, installation, and development throughout the majority of Palmdale, generally east of State Route 14 (SR-14). The goal of the PRWA is to analyze existing and planned recycled water facilities and explore opportunities to offset potable water demand using recycled water.
City of Palmdale Storm Water Management Plan (2003)
The Palmdale Storm Water Management Plan (SWMP) was adopted in 2003. The Plan was prepared by the Palmdale Department of Public Works with the objective to preserve the quality of City waters, including storm water conveyances such as closed conduits, open channels, drainage basins, and dry wells. The city currently maintains a “small” Municipal Separate Storm Sewer System (MS4) permit that authorizes the city to legally discharge stormwater into local waterways. The goal of the SWMP is to reduce the discharge of pollutants to the MS4 to the Maximum Extent Practicable (MEP). The Plan requires that each development attenuate post-developed flows to 85 percent of pre-developed flows, enforced through City Ordinance.

Palmdale Sewer System Management Plan (2009)
The Palmdale Sewer System Management Plan (SSMP) was adopted in 2009 to address the planning, operation, and maintenance of the City’s sewer system. The SSMP presents an analysis of the hydraulic capacity of the sewer system under current and future flow conditions and provides an assessment of the existing structural conditions of the sewer system. Updates to this plan took place in 2014 and are underway as of 2022.

Palmdale Drainage Master Plan (1989)
The Palmdale Drainage Master Plan was adopted in 1989 to address existing drainage issues associated with storm water runoff and prepare for anticipated drainage from future development. The Plan outlines construction of flood control facilities in Palmdale that would connect with the planned regional drainage system. As of 2022, the City of Palmdale is underway with an update to this plan to reflect changes to the Anaverde and Pearblossom drainage areas.
Public Facilities

The City of Palmdale offers a range of public facilities to meet community needs. Palmdale’s main governmental offices are centrally located at the intersection of Palmdale Boulevard and Sierra Highway and includes City Hall, which houses the office of the City Manager, elected officials, City Council chambers, City Attorney, Administrative Services, and City Clerk. The City’s Development Services Building is located at 38250 Sierra Highway, and includes Building & Safety, Planning, Public Works, Business License, Economic Development, and Neighborhood Services.

As shown in Figure 12.1, in addition to the main Palmdale governmental offices, there are several other local, regional, and federal facilities that are open to the public. Table 12.1 lists major publicly accessible City services and facilities in Palmdale. These are organized by the City of Palmdale, County of Los Angeles, and Federal facilities. Note that recreation facilities and programs are discussed and mapped in Chapter 10: Parks, Recreation, and Open Space.

Table 12.1

<table>
<thead>
<tr>
<th>Map #</th>
<th>Facility</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITY OF PALMDALE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Palmdale City Hall</td>
<td>38300 Sierra Hwy</td>
</tr>
<tr>
<td>2</td>
<td>Palmdale City Library</td>
<td>700 East Palmdale Boulevard</td>
</tr>
<tr>
<td>3</td>
<td>Palmdale Playhouse</td>
<td>38334 10th Street East</td>
</tr>
<tr>
<td>4</td>
<td>Palmdale Parks and Recreation</td>
<td>827 E. Avenue Q-9</td>
</tr>
<tr>
<td>5</td>
<td>Palmdale South Antelope Valley Emergency Services (SAVES)</td>
<td>1002 East Avenue Q-12</td>
</tr>
<tr>
<td>COUNTY OF LOS ANGELES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Los Angeles County Animal Care Center</td>
<td>38550 Sierra Hwy</td>
</tr>
<tr>
<td>7</td>
<td>Los Angeles County Department of Children &amp; Family Services</td>
<td>39959 Sierra Highway #150</td>
</tr>
<tr>
<td>8</td>
<td>Los Angeles County Housing Authority</td>
<td>2323 E Palmdale Boulevard</td>
</tr>
<tr>
<td>9</td>
<td>Los Angeles County Public Works</td>
<td>38126 Sierra Hwy</td>
</tr>
<tr>
<td>10</td>
<td>Palmdale GAIN Office*</td>
<td>1050 East Palmdale Boulevard</td>
</tr>
<tr>
<td>FEDERAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Antelope Valley Veterans Center</td>
<td>38925 Trade Center Drive</td>
</tr>
<tr>
<td>12</td>
<td>SSA Office of Disability Adjudication and Review</td>
<td>38925 Trade Center Drive</td>
</tr>
</tbody>
</table>

*The GAIN (Greater Avenues for Independence) program is provided by the Department of Public Social Services, for Los Angeles County.
Schools

Palmdale is served by three school districts. These districts include two elementary (K-8) districts – Westside School District and Palmdale School District; and one high school district – Antelope Valley Union High School District. Table 12.2 lists each school serving Palmdale by district and grade level. Schools serving Palmdale are mapped in Figure 12.2.

Table 12.2

<table>
<thead>
<tr>
<th>Map #</th>
<th>Institution</th>
<th>Address</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANTELOPE VALLEY UNION HIGH SCHOOL DISTRICT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Highland High School</td>
<td>39055 25th St West</td>
<td>9-12</td>
</tr>
<tr>
<td>2</td>
<td>Knight High School (William J. &quot;Pete&quot; Knight High School) and Academy Prep Junior High School Knight Campus</td>
<td>37423 70th St East</td>
<td>9-12</td>
</tr>
<tr>
<td>3</td>
<td>Palmdale High School</td>
<td>2137 East Avenue R</td>
<td>9-12</td>
</tr>
<tr>
<td>4</td>
<td>R. Rex Parris Alternative High School</td>
<td>38801 Clock Tower Plaza Dr East</td>
<td>9-12</td>
</tr>
<tr>
<td>5</td>
<td>Palmdale Prep Academy Junior High School/SOAR</td>
<td>2270 East Avenue Q</td>
<td>7-8</td>
</tr>
<tr>
<td><strong>PALMDALE SCHOOL DISTRICT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Barrel Springs Elementary</td>
<td>3636 Ponderosa Way</td>
<td>K-5</td>
</tr>
<tr>
<td>7</td>
<td>Buena Vista Elementary</td>
<td>37005 Hillcrest Dr</td>
<td>K-5</td>
</tr>
<tr>
<td>8</td>
<td>Cactus Intermediate</td>
<td>3243 East Ave R-8</td>
<td>6-8</td>
</tr>
<tr>
<td>9</td>
<td>Chaparral Elementary</td>
<td>37500 50th St East</td>
<td>K-5</td>
</tr>
<tr>
<td>10</td>
<td>Cimarron Elementary</td>
<td>36940 45th St East</td>
<td>K-5</td>
</tr>
<tr>
<td>11</td>
<td>David G. Millen Intermediate</td>
<td>39221 22nd Street West</td>
<td>6-8</td>
</tr>
<tr>
<td>12</td>
<td>Desert Rose Elementary</td>
<td>37730 27th St East</td>
<td>K-5</td>
</tr>
<tr>
<td>13</td>
<td>Desert Willow Intermediate</td>
<td>36555 Sunny Lane</td>
<td>6-8</td>
</tr>
<tr>
<td>14</td>
<td>Dos Caminos Elementary</td>
<td>39147 Palm Tree Way</td>
<td>K-5</td>
</tr>
<tr>
<td>15</td>
<td>Golden Poppy Elementary</td>
<td>37802 Rockie Lane</td>
<td>K-5</td>
</tr>
<tr>
<td>16</td>
<td>Innovations Academy of Palmdale</td>
<td>37230 37th Street East</td>
<td>K-8</td>
</tr>
<tr>
<td>17</td>
<td>Joshua Hills Elementary</td>
<td>3030 Fairfield Ave</td>
<td>K-5</td>
</tr>
<tr>
<td>18</td>
<td>Los Amigos Elementary</td>
<td>6640 East Ave R-8</td>
<td>K-5</td>
</tr>
<tr>
<td>19</td>
<td>Manzanita Elementary</td>
<td>38620 33rd St East</td>
<td>K-5</td>
</tr>
<tr>
<td>20</td>
<td>Mesquite Elementary</td>
<td>37622 43rd St East</td>
<td>K-5</td>
</tr>
<tr>
<td>21</td>
<td>Oak Tree Community Day</td>
<td>37230 37th Street East</td>
<td>K-8</td>
</tr>
<tr>
<td>22</td>
<td>Oak Tree Learning Center</td>
<td>38136 35th St East</td>
<td>K-8</td>
</tr>
<tr>
<td>23</td>
<td>Ocotillo Elementary</td>
<td>38737 Ocotillo School Drive</td>
<td>K-5</td>
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<tr>
<td>24</td>
<td>Palm Tree Elementary</td>
<td>326 East Avenue R</td>
<td>K-5</td>
</tr>
<tr>
<td>25</td>
<td>Palmdale Discovery Center</td>
<td>39174 Palm Tree Way</td>
<td>K-8, Special Education</td>
</tr>
</tbody>
</table>

Palmdale contains three charter schools within its purview: the Antelope Valley Learning Academy for home-schooled children, Palmdale Academy Charter School, and The Palmdale Aerospace Academy. With the clustering of aerospace industries in the city, many campuses have taken a focused approach to educating local talent and inspiring young minds to join the aerospace industry. The City of Palmdale nominates members to serve on the board of the Palmdale Aerospace Academy, which provides specialized STEM education for grades 7-12.
<table>
<thead>
<tr>
<th>Map #</th>
<th>Institution</th>
<th>Address</th>
<th>Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Palmdale Learning Plaza</td>
<td>38043 Division Street</td>
<td>K-8</td>
</tr>
<tr>
<td>27</td>
<td>Quail Valley Elementary</td>
<td>37236 58th St East</td>
<td>K-5</td>
</tr>
<tr>
<td>28</td>
<td>Sage Space &amp; Aeronautics Gateway to Exploration Magnet Academy</td>
<td>38060 20th Street East</td>
<td>6-8</td>
</tr>
<tr>
<td>29</td>
<td>Shadow Hills Intermediate</td>
<td>37315 60th St East</td>
<td>6-8</td>
</tr>
<tr>
<td>30</td>
<td>Summerwind Elementary</td>
<td>39360 Summerwind Drive</td>
<td>K-5</td>
</tr>
<tr>
<td>31</td>
<td>Tamarisk Elementary</td>
<td>1843 East Ave Q-5</td>
<td>K-5</td>
</tr>
<tr>
<td>32</td>
<td>Tumbleweed Elementary</td>
<td>1100 E Avenue R-4</td>
<td>K-5</td>
</tr>
<tr>
<td>33</td>
<td>Yellen Learning Center</td>
<td>37015 Goldenview Way</td>
<td>K-8, Special Education</td>
</tr>
<tr>
<td>34</td>
<td>Yucca Elementary</td>
<td>38440 2nd St East</td>
<td>K-5</td>
</tr>
<tr>
<td></td>
<td><strong>WESTSIDE UNION SCHOOL DISTRICT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Anaverde Hills Elementary</td>
<td>2902 Greenbrier St</td>
<td>K-8</td>
</tr>
<tr>
<td>36</td>
<td>The IDEA Academy at Cottonwood</td>
<td>2740 West Avenue P-8</td>
<td>K-5</td>
</tr>
<tr>
<td>37</td>
<td>Esparanza Elementary</td>
<td>40521 35th St West</td>
<td>K-5</td>
</tr>
<tr>
<td>38</td>
<td>Gregg Anderson Academy Elementary</td>
<td>5151 West Avenue N-8</td>
<td>K-8</td>
</tr>
<tr>
<td>39</td>
<td>Hillview Intermediate</td>
<td>40525 Peonza Lane</td>
<td>6-8</td>
</tr>
<tr>
<td>40</td>
<td>Rancho Vista Elementary</td>
<td>40525 Peonza Lane</td>
<td>K-5</td>
</tr>
<tr>
<td></td>
<td><strong>PRIVATE AND OTHER SCHOOLS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>Antelope Valley Learning Academy</td>
<td>37212 47th Street East</td>
<td>K-12</td>
</tr>
<tr>
<td>42</td>
<td>Antelope Valley YouthBuild</td>
<td>38626 9th Street East</td>
<td>HS Diploma, Trades Training</td>
</tr>
<tr>
<td>43</td>
<td>Berean Fellowship Christian School</td>
<td>38050 30th Street East</td>
<td>1-12</td>
</tr>
<tr>
<td>44</td>
<td>Empowered Church International/Empowered Learning Academy</td>
<td>2205 East Palmdale Boulevard, Suite B</td>
<td>K-12</td>
</tr>
<tr>
<td>45</td>
<td>Palmdale Academy Charter School</td>
<td>3838 East Avenue R</td>
<td>9-12</td>
</tr>
<tr>
<td>46</td>
<td>The Palmdale Aerospace Academy (PSD, City of Palmdale, NASA)</td>
<td>37212 47th Street East</td>
<td>TK-12</td>
</tr>
<tr>
<td>47</td>
<td>Saint Mary School</td>
<td>1600 East Avenue R-4</td>
<td>K-8</td>
</tr>
<tr>
<td>48</td>
<td>Shepherd Christian School</td>
<td>1730 High Vista Ave</td>
<td>K-12</td>
</tr>
<tr>
<td>49</td>
<td>Westside Christian</td>
<td>40027 11th Street West</td>
<td>K-8</td>
</tr>
</tbody>
</table>
Higher Education

The city is also home to four higher education institutions. Antelope Valley College Palmdale Center provides Career Technical Education programs for adults interested in starting a new career in the clerical, medical, dental, and technology fields. Additionally, the Aircraft Fabrication and Assembly (AFAB) program, housed at the Antelope Valley College Palmdale Center, prepares students with entry-level and upgraded skills for the aerospace industry. Higher education, along with schools serving Palmdale, are mapped on Figure 12.2. Table 12.3 lists the higher education institutions serving the city.

While Palmdale offers a variety of higher education opportunities, residents and employers cited a need for additional higher education—specifically a four-year university—and training opportunities for Palmdale adults.

### Table 12.3 Higher Education in Palmdale

<table>
<thead>
<tr>
<th>Map #</th>
<th>Institution</th>
<th>Address</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>Antelope Valley Adult Education – Palmdale Campus</td>
<td>1156 East Avenue S</td>
<td>Public Adult School</td>
</tr>
<tr>
<td>51</td>
<td>Antelope Valley College – Palmdale Center</td>
<td>2301 East Palmdale Blvd</td>
<td>Community College</td>
</tr>
<tr>
<td>52</td>
<td>University of Massachusetts Global “UMass Global” (Formerly Brandman University)</td>
<td>39115 Trade Center Dr Suite 203</td>
<td>Private</td>
</tr>
<tr>
<td>53</td>
<td>DeVry University Keller Graduate School of Management</td>
<td>39115 Trade Center Dr Suite 100</td>
<td>Private</td>
</tr>
<tr>
<td>54</td>
<td>Embry-Riddle Aeronautical University High Desert Campus</td>
<td>40015 Sierra Hwy Suite B-110</td>
<td>Private</td>
</tr>
</tbody>
</table>
Figure 12.1
Palmdale Public Facilities and Services

Data Sources: City of Palmdale GIS data; World Terrain Base, 2015 ESRI, USGS, NOAA.
Produced by Raimi + Associates
May 2019
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Emergency Services

The City contracts with the County of Los Angeles for law enforcement, fire, and emergency medical services. Palmdale contains one sheriff’s station and five fire stations, as shown on Table 12.4 and Figure 12.3 Emergency Facilities.

Law Enforcement
As noted above, Palmdale contracts law enforcement services through the Los Angeles County Sheriff’s Department (LASD). LASD operates one station located at 750 East Avenue Q, which serves the City of Palmdale and surrounding communities (Acton, Agua Dulce, Big Pines/Wrightwood, Green Valley, Lake Elizabeth, Lake Hughes, Leona Valley, Littlerock, Llano, Pearblossom, Sun Village, Valyermo, and Vasquez Rocks). The LASD’s response time goal is under 6 minutes for on scene arrival.

The Palmdale Sherriff’s Station is a state-of-the-art facility constructed in 2006 to replace the previous neighborhood sub-station. The sheriff’s station includes a 47,000 square-foot main building, 7,800 square-foot jail, and 8,400 square-foot motor pool and storage building.

Fire and Emergency Medical Service
Fire protection, first response emergency and medical services in Palmdale are contracted through the County of Los Angeles Fire Department (LACoFD). LACoFD operates five stations within the City of Palmdale which are categorized under the North Regional office, Division Five, within Battalions 11 and 17. According to the LACoFD incident analysis for the city, the response times have generally decreased across all categories since 2015 and are within the LACoFD response time goal of 4-6 minutes for on scene arrival.

Emergency Operations
The City of Palmdale has an Emergency Services Coordinator that works in conjunction with law enforcement and fire personnel. The Emergency Services Coordinator facilitates the City’s efforts to prepare for, respond to, and recover from natural or human made disasters.

Table 12.4

<table>
<thead>
<tr>
<th>Map #</th>
<th>Facility</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Los Angeles County Sheriff’s Station</td>
<td>750 East Avenue Q</td>
</tr>
<tr>
<td>2</td>
<td>Los Angeles County Fire Department Station #24</td>
<td>1050 West Avenue P</td>
</tr>
<tr>
<td>3</td>
<td>Los Angeles County Fire Department Station #37</td>
<td>38318 9th Street East</td>
</tr>
<tr>
<td>4</td>
<td>Los Angeles County Fire Department Station #93</td>
<td>5624 East Ave R</td>
</tr>
<tr>
<td>5</td>
<td>Los Angeles County Fire Department Station #131</td>
<td>2629 East Ave S</td>
</tr>
<tr>
<td>6</td>
<td>Los Angeles County Fire Department Station #136</td>
<td>3650 Bolz Ranch Rd</td>
</tr>
</tbody>
</table>
Figure 12.3
Palmdale Emergency Facilities

City Boundary
Sphere of Influence
California Aqueduct
Major Highway/Arterial
Railroad
Fire Department Station
Sheriff's Department Station

Data Sources: City of Palmdale GIS data; World Terrain Base, 30.5 C SRL, USGS, NOAA.
Produced by Rank Associates
Map 2019
Figure 12.4
Palmdale Water Supplier Service Areas

- City of Palmdale Boundary
- Other City Boundary
- Sphere of Influence
- California Aqueduct
- Major Highway/Arterial
- Railroad
- Water Body
- Park

Palmdale Water District
LA County Water Works
Private Mutual Water Company

Data Sources: City of Palmdale GIS data, Los Angeles County, 2019.

Produced by Riscon Consultants, Inc.
Water Utilities and Infrastructure

The City has an extensive water infrastructure system. The infrastructure related to water includes pipelines, storage tanks, pumps, groundwater wells, and sewers/sewer lines. In addition, existing flood control facilities include engineered channels and retention basins along Amargosa Creek. There is also a flood retention basin along Anaverde Creek, protecting areas in the vicinity of 20th Street East and 30th Street East.

Water Suppliers
Palmdale is predominantly served by two water suppliers: Palmdale Water District (PWD) and Los Angeles County Waterworks District No. 40 (LACWD 40). PWD water supplies include groundwater, local surface water, and imported water. LACWD 40 purchases water from the Antelope Valley – East Kern Water Agency (AVEK). PWD serves the central and southern portions of Palmdale while LACWD 40 serves areas both east and west of State Route 14 (SR-14). Other water suppliers in and around Palmdale include Quartz Hill Water District, Littlerock Creek Irrigation District, various small mutual water companies, and private wells. These suppliers generally serve small portions of the city or areas adjacent to city limits. Figure 12.4 presents service areas for water suppliers in the Palmdale area.

Water Sources
Water supply in Palmdale is from the Antelope Valley Groundwater Basin, the State Water Project, and Little Rock Dam Reservoir, which is fed by natural run-off from snowpack in the San Gabriel Mountains and from rainfall. The Antelope Valley Groundwater Basin (AVGB) (Basin 6-44 is a 1,580-square mile aquifer with an estimated storage of 68 million AF (DWR 2004). The AVGB is divided into 12 sub-basins, with Palmdale overlying the Lancaster, Buttes, and Pearland sub-basins. Figure 12.5 displays locations of groundwater wells and features in the Palmdale region.

Groundwater from the AVGB has historically served as the primary supply source for PWD and a secondary source for LACWD 40. In 2015, groundwater from the basin accounted for approximately 64 percent of PWD’s supply and 47 percent of LACWD 40’s supply. Table 12.5 summarizes historic groundwater pumping in the AVGB by both water agencies.

Table 12.5 Historic Groundwater Basin Pumping by Palmdale Water Suppliers

<table>
<thead>
<tr>
<th>Year</th>
<th>Palmdale Water District (AFY*)</th>
<th>Los Angeles County Water District 40 (AFY*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>8,470</td>
<td>16,002</td>
</tr>
<tr>
<td>2017</td>
<td>5,350</td>
<td>17,397</td>
</tr>
<tr>
<td>2018</td>
<td>6,060</td>
<td>17,274</td>
</tr>
<tr>
<td>2019</td>
<td>4,430</td>
<td>12,813</td>
</tr>
<tr>
<td>2020</td>
<td>7,600</td>
<td>14,266</td>
</tr>
</tbody>
</table>

* Acre-feet per year (AFY).

PWD and AVEK have annual Table A allocations of 21,300 acre-feet (AF) and 244,844 AF, respectively, from the State Water Project (PWD 2015; County of Los Angeles 2017). The actual amount of SWP water received annually by contractors varies depending on availability.

Little Rock Dam Reservoir has a storage capacity of 3,500-acre feet or 1.1 billion gallons of water. Water from the reservoir is transferred to Palmdale Lake via a pipeline.

Recycled Water
In 2012, the City of Palmdale and PWD created the Palmdale Recycled Water Authority (PRWA) through a Joint Exercise of Powers Agreement. The PRWA oversees recycled water planning, installation, and development throughout a majority of Palmdale, generally east of SR-14. To date, recycled water infrastructure in the city is limited to a recycled water transmission line connecting the Palmdale Water Reclamation Plant to McAdams Park for delivery of irrigation water supply. Locally, at least one park uses recycled water for landscaping purposes, but there is currently no regional recycled water distribution system to convey treated water from Palmdale to locations where it can be used.

In 2015, PRWA published the Recycled Water Facilities Master Plan, calling for construction of approximately 70,000 linear feet of recycled water pipeline and a variable horsepower pump station over a 10-year period. As of 2022, the PRWA is investigating development of an advanced treatment system that would allow recycled water to be injected into the aquifer and extracted as potable water.
Sewers
Most sewers in Palmdale are within Los Angeles County Sanitation District (LACSD) 20, which covers most of the southern half of Palmdale. These sewers carry wastewater for treatment at the Palmdale Water Reclamation Plant. Some of the sewers in the northern portion of Palmdale discharge to LACSD trunk sewers that convey flow to the Lancaster Reclamation Plant within LACSD District 14. The discharge from sewers on-site at USAF Plant 42 is split between LACSD District 20 and LACSD District 14. There are also approximately 2,726 septic tanks served by the system, of which approximately 1,000 are within Palmdale city limits. The City sewer system was assessed in 2009 and found to be in adequate condition. The City continually provides for sewer system cleaning and repair as needed.

