

Adelanto North 2035 Comprehensive Sustainable Plan

City of Adelanto

Adopted August 27, 2014

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Adelanto, California 92301

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Sustainable Community Design for Adelanto North 2035

Introduction: A New Paradigm for a Sustainable Desert Community

Context for Planning

The Adelanto North 2035 Plan is the result of the State of California Sustainable Communities Planning Grant and Incentives Program. The Plan proposes a new paradigm for desert communities in San Bernardino County. The planning process created a framework facilitating collaboration between public and private entities to promote sustainable development approaches, protect environmental resources, and forge a strong physical and economic connection between the Southern California Logistic Airport (SCLA) jobs center and new mixed-use neighborhoods. The Plan establishes land use, transportation, infrastructure, economic development, and resource protection strategies that promote sustainable development approaches, particularly by reducing automobile usage and fuel consumption, and requiring cluster development approaches to protect and respect the sensitive desert environment. The Plan is based on the concept of activity centers surrounded by residential neighborhoods linked to the adjacent jobs/business centers. Activity centers create new dynamic focal points and transit hubs. “Smart growth” and “healthy community” concepts are keystones in the Plan.

Planning Area

The Adelanto North 2035 Plan encompasses lands in the City of Adelanto and unincorporated San Bernardino County, covering 55 square miles of west Mojave Desert. Shown in Figure I-1, the general boundaries are Oleander Street to the north; the western boundary of SCLA, Adelanto and Amethyst Roads to the east; Holly Road to the south; and Lessing Avenue to the west. The Planning Area is principally comprised of residential, commercial, and industrial land uses. Some of the Planning Area contains underdeveloped and vacant lands traversed by natural drainage courses and major utility easements. East of US 395, Adelanto's commercial district contains many vacant and functionally obsolete structures. Many homes in the scattered single-family and multi-family residential developments are vacant.

To develop the context for land use planning and economic issues, the technical report considered areas to the south and east of the Planning Area. Referred to as the Study Area, these adjacent areas include the unincorporated areas of San Bernardino and 1990s/2000s residential subdivisions in the City of Adelanto areas. The Study Area also includes the nearby SCLA, formerly George Air Force Base, an 11 square mile area planned for Global Access, an air and rail transportation hub. The Study Area boundaries are shown in Figure I-1.

The regional access to the Planning Area is provided by State Route 18 (Palmdale Road) and US 395, as shown in Figure I-2. Other transportation corridors connecting to the Planning Area include Adelanto Road, Air Expressway, and Holly Road.

Community Plan Reference Documents

The Adelanto North 2035 Plan is the result of thousands of hours of research and technical study, the collective efforts of elected decision-makers, individuals, and agencies who cumulatively guide and shape land use development and natural resource conservation, and the engagement of numerous community members who have articulated their hopes and expectations for the City's future.

Through the process, a number of related documents have been produced and will provide resource materials for years to come. These include:

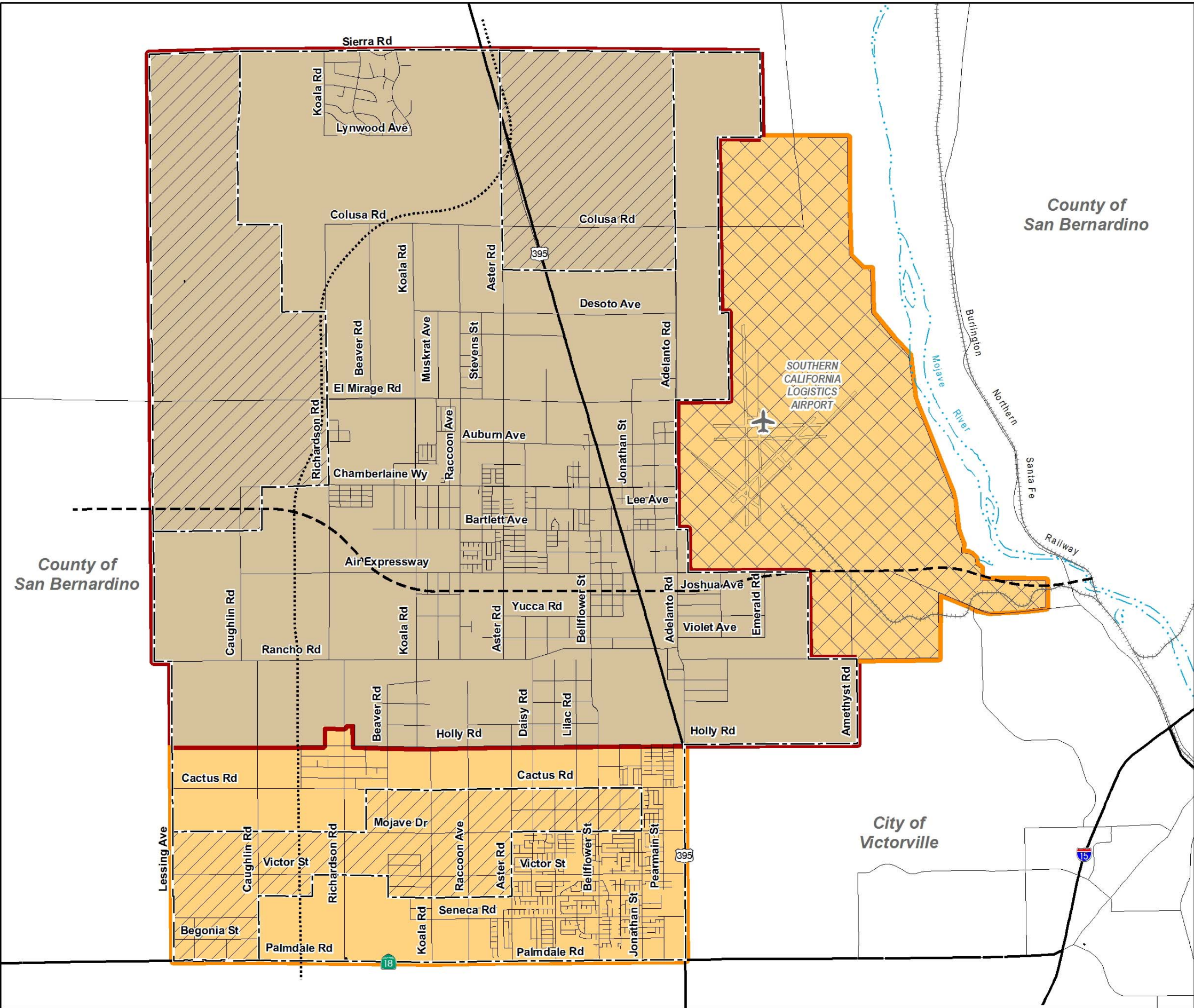
- Adelanto North 2035 Sustainable By Design Technical Background Report, 2012
- Workshop Summaries, 2013
- Adelanto North 2035 Plan Environmental Impact Report, 2014

A Community Effort

As the Adelanto North 2035 Plan was developed, the community's input was key to plan formation and policy development. As part of the planning program, the City undertook a public outreach effort to understand community values and to establish the Plan's foundation based on those values.

The outreach program for the Adelanto North 2035 Plan was multi-faceted and included the components described below.

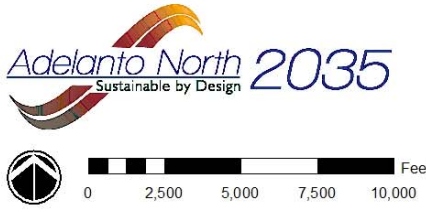
FIGURE I-1
Project Boundary
with Study Area



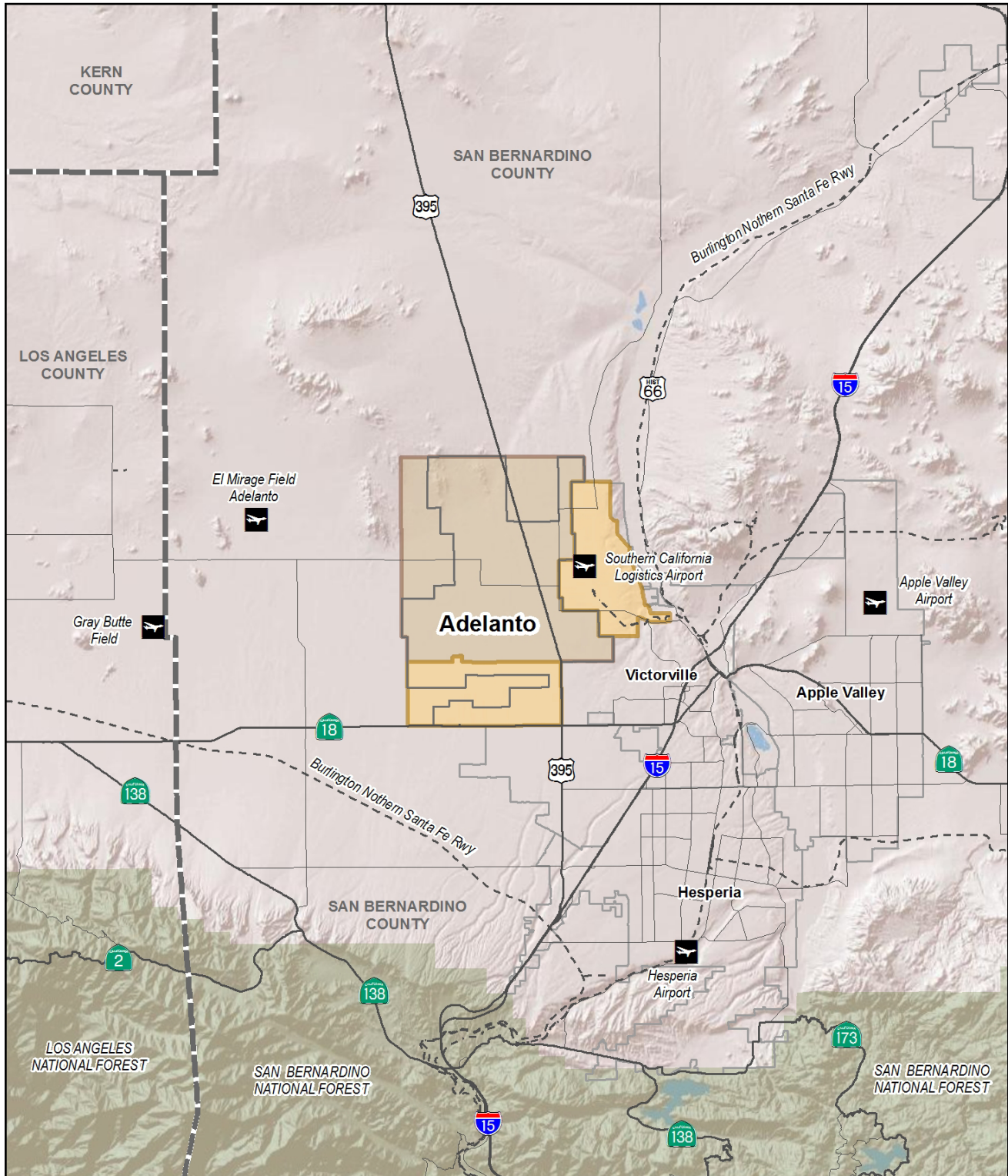
- BOUNDARIES**
- Planning Area
 - Study Area
 - City Boundary
 - Sphere of Influence
 - SCLA Land Use Area
- TRANSPORTATION**
- Highway
 - Highway 395 Realignment
 - Highway E220 Corridor
 - Street
 - Railroad
 - Mojave River

Source: City of Adelanto, 2013; Census Tiger Line Data 2000-2010.

Map prepared by MIG | Hogle-Ireland, Inc.



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Source: Census Tiger Line Data 2000-2010.



0 2 4 6 8 Miles

BOUNDARIES

- Planning Area
- Study Area

Figure I-2:
Regional Location

Stakeholder Interviews

A series of stakeholder interviews were conducted to discuss issues and opportunities facing Adelanto. These groups were diverse and included local land owners and real estate professionals, developers, and local service providers.

Community Workshops

Three large-scale Community Workshops were conducted in 2013. All events were convened in the Adelanto Stadium Conference Room. The first Community Workshop reviewed the Planning Area's characteristics and technical analyses – land use, transportation, biological resources, and infrastructure. Sustainable planning techniques applicable to the desert environment were also reviewed. The participants identified sustainable planning techniques that they would endorse for inclusion in the Plan. The second Community Workshop presented two land use plan alternatives to the participants for their consideration. The participants clearly indicated their land use and vehicular circulation preferences; those preferences are the fundamental basis on which the Adelanto North 2035 Plan was developed. The third Community Workshop presented the proposed Draft Adelanto North 2035 Plan for the participants review and endorsement.



September 26, 2013 Community Workshop

Adelanto North 2035 Website

The Adelanto North 2035 Plan website, www.adelantonorth2035.com, provides current and historical information on the development of the Plan. Public meeting summaries, site photos, public workshop notices, technical documents, and other materials are posted to the interactive website. The website also includes a forum for comments and questions to be submitted.

Consistency with the Adelanto General Plan

The Planning Area includes lands within the City of Adelanto's jurisdiction and lands within the County of San Bernardino's jurisdiction. Both the City and the County have General Plans providing policy direction governing development, natural resource use, and service provision. The unincorporated County land is within the City's Sphere of Influence. As such, the City has the authority and responsibility to plan for it.

Concurrent with the Adelanto North 2035 Plan's adoption, the City will amend the City of Adelanto's General Plan and Zoning Code for consistency with the Adelanto North 2035 Plan. However, if the Adelanto North 2035 Plan's goals, policy, and programs differ from or conflict with the policy contained in the Adelanto General Plan or any other applicable City regulation, rule, or policy, the Adelanto North 2035 Plan shall prevail, unless otherwise indicated. The Planning Division staff shall resolve any issues that may arise with the interpretation of the Plan.

Guidelines for Adelanto North 2035

As we move through the second decade of the 21st century, Adelanto, like the rest of the Victor Valley, will continue to face pressures to change from a bedroom community providing affordable housing to the greater Inland Empire. The following Guidelines frame how Adelanto will respond to those pressures and to act as a leader in the region.

- *Adelanto recognizes its long-term obligations to future residents by **protecting its environment**. The City embraces sustainable, green principles and promotes developments that conserve natural resources.*
- ***Neighborhoods are an important fabric** of the City and can help define social, cultural, and physical identities. Adelanto will work with neighborhood residents to create safe and healthy neighborhood villages that are focused around activity centers and are linked by pedestrian paths, bicycle trails, lanes for neighborhood electric vehicles as well as traditional roads.*
- *Adelanto will not become stagnant, but will **change over time** to meet the trends and demands of its populace. At the same time, it is important that these changes recognize and preserve the character of the City and the desert environment while adapting to meet the community needs.*
- ***A healthy economy creates for a healthy community**. The City will create a healthy and diverse economy that will retain and attract new industries, support the tax base, and sustain the ability to provide important services for existing and future residents, including expanded housing and job opportunities.*
- *Adelanto will provide the public with **transportation system choices** in and around Adelanto, reducing its dependency on the automobile. This is particularly important to youth and elderly.*
- ***Pedestrian and bicycle connectivity** are as important as automobile accommodation. For this reason, established areas will be retrofitted and new developments and public spaces will be designed with pedestrians and bicycles in mind.*
- ***Community building and public participation** provide the cornerstone of a thriving city. The City will continue to work with local homeowners and neighborhood groups, boards, and commissions to address neighborhood issues and improve Adelanto.*

Key Sustainability Design Approaches

Sustainability

Sustainability is achieved through careful planning to meet the community's current needs, without compromising the ability of future generations to meet their own needs. American land use patterns and transportation systems have become unsustainable, and they cannot be continued indefinitely without major changes. The carbon dioxide emitted from electricity

generation and the cars that we drive are some of the primary sources contributing to the Earth's climate change. Good community planning that focuses on alternative transportation policies and land use strategies offers some of the most effective solutions available as we seek a more sustainable future.



**Sustainability
Symbol**

Implementation of the Adelanto North 2035 Plan will be achieved through sustainable means at every level. Instead of drafting a separate sustainability chapter, Adelanto's policy makers determined that to have the best outcomes, sustainability should be incorporated throughout the Plan. The Adelanto North 2035 Plan sustainability symbol is a succulent. This symbol indicates that a policy or program includes specific attention to best practices from the perspective of reducing greenhouse gas emissions and conserving natural resources. Sustainability, through conservation and the development of innovative land use, transportation, and infrastructure policies, is the cornerstone of the Adelanto North 2035 Plan.

Land Use and Community Design

- **Neighborhood Focus.** A key feature of the Adelanto North 2035 Plan is neighborhood design. Neighborhood design plays a significant role in creating livable, sustainable places to live, work, play, learn, and entertain. Every neighborhood is anchored by a gathering place, such as a school, park, public space, or commercial-serving center. These gathering places are within walking distances of the homes in the neighborhood. Neighborhoods are connected to the overall community through an interconnected, pedestrian-friendly street and trail system. The neighborhood street layout consists of a gridded street network, walkable blocks, trail system, and the inclusion of pedestrian access points at open-ended cul-de-sacs, allowing connectivity throughout the neighborhood.
- **Mixed Use Town Center.** The Mixed Use Town Center is Adelanto's focal point for retail, business, medical, entertainment, and civic activity. It will function as the City's downtown and "Main



Street”, allowing both local and regional businesses. This Town Center encourages a range of complementary uses, including multifamily residential uses within walkable blocks, pedestrian-friendly streetscape, High Desert Corridor transit station, and a large town square where community events can convene. The Town Center also includes Adelanto City Hall and a large central park. Besides the town square and central park, amenities can include plazas, promenades, and an amphitheater. The Main Street character facilitates pedestrian activities in the form of sidewalk vendors, outdoor cafes, and farmer’s markets.

