

Air Quality Policy Framework

Introduction

The City of Palmdale has embarked on a comprehensive update to its General Plan, called “Envision Palmdale 2045: A Complete Community,” to create a forward-looking document that will serve as the blueprint for the City’s vision through the year 2045. The goals, policies, and actions in Palmdale 2045 will serve as a compass for decision-makers and will shape future plans and actions of the City. This revised policy document will replace the 1993 General Plan.

This air quality policy framework is an interim step in the General Plan Update process prior to drafting the elements (or chapters). This framework highlights key outcomes and performance metrics related to air quality and includes a draft policy framework that includes goals, policies, and implementation activities. This policy framework was developed by compiling feedback from community members, General Plan Advisory Committee members, Planning Commission, and City Council. This framework synthesizes critical issues and policy approaches by describing key strengths and opportunities, challenges and threats, and what we heard from the community.

Where We Are Now

Previous steps in the planning process have identified community strengths and opportunities, and challenges and threats related to air quality. Those are summarized below.

Strengths and Opportunities

- **The City’s preferred land use alternative would generally reduce per capita vehicle miles traveled (VMT) and associated emissions by providing a range of residential, employment-generating, retail, and recreational uses in proximity to one another.** The preferred land use alternative (Alternative 3) includes four mixed-use districts that would provide residential, retail, and office uses in a pedestrian-friendly setting that is conducive to transit use and active transportation. The land use alternative also accommodates a mix of jobs, including industrial/manufacturing jobs, and housing that would allow people to live and work in Palmdale. These factors would generally be

expected to reduce per capita VMT and associated air pollutant emissions, thus assisting in attainment of federal and state air quality standards.

- **Potential Transit Enhancements could reduce per capita VMT and associated emissions.**

The vision and guiding principles for the General Plan Update call for improved transit opportunities and the preferred land use plan, in particular the mixed-use districts and employment centers, is generally conducive to encouraging transit use. In addition, the proposed High Speed Rail line and local station, if implemented, could eventually reduce emissions by providing commuters an alternative to long distance driving to other parts of the Los Angeles region or other employment centers.

Challenges and Threats

- **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).**

The City's sunny climate, pollution-trapping mountains, transport pollution from the Los Angeles basin, and a growing population, all contribute to the problem.¹ Although the AVAQMD's Air Quality Management Plan anticipates attainment of state and federal standards by 2027, the local air basin is currently a nonattainment area for the above criteria pollutants and rising temperatures and increased wildfire incidents have created uncertainty about the ability to meet standards. Although the City's ability to influence regional air quality is limited, actions in the air basin to reduce emissions will be critical for improving local air quality. Growth forecast in the City as well as the potential expansion of the airport will create challenges for curtailing emissions.

- **Mixed-Uses in a “Downtown” Setting May have the Potential for Increased Local Exposure to Air Pollution.** Creating mixed-use spaces provides opportunities for reduced VMT by siting land uses in close proximity to one another, which promotes active transportation. Although the mixed-use districts proposed as part of the preferred land use plan would be expected to generally reduce per capita VMT and associated emissions, placement of sensitive residential receivers in close proximity to office/retail uses, high levels of traffic, and transit systems has the potential to increase exposure to relatively high concentrations of air pollutants. Vehicular and other emissions are expected to decline over time as technologies change, but residential and other sensitive uses in proximity to heavily traveled roads and other air pollution generators will require careful site planning and potentially health risk assessment and mitigation if significant health risks are identified. Of particular concern is the potential for exposure to diesel particulate matter (DPM), a toxic air contaminant (TAC) generated by heavily traveled roads and other

¹ AVAQMD. 2021. About the District <https://avaqmd.ca.gov/about-the-district-f237c03>

sources and that the California Air Resources Board estimates are responsible for about 70 percent of the overall cancer risk related to toxic air contaminants in California.

What We Heard About This Topic

Although air quality concerns were not directly identified, stakeholders voiced needs that could affect local air quality, such as expanding Palmdale Regional Airport, increasing transit options, and development of industrial uses. Below is a list of community concerns that may affect air quality in Palmdale.

- Bring commercial service to Palmdale Regional Airport.
- Increase alternative transportation options, such as High Speed Rail, public transit within Palmdale, and creating rail connections to Los Angeles Union Station.
- Existing traffic, including trucking and goods movement is an existing challenge that continues to expand because new employees live outside the City and commute into Palmdale.
- Palmdale Boulevard (Highway 138) is controlled by Caltrans, which poses a challenge when wanting to improve this roadway.
- Additional industrial development necessary to meet industry needs. In addition, there is a desire to attract more industry to Palmdale.