Water Treatment
Water and wastewater treatment facilities in Palmdale are shown in Figure 12.6. A summary of existing facilities is included below.

- The Palmdale Water Treatment Plant, also known as the Leslie O. Carter Treatment Plant, is located at 700 East Avenue S, along the shores of Lake Palmdale. It can treat 35 million gallons per day. Water from Lake Palmdale is conveyed to the treatment plant via a pipeline along East Avenue S.

- The Palmdale Water Reclamation Plant, north of Palmdale, provides primary, secondary, and tertiary treatment for 12 million gallons of wastewater per day. Effluent is reused for irrigation of trees and fodder crops on the City of Los Angeles airport property, and for parks in the City of Palmdale.

- The Acton Water Treatment Plant treats water from the SWP and is operated by the Antelope Valley-East Kern Water District (AVEK). This water is pumped via pipeline from the plant site near Barrel Springs Road to Vincent Hill Summit. From there it is pumped into the Los Angeles County Waterworks pipeline for transport to the Acton area.

- The Quartz Hill Water treatment plant is located in western Palmdale off West Avenue N, near the California Aqueduct. As a water wholesaler, AVEK is a SWP contractor who obtains all its water from the California Aqueduct to supply the Antelope Valley with potable water and untreated agricultural water.

- The Eastside Water Treatment Plant is operated by AVEK and is located between Littlerock and Pearblossom.

- The Little Rock Reservoir is formed behind the Littlerock Dam, south of Palmdale in the San Gabriel Mountains. The capacity of the Little Rock Reservoir is 3,270-acre feet. Water travels to the Palmdale Water Treatment Plant through an earthen channel called Palmdale Ditch.

Storm Drainage and Flood Protection
Portions of Palmdale adjacent to Amargosa Creek and Anaverde Creek, along the southwestern portion of Palmdale, are classified by FEMA as Zone A, AE, or AO—areas subject to inundation by the 1-percent-annual-chance flood. A wide swath along the Littlerock Wash in the eastern portion of Palmdale (and currently occupied by mining operations) is also classified as Zone A.

Storm water mitigation in the City of Palmdale consists mostly of a network of flood control channels and culverts maintained by the Los Angeles County Flood Control District. Floodwaters are restricted by catch basins feeding into a network of 396 miles of gravity flow sewer mainlines and 2,790 feet of forced flow mainlines. There are approximately 172 catch basins within the Palmdale city limits. Two pump stations operate within Palmdale.

The Los Angeles County Flood Control District also maintains three debris retention basins along the southern edge of the city.

The Upper Amargosa Creek Recharge Project, completed in 2021, provides flood control along with erosion protection for housing developments along Elizabeth Lake Road and 25th Street West. This project provides groundwater recharge and protection of buried utilities in addition to flood control.

The City’s Capital Improvement Plan specifies the development of a new regional detention basin located near Division Street and Avenue R. The new basin will store water from the Anaverde Watershed and reduce flooding along Avenue R and a secondary drainage channel near the existing Palmdale Transportation Center.
Figure 12.6
Palmdale Wastewater Facilities

- City Boundary
- Sphere of Influence
- California Aqueduct
- Major Highway/Arterial
- Railroad
- Sewers
- Sewer (Trunk)
- LACSD District 14
- LACSD District 20
- Palmdale Water Reclamation Plant (ponds)
- Palmdale Water Treatment Facility
- Pelona Vista Pump Station
- Antelope Valley-East Kern Water Facility
- Upper Amargosa Creek Recharge Ponds
- California Aqueduct (State Water Project)
- Lake Palmdale
- Avenue S Pump Station
- Acton Wastewater Treatment Plant
- Little Rock Wash
- Pearblossom Pumping Plant

Data Sources: City of Palmdale GIS data, World Terrain Base, 2010 ESRI, USGS, NOAA.
Produced by Rotary A Associates
May 2010
Dry Utilities and Infrastructure

Landfill
The Antelope Valley Recycling and Disposal facility is operated by Waste Management and is located off City Ranch Road, west of State Route 14. Onsite facilities include a weigh station and a liquefied natural gas fueling station. There is an operations facility, facilities for green waste recycling and electronic waste recycling.

Additional places in Palmdale to bring materials for recycling include:

- Alameda Metals
- Allen Company Recycling Center
- 75th Street Quarry & Recycling
- Genesis Recycling
- Granite Materials
- Vulcan Materials
- Hi Grade Materials Company
- AV Quarry
- Robertsons

Electricity
Southern California Edison is responsible for the distribution of electricity in the Palmdale area. There are several electric substations located throughout the City of Palmdale. High voltage electrical transmission lines (220 kilovolts and greater) cross the Palmdale area along the western border and along the base of the San Gabriel Mountains in the south. The high voltage transmission lines converge on the Vincent Substation south of Palmdale. Standard electrical distribution lines run along existing street right-of-way throughout the city. All substations are located along the electrical distribution lines.

Other sites associated with electrical distribution include the Southern California Edison Antelope Valley Service Center, located on 10th Street West in Lancaster, and the Lockheed Energy Plant. As of 2022, the Lockheed Energy Plant, located at a Lockheed facility near Plant 42, is under construction and will produce power for Lockheed Martin and other users, using a single axis photovoltaic system that racks the sun and converts direct current (DC) to alternating current (AC), before it goes to the grid.

The City has established a Community Choice Aggregation (CCA) Program that will be available for municipal and residential customers in October 2022 and commercial and industrial customers in May 2023. The CCA Program allows the local utility (Southern California Edison) to continue to provide the infrastructure needed to serve a location, but the CCA will produce the energy on behalf of rate payers. This will allow the City to have better control over greenhouse gas emissions and the City’s sources for renewable and non-renewable energy.

Gas
Natural gas is distributed by Southern California Gas. The distribution lines are located throughout the Palmdale area. A 30-inch main gas transmission pipeline runs through the southern portion of Palmdale, along an easement on the south side of Avenue S.

Telecommunications
Cell phone towers, microwave towers and other telecommunication equipment are located throughout the city. Cell phone, fiber optic, and microwave towers are owned by AT&T, CenturyLink, Direct TV, Dish Network, Excede Satellite Internet, Frontier Communications, HughesNet, Sprint, Time Warner, Verizon, and Viasat Satellite. Television/radio towers are in the foothills of the San Gabriel Mountains.
Infrastructure Limitations to New Development

As shown in Figure 12.5, sewer access is limited to the developed core of Palmdale. The lack of existing sewer connections in the northern portion of the city—as well as the outer perimeter of Palmdale—adds expenses to new development already saddled with rising construction and labor costs. Specifically, the lack of available sewer utilities is one of the constraints that suppresses new housing production on undeveloped land.

While the Palmdale community, and State of California, desperately need new housing, cheaper development on the outer edges of a city can bring a host of unforeseen costs and consequences. This development style, when developers skip over land to obtain cheaper land further away from developed areas, leaves huge swaths of vacant land between the developed core and new construction. This exacerbates reliance on automobiles for daily goods and services and reduces opportunities to safely walk and bike as a means of transportation. Leap-frog development also adds a cost burden to local government who are now required to maintain and provide future upgrades to new infrastructure created by developers.

While the lack of critical infrastructure makes new development more costly, it also encourages new construction to take place where sewer connections already exist—thus promoting infill development. Infill development offers benefits like, access to existing public transportation, access to goods and services, promotes walkability, and preserves natural resources and open spaces.

In an effort to expand critical utilities that support new development, the City of Palmdale has created an Enhanced Infrastructure Financing District (EIFD), which is described in the following section.

Palmdale’s Enhanced Infrastructure Financing District (EIFD)

Approved by State legislation in 2014, EIFDs are special districts with defined boundaries that use local property taxes to issue bonds to fund infrastructure projects (e.g., streets, utilities, sidewalks, pedestrian safety enhancements) or affordable housing. EIFDs can be formed among any entities with property taxing authority, including a City, County, or Special District, but excluding school districts. In Palmdale’s case, the two entities with property taxing authority include the City and the County of Los Angeles.

The City of Palmdale, in partnership with the County of Los Angeles, initiated an EIFD in 2021. The goal of the Palmdale Enhanced Infrastructure Financing District (“Palmdale EIFD” or “District”) is to support needed infrastructure in the Antelope Valley to help accelerate the production of quality jobs and accessible housing. The Palmdale EIFD will help fund investments in streets and roads, utilities, and exploration of an Antelope Valley County Service Center to help fulfill economic goals for the City, County, and State, as well as promote sustainability by connecting jobs and housing in the Antelope Valley. The anticipated $176.2 million of infrastructure will help accelerate $3.5 billion in private sector investment to promote jobs and housing in Palmdale and the growing Antelope Valley.
The following desired outcomes and metrics were identified to help the City of Palmdale track progress toward maintaining and enhancing public facilities, services, and infrastructure. This process follows the City of Palmdale’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

### Desired Outcomes, Indicators, and Targets

**OUTCOME:** Protection of Palmdale’s residents, workers, and visitors from fire hazards

**KPI’s:**
- Fire service response times
- Fire Station proximity to developed areas

**TARGETS:**
- Maintain Los Angeles County Fire Protection District’s response time goal of 4-6 minutes
- Maintain a 2-mile proximity of fire stations to all existing and newly developed areas

**OUTCOME:** Protection of persons and property from criminal activity

**KPI’s:**
- Police service response times
- Crime rate

**TARGETS:**
- Maintain police emergency response time under 6 minutes
- Rates of violent and non-violent crime below State averages

**OUTCOME:** Reduce reliance on imported water from the State Water Project.

**KPI’s:**
- Recycled water use

**TARGETS:**
- Construct and maintain infrastructure needed to store and distribute recycled water as appropriate

**OUTCOME:** Maintenance of a consistent level of wastewater treatment service to meet existing and new development demands.

**KPI’s:**
- Adequate wastewater treatment capacity
- Adequate sewer line capacity

**TARGETS:**
- Upgrade treatment capabilities at facilities once utilization of the current capacity reaches 85%
- Address sewer line inadequacies as outlined in the City’s Capital Improvement Program

**KPI = Key Performance Indicator**
Goals and Policies

The following section includes goals and policies for the Public Facilities, Services, and Infrastructure Element. Goals and policies are followed by implementation actions. Some related policies are woven throughout the General Plan, including in the Land Use and Community Design, Equitable and Healthy Communities, and Safety Elements.

PUBLIC FACILITIES AND SCHOOLS

Goal PFSI-1
Maintain superior public facilities to support the Palmdale community.

PFSI-1.1 Community Facilities Master Plan. Prepare a citywide master plan for community facilities that addresses existing and future facilities and equitable access. Include evaluation of existing facilities, need for new or expanded facilities and potential locations, and a funding plan.

PFSI-1.2 Accessibility. Promote accessibility for all residents within City facilities by meeting ADA guidelines and expanding language resources when feasible.

PFSI-1.3 Expand Public Facilities. Expand public facilities, recreation, and library facilities to underserved areas as needed, including the areas west of SR-14.

PFSI-1.4 Access to Library Services. Consider expanding library services to include branch locations in Village Centers (including retail centers), Education Districts, near public parks, and other similar settings to provide access to residents across Palmdale.

PFSI-1.5 Pursue Funding. Pursue federal and state funding sources to utilize in the expansion and enhancement of local public facilities, especially in underserved areas.

PFSI-1.6 Rehabilitate Facilities. Rehabilitate City-owned public facilities using the most innovative technologies and best practices available to ensure long term efficacy.

PFSI-1.7 City Facility Efficiency. Install energy efficient lighting and promote energy conservation practices in all city-owned facilities.

PFSI-1.8 Public Facilities Adequacy. Assess deficiencies in public facilities and address identified issues when feasible.

PFSI-1.9 Higher Education Facilities. Attract, encourage, and support the development of higher education facilities, trade and vocational training in areas within the Education District land use designation.

PFSI-1.10 Private Educational Facilities. In order to encourage development of educational facilities, permit development of private educational facilities that are found to meet the general educational needs of the community within residentially designated districts.
Goal PSFI-2
Maintain superior public safety services to protect the community and meet the need of residents, businesses, and visitors.

PFSI-2.1 Response Times. Maintain existing or superior average response times for fire and police services as the City’s population expands.

PFSI-2.2 Fire Protection. Coordinate with and assist the Los Angeles County Fire Department in planning for future fire station sites in Palmdale and facilitate location and construction of fire stations in conjunction with other City facilities (such as parks or municipal buildings) where feasible.

PFSI-2.3 Service Level Expansion. Regularly assess the need for service level expansion for fire and police services as the City’s population expands.

PFSI-2.4 County Sheriff Coordination. Coordinate with the Los Angeles County Sheriff’s Department to ensure that service availability, resources, and staffing are appropriate for the community need.

PFSI-2.5 County Fire Coordination. Coordinate with the Los Angeles County Fire Department to ensure that service availability, resources, and staffing are appropriate for the community need.

PFSI-2.6 Community Policing. Strengthen the relationship between law enforcement and the community by developing programs and initiatives focused on community policing.

WASTE AND WASTEWATER
Goal PSFI-3
Ensure that all development in Palmdale is served by adequate water distribution and sewage facilities.

PFSI-3.1 Water Supply and Delivery. Support water suppliers and other jurisdictions within the Antelope Valley in studying status and projected needs for water supply and delivery.

PFSI-3.2 Local Drainage Detection Basins. Make use of interim local drainage detention basins to slow stormwater runoff until such time as permanent drainage facilities are constructed.

PFSI-3.3 Retention Facilities. Where feasible, plan for detention or retention facilities in areas where groundwater recharge can be accomplished.

PFSI-3.4 Drainage Facilities. Through the development review process, reserve land in appropriate locations for construction of drainage facilities.

PFSI-3.5 Sanitation District Collaboration and Water Purveyors. Work with the Sanitation District and Water Purveyors to identify users for reclaimed water and support plans for its treatment and distribution.

PFSI-3.6 Code Compliance. All private sewage disposal systems must comply with the requirements of the City of Palmdale Plumbing Code, the Los Angeles County Health Department, and Lahontan Regional Water Quality Control Board and any Memorandum of Understanding between these agencies concerning private sewage disposal systems.

PFSI-3.7 Public Sewer System Prioritization. Require that all commercial, industrial, institutional, and multiple family uses be connected to a public sewer system with only limited use of private sewage disposal systems.
WASTE AND WASTEWATER

Goal PSFI-3
Ensure that all development in Palmdale is served by adequate water distribution and sewage facilities.

PFSI-3.8 Public Sewer System Utilization Requirement. Require that all single-family residential uses with lot sizes of less than one acre be connected to a public sewer system.

PFSI-3.9 Renewable Energy Project Disposal Systems. Allow the use of private sewage disposal systems on nonresidential renewable energy projects with domestic discharge only on property with an IND (Industrial) General Plan Land Use designation located between Avenue L and M between 50th Street East and 120th Street East, and on property with an IND (Industrial) General Plan Land Use designation on property located south of Avenue M, north of Avenue P-8, between 90th Street East and 120th Street East. The maximum daily estimated discharge shall not exceed 500 gallons/acre/day wastewater flow with a maximum discharge of 5,000 gallons per day.

PFSI-3.10 Mining and Construction Disposal Systems. Allow the use of private sewage disposal systems on nonresidential industrial aggregate mining and construction aggregate related uses with domestic discharge only within the MRE (Mineral Resource Extraction) General Plan Land Use designations. The maximum daily estimated discharge shall not exceed 500 gallons/acre/day wastewater flow with a total maximum of 5,000 gallons per day.

PFSI-3.11 New Development Fees. Require new development to pay necessary fees for expansion and ongoing maintenance of the sewage disposal system to the appropriate agencies, to handle the increased load, which it will generate.

PFSI-3.12 Water and Wastewater BMPs. Utilize best management practices (BMPs) in the purveyance of water resources and management of wastewater.

PFSI-3.13 Low Impact Development. Require new development to minimize storm water runoff and pollutant exposure by incorporating low impact development (LID) measures and appropriate best management practices (BMPs) consistent with the National Pollution Discharge Elimination System (NPDES).

PFSI-3.14 Water and Wastewater Provision. Ensure the provisions of adequate water and wastewater services to all new development.

PFSI-3.15 Diversify Water Supplies. Coordinate with water purveyors to facilitate the commitment to diversifying the region’s water supply through water banking projects and expanded recycled water projects.

PFSI-3.16 Service Levels. Provide sufficient levels of water, sewer, and storm drain services throughout the City.

PFSI-3.17 Adequate Systems. Identify and correct issues within the City’s sewer and storm drain systems to prevent system failures.

PFSI-3.18 Water Conservation. Support and promote water conservation across all facets of City water infrastructure.
Goal PSFI-4
Maximize the use of infrastructure facilities through appropriate land use strategies.

PFSI-4.1 Infill Development. Direct growth toward areas which already have backbone infrastructure available by providing incentives for infill development.

PFSI-4.2 Utilize Existing Infrastructure. Encourage development, which fully utilizes existing infrastructure systems, while decreasing the need for costly extensions of infrastructure into undeveloped areas.

PFSI-4.3 Infrastructure Evaluation. Evaluate infrastructure facilities and service levels within developed areas, which annex to the City, and promote programs to retrofit street, drainage and sewer improvements where warranted.

PFSI-4.4 Cluster Development. Encourage clustering of development where appropriate, to maximize use of infrastructure.

PFSI-4.5 Planning Documents. Require comprehensive planning documents such as area plans, specific plans, and development agreements, to specify the nature, timing and financing of both capital improvements and ongoing operations/maintenance of public improvements and services.

PFSI-4.6 Mixed Use Development. Encourage mixed use development to maximize use of existing infrastructure systems.

PFSI-4.7 EIFD. Utilize Palmdale’s Enhanced Infrastructure Financing District to issue bonds to fund infrastructure projects (e.g., streets, utilities, sidewalks, pedestrian safety enhancements) or affordable housing.
**UTILITIES**

**Goal PSFI-5**
Ensure that adequate public utilities are available to support development in an efficient and orderly manner.

**PFSI-5.1 Development Priorities.**
Prioritize development in areas that have existing horizontal infrastructure (roads, sewer, water, drainage, etc.).

**PFSI-5.2 On-site Infrastructure.**
Require all new development, including major modifications to existing development, to construct required on-site infrastructure improvements pursuant to City standards.

**PFSI-5.3 Off-Site Fair Share Contribution.**
Require all new development, including major modifications to existing development, to construct or provide a fair share contribution toward construction of required off-site improvements needed to support the project. This includes a fair share contribution toward development of regional master facility plans for roads, sewer, water, drainage, schools, libraries, parks, fire, and other community facilities, prior to granting approval of development applications.

**PFSI-5.4 Funding for Maintenance.**
Ensure there is a funding plan in place for the ongoing maintenance of these off-site facilities.

**PFSI-5.5 Improvements Prior to Occupancy.**
Require that on- and off-site improvements are constructed prior to occupancy of a new development project, or phase thereof, unless otherwise approved by the City.

**PFSI-5.6 Land Use Changes.**
When reviewing applications for land use designation changes (i.e., zone change, General Plan Amendment, specific plan amendment), conduct a thorough analysis of the impacts of the proposed change on all elements of the City’s infrastructure systems, and require mitigation as deemed appropriate.

**PFSI-5.7 Adjacent Development Integration.**
Require that individual development projects integrate with adjacent development with respect to backbone infrastructure (streets, sewer, water, and drainage). If adjacent property is undeveloped, a conceptual plan should be prepared to show that the pending development will allow for future integration and development of adjacent properties in a manner which is reasonable from a design, construction, and cost standpoint.
Goal PSFI-6
Coordinate with utility providers to support adequate provision of critical utilities.

PFSI-6.1 Infrastructure Equity. Distribute the costs of extending infrastructure equitably among those benefiting from the improvements.

PFSI-6.2 Waste Ordinance Review. Regularly review the City’s ordinances related to recycling and solid waste to reflect updated best management practices and technological innovation.

PFSI-6.3 New Utility Development. When feasible, require new utility lines to be constructed underground and along existing utility corridors.

PFSI-6.4 Utility Construction Cost Minimization. Coordinate installation of utility line placement with street construction to minimize cost, where possible.

PFSI-6.5 Utility Provision. Coordinate with electricity, gas, and waste providers to ensure adequacy of services for future and current needs.

PFSI-6.6 Prioritize Connections. Work with providers to prioritize connections near existing development in the core of the city.

PFSI-6.7 Utility Safety. When feasible, require new utility lines to be constructed away from fault lines, flood zones, fire zones, and other vulnerable areas.

PFSI-6.8 Utility Easements. Through the development review process, protect existing utility easements and require dedication of additional easements where needed.

PFSI-6.9 Telecommunication Retrofitting. Work with telecommunication providers to retrofit underserved areas with necessary telecommunication facilities and utilities.

PFSI-6.10 Capital Improvement Plans. Adopt and annually update the City’s Capital Improvement Program to prioritize funding for public works projects in accordance with the General Plan.

PFSI-6.11 City-Initiated Planning. Inform adjacent cities, town councils and county agencies of City-initiated planning and public works projects which may impact infrastructure systems and consider input and recommendations from these entities in the land use decision process.