- **Practicable Green and Sustainable Development.** The Adelanto North 2035 Plan promotes wise use of land and resources including recycling or reclaiming water, soils or waste resources; efficient use of urban services by establishing opportunities for “practicable green” solutions for effective reduction in energy and water consumption; and a comprehensive mix of land uses and housing choices, which makes it easier to live, work, and get around by walking and biking.
- **Desert Sensitive Design.** Buildings, parks, streets, landscaping, lighting, public facilities, infrastructure, and storm drainage systems are designed to reflect the desert environment, while integrating sustainable measures. The Mojave Desert is an important ecosystem for plants and wildlife. With an average of seven inches of rain per year with intense summer heat and chilly nights, everything must take into account these harsh conditions. This Plan creates a balanced approach to create a comfortable environment for residents and businesses that limits the impact to the desert wildlife and habitat.



Economic Development

- **Business Districts and Employment Centers.** This Plan accommodates various employment uses to create a balance between the number of jobs and housing units. A balanced approach allows residents the opportunity to live close to work and affords employers the opportunity to choose workers from a sizable, skilled labor pool. A



large number of available employment opportunities attracts new residents and gives them choices in commuting patterns. The Plan includes significant lands designated for employment generating uses in the logistics and industrial sectors. Many of these uses will complement and provide economic support to the Southern California Logistics Airport. In addition to the manufacturing and commercial districts, two districts will further promote economic development: Mixed Use Town Center and Visitor Serving Center. The Mixed Use Town Center will accommodate a variety of retail, office, services, medical, and civic uses in a downtown setting. The Visitor Serving Center area will provide opportunity for local and regional visitor servicing uses such as movie theaters, playhouses, the Adelanto Stadium, and hotel accommodations. This center will serve as a venue for ancillary entertainment uses such as community events, concerts, and festivals. The Plan aims to spur local economic development and create a self sufficient, sustainable economy.

Mobility

- **Complete Streets: Walking, Bicycling and Transit.** The Adelanto North 2035 Plan includes a hierarchal network of streets that accommodates a variety of transportation modes and users. The entire Planning Area consists of major streets, boulevards, and collector streets designed in a gridded street pattern to facilitate mobility. Streets accommodate pedestrian, bicycling, and transit modes whereas activity streets include the design of buildings, streetscapes, and amenities working together to create a pedestrian-friendly atmosphere. These streets are designed safer, more livable, and welcoming to all modes beyond just driving.
- **Trail System.** The Adelanto North 2035 Plan is traversed by natural drainages, arroyos, and utility easements. The Plan takes advantage of these corridors by using them for a trail system, providing linear open space corridors. The trail system accommodates pedestrian and bicycle modes. Additionally, Neighborhood Trails and Street Trails will also provide multi-use trails within neighborhoods and connectivity to surrounding activity areas, including parks and schools. Trail design respects the natural desert habitat and limits impacts to native wildlife.



Public Facilities and Infrastructure

- **Concurrent Infrastructure.** Infrastructure improvements shall be completed in advance of new development. New development will be required to pay its own way. To do

this, the Adelanto North 2035 Plan requires available water supply and distribution systems in relationship to its growth zone to support the needs of residential, commercial, and industrial growth. It requires an available sanitary sewer system and capacity in place to serve new development. It requires flood protection measures that are in place to protect new growth, with minimal disruption to the natural desert environment.

- **Water Conservation and Reclaimed Water.** Due to the desert environment, harsh conditions, and limited water resources, using water efficiently allows for long-term sustainability of this valuable resource. Water conservation measures are incorporated into the Plan to conserve this limited natural resource through sustainable and efficient landscaping and irrigation, and efficient household and business appliances and equipment. Where feasible, the use of reclaimed water will irrigate parks, school grounds, industrial businesses, golf courses, landscaped medians, and other facilities that require large amounts of water.
- **Renewable Energy: Solar and Wind.** The Adelanto North 2035 Plan accommodates various renewable energy sources, such as solar and wind energy. These facilities will create sustainable energy sources that augment existing energy sources to power Adelanto into the future. Solar and wind energy facilities are allowed in the Light Manufacturing and Manufacturing Districts.
- **Storm Drainage and Groundwater Recharge.** This Plan maintains key natural drainages while protecting the community from flooding hazards caused by storm waters. In addition, parks, parking lots, green streets, and other infrastructure will be used to recharge the groundwater basins.



Parks and Recreation

- **Accessible Parks in Every Neighborhood.** The Plan provides a hierarchy of parks, including community parks, neighborhood parks, and pocket parks to be

conveniently located and to be accessible to residential neighborhoods. A greater number of smaller parks are planned to serve residential neighborhoods. Parks will use sustainable features to conserve water and blend in with the desert environment.

- **Community Gathering Spaces.** A town square, plazas, parks, promenades, pedestrian-friendly sidewalks, shaded seating, outdoor dining, outdoor amphitheater, and other public amenities are planned to provide social gathering places for residents and visitors and create a sense of community. In addition, community centers, libraries, and community gardens will meet the needs of the community and provide additional public gathering spaces.

Open Space and Conservation

- **Habitat Mitigation and Desert Open Space.** Open Space designations will remain largely undeveloped in direct relationship to the designated growth zones. Areas with sensitive habitat may serve as habitat mitigation areas or be maintained or preserved as a natural resource. Other suitable open space areas may be used for renewable energy improvements, so long as they minimize impacts on plants and wildlife.



- **Natural Desert Habitat.** Natural desert habitat will be preserved through the Open Space designation. Some areas may be re-vegetated, restored, or enhanced to increase their habitat value. Drainage channels and detention basins shall be linked to the open space system—arroyos, open space, and utility easements—to provide for wildlife habitat and movement. New development adjacent to open space areas will minimize impacts to wildlife.



Public Health and Safety

- **Hazardous Materials.** The Plan encourages education about the issues of household hazardous wastes and improper disposal, as well as using toxic material substitutes. The Plan also encourages minimizing the use of pesticides, herbicides and other toxic materials by implementing integrated pest management strategies and by controlling and preventing invasive weeds and pests on all City property. The Plan also promotes the use of sustainable or green materials and products.

Using the Adelanto North 2035 Plan

Using the Plan

The Adelanto North 2035 Plan is a community document intended for use by all residents, business owners, decision-makers, and workers in Adelanto. As such, the Plan has been written and organized for ease of use. Tables, diagrams, and maps help readers understand the planning concepts. A glossary provides further guidance and support to encourage a deeper understanding of all topic areas.

The organization of the Plan allows users to turn to the section that interests them and quickly obtain a perspective of City policies on the subject. However, Plan users should realize that the goals, policies, and programs throughout all the chapters are interrelated and should be examined comprehensively. All of these policy components must be considered together when making planning decisions.

Key Terms Used

Goals and policies represent the Plan's foundation. A **goal** is an overall statement of community desires and consists of a broad statement of purpose or direction. For each goal in the Plan, associated and more definitive policy statements follow. A **policy** provides guidance to the City Council, other City commissions and boards, and City staff in their review of development proposals and other actions taken. Implementation provide further articulation regarding how the City will achieve its goals and policies. Goals, policies, and programs are listed at the end of each topic discussion to keep these important components with the context backgrounds for better understanding of intent. The Implementation Plan and related matrices are included for ease in referencing the actions related to the Adelanto North 2035 Plan. Implementation programs are intended to be reviewed and updated periodically to allow decision-makers to adjust to current community priorities and funding resources. Updating an Implementation Program will not require a Community Plan amendment or a General Plan amendment.

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Land Use and Community Design

Introduction

The Land Use and Community Design Chapter guides development choices toward a high quality, balanced community that residents and businesses value and appreciate.

Context

The Adelanto North 2035 Planning Area's established land use patterns reflect a very fragmented and sparse landscape, with commercial uses and residential areas separated by vacant lands. Very few residential, commercial, or industrial blocks are entirely developed, except for some of the newer residential subdivisions that were built in the past 10 years. The following provides a context for examining development constraints and exploring opportunities for land use change over the long term (20-year period).

- **Limited Commercial Investment.** Adelanto's commercial areas in the Adelanto North 2035 Planning Area are older with limited activity. Inadequate commercial investment and redevelopment has occurred. Some businesses have closed and buildings have been shuttered creating blight conditions. The limited number of businesses, the blight conditions coupled with the vacant sites scattered between commercial and residential buildings thwart walkability and decrease aesthetic appeal.
- **Incentives For Business Uses to Locate Elsewhere.** Companies moving into SCLA area are able to take advantage of the Local Agency Military Base Recovery Area (LAMBRA) Enterprise Zone designation for its benefits and tax incentives. The LAMBRA

Enterprise Zone does not extend into the City of Adelanto. Therefore, it may be more advantageous for businesses to locate in SCLA and in the City of Victorville as opposed to locating in the City of Adelanto. This presents a challenge for the City of Adelanto in its efforts to attract new businesses to locate in their community. The Economic Development Chapter provides more context and policy direction regarding attracting new industrial and manufacturing businesses to the City of Adelanto.

- **Master Planning.** New master land use planning and development efforts may be difficult as they will require significant ongoing coordination with a large number of property owners and may require significant lot consolidation. The North Adelanto 2035 Planning Area is comprised of many smaller sized properties with different ownership. There are few large parcels in the Planning Area; only one vacant parcel is over 200 acres and approximately a dozen vacant properties are over 100 acres.
- **Utility Easements.** Many transmission lines and easements traverse the Planning Area and fragment the land area. However, the lines and easements also provide opportunities for trails and open space corridors. Master land use planning should consider secondary uses for the easements.
- **Correctional Facilities.** The correctional and detention facilities located in the Adelanto North Planning Area provide employment opportunities and important tax revenues for the City. Although most residents either supported or had ambivalent feelings about these uses, these facilities can create a negative perception of Adelanto for those outside the community affecting choices to move to or invest in the community.
- **Lack of Cohesive Design Theme and Placemaking Features.** Adelanto lacks an overall architectural and landscape design theme of its public streets and spaces. There are no inspiring gateway signage and entrances at major entrances into Adelanto.
- **The Design of Buildings Do Not Reflect Desert Environment.** Many of Adelanto's buildings and structures are not designed to reflect the Mojave Desert's environmental conditions. As a result, many buildings require substantial consumption of energy to cool or warm the building's interior.

Key Sustainability Features

- **A Balanced Community.** Adelanto North 2035 Plan seeks to be a "balanced community" where residents live, work, shop, learn, socialize, and recreate. In addition, balanced land uses provides the City with the diversification to run a successful government, with a diversified tax base and a variety of marketable characteristics. Key to the development of a balanced community is the preparation and implementation of master plans. The master plans will ensure that schools, parks, other public facilities/infrastructure are provided concurrently with the residential and nonresidential development. The master plans will ensure that the pedestrian, bicycle, transit, and automobile circulation system fully supports and sustains the land use development. The master plans will ensure that sustainable development and planning practices are implemented on a neighborhood by neighborhood basis.

- **Complementary Mixed Uses.** The Land Use Plan accommodates complementary mixed uses with higher residential density and commercial intensity in the Town Center and Visitor Serving Center. These compact uses will create vibrant walkable areas with easy access to transit facilities and an integrated street and sidewalk system. The Town Center will serve as the “downtown” providing local and regional goods and services. The Visitor Service Center will provide a regional “destination” center providing entertainment and recreational uses that draw patrons from the larger Victor Valley and provide accommodations for US 395 travelers.
- **New Town Center “Main Street”.** The new “Main Street” in Town Center will serve as the business and commercial heart of the community and will include an array of community amenities and places for public events.
- **Growth Areas.** The Adelanto North 2035 Plan establishes five growth areas directing new development into areas with established infrastructure first. Establishing the growth areas allows for a reasonable, planned development scenario and allows for conservation of desert habitat through the open space and easement corridors. The growth area encourages future growth, including compact, mixed use development along portions of US 395 and where adequate public facilities such as roads, water and sewer systems, and public safety.
- **Concurrent Infrastructure.** New development growth will be balanced with infrastructure capacity. Parks, schools, water, storm drainage, and sewer infrastructure systems, other utility facilities, and public safety facilities shall be in place before or be developed concurrently with new residential and nonresidential development.
- **Preserve Natural Function of Drainage Corridors and Create Open Spaces.** Greenbelt corridors will preserve the natural function of drainage corridors and sensitively integrate multi-use trails. Open Space designations will preserve and protect native habitat for wildlife, while allowing for limited residential development.
- **Renewable Energy.** The Adelanto North 2035 Plan encourages renewable energy generation facilities. Solar and wind generation facilities are accommodated in several land use districts to provide renewable energy sources for the community and region.
- **Sustainable Building Design.** Sustainable design approaches include design and construction practices that significantly reduce or eliminate the development’s negative impacts on the environment. It includes features and materials that reduce energy consumption and creates a more comfortable building interior and may shelter pedestrians entering or leaving the building from sun, wind, or rain.

Land Use Plan

The Adelanto North 2035 land use strategy promotes sustainable long-term growth in the City by providing a balanced allocation of residential, commercial, industrial, and open space uses. Critical to the success of the Plan is directing new residential and mixed use development to occur within growth priority areas where the existing infrastructure and community services has been established. Another critical element of the plan is establishing new development patterns that provide a more compact, pedestrian-friendly physical environment.

In addition, coordinating economic development, sustainability, transportation, and land use policies will help Adelanto reduce local contributions to greenhouse gas emissions by making it possible for greater numbers of people to make more trips using transit, walking, or biking.

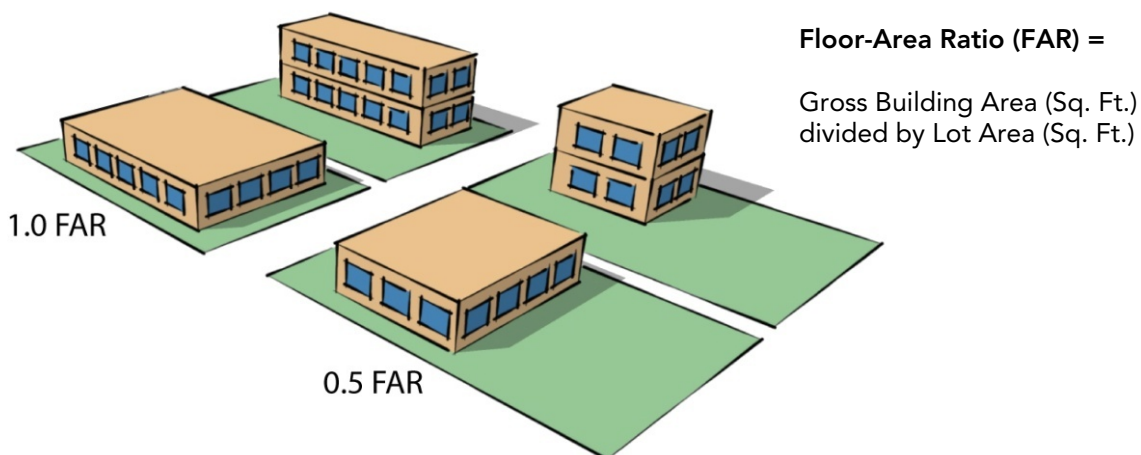
A key component of the Adelanto North 2035 Land Use Plan is the inception of the Mixed Use Activity Centers, including the Town Center and Visitor Serving Center. These mixed use districts provide for a range of uses: offices, stores, residences, schools, hotels, and restaurants. The synergy created by these diverse uses creates a Town Center that functions as the City's hub of commercial and civic uses complemented by the Visitor Serving Center that provides opportunities for recreation and entertainment uses. This strategy is balanced with efforts to: 1) establish compact, mixed use environments that promote alternative modes of transportation, 2) create complete residential neighborhoods in which, residents neighborhood are able to comfortably stroll or pedal to school, work, leisure, or civic activities in 20 minutes or less, and 3) create sustainable business and industrial districts that provide diverse business and employment opportunities.

Land Use Density and Intensity

Density and intensity are quantitative measures used to describe how much development may occur on a property. For residential uses, the term "density" is used. This section describes density in terms of the number of dwelling units allowed per acre (du/ac). This is commonly known as gross density.

For nonresidential land uses, the term "intensity" is used. Development intensity addresses the amount of building square footage on a particular parcel or lot. Intensity can be described in many ways, including total building square footage, the percent of the lot the building occupies, the mass of a building, or a floor/area ratio. This Plan uses a floor-area ratio (FAR) to measure nonresidential intensity. The FAR defines the ratio of the total gross floor area of all buildings on a lot to the total land area of the lot. It is useful to note that FAR alone does not describe the form of buildings. For example, an FAR of 1.0 may yield a one-story building that covers the entire lot, or a two story building that covers half of the lot, or a number of other possible configurations as illustrated in Figure LC-1.