Where we want to be in the future

Applicable Vision themes and Guiding Principles

Through the first phase of community engagement, the General Plan team explored how individuals envision the future of Palmdale, what makes it unique and special, and what things residents and businesses would like to change. Summarized into a stand-alone document, the General Plan Vision and Guiding Principles illustrate the future of Palmdale, capturing key values and aspirations, and providing a framework for future decision-making.

The list below represents vision themes and guiding principles that are most relevant to air quality. Visit the Palmdale 2045 website at <https://www.palmdale2045.org/resources> for the complete vision and guiding principles document.

Safe, healthy place to live and work

- Foster active living with improvements to pedestrian environment
- Prioritize walking, biking, and access to local and regional transit
- Promote living and working in Palmdale and reducing commute times

Palmdale's beautiful natural setting

- Preserve existing mountain views
- Preserve access to a dark night sky
- Maintain high air quality

Top key outcomes (related to topic)

- **Attain Air Quality Standards.** Meet state and federal standards for all criteria air pollutants. Note that the City only constitutes a portion of the local air basin so the City lacks complete control over this outcome.
- **Reduce VMT:** Reduce per capita VMT, VMT per employee, and improve air quality through land use decisions that reduce travel distances and increase uses of alternative transportation modes.
- **Minimize Exposure to Air Pollution and TACs in particular.** Minimize exposure of sensitive receptors such as residences, schools, and hospitals to air pollution through careful site planning and, as necessary, separation of uses and/or use of filtration systems or other methods to reduce indoor air pollution.

Key performance indicators

- **Key Performance Indicator:** Regional air quality
 - **Target:** Achieve state and federal air quality standards for all criteria pollutants.
- **Key Performance Indicators:** VMT
 - **Target:** Achieve per capita VMT of 16.8 percent below the current Citywide per capita average for new development in accordance with the Office of Planning Research (OPR) recommendation.
 - **Target:** Achieve Citywide per capita VMT of 16.8 percent below the current Citywide average.
- **Key Performance Indicator:** Transit ridership
 - **Target:** Achieve a 10 percent increase in Citywide transit ridership.
- **Key Performance Indicator:** Energy use
 - **Target:** Achieve energy efficiency of at least 15 percent beyond Title 24 requirements on all new development.
 - **Target:** Reduce overall Citywide per capita energy use by 15 percent.

Policy framework

The following section includes draft goals and policies under consideration for the Palmdale General Plan Air Quality Element. Many of the goals and policies are from the existing Air Quality

Element and have been retained, but in certain cases goals and policies have been reorganized, rephrased, and or simplified while the objectives from the current element have been reframed as either goals or policies.

- **Goal 1: A City with minimal local air pollution caused by motor vehicles.**
 - 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, and creation of additional park and ride facilities.
 - 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.
 - Reduce vehicle emissions by maintaining and improving traffic flow per the Circulation Element.
 - Promote high occupancy vehicle lanes on State Route 14.
 - 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.
 - To the extent practicable, require control of emissions from the future Palmdale Regional Airport.
 - Expand the services of the existing dial-a-ride program, resulting in reduced need for automobiles and parking by retired citizens.
 - 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.
- **Goal 2: A City that minimizes particulates less than 10 microns in size (PM₁₀) and minimizes activities that generate dust.**
 - Reduce roadway dust by requiring paving or vegetative stabilization of unpaved roads and parking lots; require measures at construction sites to prevent deposition of soil onto public rights-of-way.
 - 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.
 - Require erosion and dust control measures on new construction, including covering soil with straw mats or use of chemical soil and dust binders during site

grading, followed by seeding and watering as soon as possible after grading to prevent fugitive dust.

- **Goal 3: Reduction and/or elimination of unnecessary sources of air pollution.**
 - Promote the AVAQMD's program to encourage local entities to install electric vehicle charging stations to offer public options for electric vehicle charging, a 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 (GVWR greater than 14,000 lbs.) using proven technologies.
 - 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.
 - Minimize traffic congestion, which contributes emissions from vehicle idling, by designing effective street systems and identifying appropriate truck routes.
 - 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.
 - 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.
 - 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.
 - 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.
- **Goal 4: Reduction of air pollution caused by energy consumption.**
 - Encourage residents and business owners to participate in Energy for Palmdale's Independent Choice (EPIC), which will provide energy for residential and municipal customers from October 2022 and for commercial customers from May 2023.
 - 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.
 - 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 Chapter 5.52, Solid Waste Handling and Recycling Service, of the Palmdale Municipal Code.

- Require new developments to promote the use of solar energy systems by providing maximum solar access.