PFSI-6.12 Area-Wide Improvements. Participate in regional efforts to gain State or Federal funding for area-wide improvements.
# Implementation Actions

The table below identifies programs, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s Public Facilities, Services, and Infrastructure goals and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goals</th>
<th>Action</th>
<th>Timeframe Key</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFSI-1</td>
<td><strong>Facilities Master Plan.</strong> Prepare a master plan for the City’s community facilities including libraries, recreation facilities, City services, etc.</td>
<td>[ ]</td>
<td>Public Works and Parks and Recreation</td>
</tr>
<tr>
<td>PFSI-3, PFSI-4, PFSI-5</td>
<td><strong>Fee Programs.</strong> Review the City’s Impact Fee program to determine if additions are needed to facilitate City growth and adequate provisions.</td>
<td>[ ]</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>PFSI-3</td>
<td><strong>Water Use Efficiency Ordinance.</strong> Adopt an ordinance aimed at efficient water use. The ordinance will address a variety of water conservation measures, potentially including but not limited to low water use fixtures, low water use landscaping and irrigation, and water recycling/use of graywater.</td>
<td>[ ]</td>
<td>Public Works</td>
</tr>
<tr>
<td>PFSI-3</td>
<td><strong>Sewer System Management Plan.</strong> Review and update the City’s Sewer System Management Plan.</td>
<td>[ ]</td>
<td>Public Works</td>
</tr>
<tr>
<td>PFSI-3</td>
<td><strong>Sewer System Assessment.</strong> Perform an assessment of the City’s sewer and storm drain system to identify infrastructure deficiencies. Develop a strategy to address deficiencies when feasible.</td>
<td>[ ]</td>
<td>Public Works</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Action</td>
<td>Timeframe</td>
<td>Responsibility</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------</td>
<td>-----------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>PFSI-4</td>
<td><strong>Federal Recovery and Infrastructure Fund.</strong> Follow procedures to secure both formula allocation as well as competitive grant funds to be deployed via the bi-partisan infrastructure bill.</td>
<td></td>
<td>City Manager’s Office and Public Works</td>
</tr>
<tr>
<td>PFSI-6</td>
<td><strong>High Speed Broadband Infrastructure.</strong> Implement universal broadband to reduce the digital divide faced by small businesses and low-income households.</td>
<td></td>
<td>Public Works</td>
</tr>
</tbody>
</table>
Chapter 13

Safety

This Safety Element outlines the goals and policies related to hazards and safety in Palmdale.
Statutory Requirements

The United States Federal Government and the State of California require local governments to address potential hazards that may have an impact on community safety including flood hazards, wildfires, seismic risks, and more. Per California Government Code section 65302, a Safety Element provides protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence; liquefaction; and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of Division 2 of the Public Resources Code, and other geologic hazards known to the legislative body; flooding; and wildland and urban fires. The Safety Element also includes mapping of known geologic hazards and addresses evacuation routes, military installations, peak load water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards. The following State and Federal regulations have been established to prevent and mitigate community harm associated with safety hazards.

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) is the national department assigned to prepare for, prevent, and mitigate emergency events and natural disasters within the United States. FEMA was assigned federal authorities under the Stafford Act of 1974 and has since been authorized to oversee hazard mitigation planning through programs such as the National Flood Insurance Program (NFIP).

The NFIP was developed through the Flood Disaster Protection Act of 1973. Under the NFIP, FEMA works to evaluate flood hazards across geographic areas and provide Flood Insurance Rate Maps (FIRM’s) for local and regional planners to promote appropriate land use and floodplain development. Further, FEMA maintains a voluntary Community Rating System (CRS) that recognizes communities that implement superior floodplain management practices through a credit-based system. This Safety Element identifies and reviews areas that are subject to flooding or identified by flood plain mapping prepared by FEMA or the Department of Water Resources.

Senate Bill 379

California Senate Bill (SB) 379 requires cities and counties within the state to consider and address climate change and resiliency within the Safety Element of their General Plans. The Bill requires local agencies to perform a vulnerability assessment that identifies the potential impacts to the community associated with climate change. Further, cities and counties must utilize the vulnerability assessment to develop goals and policies to facilitate climate adaptation and minimize the risks associated with climate impacts. For the purposes of this General Plan, goals and policies related to climate change and vulnerability are addressed within a defined sustainability chapter (Chapter 12: Sustainability and Climate Vulnerability Assessment).

Senate Bill 99 and Assembly Bill 747

SB 99 requires all cities and counties, upon the next revision of the housing element on or after January 1, 2020, to update the Safety Element to include information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes. By increasing the duties of local officials, this bill would impose a state-mandated local program. Assembly Bill (AB) 747 requires all cities and counties to identify evacuation routes in the General Plan Safety Element beginning January 1, 2022. The bill requires evaluation of evacuation route capacity, safety, and viability under a range of emergency scenarios. The bill allows cities or counties with an adopted local hazard mitigation plan, emergency operation plan, or other document that fulfills commensurate goals and objectives, to summarize or incorporate the information from these plans or documents in the safety element to comply with this requirement.
Local Hazard Mitigation Plan (2021)
FEMA requires all local governments to participate in local hazard mitigation planning as a prerequisite to qualifying for FEMA grant assistance. As part of this planning process, state and local government agencies must prepare a comprehensive disaster mitigation plan to address risks from natural and manmade hazards and reduce the loss of life associated with local disasters. The City of Palmdale Local Hazard Mitigation Plan (LHMP) was submitted to CalOES for review in January 2022 and will be reviewed by FEMA before it goes to City Council for Adoption. The updated LHMP includes mitigation strategies related to hazard risks such as wildfires, geologic hazards, flooding/inundation, severe weather, and utility failure, among others.

City of Palmdale Emergency Operations Plan (2012)
The Palmdale Emergency Operations Plan was developed in 2012 to serve as a guiding document for emergency/disaster response in the city and is currently being updated with the goal of City adoption by December 2022. The Plan assigns responsibility to organizations and individuals for carrying out specific actions at projected times and places in an emergency that exceeds the capability or routine responsibility of any one agency. Sets forth lines of authority and organizational relationships and shows how all actions will be coordinated. Describes how people and property will be protected in emergencies and disasters. Identifies personnel, equipment, facilities, supplies, and other resources available—within the jurisdiction or by agreement with other jurisdictions—for use during response and recovery operations.

City of Palmdale Storm Water Plan (2003)
The Palmdale Storm Water Management Plan (SWMP) was adopted in 2003. The Plan was prepared by the Palmdale Department of Public Works with the objective to preserve the quality of city waters, including storm water conveyances such as closed conduits, open channels, drainage basins, and dry wells. The City currently maintains a “small” Municipal Separate Storm Sewer System (MS4) permit that authorizes the City to legally discharge stormwater into local waterways. The goal of the SWMP is to reduce the discharge of pollutants to the MS4 to the Maximum Extent Practicable (MEP). The Plan requires that each development attenuate post-developed flows to 85 percent of pre-developed flows.
Palmdale Drainage Master Plan (1996)
The most recent Palmdale Drainage Master Plan (DMP) was adopted in 1996 to address existing drainage issues associated with storm water runoff and prepare for anticipated drainage from future development. The DMP outlines construction of flood control facilities in Palmdale that would connect with the planned regional drainage system.

Palmdale Hillside Management Ordinance
Palmdale Municipal Code Chapter 17.100 was adopted to establish hillside development standards to prevent landslide and erosion hazards. The Ordinance establishes the maximum angle and height of manufactured slopes and maintenance of natural drainage.
Geologic and Seismic Hazards

Fault Rupture
Palmdale lies within a seismically active geographic area in California. Several faults in the city are capable of producing fault rupture hazards in the event of an earthquake. Faults in the city include the San Andreas, Nadeau, Cemetery, Little Rock, and Leona Avenue. All of these are considered active or potentially active. Palmdale lies in the northern portion of Los Angeles County, through which the San Andreas Fault runs. It is estimated that large and potentially destructive earthquakes occur on the San Andreas Fault about every 130 years. Figure 13.1 shows the location of local faults, and the earthquake fault zones where there is the potential for surface rupture.

The Alquist-Priolo Earthquake Fault Zoning Act requires State Geologists to delineate “special study zones” along known active faults. The San Andreas Fault zone is among those identified; therefore, the City is required to regulate development within these seismic hazard zones. The City implements the Alquist-Priolo Earthquake Fault Zoning Act by means of development review process, in which every proposed development within a seismic hazard zone is required to prepare a detailed geotechnical report and fault rupture survey.

Ground Shaking
The intensity of ground shaking during an earthquake is dependent upon the distance from the fault; the magnitude and failure mechanism of the earthquake; and the nature of the bedrock, alluvium, and soil through which the shock waves travel. There are a number of existing faults within Palmdale that may cause ground shaking. The city’s proximity to the San Andreas Fault makes it susceptible to the highest level of earthquake hazard risk related to ground shaking. The fault is estimated to be capable of producing earthquakes of magnitude 8.0 or greater. In addition to faults within the city, there are several city-adjacent faults that are capable of producing ground shaking which could impact Palmdale. These adjacent faults include the Sierra Madre-San Fernando, Garlock, Owens Valley, and White Wolf faults. Generally, shock waves weaken with distance from the focus of the earthquake; therefore, faults located further away from the city are likely to have a lesser impact.

Liquefaction
Liquefaction occurs when soil that exists below the water table temporarily loses strength during an earthquake and changes to a near-liquid state. Liquefaction can cause large movements of surface ground and damage buildings and buried utilities. A related occurrence, known as lateral spreading, can cause damage to structures located on gently sloping ground. Figure 13.2 shows liquefaction risk zones within Palmdale. The majority of Palmdale consists of low relative liquefaction susceptibility zones, which are indicated on the map as non-shaded areas. However, liquefaction risk zones are present in the city. These areas include Little Rock Wash in the eastern portion of the city as well as Anaverde Creek, and areas along the San Andreas Fault. Development in liquefaction risk zones is subject to the same regulations as described for ground shaking hazard; a geotechnical study is required along with compliance with the Palmdale Building Code and California Building Code.
Erosion
Erosion occurs when the land detaches because of the movement of soil and rock fragments during a flood or storm over years through the action of wind, water, or another geological process. Though not immediately impacted by erosion in Palmdale, concerns arise because of the impact erosion can have on transportation assets throughout Southern California. Areas within Palmdale have been identified to have moderate erosion potential and therefore, erosion control measures are common for development projects within Palmdale.

Landslides
A landslide refers to the movement of rock, earth, or debris down a sloped section of land. Slopes greater than 25 percent are considered unsafe for development as they typically have high risk of landslides. Slopes ranging from 10 to 25 percent are required to implement hillside construction techniques to reduce risk of landslides, while slopes lower than 10 percent are considered to have low landslide risk. As shown in Figure 13.3, the southern and western edges of Palmdale contain steep hillsides with slopes greater than 25 percent that are susceptible to landslides. The remainder of the Planning Area is relatively flat, with low landslide risk.

Dam Failure
Earthquakes can cause the rupture of dams in Palmdale. The rupture of the Lake Palmdale Dam or the Littlerock Dam can result in flooding. Subsequent flooding could be as deep as 50 feet immediately downstream of the Littlerock Dam. Failure of the Littlerock Dam would result in the inundation of a 300-foot-wide area for 0.25 miles north of the dam. The water depth would vary from 50 to 15 feet along this length. Earthquake damage to Lake Palmdale, would greatly impact one of the City’s primary sources of water and cause inundation across the city reaching Plant 42. Ten minutes after the dam failure, the floodwater would veer eastward for 800 feet to Avenue U, where the depth would be reduced to 10 feet. Trending north from Avenue U, the water would eventually dissipate so that the depth is no longer a risk to downstream developments.

Tsunami
A tsunami is a great sea wave produced by submarine earth movement or volcanic eruption. Tsunamis are not a threat in Palmdale since Palmdale is located approximately 40 miles from the coast.
High Wind Hazards

High winds are commonly associated with severe thunderstorms and hurricanes. In southern Palmdale, they occur due to differences in air pressure and are called Santa Ana winds. Santa Ana winds are defined as warm, dry winds that blow down from the east or northeast into basins. These winds are usually strongest in the valley and canyon areas near the mountains and typically occur in the fall and winter. Typically, these winds blow in the 40-55 mile per hour range and can gust up to 90 miles per hour. Santa Ana winds develop when a high-pressure region builds over the high plateau east of the Sierra Mountains and west of the Rocky Mountains. Clockwise circulation around the center of a high-pressure area forces air down the slope from the high plateau. The air warms as it descends toward the California coast due to the heating of the air caused by compression. This heating of the air as it is compressed provides the primary source of warming. The air is dry since it originated in the desert, and its moisture will continue to dissipate as it is heated. Santa Ana winds typically occur between October and April and can be catalysts for wildfire outbreaks in the region. They also cause downed power lines, blown over trees, and blown debris.

Wildfires

Wildfire hazard is determined by a combination of factors including precipitation, winds, temperature, landscape, and vegetation conditions. Based on these factors, Palmdale has been identified by the California Department of Forestry and Fire Protection (CAL FIRE) as being within a wildland-urban interface. Wildland-urban interface areas are those areas in which homes or other structures are built near or among lands prone to wildland fire. The extent to which lands are prone to wildfire can be determined using CAL FIRE severity zone designations. The zone designations are based on factors such as fuel, slope and fire weather and include the following designations:

- Moderate Fire Hazard Severity
- High Fire Hazard Severity
- Very High Fire Hazard Severity

In Palmdale, the areas south and west of the California Aqueduct, including Joshua Ranch, Ritter Ranch, and Anaverde Nuevo neighborhood and the adjacent open space, are identified as very high fire hazard severity zones (VHFHSZ) and are considered to be under local fire agency responsibility (see Figure 13.4). These areas consist primarily of undeveloped open space, which is largely vegetated with chaparral, trees and grassland groundcover, which can provide fuel for wildfires. Development within VHFHSZ’s is considered unless fire suppression improvements are built to address existing issues like lack of water, rugged terrain, and lack of fire facilities. The remainder of Palmdale is not under significant wildfire hazard risk. The sparse vegetation and urban development do not provide significant fuel for wildfire propagation.

There are several notable areas adjacent to Palmdale that are subject to high and very high fire risk. These areas have the potential to rapidly spread wildfire into the city and may have widespread air quality impacts. These notable areas include the areas to the south and west of Palmdale, within Palmdale’s sphere of influence. There are moderate fire hazard severity zones just south of Avenue S - between Sierra Highway and SR-14 and just south of where Pearblossom Highway intersects Fort Tejon Road. In addition, there are high and very high fire hazard severity zones that extend outside of these identified areas. As shown in Figure 13.8, there are no public or emergency facilities located in the VHFHSZ or in the State Responsibility Areas (SRAs).

Although Palmdale has not experienced any major fire events, it should be noted that there has been two major fire events in the outlying areas of the Antelope Valley. The Powerhouse Fire occurred in May 2013 and burned 30,274 acres in the Antelope Valley and the Los Angeles County mountains. In 2010, the Crown Fire occurred west of Palmdale in the Leona Valley Area and burned more than 14,000 acres, destroying 10 structures and damaged 6 homes.
Hazardous Materials

A wide variety of products, chemicals, and elements that are considered hazardous or toxic are used in households, commercial businesses, and industrial operations and processes. The improper use and management of hazardous materials can pose a significant potential threat to the community and its environment. Prevalent sources of hazardous material exposure in cities are often commercial and industrial sites. Leaking underground storage tanks (LUST) and former industrial and commercial land uses sites can expose the community and environment to hazardous materials. Leaks require immediate action upon detection to reduce the spread of contaminants and reduce potential harm. In addition, industrial and commercial activities sometimes utilize hazardous and toxic chemicals for operations. Spills or mishandling of these materials can result in site contamination. These sites are known as “brownfields”, and their clean-up and revitalization is regulated by the U.S. Environmental Protection Agency.

A number of hazardous material sites are located in Palmdale. These include LUST and contaminated groundwater sites under the jurisdiction of the State Water Resources Control Board Site Cleanup Program. While many of these sites have been remediated or closed, there were five open or active cleanup sites within the city and its sphere of influence in 2019. As of 2021, three of these five sites have been remediated. The status of the five sites is listed in Table 13.1 with their locations shown in Figure 13.6.

### Table 13.1

<table>
<thead>
<tr>
<th>Site Name/Site ID</th>
<th>Site Type</th>
<th>Site Status</th>
<th>Address</th>
<th>Contaminants Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circle K Store # 2709464 (T10000012661)</td>
<td>LUST Cleanup Site</td>
<td>Completed- Case Closed as of 2/18/2020</td>
<td>520 West Rancho Vista Boulevard</td>
<td>None Present</td>
</tr>
<tr>
<td>Petro-Lock Inc. (T0603700266)</td>
<td>LUST Cleanup Site</td>
<td>Completed- Case Closed as of 7/7/2021</td>
<td>38206 Sierra Highway North</td>
<td>Gasoline</td>
</tr>
<tr>
<td>Shayan Capital Ventures (T10000012057)</td>
<td>LUST Cleanup Site</td>
<td>Completed- Case Closed as of 1/9/2020</td>
<td>103 W Palmdale Boulevard</td>
<td>Diesel</td>
</tr>
<tr>
<td>Palmdale Water Reclamation Plant (T10000004967)</td>
<td>Cleanup Program Site</td>
<td>Open-Assessment &amp; Interim Remedial Action as of 10/15/2006</td>
<td>39300 30th Street East</td>
<td>Nitrate</td>
</tr>
<tr>
<td>Air Force Plant 42 (Multiple)</td>
<td>Military Cleanup Site</td>
<td>Open</td>
<td>2503 East Avenue P</td>
<td>Metal, VOCs, Trichloroethylene, Cyanide</td>
</tr>
</tbody>
</table>


Climate Change

Climate Change is the long-term modification of temperature and weather patterns associated with human activity. Forecasted effects to Palmdale from climate change include increased average temperature, increased prevalence of wildfires and extreme heat, and diminished local air quality. The goals and policies included in this Element are related to safety in the City and account for local climate change vulnerabilities as identified within the 2021 Vulnerability Assessment. Detailed goals and policies related to climate vulnerability and adaptation, in accordance with SB 379, are included within the Sustainability Element of the General Plan.
Flooding

Flood damage is a significant hazard for many communities across California. In Palmdale, localized flooding occurs when rainfall is heavy and prolonged. Rainfall in the city is typically sparse due to its location on the leeward side of the Sierra Pelona and San Gabriel Mountains. The typical amount of rainfall for Palmdale is 7.4 inches per year. Nevertheless, periods of excessive rainfall can occur during winter storms, from October to March, and monsoonal thunderstorms during summer months.

Areas in Palmdale with known flood hazards include the natural drainage channels of Amargosa Creek, Anaverde Creek, Little Rock Wash and Big Rock Wash. These natural drainage channels are mapped in Figure 11.4 of the Conservation, Natural, and Cultural Resources chapter. The drainage channels are subject to a one-percent annual-chance-flood, also referred to as a 100-year flood.

Portions of Palmdale adjacent to Amargosa Creek and Anaverde Creek, along the southwestern portion of Palmdale, are classified by FEMA as Zone A, AE, or AO—areas subject to inundation by the 1-percent-annual-chance flood. A wide swath along the Little Rock Wash in the eastern portion of Palmdale (and currently occupied by mining operations) is also classified as Zone A. Flat plains and natural depressions in Palmdale are also subject to flooding. These depressions in combination with increases in impermeable surfaces have contributed to street flooding caused by storm water runoff. Some of the city flat plain and depression areas are within 500-year flood zones. These include urban areas near the center of Palmdale and the undeveloped region east of Sierra Highway. Figure 13.5 depicts FEMA Flood Insurance Program designated flood zones in the City.

Emergency Evacuation

Emergency evacuation is a vital component of ensuring community safety and resilience in the face of a hazardous event. Facilitating efficient evacuation within a coordinated system of emergency service providers, facilities, and among residents is essential. Palmdale contracts law enforcement, fire, and emergency medical services to the County of Los Angeles, as noted in Chapter 10 Public Facilities, Services, and Infrastructure. As discussed earlier in this Chapter under Relevant Plans and Documents, the City’s Emergency Response Plan is currently being updated with the goal of City Council adoption by December 2022. This updated Plan identifies evacuation routes, personnel, equipment, facilities, supplies, and other resources available for use during response and recovery operations.

This Safety Element addresses recent evacuation legislation (Senate Bill 99 and Assembly Bill 747) to: 1) identify residential developments in hazard areas that do not have at least two emergency evacuation routes and 2) evaluate evacuation route safety under a range of emergency scenarios. A brief summary of this analysis is provided below.

1. Most residential developments throughout the city have at least two points of ingress and egress. However, five neighborhoods, only 4 of which are currently within the City of Palmdale—developments with 30 or more homes—have only one point of access, some of which are located in the Fire Hazard Severity Zones. These are shown in Figure 13.7 Single Access Neighborhoods.

2. The existing grid pattern roadway network allows for many ways to exit the city, therefore emergency evacuation is not a major concern in Palmdale. A scenario-based evacuation analysis shows that generally the vulnerability of the city’s transportation network during an emergency event is low. Events that could cause delays in evacuation...
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Figure 13.1
Palmdale Fault Traces and Hazard Zones

- City Boundary
- Sphere of Influence
- Major Arterials
- Highway
- Railroad
- Fault Line
- Fault Zone
- Water Body
- Parks
- California Aqueduct

Data Sources: City of Palmdale GIS data; California Geological Survey, 1979, U90X8.
Figure 13.2
Palmdale Liquefaction Risk

- City Boundary
- Sphere of Influence
- Major Arterials
- Highway
- Railroad
- Seismic Hazard Liquefaction Zone

Data Sources: City of Palmdale GIS data; California Geological Survey, 2005, USGS.
Produced by Rossen Consultants, Inc.; June 2018.
Figure 13.3
Palmdale Slope Map

- City Boundary
- Sphere of Influence
- Major Arterials
- Highway
- Railroad

Slope (Degrees)
- 0-5
- 5-10
- 10-25
- >25

City of Lancaster
Figure 13.4
Palmdale Fire Hazard Area

City Boundary
Sphere of Influence
Major Arterials
Highway
Railroad

Moderate, State Responsibility Area
High, State Responsibility Area
Very High, State Responsibility Area
Moderate, Local Responsibility Area

Data Sources: City of Palmdale GIS data, CAL FIRE, 2012
Produced by Rissou Consultants, Inc.
June 2019
Figure 13.5
Palmdale Flood Hazard Areas

City Boundary
Sphere of Influence
Moderate to Low Risk Areas
High Risk Area
Undetermined Risk Area

Major Arterials
Highway
Railroad

Data Sources: City of Palmdale GIS data, FEMA, 2019.
Produced by Rossen Consultants, Inc.
June 2019
Figure 13.6 Palmdale Hazardous Waste Sites

- Sphere of Influence
- Major Arterials
- Highway
- Railroad

Hazardous Waste Sites:
- Circle K Store & Plant 42
- Air Force Plant 42 (Multiple)
- Palmdale Water Reclamation Plant
- Shayan Capital Ventures
- Petro-Lock Inc.