Figure LC-1: Floor-Area Ratio



Land Use Designations

There are 12 land use designations in four different land use categories.

Residential:

- Desert Living (DL-9, DL-5, DL-2.5)
- Single Family Residential (R-S1, R-S5)
- Medium Density Residential (R-M12)

Mixed Use:

- Mixed Use (MU): Town Center and Visitor Serving Center

Business and Manufacturing

- Business Park (BP)
- Light Manufacturing (LM)
- Manufacturing/Industrial (MI)
- Airport Development District (ADD)

Open Space, Greenbelt Corridors, and Public Utilities

- Open Space (OS)
- Greenbelt Corridor: Drainage Easement (DE)
- Greenbelt Corridor: Utility Easement (UE)
- Public Utilities (PU)

Residential

Three residential land use designations are established to create vibrant, pedestrian-friendly, and sustainable residential neighborhoods in the Adelanto North 2035 Plan. The varying residential types and density provides housing opportunities for all household income ranges. While residential uses are the primary permitted uses, other complementary and compatible uses can be established, including parks, trails, schools, and some community amenities. Residential land use designations are shown in the Figure LC-2, Adelanto North 2035 Land Use Plan. In addition, higher density residential uses will be permitted in the Mixed Use district.

Desert Living (DL-9, DL-5, DL-2.5)

The Desert Living residential land use categories allow single family residential development on large lots at very low density. This designation consists of three residential density ranges, DL-9, DL-5, and DL-2.5. These residential areas are intended to be designed with innovative home sites and structures integrated into the desert environment with a sensitivity to land forms, and taking careful consideration of adequate availability of services, access, and circulation. Other permitted uses that may be allowed include school, park, recreation/golf, and renewable energy production that are compatible with low density residential uses.

A conceptual design of a Desert Living neighborhood is illustrated in Figure LC-3.



The Desert Living designation provides opportunities for single family homes on large lots with minimum lot sizes ranging from 2.5 acres to 9 acres

Development Standards:

Desert Living development density is targeted from 0.10 to 0.40 du/ac, minimum lot sizes range from 2.5 to 9 acres, and a maximum building height of 2 stories.

- Desert Living (DL-9): 0.11 du/ac (1 unit per 9 acres) maximum allowable density
- Desert Living (DL-5): 0.20 du/ac (1 unit per 5 acres) maximum allowable density
- Desert Living (DL-2.5): 0.40 du/ac (1 unit per 2.5 acres) maximum allowable density

Single Family Residential (R-S1, R-S5)

The Single Family Residential land use categories are intended for “traditional” neighborhood developments. This designation consists of two residential density ranges, R-S1 and R-S5. These residential neighborhoods will include conventionally subdivided residential lots, with recreation facilities, parks, trails, and daycare and school sites. A conceptual design of the Single Family Residential neighborhood is illustrated in Figure LC-3.

Development Standards:

Single Family Residential development density is targeted from 1 to 5 du/ac, a minimum lot size of 5,000 square feet, and a maximum building height of 2 stories.

- Single Family Residential (R-S1): 1.0 du/ac maximum allowable density
- Single Family Residential (R-S5): 5.0 du/ac maximum allowable density

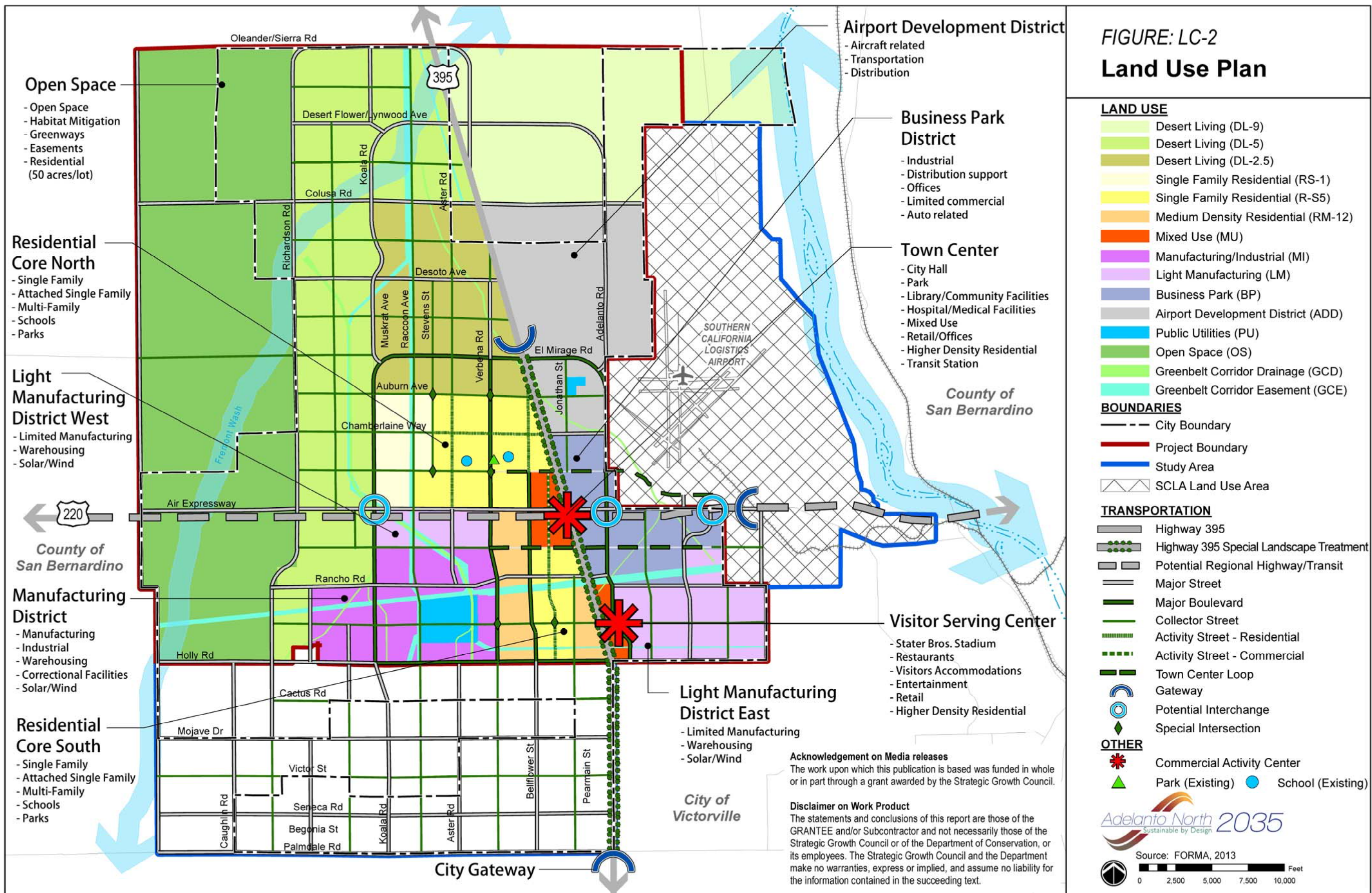


FIGURE: LC-2
Land Use Plan

Date: Thursday, September 04, 2014

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The Single Family Residential maximum density can range from 1 to 5 dwelling units per acre



The maximum height is two stories with a minimum lot size of 5,000 square feet

Medium Density Residential (R-M12)

The Medium Density residential land use category is intended to provide a variety of housing opportunities for start-up families, empty nesters, and/or active adults. These residential neighborhoods may include smaller lot single family homes, as well as single family attached units. Other uses permitted will include recreational facilities, parks, trails, community amenities, and daycare and school sites. A conceptual design of the Medium Density Residential neighborhood is illustrated in Figure LC-3.

Development Standards:

Medium Density Residential development is targeted from 5 to 12 du/ac, a minimum lot size of 3,500 square feet, and maximum building height of 2 stories.



Small-lot single-family homes



Townhomes with front entry access to sidewalk



Desert appropriate landscaping



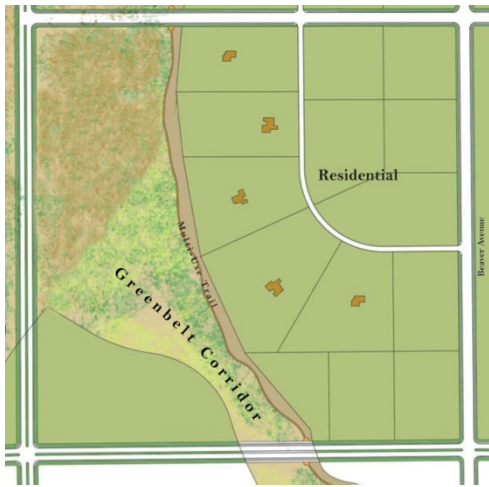
Pedestrian friendly streetscape



Medium Density Residential integrates community facilities and recreational amenities

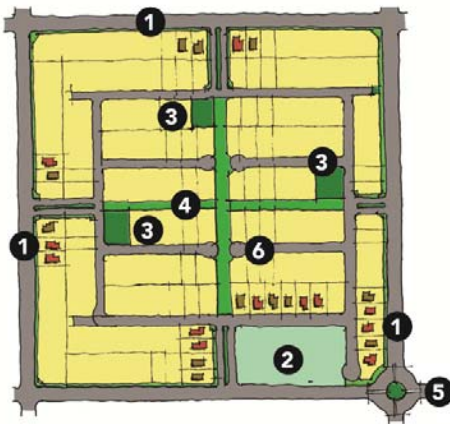
Figure LC-3: Conceptual Residential Neighborhoods

Conceptual Desert Living Neighborhood



1. Access to greenbelt drainage and easement corridor
2. Substantial use of native desert vegetation
3. Multi-use trails along Major and Collector Streets
4. Limited use of sidewalks

Conceptual Single Family Residential Neighborhood



1. Residential Activity Street: Residential units load to the street
2. School located along Collector Street
3. Neighborhood accessible parks
4. Neighborhood greenbelt trail system with bicycle and pedestrian paths
5. Traffic roundabout
6. Open-ended cul-de-sacs

Conceptual Medium Density Residential Neighborhood



1. Neighborhood greenbelt trail system with bicycle and pedestrian paths
2. School located along Collector Street
3. Neighborhood accessible parks
4. Mixture of multiple family residential product types
5. Open-ended cul-de-sacs

Mixed Use

With the desire to achieve sustainable development forms, the Mixed Use land use category is established. Mixed-use development approaches offer opportunities for people to live close to work or near transit stops, walk to neighborhood stores and parks, enjoy indoor and outdoor entertainment close to home, and experience vibrant pedestrian districts. The Mixed Use designation includes two activity areas: Town Center and Visitor Serving Center.

Mixed Use: Town Center and Visitor Serving Center

The Mixed Use designation is to allow mixed use development, thereby, providing maximum opportunity and flexibility for a broad array of long term residential, commercial, institutional, and business uses within walking distance to multiple land use opportunities. The mixed use concept is embraced for the Town Center Mixed Use and the Visitor Serving Center Mixed Use areas.



Mixed use: commercial on first floor with residential or offices uses on second and third floor



Multi-family residential

The Mixed Use designation encourages a mixture of compatible and synergistic land uses, such as residential with compatible non-residential uses. Residential live-work, single family attached residences, and multi-family units are permitted. The Mixed Use residential land use is a high density category, and may include compact residential lots, attached homes, condominiums, multi-family – for-sale and rental units located conveniently to services and transportation. Ideally, these neighborhoods will have convenient access to recreational and daycare facilities. Compatible non-residential uses include, but are not limited to: civic and community facilities, City Hall, Adelanto Stadium, visitor serving accommodations, senior center, Central Park, farmer's markets, museums, libraries, movie theaters, shopping and dining, and employment opportunities in medical/business offices.

Transportation and circulation collaboration play an important role for successful mixed use planning efforts and must be supported by amenities such as bus stops, park and ride and/or transit/metro facilities, shuttle services, and parking accommodations.

Development Standards:

For Mixed Use the maximum development intensity is 0.45 (FAR), 4 stories building height and 18 du/ac. Density. For single use residential the maximum is 0.35 FAR, 2 stories building height, and 12 du/ac. For single use nonresidential the maximum development is 0.25 FAR and 2 stories building height.

The Mixed Use designation consists of two centers: Town Center and Visitor Serving Center.

- **Town Center.** The Town Center is envisioned to be the heart or main focal point of the City. It will include a "Main Street" and a downtown that allows a variety of uses including residential. It will accommodate current civic and community uses such as City Hall, a community or senior center, and sports park. Other visitor serving, cultural, and recreational needs could include museums, libraries, or movie theaters. Commercial retail will provide shopping, dining, and personal services for residents; employment opportunities may also include business or medical offices or even a hospital.

Transportation and circulation needs will be accommodated through transit facilities such as bus stops, centralized park and ride lots or parking structures. Future transit/metro or local shuttle services must be provided in close proximity to residential uses. Residential uses may include live/work units, single family attached, and multi-family neighborhoods. The Main Street character will facilitate pedestrian activities and amenities in the form of sidewalk vendors, outdoor cafes, and farmer's markets.



'Main Street' commercial environment



Desert friendly landscaping



Plazas and public spaces creates activity



Town square for community events



Town Center "Main Street" setting



Building frontages located along sidewalks



Angled parking provides numerous spaces



Comfortable shaded sidewalks with planters



The town center provides opportunities for civic events, such as a farmers' market or festivals



Entertainment and restaurant uses create pedestrian activity around the town square



Landscaped courtyards provide ample seating areas in a comfortable environment



Crosswalks, benches, planters, street trees, lighting, and banners, contribute to a pedestrian-friendly streetscape

- **Visitor Serving Center.** The Visitor Serving Center area will provide an opportunity for hotel accommodations and resort facilities related to Adelanto Stadium and serve as a venue for entertainment uses such as community events, concerts, and festivals. The areas immediately adjacent to the stadium will provide for the growth of retail shops, personal services, and dining establishments, as well as supporting residential units consistent with the character of the neighborhood.

The Visitor Serving Center encourages a mixture of compatible and synergistic land uses, such as residential with compatible non-residential employment-intensive uses, and entertainment uses (including hotels and entertainment venues), with a particular focus on fostering pedestrian activity, vertically mixed use projects, public spaces, and other community amenities.



Lodging accommodations



Adelanto Stadium



Restaurants and entertainment venues



Varying residential types



Adelanto Stadium and new sports facilities



Soccer fields



Pedestrian Promenade



Highway oriented signage



Entertainment uses, including a theater



Pedestrian promenade with shade features and public art



Live/work units



Live/work units

Table LC-1 Residential Density and Height Standards

Residential Designations	Density Range (dwelling units per acre – du/ac)		Maximum Height
	Minimum	Maximum	
Open Space	0.001 du/ac	0.02 du/ac (1 unit per 50 acres)	2 stories
Desert Living (DL-9)	0.03 du/ac	0.11 du/ac (1 unit per 9 acres)	2 stories
Desert Living (DL-5)	0.12 du/ac	0.20 du/ac (1 unit per 5 acres)	2 stories
Desert Living (DL-2.5)	0.21 du/ac	0.40 du/ac (1 unit per 2.5 acres)	2 stories
Single Family Residential (R-S1)	0.41 du/ac	1.0 du/ac	2 stories
Single Family Residential (R-S5)	1.1 du/ac	5.0 du/ac	2 stories
Medium Density Residential (R-M12)	5.1 du/ac	12.0 du/ac	2 stories
Mixed Use (MU)	12.1 du/ac	18.0 du/ac	4 stories

Note: The densities in this table are a range and one single-family residence is allowed on any existing legal lot.

Source: FORMA, August 2013.

Business Park and Manufacturing

The Adelanto North 2035 Plan's strategic proximity to the SCLA, near existing and planned major highways and rail, and abundance of available land, makes Adelanto an attractive location for businesses, logistics facilities, and manufacturing uses. Four land use designations accommodate a diversity of industrial businesses aimed at increasing employment opportunities for the community. These uses will also complement the expansion and growth of SCLA.

Business Park (BP)

The Business Park land use designation allows for employment uses that may be related and supportive of SCLA along with synergistic uses like research and design, medical and professional offices, schools/studios for professional and business advancement, and health and fitness facilities to attract employment activity from beyond the City's boundary.



Professional offices



Research and design, medical, and office uses

Development Standards:

The maximum Business Park development intensity is 0.75 FAR with maximum building height at 3 stories or 50 feet.

Light Manufacturing (LM)

The Light Manufacturing land use designation allows for employment uses that serve as transitional zones between manufacturing or heavier industrial designations and commercial or higher density residential land use designations and will be considered as conditional or restricted uses. A few examples of these types of uses may involve renewable energy, medical labs/equipment, food/beverage services, and clothing and accessories.



Light industrial/manufacturing



Light industrial/manufacturing

Development Standards:

The maximum Light Manufacturing development intensity is 0.60 FAR with maximum building height at 3 stories or 50 feet.

Manufacturing/Industrial (MI)

The Manufacturing/Industrial land use designation considers more employment-intensive developments at key locations that are protected in a manner that minimizes exposure to its surroundings. The correctional facilities and controlled hazard uses are examples of permitted development in this land use designation. Other types of uses that may be conditionally permitted to avoid or mitigate impacts from nearby sensitive uses or development conditions are renewable energy facilities, manufacturing, distribution and warehousing, and automotive related business.