City Boundary

Data Sources: City of Palmdale GIS data; California Water Resources Control Board, 2019.
Figure 13.7
Single Access Neighborhoods

City Boundary
Sphere of Influence
Exit/Entry Point
Single Exit/Entry Neighborhood
Undetermined Risk Area

Road Hierarchy
Highway
Arterial Roads
Collector Roads
Local Road

Data Sources: City of Palmdale GIS data.
Produced by Rineer Consultants, Inc.
May 2022
Figure 13.8
Palmdale Fire Hazard Areas Related to General Plan Land Use and Public Facilities

- City Boundary
- Sphere of Influence
- Major Arterials
- Highway
- Railroad
- Water Body/Recharge

Legend:
- Equestrian Residential
- Low Density Residential
- Single Family Residential
- Employment Flex
- Mixed Use
- Acreage Flex
- Ridgecrest Road
- Kingman Road
- Accessory Dwelling Unit

Legend for Fire Hazard Areas:
- High, State Responsibility Area
- Very High, State Responsibility Area
- Very High, Local Responsibility Area
- Moderate, State Responsibility Area
- High, Local Responsibility Area
- Very High, State Responsibility Area
- Sheriff Stations
- Hospitals
- Fire Stations
- Schools

Data Sources:
City of Palmdale GIS data, CAL FIRE, 2012.
Produced by Rescon Consultants, Inc.
October 2022
The following desired outcomes and metrics were identified to help the City of Palmdale track progress toward maintaining and enhancing safety. This process follows the City of Palmdale’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

**Top Key Outcomes**

**OUTCOME:** Address increased risk related to climate change in accordance with State requirements, particularly along the wildland urban interface at the southwestern and western edge of the City

KPI's:
- Wildfire hazard protection

TARGETS:
- Reduced human casualties and property damage in a wildfire event

**OUTCOME:** Ensure that soil and groundwater are not at risk from flooding, water quality, and erosion to ensure that they are suitable to support redevelopment following a large fire

KPI's:
- Presence of soil/groundwater contamination

TARGETS:
- Clean-up of identified contamination prior to development/redevelopment of individual properties

**OUTCOME:** Protection of Palmdale's residents, workers, and visitors from fire hazards

KPI's:
- Fire service response times and fire station proximity to developed areas

TARGETS:
- Maintain Los Angeles County Fire Protection District’s response time goal of 4-6 minutes
- Maintain a 2-mile proximity of fire stations to all existing and newly developed areas

**OUTCOME:** Protection of persons and property from criminal activity

KPI's:
- Police service response times and crime rate

TARGETS:
- Maintain police emergency response time under 6 minutes
- Rates of violent and non-violent crime below State averages

*KPI = Key Performance Indicator*
SEISMIC SAFETY

Goal SE-1
A city with minimal public health, safety, and welfare impacts resulting from seismic hazards.

SE-1.1 Geologic Review. Review development within or adjacent to geologic hazard zones and provide copies of geotechnical reports and studies to be reviewed by a qualified geologist and implement recommendations to ensure adequate provisions for public safety.

SE-1.2 California Building Code. Require appropriate structural setbacks from active fault rupture traces in accordance with Alquist-Priolo standards and continue to follow California Building Code.

SE-1.3 Utility Lines Design. Design utility lines crossing active fault traces to withstand the expected movement of the earth in these locations. Utility lines as defined here include, but are not to be limited to, electricity, water, internet, natural gas, and sewer.

SE-1.4 Essential Service Buildings Location. As feasible, ensure that essential services buildings are not located in geologic hazard zones.

SE-1.5 Local Hazard Mitigation Plan. Implement the policies and mitigation strategies outlined within the Palmdale Local Hazard Mitigation Plan.

Goals and Policies

The following section includes goals and policies for the Safety Element. Goals and policies are followed by implementation actions. Some safety policies are woven throughout the General Plan, including in the Land Use and Community Design, Conservation, Equitable and Healthy Communities Elements, among others.
WILDFIRE AND FIRE

Goal SE-2
Minimize public health, safety, and welfare impacts resulting from wildfire hazards.


SE-2.2 Redevelopment Compliance. After a large fire, ensure that re-development located in the in the High and Very High Fire Hazard Severity Zones complies with fire safety requirements for construction, accounting for any increased risk related to climate change.

SE-2.3 Wildland Development. Require that developments located in VHFSZ incorporate and enforce standards for construction, including a fuel modification program (i.e., brush clearance, planting of fire-retardant vegetation) to reduce the threat of wildfires, accounting for any increased risk related to climate change.

SE-2.4 Landscaped Buffer Zones. Provide fire-resistant landscaped buffer zones between high-risk fire hazard areas and urban development with fire clearance located on private land and maintained by the property owner(s).

SE-2.5 Maintain Firesafe Zones. Require property owners to clear brush and high fuel vegetation and maintain firesafe zones (a minimum distance of 30 feet from the structure or to the property line, whichever is closer) to reduce the risk of fires. For structures located within a Very High Fire Hazard Severity Zone, the required brush clearance distance is 200 feet from structures to the property line.

SE-2.6 Soils and Waterways. Evaluate soils and waterways for risks from flooding, water quality, and erosion to ensure that they are suitable to support redevelopment following a large fire.

SE-2.7 Emergency Access Routes for Wildfire Hazard Zones. Require all new development in or near designated wildfire hazard zones to identify multiple evacuation/emergency access routes and file with City.

SE-2.8 Los Angeles County Fire Department Coordination. Continue to coordinate with the Los Angeles County Fire Department to provide emergency evacuation support and address fire hazards.

SE-2.9 Development Requirements. As part of the city’s development review process, require that all new buildings and facilities comply with Los Angeles County, state, and federal regulatory standards such as the California Building and Fire Codes as well as other applicable fire safety standards and work with the Fire Department to ensure the provision of adequate fire stations, personnel, and equipment to meet the City’s needs over time.

SE-2.10 Water system requirements. Require all new development to be served by a water system that meets applicable fire flow requirements.

SE-2.11 Non-conforming Development. Require existing non-conforming development to comply with contemporary fire safe standards during a permit or entitlement process, in terms of road standards and vegetative hazard, and meet or exceed SRA Fire Safe Regulations.
HAZARDOUS MATERIALS

Goal SE-3
Minimize risks associated with the transport, storage, use, and disposal of hazardous materials.

SE-3.1 Hazardous Materials. Coordinate with the Los Angeles County Fire Department to maintain a list of hazardous waste generators that could affect City residents.

SE-3.2 Remediate Contaminated Sites. Continue to support and encourage state and county efforts to identify and remediate contaminated sites.

SE-3.3 Soil and Groundwater Cleanup. Require clean-up of soil and/or groundwater containing hazardous materials exceeding regulatory action levels to the satisfaction of the agency having jurisdiction prior to granting permits for new development.

SE-3.4 Hazardous Materials Transport. Require transport of hazardous materials along designated routes that minimize risks to the public and sensitive environmental areas and cooperate with regional agencies in developing and maintaining such routes.

SE-3.5 Review Development Near Hazardous Materials. Review proposed development in proximity to any existing or proposed facility that uses, stores, or transports large amounts of hazardous materials to ensure adequate mitigation of impacts related to hazardous materials (e.g., appropriate site design, setbacks, and buffering).

SE-3.6 Hazardous Waste Facility Compliance. Require all proposed hazardous waste facilities to comply with the City’s hazardous waste management plan and the Hazardous and Waste Facilities Section of the Palmdale Municipal Code.

SE-2.12 Fire Protection Plans. Require fire protection plans for all new development in the VHFSZ.

SE-2.13 Long-term Maintenance. Continue annual brush inspections and enforce clearance requirements on public and private property within the Very High Fire Hazard Severity Zone (VHFHSZ), as dictated by CAL FIRE, in accordance with the Board of Forestry and Fire Protection Fire Safe Regulations, California Building Standards Code, and Palmdale Municipal Code related to ongoing maintenance of vegetation clearance on public and private roads, roadside fuel reduction plan, and defensible space clearances (including fuel breaks).

SE-2.14 Water Evaluation. Evaluate the location and capacity of the City’s water supply availability to suppress wildfire as part of the City’s Local Hazard Mitigation Plan Updates.
**FLOODING**

**Goal SE-4**
Minimize impacts to public safety and/or property as a result of flooding.

- **SE-4.1 Floodplain Management Ordinance.** Require development in designated flood hazard areas to meet standards outlined in the City’s Floodplain Management Ordinance and related criteria in the City’s Engineering Design Standards.

- **SE-4.2 Drainage Management Plan.** Implement the City’s drainage management plan through the capital improvement program and development review process.

- **SE-4.3 National Pollutant Discharge Elimination System and Low Impact Development.** Ensure that new development meets National Pollutant Discharge Elimination System (NPDES) and associated Low Impact Development (LID) standards that limit peak runoff to pre-development rates.

- **SE-4.4 Recharge Areas.** As appropriate, use open space and recreational areas to serve as floodplains that reduce downstream flooding and aid in groundwater recharge.

- **SE-4.5 Floodplains Value.** Preserve and restore the natural and beneficial values served by floodplains to the extent feasible, consistent with public health, safety, and welfare.

- **SE-4.6 Localized Flooding.** Address localized flooding east of SR-14, particularly near Amargosa Creek, Anaverde Creek, Little Rock Wash, and Big Rock Wash.

**INFRASTRUCTURE SAFETY**

**Goal SE-5**
Minimize damage from catastrophic failure of infrastructure.

- **SE-5.1 Evaluate inundation hazards.** As appropriate, evaluate inundation hazards related to the potential rupture of the following when reviewing development proposals: California Aqueduct, Palmdale Dam, Littlerock Dams and/or proposed basins.

- **SE-5.2 Buffers for gas lines.** Require buffers for development in areas near high-pressure natural gas lines and that ensure such development is provided with alternative access/evacuation routes.

**AIRCRAFT SAFETY**

**Goal SE-6**
Minimize impacts to public safety and property resulting from aircraft accidents.

- **SE-6.1 Consistent development with Department of Defense.** Require all development to be consistent with Department of Defense regulations as outlined in the Air Force Plant 42 Air Installation Compatibility Use Zone (AICUZ) Report and comply with applicable FAA regulations that affect development in the Accident Potential Zones.

- **SE-6.2 Linear corridor in Accident Potential Zones.** Through the design review process, ensure that new buildings are located in a manner that will promote clear linear corridors through the developed area in any Accident Potential Zones.

- **SE-6.3 Evaluate incompatible land uses near the airport.** Review and evaluate currently existing incompatible development within the low altitude overflight areas uses and determine the potential for redevelopment to convert those land uses to airport compatible uses.
EMERGENCY PREPAREDNESS

Goal SE-7
Ensure safe evacuation of residents in the event of an emergency requiring evacuation.

SE-7.1 Maintain Emergency Evacuation Map. Maintain and, as necessary, update a map of designated emergency evacuation routes for various types of disasters (e.g., earthquake, wildfire, hazardous material release, dam failure) and disaster scenarios.

SE-7.2 Evacuation Route Information. Make information regarding emergency evacuation routes readily available to all city residents.

SE-7.3 Review Development Consistency. Review all new development for consistency with applicable evacuation plans and ensure access to at least two evacuation routes.

SE-7.4 Emergency Evacuation Evaluation. Continue to evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios.

SE-7.5 Evacuation in VHFSZ and HFSZ. Require developers proposing development on properties within VHFSZ and HFSZ areas to evaluate and provide adequate evacuation routes.

SE-7.6 Assess Emergency Service Needs. Continue to assess current and projected emergency service needs, and goals or standards for emergency services training for City staff and volunteers as part of the City's Emergency Operation Plan Updates.

Goal SE-8
Improve disaster preparedness in the event of an emergency.


SE-8.2 Annual Maintenance Review. Periodically, but not less than annually, review emergency service equipment and shelters to ensure that they are adequate to meet the needs of changing land uses and development types.

SE-8.3 Disaster Preparedness Training. Require City staff to undergo regular disaster preparedness training annually at minimum.

SE-8.4 Legible Signs. Require all residences and businesses to maintain visible and clearly legible signs and/or street numbers to shorten the response times of emergency personnel.

SE-8.5 Emergency Water. Promote the use of emergency water supplies or water filtration systems at point-of-delivery to ensure provision of acceptable water quality in emergency situations.
Goal SE-9
Improve public safety.

SE-9.1 Palmdale Municipal Code. Ensure safe and sanitary living and working conditions throughout the City and coordinate with other agencies, including but not limited to Los Angeles County Department of Health, Los Angeles County Fire Department, and Los Angeles County Sheriff’s Department to maintain the goals, standards, resources, and training for enforcement and emergency services.

SE-9.2 Public Education. Continue and, as appropriate, update public education programs regarding response to hazards such as earthquakes, floods, hazardous material spills, and wildfire for residents, businesses, and schools.

Goal SE-10
Reduce crime activity.

SE-10.1 Crime Rate. Track the rates of crime in the community on an ongoing basis and reallocate resources as necessary to address crime-related issues of concern.

SE-10.2 Crime Statistics. Make up-to-date crime statistics readily available to the community via the City’s website or other media.

SE-10.3 Maximize Safety and Security. Through the development review process, ensure that sites are designed in order to maximize safety and security, considering such factors as visibility, lighting, emergency access, legibility of street numbers, and fencing.

SE-10.4 Adequate Lighting. Require all commercial and industrial developments to provide adequate lighting for buildings and parking areas as well as sufficient visibility for patrol vehicles to assist in law enforcement surveillance.

SE-10.5 Watch Group Education. Encourage the formation and continued education of neighborhood and business watch groups to assist in crime prevention and detection.

SE-10.6 Crime Prevention Efforts. Coordinate with local partners to encourage community-based crime prevention efforts.

SE-10.7 Safe Environment Programs. Promote after school, volunteer, and Business and Neighborhood Watch programs, and other innovative programs to help maintain a safe environment.

SE-10.8 Law Enforcement and Youth Interaction. Expand opportunities for positive law enforcement and youth interaction.
Implementation Actions

The table below identifies programs, planning efforts, coordination efforts, and other actions that will help implement the General Plan Safety Element goals and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goals</th>
<th>Action</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE-1</td>
<td><strong>LHMP:</strong> Implement the 2021 Palmdale Local Hazard Mitigation Plan</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>SE-1</td>
<td><strong>Seismic Standards:</strong> Update existing and future standards of the Palmdale Municipal Code to meet seismic safety standards established by the California Building Code and Alquist-Priolo Earthquake Fault Zoning Act in order to protect residents of Palmdale</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>SE-2, SE-5, SE-7</td>
<td><strong>Fire Hazard Pre-Plans:</strong> Develop evacuation strategies and other preemptive measures</td>
<td></td>
<td>Public Works, Economic and Community Development, Neighborhood Services, LA County Sheriff’s Department, Los Angeles County Fire Department</td>
</tr>
<tr>
<td>SE-2</td>
<td><strong>Wildland Interface Fire Standards:</strong> Require that developments located in VHFSZ incorporate and enforce standards for construction, including a fuel modification program (i.e., brush clearance, planting of fire-retardant vegetation).</td>
<td></td>
<td>Public Works, Economic and Community Development, Neighborhood Services, LA County Sheriff’s Department, Los Angeles County Fire Department</td>
</tr>
<tr>
<td>SE-3</td>
<td><strong>Hazard and emergency safety information:</strong> Provide hazard and emergency safety information to the public, including evacuation routes and fire protection resources via the City’s website and social media platforms</td>
<td></td>
<td>Public Works, Economic and Community Development, and Neighborhood Services</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Action</td>
<td>Timeframe</td>
<td>Responsible Department</td>
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</tr>
<tr>
<td>SE-2, SE-5, SE-8</td>
<td><strong>Stakeholder Meetings:</strong> Meet with key stakeholders to ensure evacuation resources and emergency protocols are sufficient</td>
<td></td>
<td>Economic and Community Development and Neighborhood Services</td>
</tr>
<tr>
<td>SE-2, SE-3, SE-5, SE-8</td>
<td><strong>Roadway Assessment:</strong> Assess existing roadways along evacuation routes and emergency access routes to determine the adequacy of existing infrastructure</td>
<td></td>
<td>Public Works, and Los Angeles County Fire Department</td>
</tr>
<tr>
<td>SE-2, SE-3</td>
<td><strong>Critical Facilities Relocation Plan:</strong> Identify critical facilities in hazard zones and prepare a plan for relocation of these facilities</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>SE-1, SE 2, SE-3, SE-9, SE-9</td>
<td><strong>Municipal Code Updates:</strong> Update the Municipal Code to include a requirement for the use of fire-safe landscaping in VHFHSZ’s and a requirement for property owners to clear brush and high fuel vegetation in VHFHSZ’s</td>
<td></td>
<td>Economic and Community Development, Neighborhood Services, and Public Works</td>
</tr>
<tr>
<td>SE-4</td>
<td><strong>Drainage Master Plan:</strong> Update the City’s Drainage Master Plan</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>SE-4, SE-5</td>
<td><strong>Update flood hazard data:</strong> Biannually review flood hazard maps and other relevant floodplain data and revise local maps and information as new data becomes available</td>
<td></td>
<td>Economic and Community Development, Neighborhood Services, and Public Works</td>
</tr>
<tr>
<td>SE-1, SE-8</td>
<td><strong>Review Climate Change Trends:</strong> Annually assess novel state and national trends related to climate change to inform City procedure and future policy development</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>SE-2, SE-3</td>
<td><strong>Critical Facilities Evaluation:</strong> Perform an evaluation of existing critical facilities to identify necessary updates and improvements.</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>SE-8</td>
<td><strong>Review of the City’s Emergency Operation Plan:</strong> Perform a comprehensive review of the City’s Emergency Operation Plan to determine the need for an update.</td>
<td></td>
<td>City Manager’s Office, Neighborhood Services, and Public Works</td>
</tr>
<tr>
<td>SE-1, SE-3, SE-5, SE-8, SE-9, SE-7, SE-10</td>
<td><strong>Publish safety information:</strong> Publish mapped evacuation routes, crime statistics, and other pertinent safety information on the City webpage and social media</td>
<td></td>
<td>Neighborhood Services, Communications, and Public Works</td>
</tr>
<tr>
<td>SE-9 and SE-10</td>
<td><strong>Training and Education Program:</strong> Annually implement an education and training program regarding how to increase public safety in response to natural hazards and crime.</td>
<td></td>
<td>Communications, Neighborhood Services, and Public Works</td>
</tr>
</tbody>
</table>
Sustainability, Climate Action, and Resilience

This chapter of the General Plan serves as the Climate Action Plan for the City of Palmdale and outlines the City’s greenhouse gas reduction and sustainability strategies.
Overview

Climate change is affecting California and the Los Angeles region, and the impacts are projected to worsen, even with only moderate increases in greenhouse gas (GHG) emissions. Climate change is not only impacting our natural environment, but also threatening the health and economic vitality of communities across the State. The future extent to which Palmdale is impacted by climate change is dependent on our actions today. By curbing GHG emissions and adapting our community to the already changing environment, we can significantly reduce the damages incurred from climate change. Palmdale is in a unique position to become a regional climate leader by implementing citywide policies, incentives, and education programs to deploy new technologies, pilot regulatory mechanisms, and spark behavioral change to meet the deep greenhouse gas reduction targets established by the State of California.

Palmdale has embedded this Climate Action Plan (CAP) into its General Plan to serve as a guide for the community’s response to challenges posed by climate change and to build on the City’s ongoing efforts to mitigate and adapt to the impacts of climate change. In addition to climate concerns, this chapter addresses the following additional sustainability issues: water quality and supply, waste management, ecosystem stewardship, environmental literacy, equitable access to open spaces, and supporting the health, well-being, and spirit of the community.
What is Sustainability?

Sustainability is the ability to meet the needs of the current generation without compromising the ability of future generations to meet their needs. Sustainability is a cross-cutting issue that centers on the dynamic relationship between environmental, social equity, and economic considerations. In specific terms, taking a sustainability approach means conserving energy and water, diverting waste from landfills, reducing greenhouse gas emissions, protecting, and restoring ecosystems, and preparing for the potential impacts of climate change, among others.

The importance of practicing sustainability is becoming a greater priority due to the potential impacts of climate change. Climate is the long-term behavior of the atmosphere – typically represented as averages – for a given time of year. This includes average annual temperature, snowpack, or rainfall. Human emissions of carbon dioxide and other greenhouse gases are important drivers of global climate change. Greenhouse gases trap heat in the atmosphere, resulting in warming over time. This atmospheric warming leads to other changes in earth systems, including changing patterns of rainfall and snow, melting of glaciers and ice, and warming and acidification of oceans.

The future impacts of climate change depend in part on the amount of greenhouse gas emissions that are present in the atmosphere. Greenhouse gas emissions are driven by economic systems, land use patterns, transportation and energy systems, resource use, and other social and political factors. The City can help to mitigate the long-term impacts of climate change by reducing greenhouse emissions. Adaptation strategies such as increasing shade and increasing light-colored surfaces can reduce the negative effects of high heat days. Combining climate strategies with other efforts related to water conservation, energy efficiency, recycling, and ecosystem protection helps to increase the overall sustainability and livability of the community.

What is a Climate Action Plan?

A Climate Action Plan (CAP) is the City’s strategic planning document that outlines:

• Current inventory of greenhouse gas emissions
• Projected greenhouse gas emissions
• Greenhouse gas emissions reduction targets
• Strategies and actions for reducing emissions to meet the targets
• Projected changes to natural hazards from climate change

The CAP is reflective of Palmdale’s unique environment and community, and it affirms the City’s environmental leadership in the region.

CEQA Qualified Plan

The GHG reduction targets specified by the State are consistent with substantial scientific evidence published by the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC) regarding the need to ultimately reduce global GHG emissions to 80% below 1990 levels by 2050. This consistency is important for creating a “qualified” CAP. The concept of having a “qualified” CAP means that a CAP meets the criteria specified in CEQA Guidelines Section 15183.5(b) for a plan for the reduction of greenhouse gas emissions, such that a “qualified” CAP may then be used for the specific purpose of streamlining the analysis of GHG emissions in subsequent projects. Local governments have discretion on what levels or targets are established in a “qualified” CAP, provided they address adopted policies and are based on substantial evidence.
State Regulatory Framework

California is a national leader on climate action. The following section describes key elements of the legislative and regulatory context in California. This legislative framework guided the development of the CAP and GHG forecasting.

**Climate Action Targets**

**Executive Order B-55-18 (2018): Carbon neutrality by 2045**
This Executive Order set a target of statewide carbon neutrality by 2045 and to maintain net negative emissions thereafter.

**Senate Bill 32 (2016): Greenhouse Gas emission reduction target for 2030**
This Senate Bill establishes a statewide GHG emission reduction target of 40% below 1990 levels by 2030.

This Assembly Bill requires the California Air Resources Board (CARB) to adopt a statewide GHG limit equivalent to the statewide GHG levels in 1990 to be achieved by 2020. It was California’s first GHG reduction target.

**Senate Bill 379 (2015): Adaptation and Resiliency Planning**
This Senate Bill requires cities and counties to include climate adaptation and resiliency strategies in their general plan updates. The updates were required to include a set of goals, policies, and objectives based on a vulnerability assessment.

**Climate Change Scoping Plan (2017)**
The Climate Change Scoping Plan was approved by CARB in December 2008 and outlines the State’s plan to achieve the GHG reductions required in AB 32. The plan directed municipal governments to reduce emissions by at least 15% by 2020 compared to 2008 levels or earlier. The Scoping Plan was updated in 2017 to reflect the SB 32 target of reducing emissions by 40% under 1990 levels by 2030.

**Clean Energy**

**Senate Bill 100 (2018): Renewable Portfolio Standard**
This Senate bill requires that 100% of all electricity within California be carbon-free by 2045. Electricity providers must procure from eligible renewable energy sources, with interim goals of 40% by 2024 and 50% by 2030.
Transportation

**Senate Bill 375 (2008): Greenhouse Gas emission reduction targets for vehicles**

The Sustainable Communities & Climate Protection Act of 2008 requires CARB to develop regional GHG reduction targets for passenger vehicles. CARB is required to establish targets for 2020 and 2035 for each region covered by one of the State’s 18 metropolitan planning organizations.

**Senate Bill 743 (2013): Transportation Impacts**

Introduces a new performance metric, vehicle miles travelled (VMT), as a basis for determining significant transportation impacts under CEQA. Projects that are anticipated to increase VMT may mitigate impacts through measures such as car-sharing services, unbundled parking, improved transit, and enhanced pedestrian and bicycle infrastructure.


In line with the carbon neutrality goal, this Executive Order requires the elimination of new, internal combustion passenger vehicles by 2035.

**Assembly Bill 2127 (2018): EV charging infrastructure**

The California Energy Commission is required to prepare and biennially update a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption for the state to meet its goal of putting at least 5 million zero-emission vehicles on California roads by 2030.

**Advanced Clean Truck Rule (2020): Zero emission trucks**

CARB adopted this rule requiring manufacturers of heavy-duty, on-road trucks to sell an increasing number of zero-emission trucks. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 vocational truck sales, and 40% of Class 7-8 truck tractor sales.

**Innovative Clean Transit (2018): Zero emission bus fleets**

CARB adopted this rule requiring public transit agencies to gradually transition to 100% zero-emissions bus fleets by 2040. This regulation applies to all transit agencies that own, operate, or lease buses with gross vehicle weight rating (GVWR) above 14,000 lbs.

**Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule (2018)**

The U.S. Environmental Protection Agency (US EPA) and the National Highway Traffic Safety Administration (NHTSA) issued the SAFE Vehicles Rule. This rule set a vehicle fleet efficiency standard increase of 1.5% per year above 2020 standards through 2026.

Solid Waste

**Senate Bill 1383 (2016): Short-lived Climate Pollutants - Organic Waste Reductions**

This Senate Bill establishes a statewide target to reduce the disposal of organic waste by 75% by 2025 to reduce methane emissions from organic material in landfills. As well as establishes edible food rescue requirements.

**Assembly Bill 341 (2012) and Assembly Bill 1826 (2016): Mandatory Recycling**

AB 341 requires all commercial businesses and public entities that generate four cubic yards or more of waste per week and all multi-family apartments with five or more units to have a recycling program in place to help meet the state’s recycling goal of 75% diversion by 2020. AB 1826 requires all commercial businesses to collect yard trimmings, food scraps, and food-soiled paper for composting.
Current Conditions

Sustainability in Palmdale

To date, Palmdale has several key plans in place with the direct purpose of reducing GHGs citywide. The City is implementing the 2011 Palmdale Energy Action Plan (PEAP). Efforts include implementing interior and exterior lighting and heating, ventilation, and air conditioning (HVAC) upgrades across City facilities and installing solar panels to generate renewable, carbon-free energy. The City also installed 21 publicly accessible electric vehicle (EV) chargers, including five DC Fast Chargers to support the transition to EVs. Most importantly, the City is moving forward with a Community Choice Aggregation program (CCA) to supply carbon-free electricity to City residents and businesses starting in October of 2022. Focusing on community emission mitigation provides the City with the greatest opportunity to reduce emissions.

Climate Resilience in Palmdale

**Senate Bill 379**

California Senate Bill (SB) 379 requires cities and counties within the state to consider and address climate change and resiliency within the Safety Element of their General Plans. The Bill requires local agencies to perform a vulnerability assessment that identifies the potential impacts to the community associated with climate change. Further, cities and counties must utilize the vulnerability assessment to develop goals and policies to facilitate climate adaptation and minimize the risks associated with climate impacts.

Resilience issues impacting the City include changes to temperature, precipitation, and wildfire threats. See Table 14.1 for a more detailed explanation of the current and future climate hazards facing Palmdale.

**Temperature**

Average temperatures and the number of extreme heat days are expected to increase in the future. Annual temperatures are estimated to increase by 4.6°F to 9.1°F by the end of the century.\(^{51}\) Similarly, the number of high heat days\(^{52}\) is modeled to increase from 11 in 2017 to 27-33 in 2045 and 35-60 days by the end of the century according to Cal-Adapt.\(^{53}\) Higher temperatures and prolonged heat waves can negatively impact human health. Figure 14.1 illustrates the projected change in average annual minimum temperature in Palmdale, while Figure 14.2 illustrates the projected change in average annual maximum temperatures in Palmdale.

---


\(^{52}\) Number of days in a year when daily maximum temperature is above a threshold temperature of 102.5 °F. Threshold temperature is defined as the 98th percentile value of historical daily maximum/minimum temperatures (from 1961–1990, between April and October) observed at a location.

**Figure 14.1**  
Projected Change in Average Annual Minimum Temperatures in Palmdale

<table>
<thead>
<tr>
<th>MODELED HISTORICAL Baseline (1961-1990)</th>
<th>FUTURE PROJECTIONS Mid-Century (2035-2064)</th>
<th>FUTURE PROJECTIONS End-Century (2070-2099)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 YEAR AVG</td>
<td>30 YEAR RANGE</td>
<td>30 YEAR AVG</td>
</tr>
<tr>
<td>46.9 °F</td>
<td>44.7-49.7 °F</td>
<td>52.4 °F</td>
</tr>
</tbody>
</table>

Source: Cal-Adapt. Data: LOCA Downscaled CMIPS Climate Projections (Scripps Institution of Oceanography), Gridded Observed Meteorological Data (University of Colorado Boulder), LOCA Derived Products (Geospatial Innovation Facility).

**Figure 14.2**  
Projected Change in Average Annual Maximum Temperatures in Palmdale

<table>
<thead>
<tr>
<th>MODELED HISTORICAL Baseline (1961-1990)</th>
<th>FUTURE PROJECTIONS Mid-Century (2035-2064)</th>
<th>FUTURE PROJECTIONS End-Century (2070-2099)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 YEAR AVG</td>
<td>30 YEAR RANGE</td>
<td>30 YEAR AVG</td>
</tr>
<tr>
<td>77.1 °F</td>
<td>73.7-80.2 °F</td>
<td>83.0 °F</td>
</tr>
</tbody>
</table>

Source: Cal-Adapt. Data: LOCA Downscaled CMIPS Climate Projections (Scripps Institution of Oceanography), Gridded Observed Meteorological Data (University of Colorado Boulder), LOCA Derived Products (Geospatial Innovation Facility).
Precipitation
In the present-day climate, the region experiences wide swings in precipitation from year-to-year, and this variability is expected to continue under climate change with fluctuations between wet years and dry years. Climate change is likely to increase the duration and severity of droughts in California. Increasing temperatures and changing precipitation patterns can create periods of abnormally dry weather that result in water supply shortages. Reduced water supplies can have direct and indirect impacts on natural vegetation, wildlife, and quality of life. Figure 14.3 below illustrates the annual precipitation variability beginning in the year 1950 projected through the year 2100.

Similarly, these fluctuations in precipitation can exacerbate flooding hazards. The Antelope Valley Integrated Water Management Plan identified flash flooding and inland flooding as likely to increase due to climate change. The areas of Amargosa Creek, Anaverde Creek, Little Rock Wash, and Big Rock Wash are subject to 100-year floods.

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**Figure 14.3** Projected Change in Average Annual Maximum Temperatures in Palmdale

<table>
<thead>
<tr>
<th>MODELLED HISTORICAL Baseline (1961-1990)</th>
<th>FUTURE PROJECTIONS Mid-Century (2035-2064)</th>
<th>FUTURE PROJECTIONS End-Century (2070-2099)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 YEAR AVG 7.7 inch</td>
<td>30 YEAR AVG 7.8 inch</td>
<td>30 YEAR AVG 8.7 inch</td>
</tr>
<tr>
<td>30 YEAR RANGE 1.2 – 20.8 inch</td>
<td>30 YEAR RANGE 0.8 – 24.3 inch</td>
<td>30 YEAR RANGE 0.9 – 23.9 inch</td>
</tr>
</tbody>
</table>

Source: Cal-Adapt. Data: LOCA Downscaled CMIP5 Climate Projections (Scripps Institution of Oceanography), Gridded Observed Meteorological Data (University of Colorado Boulder), LOCA Derived Products (Geospatial Innovation Facility).
Wildfire

Wildfires in the Angeles National Forest and other nearby forested and natural areas and the associated property damage and worsened air quality are also a concern. Fire danger is impacted by human activity, vegetation, wind, temperature, relative humidity, atmospheric stability, etc. The Keech-Byram Drought Index (KBDI) represents a simplified proxy for favorability of occurrence and spread of wildfire but is not itself a predictor of fire. The KBDI suggests that by 2045 Palmdale could have 57-64 days with conditions to produce and spread wildfire and 62-91 days by the end of the century. As shown in Figure 14.4, the South Coast region, which includes Palmdale, had significant peaks in the area burned in the 1920s, 1940s, 2000s in CalFire state lands and 1920s, 1970s, and 2000s in USFS federal lands. The South Coast region was among the few areas within the State that had an increase in burned area in recent decades.

Air Quality

Air quality is expected to worsen with climate change, as shown in Table 14.1 which describes historic and expected climate impacts in California. Air quality is strongly dependent on weather, and climate change is expected to impact air quality through warming temperatures and more frequent episodes of stagnant air. Many strategies that are used to reduce greenhouse gases, however, will also reduce emissions of air pollutants, such as ozone and particulate matter. Palmdale is part of the Antelope Valley Air Quality Management District (AVAQMD), which does not currently meet state or federal standards for ozone or particulate matter (PM10).

<table>
<thead>
<tr>
<th>Climate Change Hazards</th>
<th>Historical Trend</th>
<th>Future Change</th>
<th>Confidence for Future Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Temperature</td>
<td>Warming (last 100+ years)</td>
<td>Warming</td>
<td>Very High</td>
</tr>
<tr>
<td>Extreme Heat</td>
<td>Rising (last 100+ years)</td>
<td>Rising</td>
<td>Very High</td>
</tr>
<tr>
<td>Annual Precipitation</td>
<td>No significant trends (last 100+ years)</td>
<td>Unknown</td>
<td>Low</td>
</tr>
<tr>
<td>Heavy Precipitation Events</td>
<td>No significant trends (last 100+ years)</td>
<td>Increasing</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Drought</td>
<td>No significant trends (last 100+ years)</td>
<td>Increasing</td>
<td>Medium-High</td>
</tr>
<tr>
<td>Air Quality</td>
<td>Improving (30+ years)</td>
<td>Worsening</td>
<td>Low</td>
</tr>
<tr>
<td>Wildfire</td>
<td>Increasing (last 30+ years)</td>
<td>Increasing</td>
<td>Medium-High</td>
</tr>
</tbody>
</table>

Source: Adapted from California’s Fourth Climate Change Assessment (2018).


Social Vulnerability

There are many social, economic, and environmental factors that influence community and individual vulnerability to climate impacts and their ability to adapt to climate change. Chapter 9: Equitable and Healthy Communities identifies disadvantaged communities (DACs) in Palmdale where residents experience health inequities based on pollution burden and social determinants of health. The populations in DACs may also be more vulnerable to climate change.

Wildfire

The direct and indirect impacts of wildfire are particularly harmful to vulnerable segments of the population. Damage to housing and community assets, evacuation, rebuilding incurs financial losses for which low-income households may not have resources. Residents who are more physically vulnerable (i.e. older adults, people with disabilities) and those without access to information and resources (i.e. people with limited English proficiency or households without a vehicle) may experience challenges evacuating and accessing emergency services like shelters. Older adults, people with heart disease, and people with respiratory conditions are more susceptible to adverse health impacts from wildfire smoke exposure. Children are also more at risk for lung issues related to smoke because their lungs are still developing and other physiological factors. Unhoused individuals are also vulnerable to wildfire smoke if they live outdoors and do not have places to take refuge or access filtered air.

As shown in Figure 14.5, DACs within the Palmdale city limits are not directly within any of the fire hazard severity zones. Within the Sphere of Influence, the DAC portion of census tract 9102.13 is within Moderate, High, and Very High fire hazard severity zones. The DAC portion of census tract 9110.01 is in the High fire hazard severity zone. Regardless of inclusion in fire hazard severity zones, it is important to note that wildfire smoke can affect all DAC tracts by producing bad air quality in the entire city.

Flood

Like wildfire, the direct and indirect impacts of flood are particularly harmful to vulnerable segments of the population. In general, people with lower income are less able to pay for resources to respond and recover from flooding; for instance, recovering from property damage may be burdensome to low-income households, households without flood insurance, and renters. Similarly, unhoused individuals are highly vulnerable to flood because their dwellings and possessions are directly exposed to damage from flooding and susceptible to developing mold post-flood. Households with lower educational attainment and/or who are linguistically isolated are vulnerable to flood impacts as they may have insufficient understanding of preparedness information for flooding risks. After a flood, people with respiratory conditions and other preexisting conditions are more susceptible to adverse health effects from mold accumulation.

As shown in Figure 14.6, Palmdale’s DACs are mostly within the moderate to low-risk zones so they are not highly exposed to flood hazards. Small portions of the DAC tracts east of State Route 14 (Tracts 9102.18, 1905.05, and 1904.04) are in high-risk flood areas.

64. Ibid.
Figure 14.5
WildFire Hazard Severity Zones and DACs

Fire Hazard Severity Zones

City Boundary
Sphere of Influence
Major Highway/Arterial
SB1000 DAC (Not Vacant)

Fire Hazard Responsibility Area, Severity Responsibility Area
Moderate, SRA
High, SRA
Very High, SRA
Very High, LRA

Data Sources:
City of Palmdale GIS data; CalFire, 2007, 2012

Produced by Raimi + Associates
April 2022
Figure 14.6
Flood Hazard Areas and DACs

- City Boundary
- Sphere of Influence
- Other City Boundary
- Major Highway/Arterial
- Railroad
- SB1000 Disadvantaged Communities

Flood Hazard Areas
- Moderate to Low Risk Areas
- High Risk Areas
- Undetermined Risk Areas

Data Sources: City of Palmdale GIS data; FEMA, 2019.
Produced by Raimi + Associates
April 2022
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Air Quality
Air quality could worsen with climate change due to the increased occurrence of stagnation events, a term that describes the phenomenon of contaminated air lingering over a region combined with a lack of rain and wind. Stagnation events lead to an increased concentration of pollution exposure, and thus, increased risk of heart disease and respiratory illnesses. Additionally, ozone production generally increases with hotter temperatures, which can result in the number of ozone days increasing up to 9 days by 2050. In California, rising temperatures could also see an increase between 22-30 days in the annual number of ozone days with over 90 parts per billion (ppb). The current EPA standard for ground-level ozone is 70 ppb, based on scientific evidence of the effects of ozone on public health, including asthma attacks, emergency room visits, and premature death.

Older adults are particularly vulnerable to negative health impacts because they are more likely to have chronic heart conditions and respiratory illness that are exacerbated by poor air quality. Additionally, people of all ages who exercise, work, or live outdoors are more likely to be impacted due to greater exposure.

Heat
Older adults, people with heart disease, and people with respiratory conditions are more susceptible to heat-related illness and death when exposed to extreme heat. Extreme heat affects these physically vulnerable populations because it exacerbates pre-existing conditions and thus their ability to regulate their body temperature. Children are also more vulnerable to impacts of high temperatures because they have less ability to naturally cool their bodies.

Households with lower socioeconomic status are also more at risk of heat stress and/or high temperature mortality. One reason is that having access to air conditioning contributes to one’s ability to withstand high temperatures. Lower income households may not have air conditioning in their dwellings, or if they do, they may not be able to afford running it. Having a lower income is also associated with lack of access to quality healthcare in the case that they experience heat stress or illness. Lastly, workers in outdoor occupations are also more vulnerable to the impacts of extreme heat because they are exposed for longer periods of time to high temperatures.

Resilience and Adaptation Opportunities
Land use modifications, water efficiency and stormwater management, renewable energy generation and storage, and increased organic waste diversion are all adaptive approaches that can improve sustainability on an ongoing basis while also increasing resilience to both the stressors and shocks related to climate change. Additionally, the Local Hazard Mitigation Plan (LHMP) and Safety Element provide guidance to prepare for and respond to earthquakes and other disasters. Many of the measures established in the LHMP can also be activated to respond to climate-related events such as high heat, poor air quality, extreme storm events, or temporary disruption of electricity service. Resilience and adaptation opportunities are addressed by the policies under Goal 8: proactively advance community resilience. Additional emergency response and hazard mitigation policies are included in the Safety, Air Quality, and Equitable and Healthy Communities Elements.

As shown in Figure 14.7 and Figure 14.8, all DACs in Palmdale will be exposed to extreme heat to varying degrees based on representative concentration pathway (RCP) 8.5 projections for mid- and end-of-century. By mid-century, the DAC tracts around the State Route 14 and Highway 138 connection (portions of census tracts 9102.18 and all of census tracts 9104.05, 1904.04, and 9102.13) and those south of Avenue R-8 (portions of census tracts 9106.02, 9106.08, 9107.20 and 9107.06; and all of census tracts 9106.06, 9107.15 and 9107.14) will experience 60-89 extreme heat days annually. The other tracts will experience 90-119 extreme heat days annually. By end-of-century, all DAC tracts will experience 90-119 extreme heat days annually. The tract in the eastern portion of Palmdale’s Sphere of Influence will experience slightly more, with an expected 120.6 extreme heat days annually.

References
https://www.cdc.gov/air/ozone.html
Figure 14.7

Extreme Heat Days and DACs (Mid-Century)

<table>
<thead>
<tr>
<th>City Boundary</th>
<th>Sphere of Influence</th>
<th>SB1000 DAC</th>
<th>Major Highway/Arterial</th>
<th>Railroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-29</td>
<td>30-59</td>
<td>60-89</td>
<td>90-119</td>
<td>120-152</td>
</tr>
</tbody>
</table>

Data Sources:
- City of Palmdale GIS data
- Business as Usual Scenario (High Emissions), Coupled Model Intercomparison Project (CMIP5)
- Fengpeng S, et al. 2015
- World Terrain Base, 2015 ESRI, USGS, NOAA.

Produced by Raimi + Associates
April 2022
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2017 Greenhouse Gas Inventory

The 2017 City of Palmdale greenhouse gas emissions inventory captures communitywide emissions generated from transportation, energy consumption in homes and buildings, solid waste, water, and off-road transportation (e.g., construction and landscaping equipment). It was developed using the ICALI Global Protocol for Community-Scale Greenhouse Gas Emission Inventories.

The City’s most recent GHG inventory for calendar year 2017 estimates total community emissions of 1,042,284 metric tons of Carbon Dioxide equivalent (MTCO2e) (see Table 14.2). Transportation related emissions are the largest contributor to community emissions, accounting for 59%, followed by residential energy use, accounting for 19%, and nonresidential energy use, accounting for 16% of emissions.\(^74\) The remaining 6% of emissions are made up of solid waste, off-road equipment, water and wastewater, and industrial sources (see Figure 14.9).

Community-wide, the City of Palmdale emitted 1,042,284 MTCO2e in 2017, an increase of 13% from the 2005 GHGs estimate of 934,415 MTCO2e. Despite a 13% increase in overall emissions, annual per service population emissions decreased from 2005 to 2017 by 12%, from 6.1 MTCO2e in 2005 to 5.3 MTCO2e in 2017. The service area population is a sum of the populations that live and/or work in the city (population and jobs). These numbers show that population, job growth, and a strong regional economy are the primary driver of emission increases.

\(^74\) Nonresidential energy use data for 2017 is not fully complete because of privacy and aggregation laws that prevent the utilities from providing information for certain customer types. Nonresidential gas and electricity use is likely higher, which would increase total greenhouse gas emissions.

### Table 14.2

<table>
<thead>
<tr>
<th>Sector</th>
<th>Subsector</th>
<th>2005</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESIDENTIAL ENERGY</td>
<td>Residential electricity</td>
<td>98,080</td>
<td>90,470</td>
</tr>
<tr>
<td></td>
<td>Residential natural gas</td>
<td>114,620</td>
<td>107,180</td>
</tr>
<tr>
<td>NONRESIDENTIAL ENERGY</td>
<td>Nonresidential electricity</td>
<td>142,570</td>
<td>119,700</td>
</tr>
<tr>
<td></td>
<td>Nonresidential natural gas</td>
<td>77,510</td>
<td>42,310</td>
</tr>
<tr>
<td>TRANSPORTATION</td>
<td>On-Road Transportation</td>
<td>379,810</td>
<td>615,601</td>
</tr>
<tr>
<td>SOLID WASTE</td>
<td>Landfilled Waste</td>
<td>44,050</td>
<td>30,490</td>
</tr>
<tr>
<td>OFF-ROAD</td>
<td>Off-Road Equipment</td>
<td>31,300</td>
<td>8,634</td>
</tr>
<tr>
<td>WATER</td>
<td>Water and Wastewater</td>
<td>46,475</td>
<td>27,900</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>934,415</strong></td>
<td><strong>1,042,284</strong></td>
</tr>
</tbody>
</table>


### Figure 14.9

Percent of Palmdale Community GHG Emissions by Source in 2017

Greenhouse Gas Emissions Forecast

Two emissions forecasts were prepared to estimate Palmdale’s emissions from 2020-2045 as presented in Table 14.3. The forecasts were developed based on the General Plan growth projections related to population and the number of jobs and housing units in the City in horizon year 2045. Population is projected to increase 31%, jobs 95%, housing units 48%, and service population 43% by 2045.

These forecasts show the emissions reductions the CAP actions will need to achieve to become carbon neutral by 2045.

**Business-As-Usual (BAU)**
The BAU scenario projects future emissions based on current population and regional growth trends, climate patterns and their impacts on energy use, and regulations (Federal, State, and local) introduced before the 2017 inventory year. BAU projections demonstrate the expected growth in GHG emissions if no further action is taken by the State or at the local level after 2017. Under this “do nothing” scenario, the City’s emissions are estimated to increase by 54% by 2045 as compared to 1990 levels.

**Adjusted Business-as-Usual (ABAU)**
The ABAU forecast shows how Palmdale’s emissions are anticipated to change while accounting for the impacts of adopted State climate-related policies if no action is taken at the local level. Based on the results of the ABAU forecast, emissions are expected to decrease of 10% by 2045 as compared to 1990 levels.