Some manufacturing and industrial uses may be in conflict with conservation/sustainability principles; however, this Plan calls for a number of policies and programs that will enhance these uses' sustainability and conservation components and minimize their environmental footprint. These policies and programs include but are not limited to:

- warehouse, manufacturing, and industrial buildings' and site plans are designed to

- accommodate passive solar planning, and rooftop solar panels,
- use of drought-tolerant, desert-friendly landscaping and implementation of other water conservation programs,
- incorporating air quality and/or odor mitigation design
- incorporating green building and infrastructure design practices.

Refer to the Sustainable Building Design discussion (below), and Open Space and Conservation Chapter for a detailed discussion, policies, and implementation programs.



Manufacturing businesses



Small manufacturing and industrial businesses

Development Standards:

The maximum Manufacturing/Industrial development intensity is 0.60 FAR with maximum building height at 2 stories or 30 feet. Correctional facilities have a permitted development intensity of 0.60 FAR and maximum building height of 4 stories or 60 feet.

Airport Development District (ADD)

The role of the Airport Development District land use designation is to provide a limited development holding zone for airport supportive uses. Site planning land use adjacent to commercial airports is intended to protect against intrusion of negative environmental conditions, such as excessive noise, while allowing compatible aviation related uses such as logistics, warehousing and distribution, automotive/truck/boat/sales, parts, and repair, RV/vehicle storage, or renewable energy facilities.



Logistics and warehouses



Renewable energy facilities

Development Standards:

The maximum Airport Development District development intensity is 0.60 FAR with a maximum building height of 2 stories or 50 feet.

Table LC-2 Non-Residential Intensity and Height Standards

Non-Residential Designations	Maximum Intensity Floor-Area Ratio (FAR)	Maximum Height	
		Story	Feet
Business Park (BP)	0.75 FAR	3 stories	50 feet
Light Manufacturing (LM)	0.60 FAR	3 stories	50 feet
Manufacturing/Industrial (MI) - Industrial or Manufacturing Uses	0.60 FAR	2 stories	30 feet
Manufacturing/Industrial (MI) – Correctional Facilities	0.60 FAR	4 stories	60 feet
Airport Development District (ADD)	0.60 FAR	2 stories	50 feet
Mixed Use	0.45 FAR	4 stories	N/A

Source: FORMA, August 2013.

Open Space, Greenbelt Corridors, and Public Utilities

In conjunction with the growth area designations, the Plan uses Open Space, Greenbelt Corridors, and Public Utilities to provide connections between urbanized areas as well as natural environments. The Open Space and Greenbelt Corridors designations identify areas devoted to the preservation of natural desert habitat resources, drainages, utility easements, and use for outdoor recreation, both active and passive. The Public Utilities category encompasses government, civic, cultural, health, and infrastructure uses and activities that contribute to and support community needs.

Open Space (OS)

The Open Space land use designation will remain largely undeveloped. Some areas may be re-vegetated, restored, or enhanced to increase their habitat value. The open space area with sensitive habitat and/or that may be considered archaeologically significant, may serve as habitat mitigation areas or areas that will be maintained or preserved as a natural resource. Other suitable open space areas may be used for renewable energy improvements and passive recreational uses.



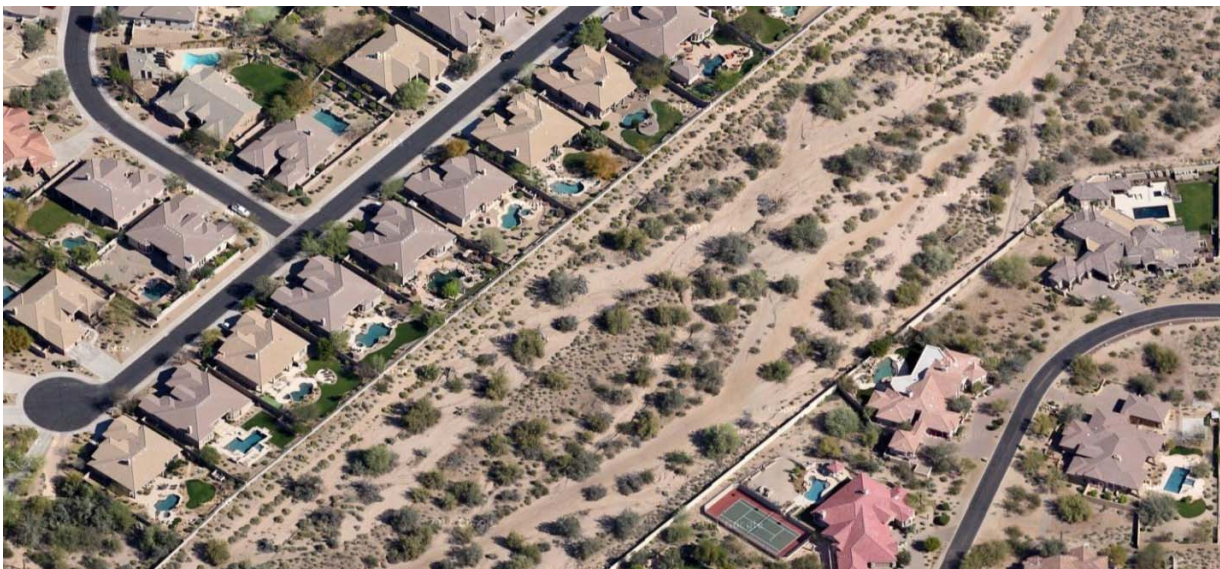
Open space habitat



Open space allows wildlife habitat to thrive

Greenbelt Corridor: Drainage Easement (GDE)

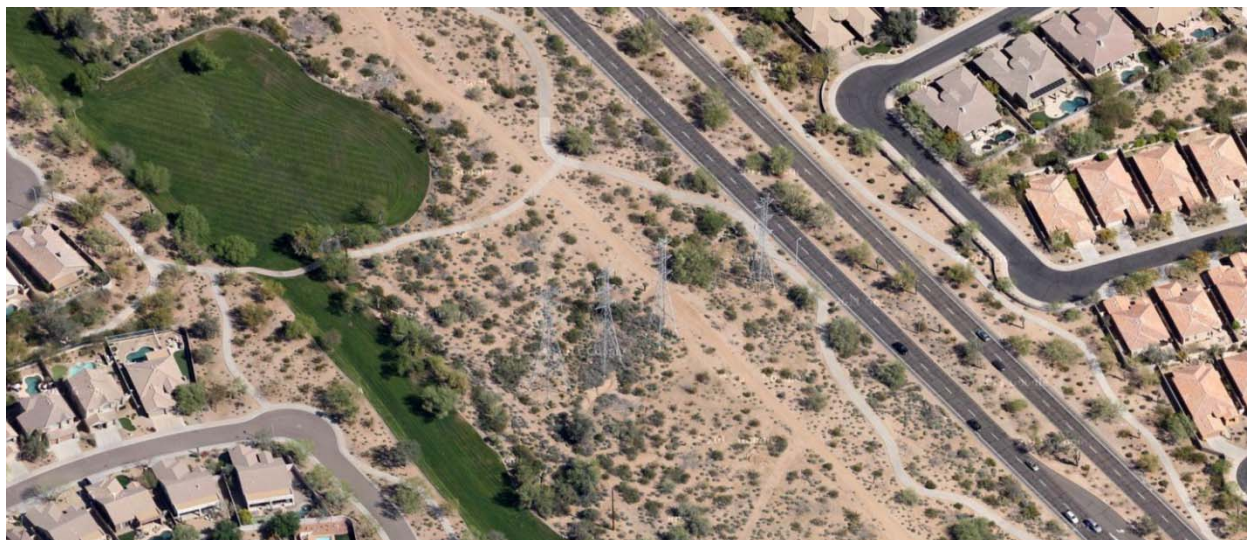
The Greenbelt Corridor Drainage areas will function as part of the storm water drainage and storm water detention areas. The drainage ways may also contain bicycle and hiking trails, and recreational park areas. The revegetated channels will also serve to provide natural habitat linkage, pedestrian trail linkage and potential wildlife movement corridors.



Greenbelt Corridor: Drainage Easements accommodate drainage courses and sensitively integrates multi-use trails and preserves native landscaping

Greenbelt Corridor: Utility Easement (GUE)

Many transmission and power lines crisscross the Adelanto. The utility easements, along with the drainage easements, will form a network of Greenbelt Corridors. These Green Corridor will also contain bicycle and hiking trails and recreational park areas. The Greenbelt Corridors will play a major role in providing connectivity within the Adelanto North 2035 Plan area and to the southern portion of the City.



Greenbelt Corridor: Utility Easement includes multi-use trails

Public Utilities (PU)

The Public Utilities category encompasses public services, utility, and infrastructure uses and activities that contribute to and support community needs.



Los Angeles Department of Water and Power Adelanto Solar Power Plant



Adelanto Wastewater Treatment Plant

Growth Areas

The Growth Areas, core to the Plan's sustainable principles, identify and encourage new development to occur in a reasoned, systematic manner including the sustainable provision of infrastructure and use of raw land. Implementation of the Growth Areas discourages the premature development of vacant lands and extension of infrastructure and services. Growth Area 1 is bounded by El Mirage Road, Holly Road, Koala Road, and the eastern planning area boundary. Development will be strongly encouraged to locate within Growth Area 1 before expanding into Growth Area 2. The location of the Growth Areas are shown in Figure LC-4.

Implications of New Growth

Table LC-3 identifies the expected, planned distribution of land uses. Over time, as properties develop and align with the intent of this Land Use Plan, the distribution of uses within the Adelanto North 2035 Plan will change. Table LC-3 summarizes the land use distribution, level of development anticipated, and the resultant residential and nonresidential levels of development that can be expected from implementation of land use policies established by this Plan. Upon implementation of the Adelanto North 2035 Plan, the Plan's anticipated up to 23,000 housing units with a population of nearly 63,000. The Plan will also accommodate almost 85,000,000 square feet of commercial, office, business park, manufacturing, industrial, and airport related uses with just over 37,000 employees.

Table LC-3 Development Levels Expectation

Land Use Designations	Acres	Dwelling Units	Population	Non-Residential Square Feet	Employees
Desert Living (DL-9)	3,405.1	17	51	--	--
Desert Living (DL-5)	5,561.3	42	125	--	--
Desert Living (DL-2.5)	2,316.9	35	104	--	--
Single Family Residential (RS-1) and (RS-5)	2309.3	10,434	31,301	--	--
Medium Density Residential (R-M12)	677.5	8,130	20,326	--	--
Mixed Use (MU)	348.0	4,176	10,439	4,547,236	4,134
Business Park (BP)	1,198.8	--	--	15,665,778	8,063
Light Manufacturing (LM)	1,559.7	--	--	33,971,073	13,041
Manufacturing/Industrial (MI)	1,327.8	--	--	28,919,638	11,102
Airport Development District (ADD)	2,870.3	--	--	1,875,440	965
Open Space (OS)	9,772.9	195	586	--	--
Greenbelt Corridor Easement (GCE)	1,029.7	--	--	--	--
Greenbelt Corridor Drainage (GCD)	378.2	--	--	--	--
Public Utilities (PU)	273.9	--	--	--	--
Roads and Roadway Right-of-way	2,274.3	--	--	--	--
Total	35,303.7	23,029	62,932	84,979,165	37,305

Source: FORMA, August 2013.

While Table LC-3 shows the reasonable expected or anticipated levels of development based on the Plan's implementation and development standards (setbacks, FARs, etc.), there is another development scenario, Full Buildout. Full Buildout scenario assumes each parcel within the plan area will be developed or redeveloped at the maximum development capacity. This scenario is unrealistic but for legal purposes, the development capacity is stated here: 28,900 dwelling units, 84,979,000 square feet non-residential, 78,860 population, and 37,300 employees.

FIGURE: LC-4
Growth Areas

GROWTH PRIORITY

- 1**
 Growth Priority Area Boundary

LAND USE

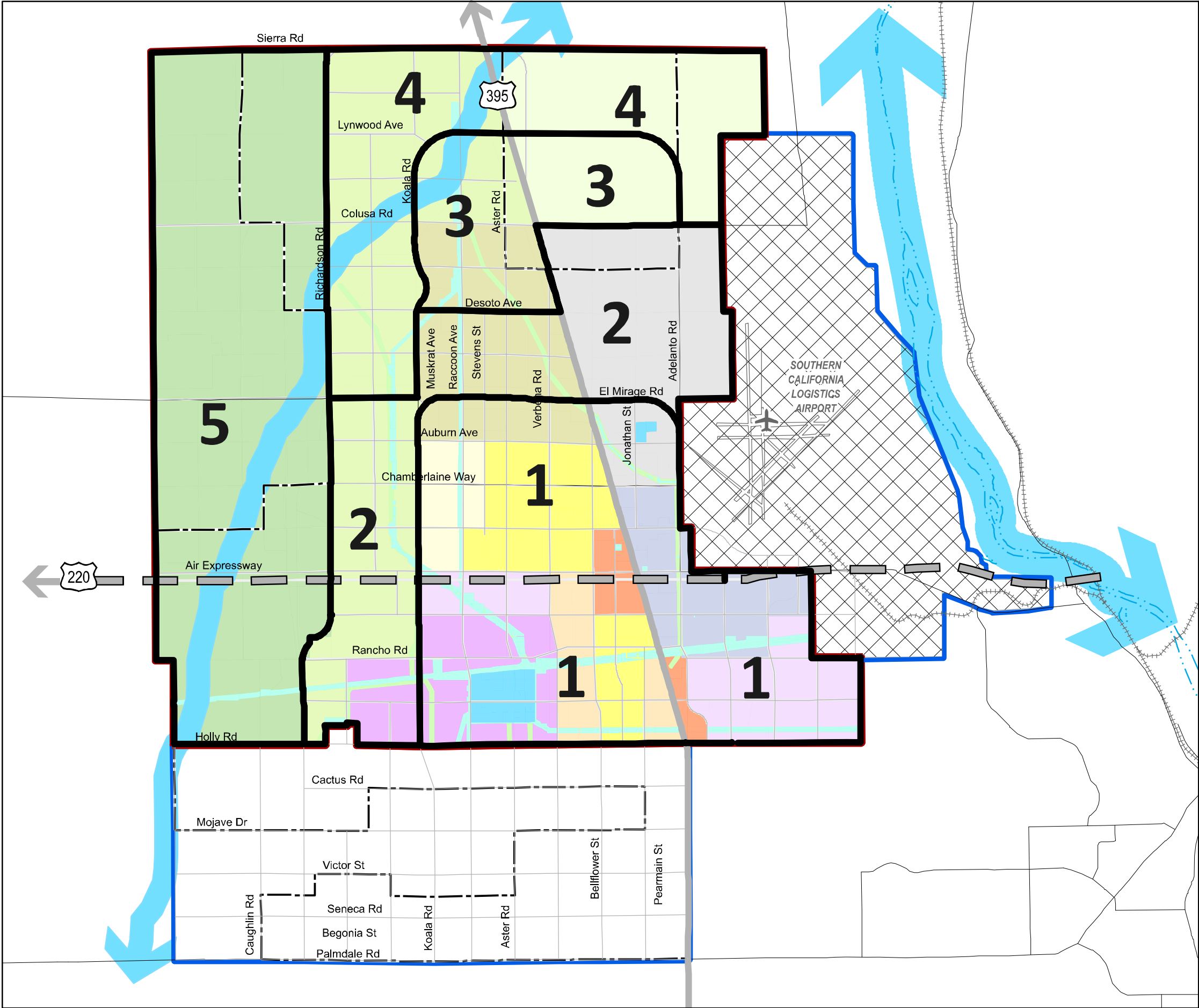
- Desert Living (DL-9)
- Desert Living (DL-5)
- Desert Living (DL-2.5)
- Single Family Residential (R1-0.5)
- Single Family Residential (R1)
- Medium Density Residential (R3-8)
- Mixed Use (MU)
- Manufacturing/Industrial (MI)
- Light Manufacturing (LM)
- Business Park (BP)
- Airport Development District (ADD)
- Public Utilities (PU)
- Open Space (OS)
- Greenbelt Corridor - Drainage
- Greenbelt Corridor - Easement

BOUNDARIES

- City Boundary
- Project Boundary
- Study Area
- SCLA Land Use Area



Source: FORMA, 2013
 0 2,500 5,000 7,500 10,000 Feet



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Community Design

The Community Design section provides guidance on achieving a high quality design for the public realm and private frontages in Adelanto North. The goals and policies are meant to encourage and require quality design that reflects the Adelanto desert conditions, create attractive streetscapes and development projects, and provide a more sustainable environment that minimizes resource consumption. This section provides the framework for new community design by creating a more walkable, sustainable, cohesive, and enduring built environment through sustainable building design; neighborhood design; residential design; mixed use and industrial design; streetscapes, intersections and gateway design; and landscaping.

Sustainable Building Design

Sustainable building design refers to design and construction practices that significantly reduce or eliminate the development's negative impacts on the environment. Sustainable design approaches are woven throughout the Plan, integrating principles of energy efficiency, landscape design, and streetscape design. This section focuses on design features that reduce energy consumption and create a more comfortable building interior.