### Table 14.3

<table>
<thead>
<tr>
<th>1990 (Backcast)</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAU</td>
<td>794,253</td>
<td>1,064,115</td>
<td>1,121,756</td>
<td>1,179,398</td>
<td>1,236,709</td>
<td>1,294,680</td>
</tr>
<tr>
<td>ABAU</td>
<td>1,017,165</td>
<td>933,108</td>
<td>849,051</td>
<td>795,517</td>
<td>767,790</td>
<td>706,943</td>
</tr>
</tbody>
</table>

*Source: R+A Emissions Forecast (2021).*

### Greenhouse Gas Reduction Targets

Palmdale has set the following GHG reduction targets consistent with State policy:

- **40% BELOW 1990 LEVELS BY 2030 (SB 32)**
- **CARBON NEUTRALITY BY 2045 (EO B-55-18)**

The CAP includes strategies and actions to significantly reduce GHGs in the future—but legacy use of natural gas or other fossil fuels or technological constraints may prevent the ability to reduce emissions to absolute zero by 2045. As a result, to achieve carbon neutrality, the City may need to offset any remaining tons of GHGs emitted with an equivalent amount of GHGs removed through a combination of nature-based solutions, carbon capture technology, and carbon offsets.
Greenhouse Gas Reduction Strategy

One of the primary objectives of this CAP is to identify pathways for reducing local GHG emissions from the City of Palmdale. The following section includes mitigation opportunities to reduce local GHG emissions.

Mitigation Opportunities

Clean Energy
Residential and nonresidential energy use, including electricity and natural gas, account for 35% of Palmdale’s greenhouse gas emissions. These emissions are mainly driven by the burning of fossil fuel and natural gas. The proportion of emissions related to natural gas are expected to increase while emissions related to electricity are expected to decrease because the City has created a Community Choice Aggregation (CCA) program, Energy for Palmdale’s Independent Choice (EPIC), that will be able to supply less carbon intensive electricity than what is currently available from Southern California Edison. A keystone effort being led by the State to help achieve its climate goals is to provide clean grid electricity, including the installation of distributed energy resources (DERs) such as local solar projects. Senate Bill 100’s renewable portfolio standard will require that supplied energy not only be 100% carbon-free by 2045 but also 100% generated from renewable sources like wind, solar, and local biogas. This opportunity for clean energy to fuel buildings and vehicles in Palmdale is addressed by the policies under Goal 2: Utilize a fossil fuel free energy system (SB 100).

Buildings
Buildings are the primary users of energy within the city and the main vehicle to reduce energy-related emissions. Electricity use in residential and nonresidential buildings accounts for 20% of community emissions and natural gas use accounts for 14% of community emissions; however, natural gas use is underestimated due to aggregation laws. There are two main approaches to reduce emissions in buildings. The first is improved energy efficiency of new and existing buildings and the second is through the electrification of buildings. Electrification removes natural gas systems from buildings and uses electric alternatives to take advantage of the cleaner electricity that will be provided by EPIC.

The number of employees and residents in Palmdale is expected to increase through 2045, and this growth will result in the construction of new residential and commercial buildings. New construction is governed by the California Building Code and must meet the California Green Building Standards (CALGreen), which includes requirements for energy performance. The building code is updated every three years to reflect industry best practices and increase the sustainability of new construction. However, to avoid developing GHG-emitting buildings and infrastructure with useful lives beyond the City’s emissions reduction goals, Palmdale will need to exceed CALGreen standards for all new construction and major remodels in the city.

Most building-related emissions are attributable to the existing building stock, which is much less efficient than new construction due to being built when building energy standards were nonexistent. Decarbonizing existing buildings is critical to meeting emissions reduction goals. There are many challenges associated with improving the performance of existing buildings including costs, rental/ownership status and split incentives, and technological constraints. However, benefits include healthier indoor air quality, reduced energy use and lower utility bills, and more resilient building systems. The opportunity to reduce building related emissions are addressed by the policies under Goal 3: Green and decarbonized buildings for new construction and major renovations.

Transportation
Having access to clean electricity makes supporting the transition to electric vehicles across Palmdale more beneficial. Although transportation demand policies are addressed in the Mobility Element of the General Plan, transportation is the largest contributor to community emissions, accounting for 59% of total emissions. Transportation is also projected to account for most emissions in 2045. To date, Palmdale has participated in the Southern California Electric Vehicle Ready project and is installing electric vehicle charging stations in public parking facilities. The City also partners with regional transit agencies including Antelope Valley Transit Authority (AVTA), Santa Clarita Transit, and Metrolink to provide alternative transportation choices. In March 2022, AVTA became the first agency to place into service a 100% zero-emission transit fleet in North America with 57 BYD zero-emission buses, 10 GreenPower EV Star Microtransit vans, and 20 MCI battery-electric commuter coaches. The City is also currently undertaking several Complete Streets projects to encourage walking and biking. The opportunity to reduce transportation related emissions are addressed by the policies under Goal 4: Reduced greenhouse gas emissions from transportation (SB 379, EO N-79-20).

Solid Waste
Solid waste accounts for 3% of Palmdale’s community emissions. By consuming less materials, recycling, and composting more, the community will be able to reduce the amount of waste sent to the landfill. Specifically, diverting organic material including food waste is a crucial step to meeting long-term goals, because organic materials produce methane, which is a more potent GHG than carbon dioxide. The State adopted Senate Bill 1383, the Short-Lived Climate Pollutants Act, which requires jurisdictions to divert 75% of food waste from landfills by 2025 and recover food waste that can be repurposed. Moreover, organics recycling can provide useful byproducts including compost and biogas, which can further reduce emissions and provide economic benefits. The opportunity to reduce solid waste related emissions are addressed by the policies under Goal 5: Increased resource capture and reduced waste sent to landfills (SB 1383).
**Water and Wastewater**

Water is a critical resource in California and Palmdale. Regional water supplies are already being adversely affected by climate change induced drought and decreased snowpack. Two water suppliers predominantly serve Palmdale: Palmdale Water District (PWD) and Los Angeles County Waterworks District 40 (LACWD 40). Both suppliers draw primarily from imported water from the State Water Project or Antelope Valley-East Kern Water Agency and local groundwater. Local groundwater supplies account for 25%-65% of supplies. Climate change may impact local hydrology and affect natural recharge to the local groundwater aquifers and the quantity of groundwater that could be pumped sustainably over the long-term. Lower rainfall and/or more intense runoff, increased evaporative losses, and warmer and shorter winter seasons can also alter natural recharge of groundwater.

Although water related emissions in Palmdale account for only 3% of the communitywide total emissions, the ecosystem and quality of life benefits that reliable clean water provide are important to protect. Thus, reducing indoor and outdoor water use through fixture upgrades and climate-appropriate landscaping for both residential and nonresidential buildings is incorporated in the General Plan. The opportunity to reduce water and wastewater related emissions are addressed by the policies under Goal 6: Safe and secure water supply.

**Ecosystems**

Carbon sequestration is the long-term removal of carbon dioxide from the atmosphere into the earth’s natural systems including trees, grasses, soils, and riparian areas, thereby slowing the accumulation of GHGs in the atmosphere. There are several forms of carbon sequestration, including planting trees, applying compost to open spaces, reusing tree biomass (tree chips) as mulch, and restoring and protecting natural areas. Carbon sequestration through the enhancement of natural systems provides many quality-of-life and resiliency co-benefits in addition to emissions reductions. For example, expanding the urban forest can help mitigate the urban heat island, improve air quality, provide traffic calming, and reduce energy use. Similarly, protecting open space can provide increased opportunities for outdoor recreation and promote biodiversity. Opportunities for ecosystem enhancement and sequestration are addressed by the policies under Goal 7: Open spaces designed to provide multiple climate and sustainability functions.

As illustrated in Figure 14.10 below, the City will need to proactively take local climate action to reduce and offset greenhouse gas emissions to achieve the GHG reduction targets. Implementing these measures can achieve the 2030 target and SB 32 goal of a 40% mass emissions reduction below 1990 levels. Furthermore, this analysis shows a 73% reduction of emissions is possible by 2045. State and regional policies and regulations are projected to reduce 2045 business-as-usual (BAU) emissions by 48%, while the actions within this CAP are projected to further reduce 2045 emissions by 25%. Therefore, additional action will be needed to close the gap of 369,956 MTCO2e to achieve carbon neutrality by 2045.
Reduction Approach

Palmdale will work to achieve carbon neutrality by 2045 by building upon the progress the City has already made and adopting new emissions reduction strategies and actions. Together, these strategies and actions: (1) provide a framework for reaching carbon neutrality; (2) make Palmdale more resilient to future climate impacts; and (3) have important social and economic benefits, such as addressing historic inequities, creating green jobs, increasing community green spaces, and improving public health. Figure 14.11 outlines the City’s five step approach to reducing community GHG emissions.

**Figure 14.11** Approach To Reduce GHG Emissions

**STEP 1**
- Foundational focus on expanding access to carbon free electricity by creating a CCA that offers 75% carbon free electricity.
  - Clean energy is key to reducing emissions from both buildings and transportation and meeting the City’s long-term goals.

**STEP 2**
- Significantly reduce emissions from energy use by making buildings more energy efficient while electrifying appliances and infrastructure. At the same time, reduce transportation emissions by expanding electric vehicle adoption and shifting away from single occupancy vehicles.

**STEP 3**
- Take advantage of the City’s access to carbon free electricity and experience all the co-benefits associated with it by phasing out natural gas building systems and fossil fuel-based transportation.
  - This transition will include electrifying new and existing buildings and transitioning to electric vehicles.

**STEP 4**
- Expand zero waste and sustainable consumption programs. These programs divert organic waste from landfills, where it produces potent methane emissions, and helps community members to buy and consume less generally, which reduces upstream emissions from material production and consumption.

**STEP 5**
- Throughout this process, pursue local carbon sequestration projects, including expanding local tree planting programs and adopting nature-based solutions that protect and restore natural systems and naturally capture and store carbon. Carbon sequestration is vital in reaching carbon neutrality and will help Palmdale close any gaps left by other initiatives.
Desired Outcomes, Indicators, and Targets

The following desired outcomes and metrics were identified to help the City of Palmdale in tracking progress toward creating a more sustainable community. This process follows the City of Palmdale’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission, and City Council.

**Top Key Outcomes**

**OUTCOME:** Palmdale is a regional leader by integrating sustainability and climate action into all decisions and inspiring other communities to eliminate greenhouse gas emissions.

**KPI’s:**
- Reduction in energy and water use
- Reduction in vehicle miles traveled
- Increased diversion of waste from landfills

**TARGET:**
- Carbon neutrality by 2045
  (EO B-55-18)

**OUTCOME:** New and existing buildings are decarbonized and able to operate on carbon-free energy.

**KPI’s:**
- Number of buildings retrofit per year to be all-electric
- Renewable or carbon-free content of electricity
- Total kilowatts or megawatts of distributed renewables installed
- Energy Use Intensity for existing buildings

**TARGETS:**
- 100% of new and 50% of existing buildings are all-electric and energy efficient
- Energy supply is 100% renewable (SB 100)

**OUTCOME:** Secure water supply and efficient use through aquifer management and increased water reuse.

**KPI’s:**
- Compliance with water quality regulations for potable water and stormwater quality
- Water use per capita (gpcd)
- Number of permitted greywater reuse systems

**TARGET:**
- Water use is 85 gallons or less per person per day

**OUTCOME:** Reduced emissions from transportation, increase access and safety for walking, biking, and transit use.

**KPI’s:**
- Number of pedestrian and cyclist accidents and fatalities
- Vehicle miles traveled
- Mode share
- Number of EV chargers installed
- Electric vehicle ownership

**TARGETS:**
- Zero pedestrian and cyclist fatalities
- Increase in walking and biking mode share

KPI = Key Performance Indicator
KPI’s:
• Total area of parks
• Park space per capita
• Percentage of people within a 20-min to a park or open space

TARGET:
• 80% of residents have nearby access to natural or open space

OUTCOME: Ecosystems and other existing or future natural open spaces are enhanced through restoration, redesign, and ongoing maintenance practices.

KPI’s:
• Number of resilience hubs
• Number of low-income and senior housing units receiving weatherization and energy efficiency upgrades
• Number of heat-related deaths, hospitalizations, and emergency room visits

TARGETS:
• A community resilience hub at each Village Center and Multiuse Nodes
• 50% of existing low-income dwelling units receive weatherization/upgrades
• 15% reduction in heat-related hospitalization and emergency room visits

OUTCOME: The most vulnerable residents are protected from climate and hazard impacts.

KPI’s:
• Total area of green space and reflective roofs

TARGETS:
• 30% of heat trapping surfaces converted to green space or reflective materials
• 40% tree canopy cover

OUTCOME: Impacts of urban heat island are reduced and mitigated.

KPI = Key Performance Indicator

CV Link Trail in Cathedral City, California
Goals and Policies

The following section includes goals and policies for the Sustainability, Climate, and Resilience Element. Goals and policies are followed by implementation actions. Related Sustainability, Climate, and Resilience policies are woven throughout the General Plan, including in the Land Use and Community Design, Circulation and Mobility, Public Facilities, Services, and Infrastructure, Equitable and Healthy Communities, and Safety Elements, among others.

**MAINTAIN AND IMPLEMENT CAP**

Goal SCR-1
Achieve a carbon neutral community by 2045 (EO B-55-18).

**SCR-1.1 CAP Maintenance.** Maintain and regularly update a Climate Action Plan to reduce GHGs generated within the City.

**SCR-1.2 GHG Inventory.** Conduct community GHG inventories every 3-5 years to track progress toward achieving the City’s GHG reduction goal.

**SCR-1.3 Funding Sources.** Seek funding to support implementation of GHG reduction projects for the City, residents, and businesses.

**SCR-1.4 Community Engagement.** Develop and implement comprehensive community engagement including educational outreach, issue-specific awareness campaigns, and technical assistance.

**CLEAN ENERGY**

Goal SCR-2
Utilize a fossil fuel free energy system (SB 100).

**SCR-2.1 Carbon Free Energy.** Direct EPIC to provide 75% carbon-free or renewable electricity to residents and businesses by 2030, achieving 100% carbon-free electricity by 2045.

**SCR-2.2 Community Solar.** Explore the development of community solar projects and microgrids.

**SCR-2.3 Battery Permitting.** Establish a streamlined approval process for battery storage systems.
BUILDINGS

Goal SCR-3
Green and decarbonized buildings for new construction and major renovations.

SCR-3.1 Energy Efficient New Construction. Integrate CALGreen Tier 1 and Tier 2 green building and energy efficiency standards into new construction and major remodels.

SCR-3.2 All-Electric Reach Code. Consider adopting a local reach code to encourage new buildings to be all-electric.

SCR-3.3 Solar and Storage. Require installation of photovoltaic panels and battery storage on all residential new construction and nonresidential new construction over 5,000 sq. ft.

SCR-3.4 Energy Efficient Existing Buildings. Establish an energy and water efficiency upgrade program for existing buildings, focusing resources on the most underserved populations.

SCR-3.4 Benchmarking Energy and Water Use. Register municipal buildings with Energy Star Portfolio Manager and report energy and water use (AB 802).

TRANSPORTATION

Goal SCR-4
Reduced greenhouse gas emissions from transportation (SB 379, EO N-79-20).

SCR-4.1 Bike Facilities. Promote bicycle use with new private development projects through requirements for bicycle parking, lockers and showers, bike share facilities, and when feasible, connections to City bike lanes.

SCR-4.2 Public Transit. Expand the public transit system, increase frequency of service, and provide shade at transit stops.

SCR-4.3 Public EV Chargers. Install EV chargers at suitable public facilities, including any parking structures, the future multi-modal High Speed Rail station, and community parks.

SCR-4.4 EV Reach Code. Adopt EV requirements beyond CALGreen in both number of chargers and charger capacity.

SCR-4.5 ZEV Purchasing. When purchasing City vehicles give preference to fuel efficient vehicles, including the use of zero emission vehicles.

SCR-4.6 Clean Fuels. Require use of clean fuels for City construction and maintenance vehicles and lawn/garden equipment.

SCR-4.7 Pedestrian and Cyclist Safety. Promote bicycle and pedestrian modes of travel by promoting pedestrian and cyclist safety.
**SOLID WASTE**

**Goal SCR-5**
Increased resource capture and reduced waste sent to landfills (SB 1383).

**SCR-5.1 Zero Waste Plan.** Create a zero-waste plan that institutes cost-effective diversion programs for municipal operations and the community.

**SCR-5.2 Organic Waste Diversion.** Establish programs to comply with State-established requirements for organics and food waste diversion.

**SCR-5.3 Waste Diversion Education and Assistance.** Develop an education and technical assistance program for residents and businesses on composting, recycling, and reuse of materials.

**SCR-5.4 Nonresidential Collection Efficiency.** Continue to review waste franchise agreements to establish rate structures that encourage less frequent nonresidential collection.

**WATER AND WASTEWATER**

**Goal SCR-6**
Safe and secure water supply.

**SCR-6.1 Recycled Water.** Increase municipal reuse of local recycled water. Support the efforts of the Palmdale Water District and the Joint Powers Authority (JPA) Palmdale Recycled Water Authority (PRWA) in its proof of concept and implementation of aquifer augmentation through advanced treatment of recycled water.

**SCR-6.2 Water Efficiency Standards.** Establish water efficiency standards that are more stringent than CALGreen and model water efficient landscape ordinance (MWELO).

**SCR-6.3 Low-Water Use Plant List.** Implement the City’s landscape plant list and use of low-water plants in new or renovated landscaped areas.

**SCR-6.4 Rainwater Capture.** Encourage rainwater capture and use of cisterns for outdoor watering purposes.

**SCR-6.5 Greywater Permitting.** Establish a streamlined permitting process for greywater systems.

**ECOSYSTEMS**

**Goal SCR-7**
Open spaces designed to provide multiple climate and sustainability functions.

**SCR-7.1 Tree Planting in Public Spaces.** Plant additional trees on streets, parks, and other public spaces to sequester carbon, provide shade, contribute to stormwater management, provide habitat, and enhance community character.

**SCR-7.2 Preferred Tree and Plant List.** Establish a preferred tree list of species appropriate for the urban forest which are more resilient to drought, heat, and pests. Prioritize native plants and pollinator-friendly plants.

**SCR-7.3 Tree Planting on Private Property.** Adopt a tree preservation ordinance to encourage tree preservation and additional planting on private property as appropriate.

**SCR-7.4 Green Infrastructure.** Integrate green infrastructure stormwater management practices into the design of open spaces and public rights-of-way.

**SCR-7.5 Cool Pavement.** Incorporate cool pavement practices into street maintenance activities to reduce the urban heat island effect.
COMMUNITY RESILIENCE AND AWARENESS

Goal SCR-8
Proactively advance community resilience.

SCR-8.1 Local Hazard Mitigation Plan. Build on the existing LHMP and acknowledge the LHMP in the General Plan per AB 2140.

SCR-8.2 Areas of Physical and Social Vulnerability. Focus investments on areas of high vulnerability, exposure, and sensitivity for both physical infrastructure and social communities.

SCR-8.3 Public Safety Power Shutoffs. Work with Southern California Edison (SCE) to minimize the impacts of Public Safety Power Shutoffs.

SCR-8.4 Resilience Features. Add resilience features to community facilities to provide basic services during disruptive events or disasters.

SCR-8.5 Pre-Disaster Recovery Plan. Create a pre-disaster recovery plan that sets up post-disaster policies and programs indicating which areas will be replanned and when, and that shows where and how rebuilding will occur.

SCR-8.6 Disaster Rebuilding and Recovery. Develop policies to ensure that housing units damaged during a natural disaster are repaired or replaced in ways that advance the policies, objectives, and actions of the General Plan.

SCR-8.7 Heat and wildfire mitigation. Develop policies and building standards that reduce the urban heat island effect and the risk and damage of wildfire such as:
- Encourage the use of high-albedo roofs and paving
- Incorporate more robust temperature and air quality controls in facility retrofits and designs
- Provide consolidated public messaging about wildfire preparation, evacuation, and communications avenues in multiple languages
- Encourage fire-wise landscaping including alternatives to wood fencing
- Require ember-resistant attic ventilation openings
- Encourage the installation of air filters to protect against indoor air quality impacts during wildfire smoke exposure events
- Identify and modify vulnerable infrastructure in high wildfire risk areas, such as replacing wooden utility poles or undergrounding utility lines

Goal SCR-9
Awareness of Palmdale’s environmental past and present.

SCR-9.1 Integration of Sustainability. Integrate environmental and sustainability issues into City decision-making processes, operations, community activities, and criteria in budgeting and prioritization efforts through a “triple bottom line” approach.

SCR-9.2 Acknowledge Indigenous History. Acknowledge and celebrate the Indigenous history and tradition of the area now known as Palmdale.