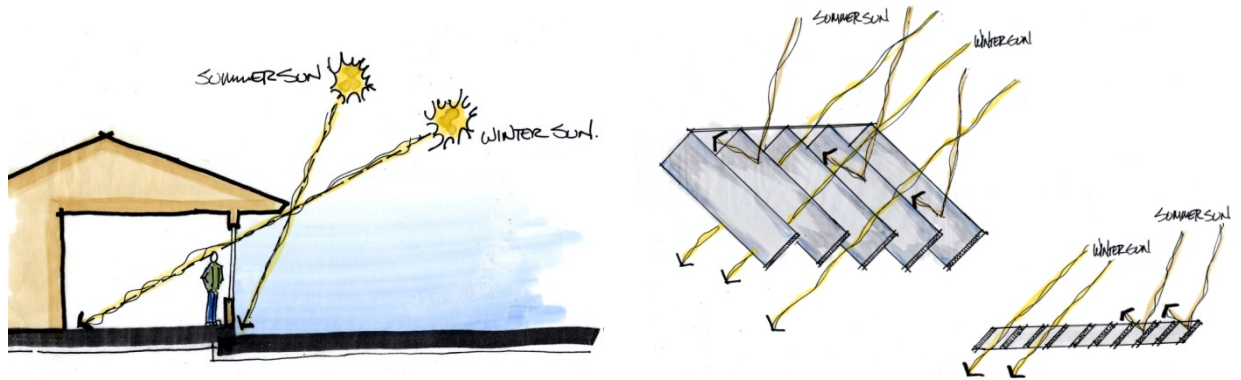
Passive Solar Building Design

Passive solar design refers to the use of the sun's energy for the heating and cooling of living spaces. In this approach, the building takes advantage of natural energy characteristics in materials and air created by exposure to the sun. Passive systems are simple, have few moving parts, require minimal maintenance, and require no mechanical systems. The key to designing a passive solar building is to best take advantage of Adelanto's local climate, see Figure LC-5.



Window shades and awnings along south-facing building façade help block direct sun light and keep building interiors cooler, while allowing indirect natural sun light to illuminate interior spaces

Figure LC-5: Passive Solar Building Design



Overhangs help during the summer and winter based on the sun's location

Window louvers can allow sunlight in during winter and block the sun during the summer

Green Site Planning and Building Design Features

Green building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle. These practices are related to site planning, energy conservation, water and wastewater, construction materials and resources, and indoor environmental quality. Benefits of green buildings include improved air and water quality, protection of wildlife habitat, reduce waste, conserve natural resources, reduces operating costs, and heightens aesthetic qualities. The goal for the Adelanto North 2035 Plan is to meet as many of the green building policies as possible for new construction and major renovation projects.

Site Planning

- **Existing Landscaping.** Protect significant natural landscaping and incorporate those elements into the new landscape design where feasible.
- **New Landscaping/Site Planning.** Program the site to create a "sense of place" through the design of a variety of experiences and activities with micro-climates appropriate to desert climate conditions. Maximize opportunities to create landscape shading and cooling for the building, exterior spaces, and walkways while also specifying low maintenance and desert-appropriate plant materials.
- **Paved Surfaces.** Utilize permeable surfaces to reduce runoff and use reflective surfaces to reduce the urban heat island effect.

Energy Use and Conservation

- **Building Envelope.** Design the building envelope to minimize heat loss and gain.

- **Climate-Responsive and Passive Systems Design.** Design buildings in a climate-responsive manner to reduce energy demand, maximize passive heating and cooling, and minimize mechanical HVAC requirements (through building form, orientation, articulated shading, natural ventilation, glazing, interior thermal mass, blinds, controls, geothermal energy, earth tempering, etc.).
- **Window Glazing.** Select glazing size and materials appropriate for the orientation of the windows. Use double or triple glazing wherever possible. Thermal breaks shall be included in window frames at all exterior glazing.
- **Window Shading.** Encourage every exterior window to be shaded appropriately for the window orientation.
- **On-Site Renewable Energy Generation.** Incorporate solar and renewable energy systems into the building design, such as photovoltaic panels that replace other building materials such as roof and wall finishes and shading elements; and/or prepare the building to receive solar equipment (conduit stub-outs, grouping of other rooftop equipment, space for solar equipment in the building, etc.). Ensure that the building and roof are "solar ready." Encourage all possible viable options for renewable energy generation.
- **Window Shading.** Specify energy-efficient HVAC and electrical systems. Provide motion sensors, daylight-responsive dimming, and electronic ventilation controls.

Water and Wastewater

- **Landscaping.** Reduce demand on all systems. Utilize appropriate low water use desert and indigenous landscaping materials, balancing that with the creation of shaded micro-climate areas and comfortable, usable outdoor spaces. Utilize dense canopy trees for shading walkways and creating desert "oasis" areas utilizing captured water.
- **Irrigation.** Maximize the use of captured water (reclaimed, harvested rainwater, etc.) for landscape irrigation. Use irrigation cisterns for water features in lieu of potable water fountains. All emitters for trees and landscape shall be designed for easy modification to reduce the amount of water used (to initially establish a desert landscape) over time to conserve water as plants become established; and to be easily modifiable to move the system farther out over time to encourage root spread.
- **Water Capture.** Provide a site location for collection opportunities for current and/or future water capture and reuse. Provide opportunities for rainwater harvesting and condensate collection.
- **Plumbing Fixtures.** All plumbing fixtures shall be certified low water use. Encourage 1/8th gallon urinals (or similar) and dual-flush toilets be used whenever possible.
- **Greywater.** Encourage greywater use for landscape irrigation and other purposes as State law allows.

Construction Materials and Resources

- **Climate-Responsive Materials.** Specify materials that are durable under desert climate conditions (UV radiation exposure and extreme heat).
- **Reused and Repurposed Materials.** Present opportunities for the installation of reused and repurposed materials, including the building shell, structural materials, and finishes, and fixtures.
- **Recycled-Content Materials.** Present options for materials with high recycled content. Utilize Green Globes reference guidelines for baseline standard.
- **Local/Regional Materials.** Encourage use of locally and/or regionally harvested and manufactured materials.
- **Rapidly Renewable Materials.** Encourage use of materials that are made from rapidly renewable materials.
- **Construction Waste.** Minimize or eliminate construction waste. Reduce, reuse, and/or recycle waste materials to minimize disposal to a landfill.
- **Indoor Environmental Quality.** Indoor environmental quality involves ventilation, low-emitting construction materials, lighting systems, and use of day lighting.

Indoor Environmental Quality

- **Volatile Organic Compounds (VOCs).** Eliminate or minimize use of volatile organic compounds for interior finishes, cabinetry, furnishings, and other interior applications.
- **Natural Daylight.** Utilize natural daylight and views to enhance building occupant comfort. Provide adequate operable shading where necessary to reduce heat and glare.

The City of Adelanto reviews all new construction and renovations for compliance with the California Green Building Standards Code (CALGreen Building Code). The Adelanto North 2035 Plan recommends encouraging the design and construction of buildings to go beyond the requirements of the CALGreen Building Code.



Overhangs reduce direct sunlight during the summer



Large windows on the north-facing façades allow natural sunlight to illuminate the interior



Solar panels and shade coverings over parking lot



Residential design that uses natural building materials

Neighborhood Design

The quality and livability of Adelanto's neighborhoods are integral components of the community's overall character. The key to a successful neighborhood is creating a sustainable environment where the ongoing investment in property is supported by public investment in schools, parks and trail areas; opportunities for social interaction; accessibility for pedestrians, bicyclists and vehicles; and distinctive characteristics that give an area a unique identity. Adelanto North 2035 Plan recognizes that the layout and the built environment influences the way residents and visitors experience a neighborhood, and it can impact their quality of life and sense of community.

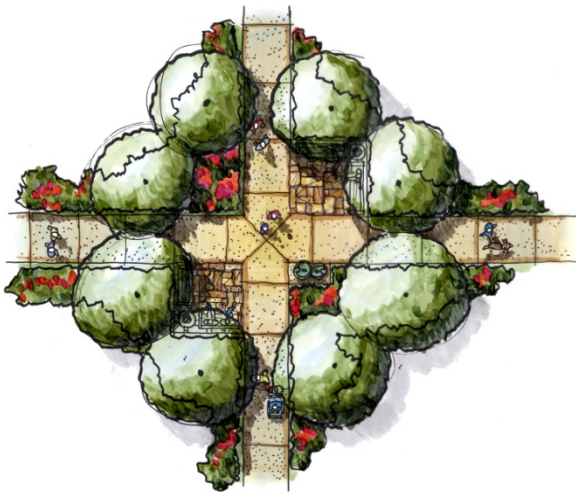
Neighborhoods shall be designed to include pedestrian and bicycle connectivity. Street sidewalks, and trails create a highly connected pedestrian system that connects parks, schools, and community amenities. Open ended cul-de-sacs include pedestrian access points, allowing greater access, while limiting through traffic and increasing pedestrian safety, see Figure LC-6 and LC-6.

Figure LC-6: Neighborhood Design

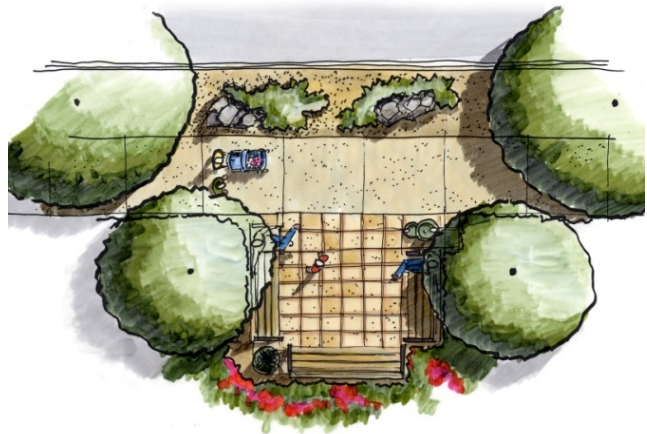


Amenities are critical in creating complete, active neighborhoods. They can include trail systems, pocket parks, passive parks, street trees, community gardens, paseos, shade structures, and rest areas with benches. These amenities can also increase walkability, particularly if they are accessible from multiple neighborhoods. See Figure LC-7.

Figure LC-7: Neighborhood Amenities



Trail node with seating areas enhanced with landscaping



Rest area with benches along street and sidewalk

Residential Design

Single-Family Residential Design

Single-family developments are made up of detached units that are usually surrounded by a yard. Adelanto North 2035 Plan encourages desirable and aesthetically pleasing single-family developments that include an assortment of design styles and emphasizes the role of the street as a pedestrian social space and encourages the use of native desert and drought tolerant landscape materials.

In Adelanto North, residential standards for single-family neighborhoods promote design diversity. Every single family neighborhood should be comprised of a variety of architectural styles, with different building plans, elevations, and architectural types in each project. Exterior building materials should be compatible with the surrounding desert environment. Additionally, garage placement should be varied to avoid creating a row of garages that dominate the streetscape. The primary purpose of building color palette selection and materials, architectural styles, and garage placement to promote interesting and varied desert neighborhoods.

Adelanto North 2035 Plan redefines the role of the street as a pedestrian social space. Sidewalks, trails and landscape parkways encourage social engagement. Neighborhoods also include public spaces for active and passive activities. Porches and front yard living spaces also encourage social engagement, balanced with privacy.

Multi-Family Residential Design

Adelanto North 2035 Plan re-images multi-family development projects not as isolated, gated developments, but as interconnected projects that blend in with other neighborhoods. Multi-family developments are higher density residential buildings, such as apartments, condominiums, and townhomes. These development types often include common facilities such as shared parking areas, open space, and recreation areas.

Multi-family developments shall be compatible with the surrounding neighborhood and shall be oriented to the street. Each individual front entry along the street should have direct access to the sidewalk, and include prominent architectural details, such as porches, roof forms, and arcades.

Outdoor living spaces, including porches, courtyards and balconies, activate the street scene and promote neighborly interaction. Outdoor spaces, when styled appropriately, should function as a highlighted feature of the elevation in size or detail. In addition, outdoor living spaces can create indoor/outdoor environments, opening up the home to enhance indoor environmental quality. They should be designed to provide shelter in the desert environment.



Clearly identify primary entries with architectural elements, such as porches, roof forms, and arcades. Prohibit isolated developments that do not connect with the neighborhood.



Articulating the building façades, varying roof forms, and use of Earth tone paint palette and natural materials creates a unique architectural style for multi-family buildings

Mixed Use, Business Park, and Industrial Design

Mixed Use Centers Design

Mixed use development plays a vital role in creating neighborhoods where people can walk from home to work, shopping centers, and parks. The design of mixed use centers needs to successfully balance the requirements of residential uses, such as the need for privacy and security, with the needs of commercial uses for access, visibility, parking, loading, and possibly extended hours of operation. The design standards for the retail core of a mixed use center are to be developed in accordance with 'Main Street' design principles, characterized by continuous pedestrian-friendly building frontages along the street frontage. Mixed uses should focus a healthy balance of retail, office, entertainment, recreational, and community related activities.

- **Town Center Mixed Use Activity Center.** The Town Center embraces placemaking that lends itself to people oriented spaces such as plazas, promenades, central parks, and amphitheater uses. This area provides space that supports community events such as Fourth of July celebrations, parades, outdoor movies or concerts, and farmer's markets.

The Town Center is intended to provide a cohesive, high quality aesthetic and recognizable theme, providing an overall design direction for the community. Theming through cohesive landscape planting, textured paving, shaded seating areas or street furniture, wayfinding signage, street lighting, fountains/water features and public art displays are some examples of pedestrian amenities that bring continuity and emphasize a sense of place. The Town Center will require defined relationships with surrounding elements including US 395, potential High

Desert Corridor (HDC)¹, the SCLA area, business districts and visitor serving center, as well as adjacent residential neighborhoods. Figure LC-8 illustrates the conceptual design of the Town Center.

- **Visitor Serving Activity Center.** Theming that is recognizable for the community, such as a “central park” or sports signature, through a cohesive landscape planting, textured paving, shaded seating areas or street furniture, are some examples of pedestrian amenities that bring continuity and emphasize this sense of place. As with the Town Center, the Visitor Serving Center for Adelanto Stadium will require defining relationships with US 395, HDC, the SCLA area, business/manufacturing districts. Figure LC-9 illustrates the conceptual design of the Visitor Serving Center.



Mixed Use Activity Center: Town Center



Attractive streetscape environment



Features to create a comfortable environment

¹ The State of California is proposing to construct the High Desert Corridor, a multi-modal 63 mile freeway/expressway with the potential for high speed rail, connecting Palmdale with Apple Valley. At the time of this Plan, two route alignments are proposed. East of Adelanto, the first route's alignment runs slightly south of Air Expressway. The second alignment proposes that the route be moved south at Koala Road to Rancho Road. Both proposed alignments propose on/off ramps at Caughlin Road, Koala Road, and US 395.



Unique entry and signage



Attractive public spaces

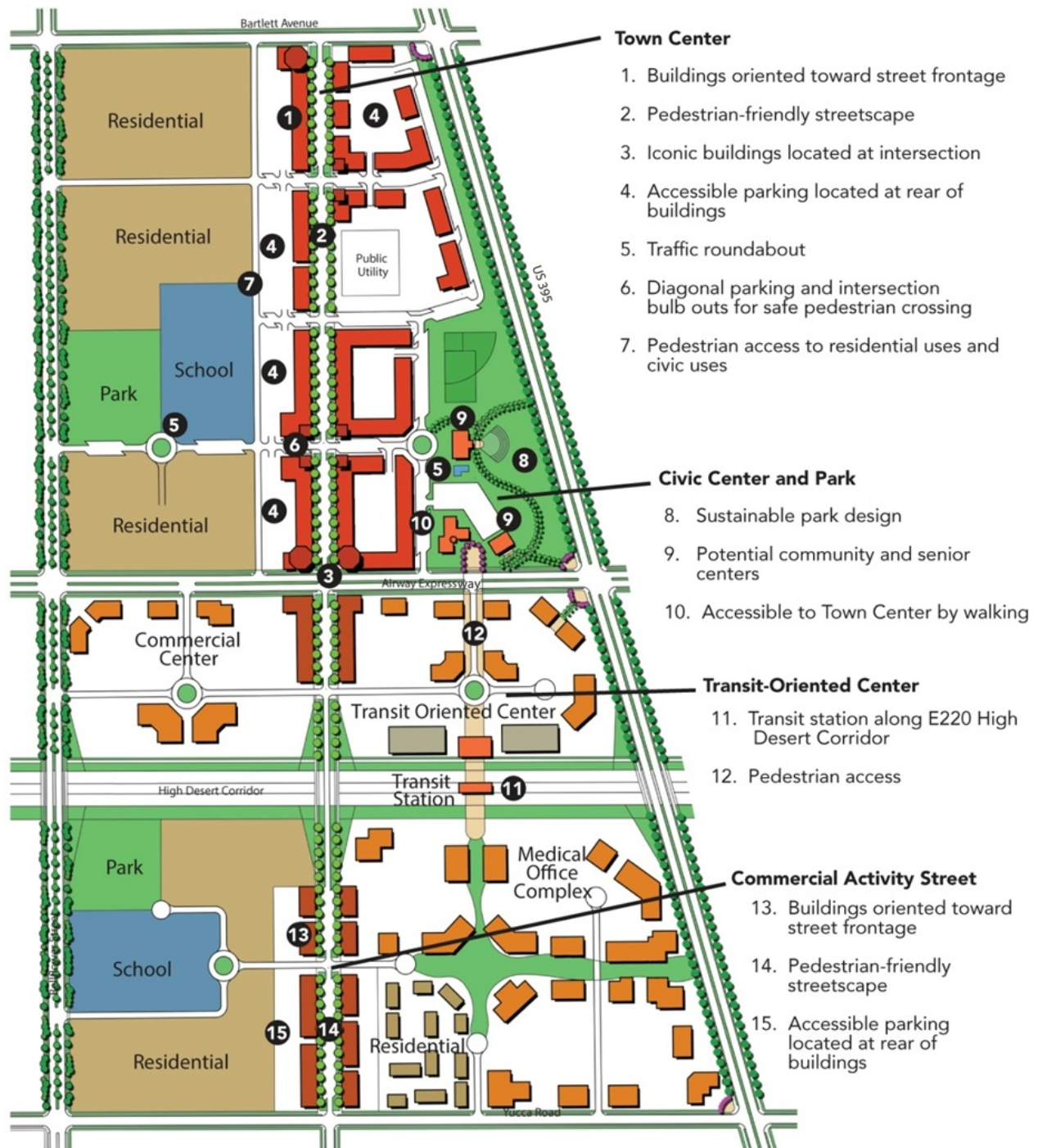


Sidewalk dining areas



Flexible spaces for special events

Figure LC-8: Conceptual Town Center Design





Courtyards and unique architectural styles



Landscaped street frontages with various tree sizes, heights, and shapes



Diverse architectural styles along streetscape



Use of water features, including fountains



Use of different crosswalks pavings and curb extensions for safe mid-block crossing



Architectural elements create focal points

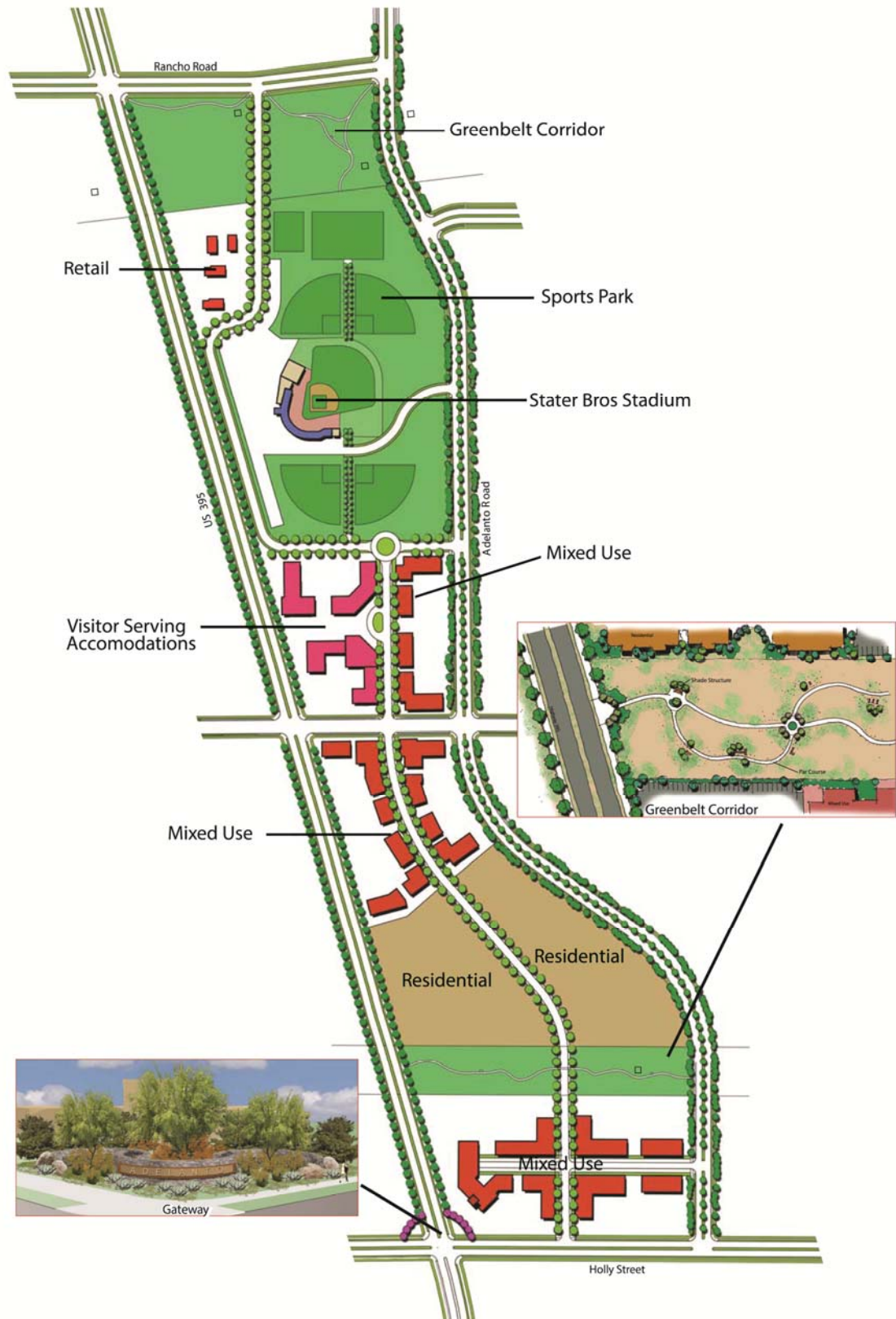


Landscape, signage, and wind art pieces create identity and major entrances



Landscaping and shade elements create a comfortable environment for visitors

Figure LC-9: Conceptual Visitor Serving Center





Roundabout with thematic landscaping



Placemaking features including a pedestrian paseo



Benches, bike paths, kinetic wind art, banners, outdoor seating, and landscaping



Court yards and outdoor communal gathering spaces



The pedestrian paseo includes special paving, lighting, movable benches and chairs, outdoor dining and shade features



Outdoor dining faces the paseo and creates a active and lively setting



Pedestrian-friendly streetscape with parking facilities located behind buildings



Walkable sidewalks, accessible pocket parks, street trees and landscaping, and benches

Business Park and Industrial Design

The Business Park and Industrial Design policies provide design elements that benefit businesses by an attractive, functional, energy efficient industrial environment. The policies are designed to establish a consistent standard of architectural and site design to ensure the long-term compatibility of business and industrial facilities within the Adelanto North's business park and industrial designations.



Articulation and architectural features along the front façade shall be used for all buildings

Place Making Design Features

Place making is the process of collectively shaping the public space and connecting the aesthetic design to the people who use the space. Place making can be used to improve the gathering places within a community—its streets, sidewalks, parks, buildings, and other public spaces—so they invite greater interaction between people and foster healthier, more social, and economically viable places. Place making capitalizes on a local community's assets, inspiration and potential; creating good public spaces promote people's health, happiness, and economic well-being. Some of Adelanto's local assets include the desert environment, local plant life, climate and weather, and history related to fruit tree orchards and the former George Air Force Base.

The main place making features in this Plan includes gateways, wayfinding and signage, and special intersection. More detail on public spaces is included in the Parks and Recreation Chapter. See also Figure LC-10 for the recommended place making feature locations.



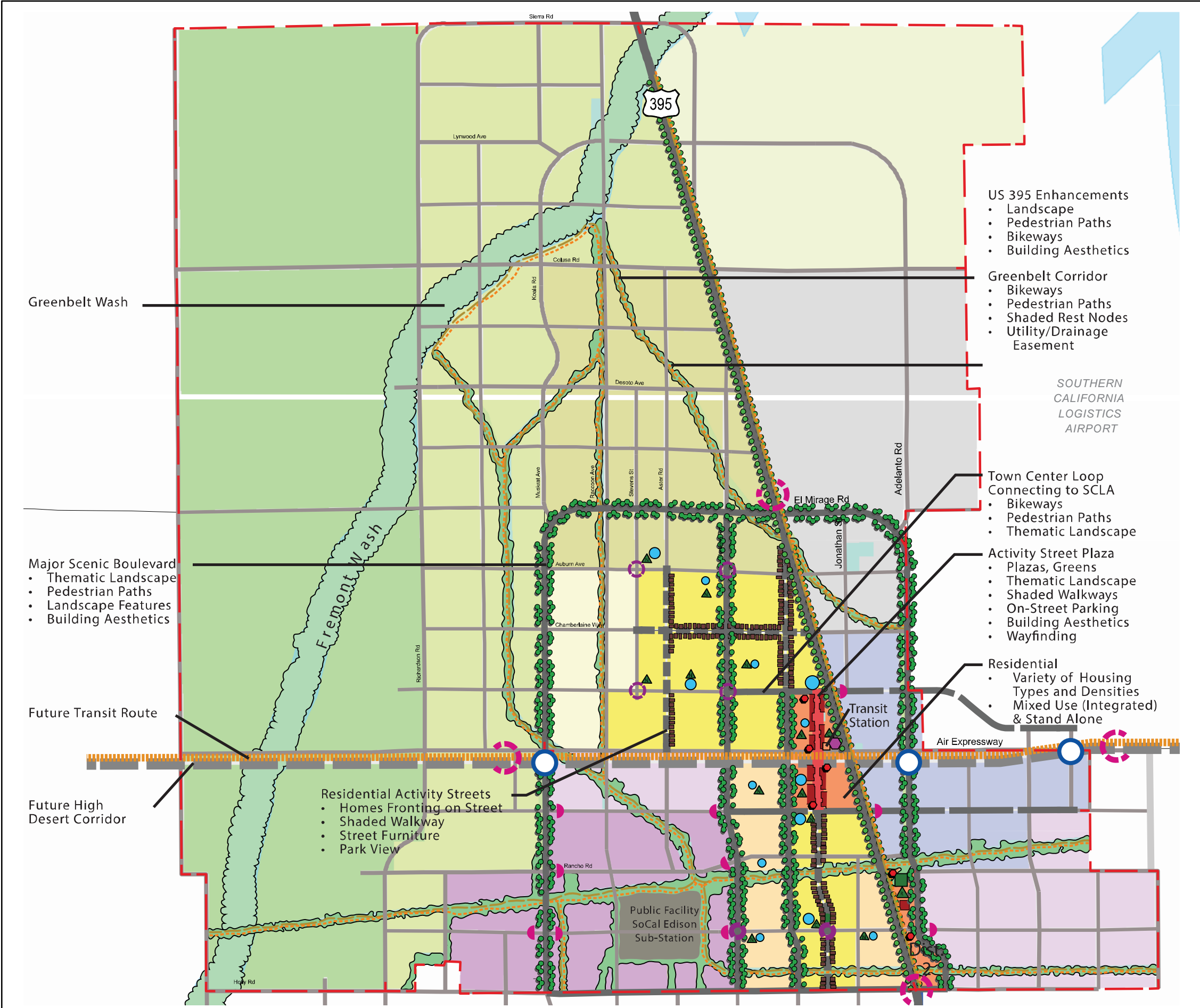
Place making design features.



Gateways

Gateways will be instrumental in providing a sense of arrival and transition into Adelanto. Physical elements of entry include medians, signs, archways, paving materials, and landscape planting materials. The physical elements should function together to physically define the City and its Mixed Use Centers and residential neighborhoods. The primary entries should be located at significant entrance points along US 395 and Air Expressway, and the proposed High Desert Corridor (HDC). See Figure LC-10 for the recommended gateway locations.

Figure LC-10
Community Design Plan



COMMUNITY DESIGN

- City and Community Center
- Place Making Feature
 - Thematic Architecture, Landmarks, Icons
 - Plazas, Squares, Green Spaces
 - Pedestrian Connectivity
- Elementary School (Grades K-6)
- Elementary/Middle School (Grades K-8)
- High School (Grades 9-12)
- Visitor Serving Accomodations
- Stater Bros. Stadium
- Neighborhood Park
- Community Park
- Regional Park
- Thematic Signage
- Gateway
- Roundabout
 - Traffic Calming with Landscape Place Making
- Future Interchange

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Disclaimer
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Source: FORMA, 2013.

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Commercial gateway sign



Town center archway



Residential neighborhood entry sign



Open space gateway sign



Visitor Serving Center gateway simulation

Wayfinding

Wayfinding consists of using landmarks, signage, pathways, and environmental cues to help first-time visitors navigate and experience an area or community without confusion. These cues should be well planned, seamlessly connected, and aesthetically pleasing, creating a positive first impression and a sense of security, comfort, and well being. These cues should also blend in and incorporate Adelanto's desert setting. The following are key in integrating wayfinding into Adelanto.

- Create an identity in Adelanto's neighborhoods and commercial centers.
- Use landmarks to provide orientation cues and memorable locations.
- Create well-structured paths and trails.
- Create areas of differing visual character.
- Provide signs at decision points to help wayfinding decisions.



Public space signage



Signs



Maps and interpretive signage along trails



Directional signs

Special Intersections

"Special Intersections" will incorporate traffic calming measures to maintain efficient traffic movement and lessen traffic, while heightening the intersections aesthetic and community design. Special intersections may include potential roundabouts. Special intersections include enhanced landscaping to create a sense of place. Pedestrian crossings are critical components of pedestrian mobility. They may include accent paving, additional landscaping, directional signs, sidewalk extensions, and street furnishings. Figure LC-11 illustrates examples of intersection monumentation, landscaping, and other design amenities for intersections.

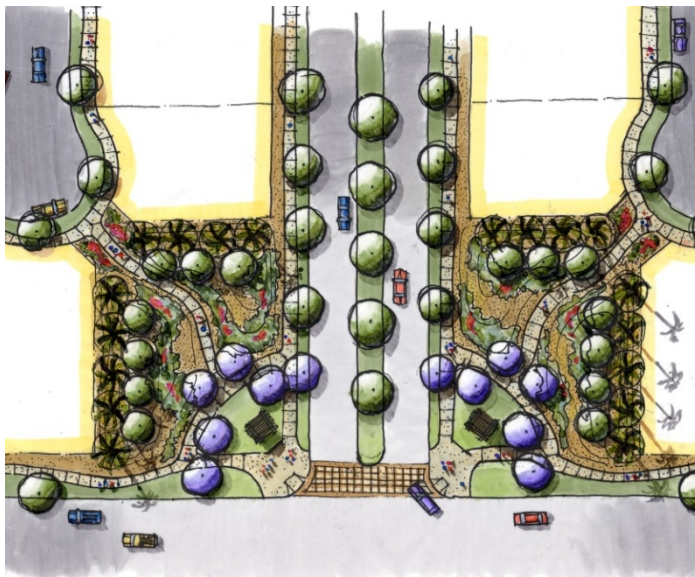
Figure LC-11: Intersection Enhancements



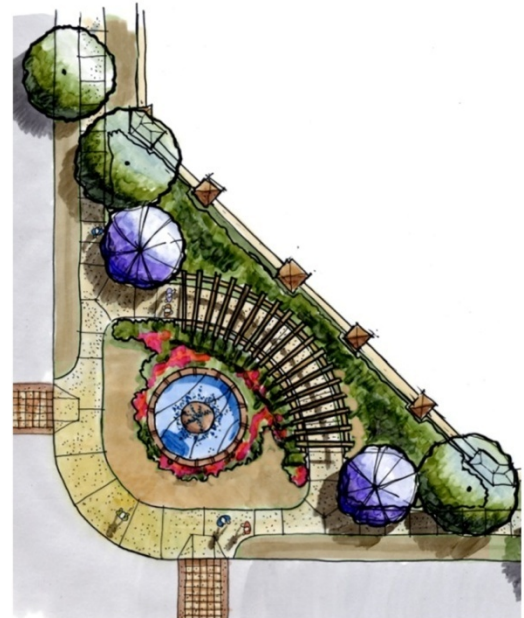
Roundabouts to slow traffic



Special paving for crosswalks



Residential neighborhood entry with open monumentation and pedestrian access



Intersection monumentation with drought-tolerant landscaping, water feature, and trellis

Streetscapes

The streetscape is the area contained in the public street right-of-way and often includes areas such as streets, sidewalks, open space, landscaping, lighting, and street furniture. The design of streetscape elements can help establish a cohesive character and, ultimately, a stronger, more distinct identity for Adelanto North, with an emphasis on creating a safe and comfortable environment for pedestrians. The following photos illustrate the major design features for different streetscapes. Figure LC-12 illustrates streetscape designs for major streets in Adelanto.