SCR-9.3 Raise Awareness about Natural Systems. Provide interpretive displays and other information on natural systems at parks, nature centers, and trailheads.
Implementation Actions

The table below identifies programs, policy updates, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s sustainability, climate, and resilience vision and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goals</th>
<th>Description</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR-1</td>
<td><strong>Conduct community GHG inventory and update CAP.</strong> Track GHG reductions by inventorying community emissions and update CAP to address challenges.</td>
<td>___</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>SCR-1</td>
<td><strong>Conduct Outreach.</strong> Develop and implement comprehensive community engagement including educational outreach, issue-specific awareness campaigns (i.e., wildfire prevention, water, and energy efficiency, building and vehicle electrification, etc.), and celebrate Palmdale’s natural and cultural history.</td>
<td>___</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>SCR-2</td>
<td><strong>Provide 75% carbon-free electricity.</strong> Prepare for EPIC to provide 75% carbon-free electricity by 2030 and 100% carbon-free electricity by 2045 through the Integrated Resource Plan (IRP) process.</td>
<td>____</td>
<td>Finance and City Manager’s Office</td>
</tr>
<tr>
<td>SCR-2</td>
<td><strong>Streamline battery permitting process.</strong> Establish a streamlined approval process for battery storage systems.</td>
<td>___</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Description</td>
<td>Timeframe</td>
<td>Responsible Department</td>
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<tr>
<td>SCR-3, SCR-4</td>
<td><strong>Adopt Reach Codes.</strong> Amendment to the Building Code that incentivizes all-electric new construction, increased energy efficiency, electric-ready buildings, enhanced solar and battery requirements, and installation of EV chargers or EV-Ready infrastructure.</td>
<td></td>
<td>Public Works and Economic and Community Development</td>
</tr>
<tr>
<td>SCR-4</td>
<td><strong>Install public EV chargers.</strong> Install EV chargers at suitable public facilities, including Downtown parking structures and community parks and the future High-Speed Rail station.</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>SCR-4</td>
<td><strong>Adopt City purchasing policies.</strong> Adopt city vehicle purchasing policy giving preference to fuel efficient vehicles and zero emission vehicles. Require use of clean fuels for City construction and maintenance vehicles and lawn/garden equipment.</td>
<td></td>
<td>Finance and Public Works</td>
</tr>
<tr>
<td>SCR-5</td>
<td><strong>Zero Waste.</strong> Explore ways to reduce waste generation and divert recyclables and organic waste from landfills to move toward zero waste.</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>SCR-5</td>
<td><strong>Establish compliance pathways to comply with SB 1383.</strong> Establish programs to comply with requirements for organics and food waste diversion.</td>
<td></td>
<td>Public Works</td>
</tr>
<tr>
<td>SCR-5</td>
<td><strong>Develop and implement community outreach.</strong> Develop an education and technical assistance program for residents and businesses on composting, recycling, and reuse of materials.</td>
<td></td>
<td>Public Works and Communications</td>
</tr>
<tr>
<td>SCR-3, SCR-4, SCR-6, SCR-7, SCR-8</td>
<td><strong>Implement Code/Guideline Modifications.</strong> Multiple code modifications to Building Code and Zoning Ordinance to address expanded application of the MWELO, stricter plumbing fixture standards, tree planting, battery storage, and microgrids</td>
<td></td>
<td>Public Works, Finance, and Economic and Community Development</td>
</tr>
<tr>
<td>SCR-6</td>
<td><strong>Streamline greywater permitting process.</strong> Establish a streamlined permitting process for greywater systems.</td>
<td></td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Description</td>
<td>Timeframe</td>
<td>Responsible Department</td>
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</tr>
<tr>
<td>SCR-8</td>
<td><strong>Adopt City policies and plans to improve emergency response.</strong> Develop resilient infrastructure and supply networks, including back up sources of water, power, and communications; increasing membership in CERT; and creating evacuation procedures for vulnerable populations in partnership with CBOs and facilities that serve identified populations.</td>
<td></td>
<td>Economic and Community Development, Public Works, and Neighborhood Services</td>
</tr>
<tr>
<td>SCR-8</td>
<td><strong>Prioritize investments in vulnerable populations.</strong> Assess climate hazards/resilience benefits in capital improvement planning and building design. Use projected climate change impacts rather than historical averages.</td>
<td></td>
<td>Economic and Community Development, Public Works, and Neighborhood Services</td>
</tr>
<tr>
<td>SCR-8</td>
<td><strong>Increase resilience to power outages from public safety or weather-related events.</strong> Require battery backup systems in new residential and multi-family developments whenever cost is not prohibitive.</td>
<td></td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>Correlating Goals</td>
<td>Description</td>
<td>Timeframe</td>
<td>Responsible Department</td>
</tr>
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</tr>
<tr>
<td>SCR-8</td>
<td>Add resilience features to community facilities. Identify and implement modifications to existing cooling centers to function as resilience hubs, clean air spaces, and community space during disaster events</td>
<td></td>
<td>Public Works</td>
</tr>
</tbody>
</table>
The Air Quality Element establishes goals and policies related to protecting, maintaining, and enhancing air quality within Palmdale.
Statutory Requirements

The federal and state government each regulate air quality by monitoring and limiting emission of airborne pollutants. Both levels of government have established ambient air quality standards for outdoor concentrations of various pollutants that are used to determine the adequacy of a community’s air environment. Per California Government Code Section 65302, objectives and policies centered around air quality are geared toward reducing the unique or compounded health risks in disadvantaged communities by means that include, but are not limited to, the reduction of pollution exposure, including the improvement of air quality, and the promotion of public facilities, food access, safe and sanitary homes, and physical activity.

Federal Clean Air Act

The Federal Clean Air Act (FCAA) is the comprehensive federal law that regulates air emissions at the national level. The goal of the Act is to protect public health by ensuring that air quality across the United States meets the recommended guidance to protect human wellbeing. The law grants the United States Environmental Protection Agency (USEPA) the authority to establish National Ambient Air Quality Standards (NAAQS). Through the FCAA, the USEPA requires states to develop state implement plans (SIPs) that outline strategies to meet the established national standards. Federal and state standards have been established for ozone, CO, NO2, SO2, PM10, PM2.5, and Pb. The national and state ambient air quality standards have been set at levels whose concentrations could be generally harmful to human health and welfare, and to protect the most sensitive persons from illness or discomfort with a margin of safety.

California Air Resource Board

The California Air Resource Board (CARB) is a regulatory body that establishes standards and procedures for adequate air quality across the state. The state air quality standards regulated by CARB are known as the California Ambient Air Quality Standards (CAAQS). Local control in air quality management is provided by CARB through multi-county and county-level Air Pollution Control Districts (APCD). CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. Palmdale is under the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD), with monitoring contracted to the Mojave Desert Air Quality Management District. The California Air Resource Board (CARB) is a regulatory body that establishes standards and procedures for adequate air quality across the state. The state air quality standards regulated by CARB are known as the California Ambient Air Quality Standards (CAAQS). Local control in air quality management is provided by CARB through multi-county and county-level Air Pollution Control Districts (APCD). CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. Palmdale is under the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD), with monitoring contracted to the Mojave Desert Air Quality Management District.
Relevant Plans & Documents

AVAQMD Air Quality Management Plan
Under state law, the AVAQMD is required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The AVAQMD updates the plan every three years. Each iteration is an update of the previous plan and has a 20-year horizon. AVAQMD released the final 2016 Air Quality Management Plan (AQMP) in March 2017. It provides a comprehensive and integrated plan primarily focused on addressing ozone standards. The plan is a regional and multi-agency effort involving AVAQMD, CARB, the Southern California Association of Governments (SCAG), and the USEPA.

AVAQMD Attainment Planning Documents
The AVAQMD has several additional planning documents that are prepared to facilitate regional compliance with air quality standards. In the Los Angeles County portion of the Mojave Desert Air Basin (MDAB), the AVAQMD is required to prepare a plan for improvement for the air pollutants for which the MDAB is in non-attainment. The AVAQMD has developed the following federal and State attainment planning documents:

- 8-hour Ozone Standards State Implementation Plan: Coachella Valley and Western Mojave Desert 8-hour Ozone Nonattainment Areas (2014)
- 2008 Ozone Early Progress Plans
- 2007 Mojave Desert Ozone Attainment Plan
- 2004 Antelope Valley Ozone Attainment Plan
Climate and Topography

As noted above, Palmdale is located in the MDAB, which is under the jurisdiction of the AVAQMD. The AVAQMD is the local air quality management agency responsible for monitoring the local air pollutant levels to ensure that state and federal air quality standards are met. The MDAB is characterized by mountain ranges and valleys, with frequent prevailing winds originating from the coastal and central regions.

Palmdale is located in northern Los Angeles County within Antelope Valley. Antelope Valley is located on the western side of the Mojave Desert which stretches approximately 3,000 square miles. The Antelope Valley is separated from the San Joaquin Valley on the northwest by the Tehachapi Mountains. It is also divided by the San Gabriel Mountains on the south and southwest. Isolated buttes distinguish the north and east boundaries of the Antelope Valley. Palmdale is dominated by the region’s Pacific high-pressure system, which contributes to the area’s hot, dry summers, and relatively mild winters.

As a result of its location and extreme heat of the Mojave Desert, Palmdale’s air quality is greatly impacted by transport air pollution which is sourced from the poor air quality areas of the Los Angeles Basin and San Joaquin Valley. In Southern California, pollutants are transported from upwind areas to the inland areas, including Palmdale. The pollutant transport pattern degrades the local air quality within the City of Palmdale and the surrounding jurisdictions.

Air Pollutants of Primary Concern

The United States EPA and the CARB have established ambient air quality standards for certain “criteria” pollutants. Criteria pollutants are those pollutants in which the relative atmospheric concentrations are indicators of overall air quality. The primary criterion pollutants for which EPA and CARB standards exist include ozone (O3), carbon monoxide (CO), suspended particulates (PM10), fine particulate matter (PM2.5), lead (Pb) and sulfur dioxide (SO2). Ambient criteria air pollutant concentrations are affected by the rates and distributions of corresponding air pollutant emissions, as well as by the climate and topographic influences discussed above. The primary determinant of concentrations of non-reactive pollutants, such as carbon monoxide (CO) and suspended particulate matter, is proximity to major sources. Ambient CO levels usually closely follow the spatial and temporal distributions of vehicular traffic. The primary pollutants of concern includes ozone, carbon monoxide, nitrogen dioxide, suspended particles, lead, Toxic Air Contaminants (TAC), and sulfur. See the Air Quality section in the Existing Conditions Report for a description of each pollutant of concern.
Existing Ambient Air Quality

As mentioned above, the USEPA and CARB have established ambient air quality standards for major pollutants, including O3, CO, NO2, SO2, Pb, PM10, and PM2.5. Standards have been set at levels intended to be protective of public health. California standards are more restrictive than federal standards for each of these pollutants except for lead and the eight-hour average for CO.

Attainment Status

Local air districts and CARB monitor ambient air quality to ensure that air quality standards are met and develop strategies to meet the standards when they are not met. As part of this effort, the local air district must sample local air quality via regional monitoring stations. These air quality monitoring stations measure pollutant ground-level concentrations at multiple locations. Depending on whether the state and federal standards are met, the local air basin is classified as in “attainment” or “non-attainment.” Some areas are unclassified, which means no monitoring data are available, but the area is considered to be in attainment.

Table 15.1 summarizes the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS) for each criteria pollutant as well as the attainment status of the MDAB. As shown in the table, the MDAB is in non-attainment for the State and Federal standards for ozone. Table 15.1 also shows how the reported local levels for Palmdale in terms of ozone, PM10, PM2.5, and nitrogen dioxide are in line with State and National standards.

### Table 15.1

**Ambient Air Quality Measurements and Basin Attainment Status**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Ozone</td>
<td>1-hour 8-hour</td>
<td>0.099 ppm 0.084 ppm</td>
<td>0.09 ppm 0.07 ppm</td>
<td>Non-Attainment</td>
<td>n/a 0.075 ppm</td>
<td>Non-Attainment</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>1-hour 8-hour</td>
<td>** **</td>
<td>20.0 ppm 9.0 ppm</td>
<td>Attainment</td>
<td>35.0 ppm 9.0 ppm</td>
<td>Attainment/Unclassified</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>1-hour Annual</td>
<td>0.052</td>
<td>0.18 ppm 0.03 ppm</td>
<td>Attainment/Unclassified</td>
<td>100 ppb 0.053 ppm</td>
<td>Attainment/Unclassified</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>Annual 24-hour</td>
<td>** **</td>
<td>** 0.04 ppm 0.25 ppm</td>
<td>Attainment</td>
<td>0.03 ppm 0.14 ppm 75 ppb</td>
<td>Attainment/Unclassified</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>Annual 24-hour</td>
<td>** 192.3 µg/m³</td>
<td>20 µg/m³ 50 µg/m³</td>
<td>Non-Attainment</td>
<td>n/a 150 µg/m³</td>
<td>Non-Attainment</td>
</tr>
<tr>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt;</td>
<td>Annual 24-hour</td>
<td>** 74.7 µg/m³</td>
<td>12 µg/m³ n/a</td>
<td>Non-Attainment</td>
<td>150 µg/m³ n/a</td>
<td>Attainment/Unclassified</td>
</tr>
<tr>
<td>Lead</td>
<td>30-Day Quarter</td>
<td>**</td>
<td>1.5 µg/m³ **</td>
<td>Attainment</td>
<td>n/a n/a 1.5 µg/m³</td>
<td>Attainment/Unclassified</td>
</tr>
</tbody>
</table>

Source: California Air Resource Board (CARB 2022); Mojave Desert Air Quality Management District (MDAQMD 2022).

Note: Ambient air pollutant concentrations in Palmdale are monitored in the City of Lancaster. Local monitoring occurs on an annual basis. Attainment status determination is based on historical monitoring and undergoes approval by CARB and EPA after continuous attainment is shown.

ppm = parts per million  
µg/m³ = micrograms per cubic meter  
n/a = not applicable  
** = Data not available, not reported by local monitoring stations
**Source Categories**

CARB provides emissions estimates from various sources, including stationary, areawide, and mobile sources. Areawide emissions tend to be released from smaller operations and therefore are commonly found and not location specific. Examples of areawide emissions include the use of consumer products, fireplaces, road dust, and farming operations. Stationary source emissions are attributed to large operations emitted at one concentrated location. Examples of stationary sources include pollutants generated by industrial and manufacturing activities. Mobile source emissions are those emissions from on- and off-road motor vehicles that generate tailpipe and evaporative emissions. Examples of mobile sources include cars, buses, trucks, ships, trains, aircraft, and various other vehicles. According to the statewide emissions inventory and estimates, mobile sources are the largest contributor to annual CO and NOx emissions in California.

**Greenhouse Gas Emissions**

The Sustainability, Climate and Resilience Element focuses on the reduction of greenhouse gas (GHG) emissions in the community. The City of Palmdale developed an Energy Action Plan in 2011. The Plan utilizes a GHG emissions inventory for the year 2005 as a baseline for the developed reduction targets. In 2017, the city emitted approximately 1,042,284 metric tons of carbon dioxide equivalent (MTCO2e) within City limits. Transportation related emissions are the largest contributor to community emissions, accounting for 59%, followed by residential energy use, accounting for 19%, and nonresidential energy use, accounting for 16% of emissions.\(^76\)

**Palmdale has set the following GHG reduction targets consistent with State policy:**
- 40% below 1990 levels by 2030 (SB 32)
- Carbon neutrality by 2045 (EO B-55-18)

---

\(^{76}\) Nonresidential energy use data for 2017 is not fully complete because of privacy and aggregation laws that prevent the utilities from providing information for certain customer types. Nonresidential gas and electricity use is likely higher, which would increase total greenhouse gas emissions.
Desired Outcomes, Indicators, and Targets

The following desired outcomes and metrics were identified to help the City of Palmdale track progress toward maintaining and enhancing air quality. This process follows the City of Palmdale’s General Plan Vision and Guiding Principles document which was informed by the General Plan Advisory Committee (GPAC), the Planning Commission and City Council.

Top Key Outcomes

**OUTCOME:** Meet state and federal standards for all criteria air pollutants\(^77\).

**KPI:**
- Regional air quality

**TARGET:**
- Achieve state and federal air quality standards for all criteria pollutants.

**OUTCOME:** Reduce VMT per capita, VMT per employee, and improve air quality through land use decisions that reduce travel distances and increase use of alternative transportation modes.

**KPI:**
- VMT

**TARGET:**
- Achieve VMT per capita below the current Citywide per capita average for new development in accordance with the Office of Planning Research (OPR) recommendation.

**KPI:**
- Transit ridership

**TARGET:**
- Increased transit ridership.

\(^{77}\) Note that the City only constitutes a portion of the local air basin so the City lacks complete control over this outcome.

\(^{78}\) “BYD Articulated Bus” by Nate Pitkin, licensed under CC BY-SA 4.0
Goals and Policies

The following section includes goals and policies for the Air Quality Element, followed by implementation actions. Some air quality policies are woven throughout the General Plan, including in the Circulation and Mobility, Equitable and Healthy Communities, Sustainability, Climate Action and Resilience Elements, among others.

**CIRCULATION**

**Goal AQ-1**
Minimize local air pollution caused by motor vehicles.

**AQ 1-1 Reduced work-related trips.**
Reduce the number and length of work-related trips through such means as providing a balance of jobs and housing in the community, promoting alternate work schedules, telecommuting, teleconferencing, company-sponsored ride-share and alternative fuel vehicle programs, use of commuter trains and other alternative modes of transportation to the workplace, creation of additional park and ride facilities, and improving the fiber optic network and connectivity.

**AQ 1-2 Reduced Non-Work Trips.**
Reduce motor vehicle non-work trips through such means as location of residences in proximity to shopping and recreation/entertainment destinations, transit system improvements, and promoting merchant transportation incentives, and distance learning.

**AQ 1-3 Improve Traffic Flow.**
Reduce vehicle emissions by maintaining and improving traffic flow per the Mobility Element.

**AQ 1-4 High Occupancy Vehicle Lanes.**
Coordinate with Caltrans to promote high occupancy vehicle lanes on SR-14.

**AQ 1-5 Reduced Tailpipe Emissions.**
As technology allows, reduce tailpipe emissions from City vehicles by replacing them with alternative fuel vehicles and encourage reduction of emissions from private vehicles through such means as reducing parking requirements and providing preferential parking for alternative fuel vehicles and bicycles.

**AQ 1-6 Airport Emissions Control.**
To the extent practicable, reduce emissions from the future Palmdale Regional Airport by purchasing renewable energy, installing airport renewable energy systems, reducing energy consumption, monitoring the efficiency of heating, ventilation, and colling systems, and purchasing low or zero emission vehicles and ground support equipment.

**AQ 1-7 Expand Dial-A-Ride.**
Expand services of the existing dial-a-ride program, resulting in reduced need for automobiles and parking by seniors and those with disabilities.

**AQ 1-8 Environmentally Review New Development.**
Use the environmental review process for new development applications to assess and, as necessary, mitigate the impacts of new development related to increased vehicle miles traveled.

**AQ 1-9 Encourage transit and bike use.**
Provide incentives to residents who bike or use public transportation such as free or discounted public transit or employer-provided subsidies or reimbursements for residents willing to bike or use public transit.

**AQ 1-10 Truck routes.**
Restrict freight to certain routes and times by adopting rules and regulations that prohibit the use of trucks in certain areas within Palmdale.
PARTICULATE MANAGEMENT

Goal AQ-2
Minimize particulates less than 10 microns in size (PM10) and minimizes activities that generate dust.

AQ 2-1 Vegetative Stabilization. Reduce roadway dust by requiring paving or vegetative stabilization of unpaved roads and parking lots.

AQ 2-2 Construction Site Requirements. Require measures at construction sites to prevent deposition of soil onto public right-of-way.

AQ 2-3 Natural Contours. Encourage developers to maintain natural contours to the greatest degree possible, to eliminate the need for extensive land clearing, blasting, ground excavation, grading and cut and fill operations.

AQ 2-4 Erosion and Dust Control Measures. Require erosion and dust control measures for new construction, including covering soil with straw mats or use of chemical soil and dust binders during site grading, followed by hydroseeding and watering disturbed construction areas as soon as possible after grading to prevent fugitive dust.
AIR POLLUTION REDUCTION

Goal AQ-3
Reduction and/or elimination of unnecessary sources of air pollution.

AQ 3-1 AVAQMD and Proven Technologies. Promote the AVAQMD program to encourage local entities to install public electric vehicle charging stations to offer incentivize residents to purchase electric vehicles (e.g., vehicle buy-back program), and the Carl Moyer program, which aims to improve the local air quality by funding local, cost-effective projects to upgrade heavy-duty equipment (Gross Vehicle Weight Rating greater than 14,000 lbs.) using proven technologies.

AQ 3-2 Eliminate Emissions.
Promote the AVAQMD’s efforts to eliminate emissions from such sources as excessive car dealership cold starts, excessive curb idling, emissions from advertising vehicles, and emissions from leaf blowers, among others, through assisting with implementation and enforcement of AVAQMD programs and rules.

AQ 3-3 Complete Streets.
Design a more effective street system by emphasizing complete streets which accommodate all modes of transportation.

AQ 3-4 Reduce Reactive Organic Gas.
Reduce reactive organic gas (ROG) and particulate emissions from building materials and construction methods, by promoting the use of nonsolvent-based, high-solid, or water-based coatings, and requiring compliance with all pertinent AVAQMD rules.

AQ 3-5 Minimize Emissions.
Minimize emissions of toxic air contaminants that contribute to climate change and ozone depletion, and that create potential health risks for residents, workers, and visitors.

AQ 3-6 Community Awareness.
Promote community awareness of the effects of climate change and ozone depleting gases, as well as methods to minimize the creation of those gases, by preparing and distributing educational materials, and cooperating with AVAQMD in establishing regional programs.

AQ 3-7 Environmentally Review New Development Applications.
Through the environmental review process for new development applications, ensure that emissions of toxic air contaminants are minimized and that any significant health effects associated with such contaminants are appropriately mitigated.

AQ 3-8 Green Technology Companies.
Encourage non-polluting industry and clean green technology companies to locate in the city.
ENERGY CONSUMPTION

Goal AQ-4
Reduce air pollution caused by energy consumption.

AQ 4-1 EPIC Participation. Encourage residents and business owners to participate in Energy for Palmdale’s Independent Choice (EPIC).

AQ 4-2 Energy Conservation. Encourage energy conservation from all sectors of the community by promoting and/or requiring the use of energy efficient appliances, processes, and equipment, and promoting energy audits and retrofits of existing structures.

AQ 4-3 Recycling. Require local government, Palmdale citizens, and local businesses and industries to recycle, as mandated by state law, and to otherwise recycle to the maximum extent possible in accordance with the requirements of the Palmdale Municipal Code.

AQ 4-4 Solar Energy. Require new developments to minimize obstruction of direct sunlight for solar energy systems on adjacent properties.
Implementation Actions

The table below identifies programs, planning efforts, coordination efforts, and other actions that will help implement the General Plan's Air Quality goals and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goal</th>
<th>Description</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ-1, AQ-2, AQ-3, AQ-4</td>
<td><strong>Municipal Code Update:</strong> Update the Municipal Code to require new multi-family residential buildings and other sensitive land uses in areas with high levels of localized air pollution be designed to achieve good indoor air quality through landscaping, ventilation systems, filtration systems or other measures.</td>
<td>Short-term</td>
<td>Economic and Community Development, Public Works</td>
</tr>
<tr>
<td>AQ-1, AQ-3, AQ-4</td>
<td><strong>Air Quality in Residential Areas:</strong> Identify locations in the city where residential uses are located in areas with high levels of air quality pollution and develop strategies to improve air quality such as tree planting and requiring use of electric powered lawn equipment.</td>
<td>Short-term</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>AQ-1, AQ-3, AQ-4</td>
<td><strong>Improve Interior Air Quality:</strong> Develop a campaign to provide homeowners with information regarding strategies for improving interior air quality.</td>
<td>Short-term</td>
<td>Economic and Community Development</td>
</tr>
</tbody>
</table>
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Chapter 16

Noise

The Noise Element outlines the goals and policies related to the noise environment in the Palmdale community.
Statutory Requirements

The United States Federal Government and the State of California acknowledge the impact that the noise environment can have on public health and wellbeing. Per Government Code 65302, a Noise Element identifies and appraises noise problems in the community. The noise element analyzes and quantifies the projected noise level of the following sources:

- Highways and freeways,
- Primary arterials and major local streets,
- Passenger and freight online railroad operations and ground rapid transit systems,
- Commercial, general aviation, heliport, helistop and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation,
- Local industrial plants, including, but not limited to, railroad classification yards, and,
- Other ground stationary noise sources, including, but not limited to, military installations, identified by local agencies as contributing to the community noise environment.