Town Center streetscape and mid-block street crossing



Town Center pedestrian-friendly sidewalk with landscaped parkway and shade features



Visitor Center streetscape with multi-story buildings and landscaped parkways



Visitor Center pedestrian-friendly sidewalk and landscaped parkways



A residential neighborhood intersection that are safe and pedestrian friendly



Residential neighborhood pedestrian-friendly sidewalk with benches, shade trees, street lighting fixtures, and landscaped parkways

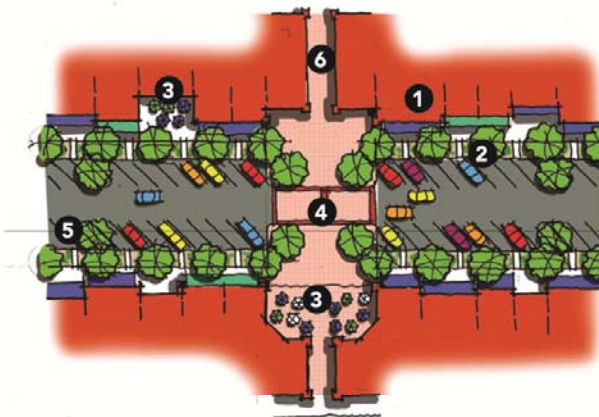
Figure LC-12: Streetscape Types

US 395



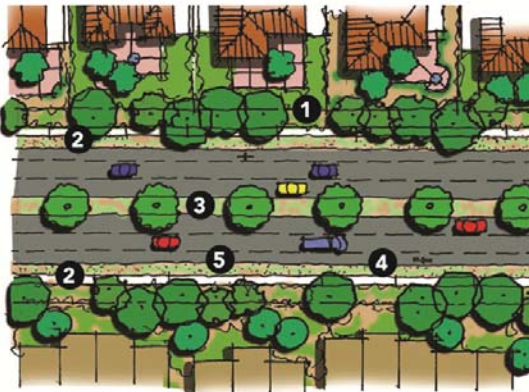
1. Multi-use trail system
2. Pedestrian sidewalk on both sides of the street
3. Vegetated bioswales
4. Landscaped median
5. Pedestrian connection to neighborhoods and businesses
6. Special thematic landscaping treatment

Town Center: Commercial Activity Street



1. Buildings oriented to the street
2. Lively and active streetscape
3. Plazas and spaces for outdoor dining
4. Pedestrian-friendly midblock crossing
5. Diagonal vehicular parking
6. Pedestrian access to rear parking lots

Major Boulevard



1. Significant landscaping with use of trees and accent plantings
2. Sidewalk on both sides of the street
3. Landscaped median
4. Vegetated bioswales
5. Appropriate right-of-way distance for landscape, parkway, and sidewalk amenities

Thematic Landscape Design

Landscaping plays an important role in creating a unifying design element that increases the overall aesthetic quality of the environment in Adelanto. North Adelanto 2035 Plan has created the following principles to make lasting aesthetic and sustainable contributions to the community:

- Landscape design should improve the visual quality and physical environment of Adelanto North, as well create a strong community identity and a sense of place.
- Landscape design should seek to utilize sustainable strategies that reflect the desert environment, reduce water and energy consumption, and use sustainable materials and green products.
- Landscape design should incorporate the desert conditions when selecting plants and materials that respond to Adelanto's local temperature, soils, precipitation, wind, and water conditions.

Thematic landscaping and design shall be used to physically enhance neighborhoods, commercial and industrial centers, and mixed use districts. Streetscapes, special intersections and roadways, corridors, and gateways shall incorporate landscaping and materials that contribute to improving the aesthetic appearance of public spaces. Plants should be used to define building entrances, parking lots, and the edge of various uses. Plants should also be used to buffer and screen neighborhood properties, increase the aesthetics of the physical environment, and provide relief from the intense desert heat and wind.



Natural landscaping suited for desert climate



Median landscaping that thrives in the desert can also improve the aesthetics of the street



Landscaping can help define building entrances



Landscaping that defines the street edge

Special Roadways Landscaping

Roadways throughout the Adelanto North 2035 Plan area should incorporate a landscaping theme that reflects their principal status and distinguishes these roadways from the surroundings. The use of tall and decorative primary street trees should create a dramatic desert background along these major corridors. Tree plantings should be formal and consistent along the length of the street, creating a rhythmic streetscape for residents and visitors. Special hierarchical landscaping requirements shall be applied to major roadway corridors, including:

- US 395
- Major Boulevards
- Major Streets
- Town Center Loop

Mixed Use Districts Landscaping

The Town Center and Visitor Serving Center will reflect the most intense character of any development in Adelanto North, with mixed use buildings and an urban-style streetscape. The landscape theme should create a comfortable outdoor environment in a desert community, integrating the use of potted plants and shaded pedestrian walkways. Primary tree plantings should include a mix of shade and accent trees strategically placed to generate a consistent streetscape and clustered to highlight a special area or provide an abundance of shade.

Public spaces should provide landscaping that is attractive and highly functional. For example, large planters may include wide edges that provide additional seating areas, in addition to accommodating canopy trees to offer shade for pedestrians. These areas should integrate an urban landscape treatment that complements seating areas, fountains, and public art pieces.



Native and drought-tolerant landscaping



Landscaping that reflects pedestrian-friendly environment

Parking Landscaping

Each parking lot should incorporate a specific primary tree that is distinct from other parking areas in the development. The placement of trees and other landscaping should emphasize the creation of shaded parking spaces at full maturity. Where there is a pedestrian passageway through a parking area, formal landscaping should be used to highlight these areas and direct pedestrians towards building entrances or public sidewalks. The use of vegetated swales can filter parking lot runoff.




Native and drought tolerant landscaping limits water consumption






Bioswales in parking lots help filter out pollutants

Goals, Policies, and Implementing Programs

Goal LC 1 A variety of business opportunities and housing choices are available that make it easier for persons of all income ranges to live, work, and recreate in Adelanto North.

- Policy LC 1.1 Accommodate a range of land use designations to meet the residential, recreational, economic, educational, and social needs of current and future residents, business owners, and local employees in accordance with Figure LC-2.
- Policy LC 1.2 Establish the Growth Area phasing system in accordance with Figure LC-4. Create a series of procedural and financial inducements to encourage the timely, phased development in accordance with the phasing system.
- Policy LC 1.3 Encourage Master Plans to be prepared prior to the approval of development applications.
-  Policy LC 1.4 Require sustainable practices and the use of sustainable methods in all site, lotting, and circulation planning.

Goal LC 2 Successful, vital, and engaging activity centers in Adelanto North include the Town Center and Visitor Serving Center.

-  Policy LC 2.1 Accommodate mixed use projects in the Town Center and Visitor Service Center areas.
-  Policy LC 2.2 Encourage higher intensity commercial uses, higher density residential uses, and higher density/intensity mixed uses in the Mixed Use Town Center and Mixed Use Visitor Serving Center.
- Policy LC 2.3 Make the Town Center the central location in Adelanto for business, government functions, shopping, dining, living, and entertainment, with attractive buildings and streetscapes.
-  Policy LC 2.4 Accommodate a complementary mix of uses within the Visitor Serving Center including hotels, resort uses, entertainment uses, recreational uses, and other visitor serving uses, as well as residential uses.
- Policy LC 2.5 Provide a variety of public amenities including sidewalk dining, seating areas, plazas, a town square, pedestrian paths in the Town Center and Visitor Service Center.
- Policy LC 2.6 Consult with Caltrans and METRO to determine the potential High Desert Corridor (HDC) right-of-way.



Policy LC 2.7
Sustainability Focus

Advocate with Caltrans and METRO for changes to the High Desert Corridor design. Specifically advocate for two on/off ramps locations (Koala Road and Adelanto Road), and a multi-modal transit center so that the Town Center can accommodate this future roadway and transit system.

Goal LC 3 Diverse employment and business opportunities.

- Policy LC 3.1 Establish business and employment land use designations to support employment and economic development.
- Policy LC 3.2 Accommodate industrial, logistics, and warehousing uses to complement the SCLA in the Airport Development District, Business Park District, and Light Manufacturing District East. Ensure the sustainable concepts and practices described in Policy OS 3.2, OS 3.5, OS 4.5, OS 6.1, OS 6.2, OS 6.3, OS 8.2, OS 9.1 are implemented.
- Policy LC 3.3 Provide neighborhood, community and regional commercial services, and retail uses to support the neighborhoods.
- Policy LC 3.4 Provide incentives to encourage businesses to locate within the Mixed Use, Business Park, Light Manufacturing, and Manufacturing/Industrial land use designations.

Goal LC 4 Sustainability incorporated into land use patterns and development approaches.



Policy LC 4.1
Sustainability Focus

Develop residential neighborhoods to include walkable environments, integrated greenbelt trails, and accessible parks and schools.



Policy LC 4.2
Sustainability Focus

Encourage compact, mixed use development within the Town Center and Visitor Serving Center to create vibrant and complete centers for the Adelanto North 2035 Plan community and the City of Adelanto.



Policy LC 4.3
Sustainability Focus

Create a sustainable community that is responsive to the environmental, water, and energy conservation needs of the region and local area.



Policy LC 4.4
Sustainability Focus

Promote the use of solar, wind, and other alternative energy generation systems as part of new planned development.



Policy LC 4.5
Sustainability Focus

Seek energy demand reductions in both residential buildings and large industrial and commercial buildings, where reductions by a single user could have a large effect.



Policy LC 4.6
Sustainability Focus

Accommodate renewable energy generation facilities within the Public Utilities, Business Park, Light Manufacturing, and Manufacturing/Industrial land use designations.

Goal LC 5 Adequate infrastructure to meet new development growth.

- Policy LC 5.1 Require new development to pay its fair share of the cost of public facilities, services, and infrastructure, including but not limited to transportation, incremental water supply, sewer and wastewater treatment, solid waste, flood control and drainage, schools, fire and police protection, and parks and recreation.
- Policy LC 5.2 Revise the Master Plans to reflect the development location and potential created by this Plan. Prioritize public infrastructure improvements within Growth Area 1.
- Policy LC 5.3 Allow development outside of Growth Area 1 only if the applicant and/or developer provides for the construction and maintenance of extending infrastructure and public facilities beyond Growth Area 1.
- Infrastructure costs should be defined in a fiscal analysis adopted by City Council.
 - Those costs should reflect construction, maintenance, and operation until such time as the adjacent areas can reasonably be expected to develop.

Goal LC 6 Natural desert habitat/wildlife and limited residential development/recreational opportunities are within Open Spaces and Green Belt Corridors.



Policy LC 6.1
Sustainability Focus

Minimize direct or indirect impacts to sensitive biological resources while optimizing the potential for mitigation.



Policy LC 6.2
Sustainability Focus

Protect and enhance the natural environmental features in Adelanto North 2035 Plan by preserving open space resources as habitat resources.



Policy LC 6.3
Sustainability Focus

Provide Greenbelt Corridors for drainages and utility easements that protect natural drainages, including Fremont Wash, and accommodate transmission of energy and fuel resources.



Policy LC 6.4
Sustainability Focus

Establish a habitat mitigation bank, in accordance with policies and programs established in the Open Space and Conservation Chapter.

Sustainable Design

Goal LC 7 Passive solar design and green building practices take advantage of Adelanto's solar and wind conditions.



Policy LC 7.1 Encourage the design and construction of buildings to go beyond the requirements of the CALGreen Building Code.

Sustainability Focus



Policy LC 7.2 Orient buildings to take advantage of solar gain, thus allowing the absorption of the sun's heat during colder months, while minimizing the sun's heat during warmer months.

Sustainability Focus



Policy LC 7.3 Encourage long overhangs to screen summer sun and allow for solar gain in the winter.

Sustainability Focus



Policy LC 7.4 Orient buildings on an east-west axis to minimize western exposure.

Sustainability Focus



Policy LC 7.5 Take full advantage of the wind to cool buildings in the summer months, and where feasible, generate alternative energy.

Sustainability Focus

Policy LC 7.6 Encourage building orientation to shelter patios and public plazas from the harsh desert winds.



Policy LC 7.7 Locate windows to maximize daylighting and views. Awnings, landscaping, spectrally selective glass, and controllable blinds should be provided to reduce heat gain through windows.

Sustainability Focus



Policy LC 7.8 Encourage buildings and large scale residential subdivisions' design to integrate green building methods regarding site and structure design efficiency, energy and water efficiency, materials and resources conservation and recycling, and improving indoor environmental quality.

Sustainability Focus



Policy LC 7.9 Encourage the building envelope to:

- minimize heat loss and gain
- reduce energy demand
- maximize passive heating and cooling
- minimize mechanical HVAC requirements

Sustainability Focus



Policy LC 7.10 Promote glazing, size, and materials appropriate for window orientation, and promote the use of double or triple glazing wherever possible. Encourage every exterior window to be shaded appropriately for the window orientation.

Sustainability Focus



Policy LC 7.11 Encourage the use of energy-efficient heating, ventilation and air-conditioning (HVAC) Systems and electrical systems.

Sustainability Focus



Policy LC 7.12 Encourage all plumbing fixtures be certified low water use, and

Sustainability Focus

encourage the use of 1/8th gallon urinals (or similar) and dual-flush toilets.



Policy LC 7.13
Sustainability Focus

Encourage materials that are durable under desert climate conditions (UV radiation exposure and extreme heat).



Policy LC 7.14
Sustainability Focus

Present opportunities for the installation of reused and repurposed materials, including the building shell, structural materials, and finishes, and fixtures.



Policy LC 7.15
Sustainability Focus

Present options for materials with high recycled content. Utilize Green Globes reference guidelines for baseline standard.



Policy LC 7.16
Sustainability Focus

Encourage use of locally and/or regionally harvested and manufactured materials whenever possible.



Policy LC 7.17
Sustainability Focus

Encourage use of materials that are made from rapidly renewable materials whenever possible and practicable.



Policy LC 7.18
Sustainability Focus

Minimize or eliminate construction waste. Encourage the reduction, reusing, and/or recycling of waste materials to minimize disposal to a landfill.



Policy LC 7.19
Sustainability Focus

Encourage the elimination or minimization of the use volatile organic compounds for interior finishes, cabinetry, furnishings, and other interior applications.



Policy LC 7.20
Sustainability Focus

Encourage the use of natural daylight and views to enhance building occupant comfort. Provide adequate operable shading where necessary to reduce heat and glare.

Goal LC 8 Walkable, integrated neighborhoods include a variety of public amenities.



Policy LC 8.1
Sustainability Focus

Encourage walking, cycling, and public transport use through permeable, well-connected, 'traditional' grid street networks.



Policy LC 8.2
Sustainability Focus

Promote neighborhoods that are physically connected to each other to foster community and connectedness beyond the individual project.



Policy LC 8.3
Sustainability Focus

Provide direct and safe connections for pedestrians, bicyclists, and drivers to local destinations and neighborhood centers.



Policy LC 8.4
Sustainability Focus

If cul-de-sacs are proposed, encourage the cul-de-sac's design to be open ended as a method to increase pedestrian and bicycle connectivity.



Policy LC 8.5
Sustainability Focus

Design neighborhood streets primarily in an east to west direction in order to orient residential building roof structures to primarily

face south in order to maximum sunlight exposure for solar roof panels.



Policy LC 8.6
Sustainability Focus

Require sidewalks on both sides of the street in the Single Family (RS-1 and RS-5), Medium Density Residential, and Mixed Use classifications. Sidewalks on local streets in the Desert Living designation areas are not required but encouraged.



Policy LC 8.7
Sustainability Focus

Design street layout that shortens pedestrian trips and promote neighborhood linkages.



Policy LC 8.8
Sustainability Focus

Provide an assortment of pedestrian amenities, such as benches, street trees, trellises, shade features, and sidewalks.

Goal LC 9 High quality single-family residential neighborhoods.

Policy LC 9.1 Prohibit monotonous residential subdivision design that features repetitive architectural styles, façades colors and materials, roof materials, and garage placement.

Policy LC 9.2 Provide a mixture of building plans, elevations, and architectural styles to provide variety in neighborhoods.

Policy LC 9.3 Allow a variety of residential building types, styles, colors, and layouts.

Policy LC 9.4 Provide individuality and identity through variation in design and layout.

Policy LC 9.5 De-emphasize garages along residential street and prohibit continuous row of garages that dominate the streetscape.

Policy LC 9.6 Provide varying setbacks and encourage front porches and outdoor living areas to dominate front areas of yards.

Goal LC 10 Street designed as pedestrian social space in residential neighborhoods.



Policy LC 10.1
Sustainability Focus

Make streets safer and a more pleasant place by narrowing the street width, introducing street trees, include landscaped parkways between curbs and sidewalks, and adding greater architectural interest along the street.




Policy LC 10.2
Sustainability Focus

Require residential units front onto Activity Street-Residential streets. Encourage vehicular access to be derived from a rear alley.




Policy LC 10.3 Emphasize the residential units' architectural detail and interactive architecture with porches, courtyards, entries, windows, and second story balconies related to the street.

- Policy LC 10.4 Orient the residential unit's living activity toward the street by incorporating front porches and active living space toward the front of the home.

Goal LC 11 Re-imagined multi-family developments are inclusive and connected to the neighborhood in which they are located.

- Policy LC 11.1 Require front entrances to have access along street front and include architectural features to accentuate entries.
- Policy LC 11.2 Require front doors to face the street in "row home" style developments.
- Policy LC 11.3 Multi-family development projects shall discourage fenced-in, enclosed projects, but shall be integrated into the neighborhood.
- Policy LC 11.4 Encourage multi-family development to include side and rear yard access gates to public sidewalks and adjoining commercial uses, and transit stops.
-  Policy LC 11.5 Incorporate transit and bicycle amenities into multi-family development projects, including shaded bus shelters and bicycle racks and lockers.
- Policy LC 11.6 Multi-family development projects shall provide outdoor living spaces, common open spaces, and communal amenities.

Goal LC 12 A vibrant Town Center 'Main Street' setting includes pedestrian and community amenities.