The following State and Federal regulations have been established to mitigate the negative externalities of excessive noise and support healthy noise environments across communities.

Federal Noise Control Act of 1972

The Federal Noise Control Act establishes a national policy to limit the negative impacts to American health and welfare because of excessive noise. The Act authorizes the establishment of Federal noise level standards for major noise sources in commerce, including motor vehicles and machinery, and directs the EPA to oversee noise research and noise control. The Act establishes local governments as the primary responsible party in addressing noise mitigation.

California Noise Insulation Standards (California Code of Regulations, Title 24)

The California Noise Insulation Standards are established in Title 24 of the California Code of regulations. The regulation establishes an interior noise limit of 45 dBA CNEL in any habitable room. To facilitate the established noise limit, Title 24 requires an acoustical analysis for any new residential building located in an area where CNEL noise levels exceed 60 dBA.

California Airport Noise Standards (California Code of Regulations, Title 21)

Title 21 of the California Code of Regulations establishes airport noise standards for airports within the state. Title 21, Section 5012 outlines the standard for the acceptable level of aircraft noise for persons living in the vicinity of airports as 65 dBA CNEL.

Federal Highway Administration Noise Standards

The Federal Highway Administration (FHWA) has established noise standards for noise sourced from highway traffic. The FHWA mandates that each state is responsible for enforcing the standards outlined by the administration. The noise standards consist of noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials.
California Land Use and Noise Compatibility Guide

The State of California Office of Noise Control (ONC) has established a set of noise standards based on land use compatibility. These standards are shown in Figure 16.1 below. The noise standards are intended to provide guidelines for the development of municipal noise elements. These basic guidelines may be tailored to reflect the existing noise and land use characteristics of a particular community.

**Figure 16.1** California Noise Land Use Compatibility Standards

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Community Noise Exposure—Ldn or CNEL, dB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55</td>
</tr>
<tr>
<td>Residential—Low Density Single Family, Duplex, Triplex, and Similar</td>
<td></td>
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<tr>
<td>Residential—Multifamily</td>
<td></td>
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<tr>
<td>Transient Lodging—Motels, Hotels</td>
<td></td>
</tr>
<tr>
<td>Schools, Libraries, Churches, Hospital, Nursing Homes</td>
<td></td>
</tr>
<tr>
<td>Auditoriums, Concert Halls, Amphitheaters</td>
<td></td>
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<tr>
<td>Sports Arena, Outdoor Spectator Sports</td>
<td></td>
</tr>
<tr>
<td>Playground, Neighborhood Parks</td>
<td></td>
</tr>
<tr>
<td>Gold Courses, Riding Stables, Water Recreation, Cemeteries</td>
<td></td>
</tr>
<tr>
<td>Office Buildings, Business Commercial and Professional</td>
<td></td>
</tr>
<tr>
<td>Industrial, Manufacturing, Utilities, Agriculture</td>
<td></td>
</tr>
</tbody>
</table>

**Legend**

- **Normally Acceptable**
  - Specified land use is satisfactory, based upon the assumption that any building involved are of normal conventional construction, without an special noise insulation requirements.

- **Conditionally Acceptable**
  - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included on the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

- **Normally Unacceptable**
  - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

- **Clearly Unacceptable**
  - New construction or development should be generally not undertaken.
Los Angeles County Airport Land Use Commission-Palmdale Regional Airport Influence Area

The Los Angeles County Airport Land Use Commission (ALUC) is a county-level agency required by the State to develop a plan for promoting compatibility between local airports and surrounding land uses. The ALUC is responsible for designating an Airport Influence Area (AIA) for every airport within its jurisdiction. An AIA is an airport planning area boundary that consists of all areas in which current or future airport-related noise, over flight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those areas. The Palmdale Regional AIA is shown in Figure 16.2. Development within these areas conform with the use, density, and intensity recommendations of the within the Accident Potential Zone (APZ) and Air Installations Compatible Use Zones (AICUZ).

Palmdale Municipal Code (Noise Standards)
The Palmdale Municipal Code (PMC) establishes a restriction on excessive noise that would disturb neighborhoods or other sensitive uses. The Municipal Code’s Noise Ordinance does not contain any specific limits, but rather states that “It shall be unlawful for any person to willfully make or continue, or cause or to be made or continued, any loud, unnecessary, or unusual noise…” The use of the Noise Ordinance to regulate noise is limited given no specific limits are provided by which to determine if a noise source is excessive or not. PMC Section 8.28.030 addresses construction-related noise by prohibiting earth excavating and similar activities between 8:00 p.m. and 6:30 a.m. and on Sundays in any residential zone or within 500 feet of any residence, hotel, motel, or recreational vehicle park.
Existing Context

Introduction

The noise environment within a geographic area may have a significant impact on the quality of life for community residents and workers. Excessive noise is defined as sound that is loud, unpleasant, unexpected, or undesired. The effects of excessive noise on humans can include general annoyance, interference with communication, sleep disturbance and hearing impairment. Perceptions of excessive noise can be highly variable and may be impacted by the time of day, distance to noise sources, characteristics of the noise receiver and qualities of the noise source. Therefore, jurisdictions must strategically establish noise standards in a manner that considers all aspects of how noise may be perceived.

Understanding the potential effects and externalities of noise requires an understanding of sound and how sound is measured. Noise is typically described in terms of loudness (amplitude) of the sound and frequency (pitch) of the sound. Noise loudness is measured in decibels (dB). Decibels (dB) are based on a logarithmic scale that condenses range in sound pressure levels to a more usable range of numbers. A 10 dB increase represents a 10-fold increase in sound intensity, a 20 dB change is a 100-fold difference, and so forth.

The human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, a method called “weighting” is applied to decibel noise measurements and used to filter noise frequencies that are not audible to the human ear. A weighted decibel (dBA) is an adjusted measure of sound loudness that adjusts the sound rating scale to levels consistent with the sensitivity range of the human ear. Typical exterior daytime noise levels range from 50 to 75 dBA.

In California, noise land use compatibility is primarily measured using Community Noise Equivalent Level (CNEL). The CNEL rating is the average sound level over a 24-hour period, with a penalty of 4 dB added between 7pm and 10pm and a penalty of 10 dB added for the nighttime hours of 10 pm to 7 am. The noise levels identified within this chapter are all discussed using dBA CNEL, unless otherwise indicated.

Noise Generators

Noise generators are major sources of noise within a community that may impact residents or workers. These major sources of noise include motor vehicles, railways, airports, and construction activities. The most distributed and predominant noise source across cities in California is traffic noise, due to the prevalence of motor vehicles driving along area roadways. Traffic noise is of primary concern because it is characterized by a high number of individual events, which often create a sustained noise level over time. In Palmdale, noise levels are the highest adjacent to freeways, highways, and other large roadways.

Traffic Noise

Traffic noise is the primary noise source in the city. The highest noise levels occur along high traffic volume roadways, including freeways, highways, and arterials. These roadways in Palmdale include Highway 138/ Palmdale Boulevard, SR-14, Sierra Highway, and major streets such as Pearblossom Highway, 5th Street West, 50th Street East, 30th Street East, Avenue S, and Rancho Vista Boulevard. For modeled existing and future noise contours along high-volume roadways, see Figure 16.3 and Figure 16.4.

Railway Operation Noise

In general, noise from rail operations is under the jurisdiction of the Federal Railroad Administration (FRA). The FRA sets forth and enforces railway noise safety standards, including noise emissions for railroad locomotive cabs, at-grade crossing bells, and locomotive warning horns. Union Pacific and Metrolink, which
transport freight and people, respectively, operate rail lines in Palmdale. These rail line operators must meet any mandates enforced by the FRA.

Currently, the Antelope Valley Station Line of the Metrolink commuter rail system runs through Palmdale adjacent to the Sierra Highway. As a commuter rail service, most weekday trains on the Antelope Valley line run during the peak traffic morning and evening hours, when noise levels are high due to peak traffic amounts.

The California High Speed Rail from San Francisco to the Los Angeles area is proposed to run through Palmdale. According to the Rail Authority, the High-Speed Rail is anticipated to result in moderate to severe impacts to the noise environment in those locations where train speeds and operations are near sensitive land uses. The level of noise impacts associated with the High-Speed Rail in Palmdale will depend on the final rail alignment and the nature and density of nearby sensitive uses.

An additional high-speed rail line, known as Brightline West, is undergoing environmental permitting, and anticipated to run from Las Vegas to Los Angeles through Palmdale. Similar to the High-Speed Rail, noise impacts associated with the rail line will depend on the final rail alignment and the nature and density of nearby sensitive uses.

Freight rail in Palmdale is transported along the Union Pacific Railroad. Most of the freight train traffic occurs between the hours of 1:00 am and 5:00 am. Freight traffic does not have a set schedule. Noise generated by freight trains in Palmdale was previously measured at 64 to 73 dBA. Approximately 10 to 25 freight trains travel through Palmdale per day.

Mineral Extraction
Sand and gravel mining widely occurs within the city, specifically throughout Littlerock Wash (floodplain within the Littlerock Fan). Active quarries are located within an existing floodplain where no other type of development exits. Consequently, development is not located near noise-generating mineral extraction activities.

Airport Noise
Plant 42, a US Air Force facility, is located in the northern part of the city near existing industrial uses and undeveloped land that is designated as industrial. The airport currently has two operational runways. Noise levels in this area of the City have been measured at 60.5 – 68.5 dBA depending on proximity to major noise sources. Peak noise levels due to aircraft operations (approaches and landings) have been measured at 85.5 dBA near the USAF Plant 42 runway. Figure 16.2 depicts the noise levels surrounding the Palmdale Regional Airport. Overall community noise levels surrounding the airport are typically around 65 CNEL.

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74 The Littlerock Fan is a 12 square mile area extending from the north flank of the San Gabriel Mountains for about 8 miles, which includes the Littlerock Wash floodplain and the fan area to the west.
The City is considering the construction of a new passenger airport terminal, which would promote an increase in commercial flights. Proposed commercial flights would not increase noise levels beyond those observed historically. In addition to the Palmdale Regional Airport, there are several airports adjacent to the city that may impact the noise environment. Airports in the vicinity of Palmdale include:

- Agua Dulce Airpark in Agua Dulce located approximately four miles from Palmdale City limits.
- Bohunk’s Airpark in Lancaster located approximately five miles from Palmdale City limits.
- Nichols Farms airport located in the unincorporated area of Los Angeles County approximately 5 miles from the Palmdale City limits.
- General William J. Fox Airfield in the Lancaster located approximately 7 miles from Palmdale.

Stationary Noise
Whereas mobile-source noise affects many receptors along an entire length of roadway, stationary noise sources affect only their immediate areas. Stationary sources of noise may occur within all types of land uses. Generally, residential uses generate noise from landscaping, maintenance activities, and air conditioning systems. Commercial uses tend to generate higher levels of noise, sourced from building operations such as heating, ventilation, air conditioning (HVAC) systems, loading docks, as well as activity from restaurants, bars, outdoor dining, parking garages/lots, etc. Consequently, potential noise concerns can arise when new developments with a mix of uses (i.e., residential, commercial, office) are proposed.

Industrial uses may generate noise from HVAC systems, loading docks, and machinery; all of which may be on a more continual basis due to the nature of the particular activities. Industrial activity is typically the generator of the highest levels of stationary source noise. However, Palmdale’s industrial uses (e.g., Air Force Plant 42, Northrop Grumman, and Boeing) are geographically insulated from noise sensitive land uses. The major industrial uses in Palmdale are primarily located in the northeastern section of the city.

A notable source of stationary noise comes from construction-related activity. Construction of new development could result in stationary noise from various types of construction equipment, such as backhoes, dump trucks, and paving machines, all of which can cause substantial short-term increases in noise in the vicinity of construction sites.

Sensitive Land Uses
Noise sensitive land uses are considered sensitive to noise impacts. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Noise sensitive land uses include residences, schools, libraries, hospitals/medical facilities, and assisted living facilities. These uses are considered the most sensitive to noise intrusion and, therefore, have more stringent noise exposure standards than manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. The sensitive noise land uses in Palmdale are shown in Figure 16.3.
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Figure 16.3
Existing Noise Contours

<table>
<thead>
<tr>
<th>Decibels (dBA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Boundary</td>
</tr>
<tr>
<td>Sphere of Influence</td>
</tr>
<tr>
<td>Major Arterials</td>
</tr>
<tr>
<td>Highway</td>
</tr>
<tr>
<td>Railroad</td>
</tr>
<tr>
<td>60 dBA</td>
</tr>
<tr>
<td>65 dBA</td>
</tr>
<tr>
<td>70+ dBA</td>
</tr>
</tbody>
</table>

Data Sources: City of Palmdale GIS data.
Produced by Princeton Consultants, Inc.
May, 2012
Figure 16.4
Future Noise Contours

- City Boundary
- Sphere of Influence
- Major Arterials
- Highway
- Railroad

Decibels (dBA)
- 60 dBA
- 65 dBA
- 70+ dBA

Data Sources: City of Palmdale GIS data.

Produced by Rioscos Consultants, Inc.
May 2023
Figure 16.5
Noise Sensitive Land Uses

- Hospitals
- Preschool
- Elementary; K-8; 6-12 Schools
- Middle Schools
- High Schools
- School District Office

- Sphere of Influence
- Highway
- Railroad
- Water Body/Aqueduct

- Equestrian Residential
- Low Density Residential
- Single Family Residential 1
- Single Family Residential 2
- Single Family Residential 3
- Single Family Residential 4
- Single Family Residential 5
- Single Family Residential 6
- Mixed Use 1
- Mixed Use 2
- Mixed Use 3
- Employment Flex
- Neighborhood/Commercial
- Visitor Commercial
- Regional/Commercial
- Health and Wellness
- Educational Flex
- Industrial
- Aerospace Industrial
- Mineral Resource Extraction
- Educational Flex
- Specific Plan
- Open Space
- Public Facility-Park
- Public Facility-School
- Public Facility-Civic
- Utilities
- Preschool
- Elementary; K-8; 6-12 Schools
- Middle Schools
- High Schools
- School District Office
- Hospitals

Data Sources: City of Palmdale GIS data, World Terrian Base, 2015 ESRI, USGS, FAA.
Produced by Rincon Consultants, Inc. October 2022
Desired Outcomes, Indicators, and Targets

The following section includes goals and policies for the Noise Element. Goals and policies are followed by implementation actions. Some Noise policies are woven throughout the General Plan, including in the Land Use Element, among others.

Top Key Outcomes

**OUTCOME:** Minimize noise exposure and noise generation near noise sensitive uses.

**KPI:**
- Noise sensitive uses near major noise generators

**TARGET:**
- No noise sensitive uses (e.g., residences, schools, hospitals) in areas where noise from freeways, high traffic volume roads, rail activity, or the airport exceeds 65 dBA CNEL

**OUTCOME:** Noise levels for all new development are within the “Normally Acceptable” range or the “Conditionally Acceptable” range.

**KPI’s:**
- Acceptable noise levels
- Construction and operational noise exposure for noise-sensitive land uses

**TARGETS:**
- Ensure that noise levels for all new development are within the “Normally Acceptable” or the “Conditionally Acceptable” range by ensuring design features can achieve the applicable interior and exterior noise standards
- Minimize exposure of noise-sensitive land uses to excessive construction and operational noise.

*KPI = Key Performance Indicator*
Goals and Policies

The following section includes goals and policies for the Noise Element. Goals and policies are followed by implementation actions. Some Noise policies are woven throughout the General Plan, including in the Circulation and Mobility, Equitable and Healthy Communities, and Land Use and Community Design Elements, among others.

NOISE EXPOSURE

Goal N-1
Minimize resident exposure to excessive noise.

N-1.1 Future Noise Levels. Use the state-recommended noise level guidelines shown in Figure 16.1 to determine the compatibility of proposed land uses with the existing and future noise environment of each proposed development site.

N-1.2 Restrict Land Uses. Restrict noise sensitive land uses near existing or future air, rail, or highway transportation noise sources unless mitigation measures have been incorporated into the design of the project to reduce the noise levels at the noise sensitive land use to less than 65 dBA CNEL at all exterior living spaces including but not limited to, single-family yards and multi-family patios, balconies, pool areas, cook-out areas and related private recreation areas.

N-1.3 Acoustical Analysis for Stationary Noise Sources. When proposed stationary noise sources could exceed an exterior noise level of 65 dBA CNEL at the property line or could impact future noise sensitive land uses, require preparation of an acoustical analysis and mitigation measures to reduce exterior noise levels to no more than 65 dBA CNEL at the property line.

N-1.4 Noise Abatement Strategies. Explore the use of noise abatement strategies such as natural barriers, sound walls, and other buffers to mitigate excessive noise.

N-1.5 Quiet Zones. Where deemed appropriate, restrict train horn noise by establishing quiet zones within Palmdale based on Train Horn Rule (49 CFR Part 222).
Goal N-2
Maintain acceptable noise environments throughout the City.

N-2.1 Extreme Noise Sources. Avoid locating new extreme noise sources adjacent to noise sensitive land uses unless mitigation measures can mitigate noise impacts to the sensitive uses.

N-2.2 Restrict Construction Activities. Restrict construction activities in the vicinity of sensitive receptors during the evening, early morning, and weekends and holidays.

N-2.3 Maintain Acceptable Noise Environments. Utilize any or all the following measures to maintain acceptable noise environments throughout the city:
- Control of noise at its source, including noise barriers and other muffling devices built into the noise source.
- Provision of buffer areas and/or wide setbacks between the noise source and other development.
- Reduction of densities, where practical, adjacent to the noise source (freeway, airport, railroad).
- Use of sound insulation, blank walls, double paned windows and other design or architectural techniques to reduce interior noise levels.
- Designation of appropriate land uses adjacent to known noise sources.

N-2.4 Acoustical Analysis for Noise Sensitive Land Uses. Where deemed appropriate based upon available information, require acoustical analysis and appropriate mitigation for noise-sensitive land uses proposed in areas that may be adversely impacted by significant intermittent noise sources. Such noise sources may include but not be limited to railroads, racetracks, stadiums, aircraft overflights and similar uses.

N-2.5 High Speed Rail and Palmdale Airport. As necessary, participate in future planning for the High-Speed Rail and the Palmdale Airport expansion to ensure that neither facility creates noise conditions that adversely affect residents, businesses, or visitors.
COMPATIBLE LAND USES

Goal N-3
Promote noise compatible land uses within the 65 dBA CNEL contour and the Frequent Overflight Area of Air Force Plant 42.

N-3.1 Frequent Overflight Area. Designate and permit employment flex, industrial, aerospace industrial, and similar uses within the 65 dBA CNEL contour and the Frequent Overflight Area.

N-3.2 Areas Within 65 dBA CNEL. Restrict noise sensitive land uses (such as residential uses, religious institutions, schools, assisted living facilities, or similar uses) within areas designated within both the 65 dBA CNEL contour and the Frequent Overflight Area, unless mitigation measures prevent adverse health impacts from high noise emissions.

N-3.3 Areas Outside 65 dBA CNEL. In areas outside of the 65 dBA CNEL contours but within the Frequent Overflight Area, encourage land uses that are not noise-sensitive, to the extent feasible.

N-3.4 Require Disclosure Statement. Through the development review process, require a disclosure statement indicating that the property is subject to frequent overflight and aircraft noise upon sale of property within the Accident Potential Zone (APZ) and Air Installations Compatible Use Zones (AICUZ).

N-3.5 Aviation Easement. Through conditions of approval, require that any owner of property within the 65 dBA CNEL noise contour or the low altitude overflight area of Plant 42 seeking a land use action from the City to provide an aviation easement to the Los Angeles Department of Airports, the U.S. Air Force, and the City of Palmdale.

CIRCULATION

Goal N-4
Minimize adverse noise impacts associated with transportation.

N-4.1 Coordinate with Caltrans. Coordinate with Caltrans to implement noise mitigation measures, such as sound barrier walls, in the design, improvement, or expansion of freeways and major roadways.

N-4.2 Assess Noise Environment in Residential Areas. Regularly assess the noise environment in residential areas related to heavy vehicle traffic to determine if adjustments should be made to transportation routes.

N-4.3 Insulate Sensitive Receivers. Implement traffic calming and traffic diversion measures across the City to insulate sensitive land uses from freeway and roadway noise.

N-4.4 Protect Disadvantaged Community Members. Prohibit new high noise generating uses in disadvantaged communities, as feasible.
**Implementation Actions**

The table below identifies programs, planning efforts, coordination efforts, and other actions that will help implement the General Plan’s Noise goals and policies. Programs are consistent with this chapter’s goals and policies.

The table provides a description of each Implementation Action and lists the correlating policies. Each action also identifies a timeframe for implementation with Short-term representing a 1–3-year timeframe, Medium-term is 4-7 years, Long-term is 8+ years and Ongoing represents an action that the City should continue. Additionally, the table includes the City department that should function as the lead for implementing the actions.

<table>
<thead>
<tr>
<th>Correlating Goals</th>
<th>Action</th>
<th>Timeframe</th>
<th>Responsible Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1, N-2, N-3</td>
<td><strong>Noise Standards</strong>: Establish numeric noise standards within the Palmdale Municipal Code consistent with the State recommended noise level guidance.</td>
<td>Short-term</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>N-1, N-2, N-3</td>
<td><strong>Municipal Code Update</strong>: Update the Palmdale Municipal Code to include noise regulations consistent with all policies outlined within this Noise chapter.</td>
<td>Short-term</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>N-1, N-2, N-3, N-4</td>
<td><strong>Noise Reporting Platform</strong>: Develop a noise reporting platform in collaboration with existing City applications or webpages to allow for easy noise reporting for community members.</td>
<td>Mid-term</td>
<td>Economic and Community Development and Public Works</td>
</tr>
<tr>
<td>N-1, N-4</td>
<td><strong>Quiet Zones</strong>: Meet and coordinate with railroad operators to install Quiet Zones at rail crossings near sensitive uses.</td>
<td>Medium-term</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>N-1, N-2, N-4</td>
<td><strong>Regional High-Speed Rail</strong>: Meet and coordinate with regional high-speed rail operators to implement the best practices for noise reduction and mitigation within the city.</td>
<td>Long-term</td>
<td>Economic and Community Development</td>
</tr>
<tr>
<td>N-1, N-2, N-4</td>
<td><strong>Traffic Calming/Diversion</strong>: Evaluate the need for the insulation of sensitive land uses from freeway and roadway noise throughout the city and include the development of insulation measures into the Capital Improvements Plan.</td>
<td>Ongoing</td>
<td>Economic and Community Development and Public Works</td>
</tr>
</tbody>
</table>