-  Policy LC 12.1 Incorporate arcades, porches, trellis, shade trees, and other shade features in the walkways of 'Main Street' to provide a comfortable pedestrian environment.
- Policy LC 12.2 Provide accessible public space amenities, including plazas, wide sidewalks, paseos, outdoor dining, fountains, seating areas and passive spaces for pedestrians, that is clearly recognizable as public space.
-  Policy LC 12.3 Establish a pedestrian-friendly environment; vehicles should be accommodated but not given priority.
-  Policy LC 12.4 Orient buildings along the street frontage to create a vibrant and active 'Main Street' setting.
- Policy LC 12.5 Break up building façades with a high level of articulation, including window features, recessed elements, transparent storefronts, arcades, awnings, and entrance awnings, especially at the ground level.

Policy LC 12.6 Create a town square with public amenities and features, and include flexible space for to allow for community events.



Policy LC 12.7 Cluster buildings along the street frontage and create interconnected pedestrian promenades connecting to parking areas.

Policy LC 12.8 Locate place making features, public art, and focal architectural elements at highly visible corners and intersections.

Policy LC 12.9 Require “Big Box” retail stores and parking structures to integrate with the ‘Main Street’ physical environment, and wrap small retail spaces around the big box store.

Goal LC 13 A lively Visitor Serving Center Mixed Use District.



Policy LC 13.1 Encourage building and street design that creates a pedestrian-friendly environment around Adelanto Stadium and integrates residential, entertainment, retail, visitor-serving uses, and hotel and accommodation uses.

Policy LC 13.2 Require public amenities, outdoor dining, use of landscaping, and building design that creates a lively entertainment district.

Policy LC 13.3 Integrate thematic landscaping, signage, public art, and design features that complement and accentuate the overall design for US 395.

Goal LC 14 Well-planned and high quality industrial and business parks.

Policy LC 14.1 Emphasize the main building entrance and landscaping at the front of the project site.

Policy LC 14.2 Design loading areas, outdoor storage equipment, service areas, and work areas to be screened with walls and landscaping.

Policy LC 14.3 Provide appropriate buffering techniques, such as setbacks, screening, and landscaping to mitigate any negative effect of the industrial operation or energy generation facility.

Policy LC 14.4 Design loading areas with adequate spacing for truck maneuvering without encroaching onto the adjoining street.

Policy LC 14.5 Provide the highest level of articulation and architectural features along the front façade.

Policy LC 14.6 Require high quality and well designed signage to direct

pedestrians and vehicles to loading and receiving, visitor parking, and other special uses.

Goal LC 15 Pedestrian friendly streetscapes, safe and aesthetically pleasing intersections, and iconic gateways are created throughout Adelanto North.



Policy LC 15.1 Design streetscapes to promote a pedestrian-friendly environment that is both safe and attractive.

Sustainability Focus



Policy LC 15.2 Include wider right-of-ways with pedestrian trails, thematic landscaping features, bicycle routes, and bio-swales along Major Boulevards, portions of US 395, Town Center Loop, and High Desert Corridor.

Sustainability Focus

Policy LC 15.3 Provide appropriate light features, signage, and street furniture along streets and within public spaces.

Policy LC 15.4 Prohibit monotonous walls along all residential streets, Major Streets, Major Boulevards, Collector Streets, and Activity Streets – Residential.



Policy LC 15.5 Require trees and landscaping materials along all streetscapes, and cluster trees in public gathering places.

Sustainability Focus



Policy LC 15.6 Use trees and other shade and windguard features to help shade and protect sidewalks and parking areas.

Sustainability Focus

Policy LC 15.7 Design Special Intersections with enhanced landscaping, special signage, opportunities for public art, and include special street crossing features as an indicator for traffic calming.



Policy LC 15.8 Encourage the use of roundabouts at major intersections.

Sustainability Focus

Goal LC 16 Unique gateways, including signage and public art features, identify and brand Adelanto North.

Policy LC 16.1 Create a hierarchy of gateway features and design components to announce the entrance to Adelanto.

Policy LC 16.2 Provide thematic landscaping, public amenities, and public art at gateway entrances.

Policy LC 16.3 Provide gateways and entrances features, including public art and signage at potential Desert Highway Corridor interchanges.

Goal LC 17 A more aesthetically pleasing environments with landscape materials that reflect the Mojave Desert environment.

- Policy LC 17.1 Use landscaping to reflect a 'sense of place' that blends in with Mojave Desert and native plant materials.
- Policy LC 17.2 Provide landscaping plants and materials that complement the Mojave Desert environment and wildlife, lower maintenance requirements, and require low to moderate irrigation requirements.
- Policy LC 17.3 Use plants that are native to the Southwest and suited to the hot desert climates.
- Policy LC 17.4 Use irrigation systems that utilize water conserving methods and incorporate water efficient technologies.
- Policy LC 17.5 Incorporate sustainable landscaping methods in all new development projects and public realm improvements.
- Policy LC 17.6 Develop Mixed Use Districts landscaping themes to provide a comfortable environment in a desert community, integrating the use of potted plants shade trees, awnings and shade structures along pedestrian walkways and public spaces. Include a mix of shade and accent trees strategically placed to highlight a special area and provide an abundance of shade.
- Policy LC 17.7 Design and select trees for parking lots that shade parking spaces at full maturity.

Goal LC 18 A higher level of design through landscaping and plant materials.

- Policy LC 18.1 Provide special landscaping treatment, meandering trails, and design features that accentuate US 395 as a Special Highway.
- Policy LC 18.2 Provide adequate hierarchical spacing and right-of-way area for landscaping on all streets.
- Policy LC 18.3 Use special street trees and plant palette for each major street to help define the uniqueness and special character of streets.
- Policy LC 18.4 Plant trees along streets to provide adequate shade and wind buffer for pedestrians and bicyclists on sidewalks, bike paths, and public spaces.

Implementing Programs

Procedures, Permits, Agreements, and Ordinances

- Program LC-1** **General Plan Amendment.** Update the General Plan to incorporate the vision, goals, policies and implementing strategies of the Adelanto North 2035 Plan. Revise the City of Adelanto General Plan Land Use and Zoning Map to reflect the Adelanto North 2035 Land Use Plan.

Timeframe: Concurrent with Plan's adoption

Responsible Party: Development Services Department

Funding Source: General Fund

- Program LC-2** **Zoning Ordinance and Map Amendment.** Update the Zoning Ordinance and Zoning map to reflect the Adelanto North 2035 Land Use Map upon adoption of the Community Plan. Create zoning districts as needed to implement the Land Use designations. Establish specific development standards for each newly created zoning district.

Timeframe: Concurrent with Plan's adoption

Responsible Party: Development Services Department

Funding Source: General Fund

Plans and Studies

- Program LC-3** **Variety in Master Planned Neighborhoods.** Develop residential master plan guidelines and standards requiring builders to provide a diverse mix of architectural styles, elevations, building floor plans, garage placements, individual features for corner lots, varied streetscapes, non-repetitive architectural components, and assortment of façade materials and colors for residential projects.

Until such guidelines are developed, individual projects will be reviewed for consistency with the design goals and policies of this Plan.

Timeframe: Intermediate, Medium Range

Responsible Party: Development Services Department

Funding Source: General Fund

- Program LC-4** **Design Guidelines.** Prepare design guidelines identifying the City's expectations for planning, designing, and reviewing development proposals. Include form based guidelines for neighborhoods, streetscapes, major roadway corridors and US 395, and Mixed Use Centers. The design guidelines may take the form of citywide guidelines or guidelines developed for identified neighborhoods, mixed use centers, and street corridors. Guidelines should discuss the private and public realms, landscaping, gateways, signage, site planning, building form and scale, pedestrian features, and other design approaches.

Until such guidelines are developed, individual projects will be reviewed for consistency with the design goals and policies of this Plan.

Timeframe: Intermediate, Medium Range

Responsible Party: Development Services Department

Funding Source: Grants, General Fund

Program LC-5

Passive Solar, Cooling, and Ventilation Manual. Develop an educational manual that identifies the methods to implement both active and passive solar and ventilation methods to help cool and heat a building during the summer and winter seasons, respectively. The manual should include samples, illustrations that feature various design features, including direct and indirect solar gain, isolated solar gain, heat storage, insulation, special glazing systems and window coverings, operable shading and insulation devices, use of landscaping, and other passive solar principles and design tools for all buildings. It should also include facts and figures regarding Adelanto's unique environment

Timeframe: Medium Range

Responsible Party: Development Services Department

Funding Source: Grants, General Fund

Program LC-6

Streetscape Plan For Mixed Use Centers. Develop an overall streetscape plan that identifies improvements for streets within Town Center and Visitor Serving Center. Include conceptual design concepts for 'Main Street' streetscape, Activity Street – Commercial, and US 395 segment along the Visitor Serving Center. Streetscape shall also include concepts for landscaping, street trees, street intersections, entry treatments, transit and bicycle amenities, public signage, and street furniture. The streetscape design should be dedicated to transforming the Mixed Use Centers into vibrant and thriving activity centers.

Timeframe: Medium Range

Responsible Party: Development Services Department

Funding Source: Grants, General Fund

Program LC-7

Landscape Plant Palette. Develop a landscape plant palette that identifies recommended accents, groundcovers, perennials, shrubs, vines, and trees that are most suitable for Adelanto and the Mojave Desert. The Landscape Plant Palette should include recommendations and requirements for plant selection regarding size and shape, sustainability, health and hardiness, climatic and microclimate suitability, aesthetics, and safety. It should include photos and characteristic descriptions of desert-friendly plants and flora.

Timeframe: Medium Range

Responsible Party: Development Services Department

Funding Source: Grants, General Fund

Program LC-8 **Growth Priority Areas.** Develop City practices that clearly support the priority growth areas, and make efficient use of land and infrastructure. Develop a process to identify and prioritize key areas (e.g., Town Center and Visitor Serving Center, and surrounding residential neighborhoods and business districts), development sites, and infill areas for rezoning to promote infill development. Prioritize development of sites identified in the Housing Element as most suitable for redevelopment as high-density residential and mixed use; encourage the inclusion of affordable housing on these sites.

Timeframe: Short Range

Responsible Party: Development Services Department

Funding Source: General Fund

Program LC-9 **Master Plan.** Encourage the preparation of a Master Plan prior to a development application's approval.

Timeframe: Ongoing

Responsible Party: Development Services Department, Developers

Funding Source: General Fund, Private Funds

Program LC-10 **Town Center and Visitor Serving Area.** Development concept plans for the Town Center and Visitor Serving Area that plan for public plazas and open spaces, pedestrian and bicycle circulation, and transit stops/stations.

Timeframe: Short Range

Responsible Party: Development Services Department

Funding Source: General Fund

Physical Improvements

Program LC-11 **Active Pedestrian Environment Streetscape Improvements.** For areas designated by the General Plan to achieve an active pedestrian environment or improvement of their image and quality, prepare design plans, street tree plans, and financing plans for the comprehensive streetscape improvements.

Timeframe: Short Range

Responsible Party: Development Services Department

Funding Source: General Fund

Outreach, Education

Program LC-12 **Public Outreach.** Provide public outreach, and encourage public involvement at the neighborhood level including residents affected by proposed projects.

Timeframe: Ongoing

Responsible Party: All Departments

Funding Source: General Fund

Program LC-13

Green Building Outreach. Provide information, and raise public awareness of the benefits of sustainable design and construction, including green building best practices in existing buildings and requirements of the Green Building Ordinance.

Timeframe: Short Range

Responsible Party: Development Services Department

Funding Source: General Fund

Inter-Agency and Other Organizations Consultation

Program LC-14

Participate with Local, Regional, State, and Federal Agencies and Other Organizations.

- Consult with Southern California Logistics Airport (SCLA) and the City of Victorville regarding economic development opportunities and coordination around the SCLA site.
- Consult with the Mojave Water Agency regarding adequate water supplies to support new development growth.
- Consult with Caltrans regarding potential 220 desert freeway corridor alternative route alignments and placement of on/off ramps and interchange with US 395.
- Consult with the Bureau of Land Management (BLM) regarding the El Mirage Off Highway Vehicle Recreation Area and BLM properties.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Implementation Program Matrix – Land Use and Community Design

Policy	Implementation Programs													
	Procedures, Permits, Agreements, Ordinances		Plans and Studies								Physical Improvements	Outreach, Education		Inter-Agency and Other Organizations Consultation
	LC-1	LC-2	LC-3	LC-4	LC-5	LC-6	LC-7	LC-8	LC-9	LC-10	LC-11	LC-12	LC-13	LC-14
	General Plan Amendment	Zoning Ordinance and Map Amendment	Variety in Master Planned Neighborhoods	Design Guidelines	Passive Solar, Cooling, and Ventilation Manual	Streetscape Plan For Mixed Use Centers	Landscape Plant Palette	Growth Priority Areas	Master Plan	Town Center and Visitor Serving Area	Active Pedestrian Environment Streetscape Improvements	Public Outreach	Green Building Outreach	Participate with Local, Regional, State, and Federal Agencies and Other Organizations.
LC 1.1	☐	☐										☐		
LC 1.2								☐				☐		
LC 1.3									☐			☐		
LC 1.4	See OS-17			☐					☐			☐	☐	
LC 2.1	☐	☐	☐							☐				
LC 2.2	☐	☐	☐							☐				
LC 2.3	☐	☐	☐						☐	☐				
LC 2.4	☐	☐	☐						☐	☐				
LC 2.5			☐			☐				☐	☐			
LC 2.6														☐
LC 2.7														☐
LC 3.1	☐	☐												
LC 3.2	See ED-1													
LC 3.3	See ED-1													
LC 3.4	See ED-1													
LC 4.1			☐	☐					☐					
LC 4.2			☐			☐				☐	☐			
LC 4.3													☐	
LC 4.4					☐									
LC 4.5	See OS-18												☐	
LC 4.6	☐	☐												
LC 5.1	See ED-6													
LC 5.2									☐					
LC 5.3									☐					
LC 6.1	See OS-4													
LC 6.2	See OS-4													
LC 6.3	See OS-17													

Implementation Program Matrix – Land Use and Community Design

Implementation Programs														Policy														LC 6.4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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LC 8.8						▣			▣		▣			
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Implementation Programs

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Implementation Program Matrix – Land Use and Community Design

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LC 17.6				■			■							
LC 17.7				■			■							
LC 18.8				■			■							
LC 18.2				■			■							
LC 18.3				■			■							
LC 18.4				■			■							

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Economic Development for Adelanto North 2035

Economic Development

Introduction

A City's economy plays an important role in the development of a community, affecting the type, amount, and location of new businesses. It will also impact the design of homes, neighborhoods, and retail opportunities ultimately defining the quality of life. The Economic Development component describes a vision for healthy, long-term economic growth and defines, goals, policies, and programs that will help the City implement this vision.

Context

The economic conditions that affect the City of Adelanto include a wide variety of factors such as land use, business development, job formation, and investment. Being a relatively smaller City, Adelanto's economic future is critically tied to that of its regional economy – the High Desert region. Given this background, several positive developments are in motion that would play out over the medium-term and long-term. These include the following:

- **Southern California Logistics Airport (SCLA) Expansion.** The City of Adelanto with its strategic location just west of SCLA, has the potential to capture a portion of the growing industrial and manufacturing/warehouse market in SCLA by expanding the current industrial and manufacturing/warehouse market in Adelanto within proximity to the SCLA.
- **High Desert Corridor (HDC) and US 395 Improvements.** The proposed High Desert Corridor (HDC) and the US 395 improvements will provide better regional traffic

circulation for the City of Adelanto. These proposed routes can bring potential economic growth along the routes of the HDC and US 395 with the development of commercial centers forming nodes, bringing in increased economic activity from passing motorists and goods movement transportation.

- **Regional Public Transportation Improvements.** Proposed public transportation improvements will provide better access between jobs at SCLA and homes in Adelanto.

Economic and Fiscal Impact Considerations

In addition, there are specific characteristics of Adelanto that affect economic development. These factors include:

- **Lack of Retail.** The City has no regional or destination retail. Residents and businesses are forced to make their purchases in the City in Apple Valley or Victorville. This results in reduced sales tax revenues to the City and increased costs for local residents who must travel outside their community to purchase the services and commodities they need.
- **Lack of Employment Opportunities.** Estimated employment in the City of Adelanto was 5,432 in 2008, according to the California Employment Department. This employment represented about 6.5 percent of the total employment (83,473) in the High Desert communities including Victorville, Apple Valley, Hesperia and Barstow.

Key Sustainability Features

Economic sustainability can be defined as the optimal use of existing resources to provide long-term benefits to the community. A sustainable economic system balances short-term growth with long-range stability to provide jobs and services as well as a continuing source of tax revenues. Some of the key sustainability features in this Plan include:

- Promote diversified job opportunities to create balance between the number of City residents that work and live in the City thus reducing vehicle trips.
- Ensure multi-modal accessibility of the mixed-use zones, and promote infill development, and infrastructure expansion in older areas.
- Pursue opportunities to attract green technology manufacturing.



Encourage more retail and entertainment opportunities



Diversify Adelanto's economic base with greater jobs opportunities

Economic Development Strategy

The Economic Development Strategy addresses the challenges faced by the City and provides recommended goals, policies, and implementation programs to address those challenges. Core economic development challenges addressed in this section include:

- Increase the economic competitiveness of Adelanto and Adelanto businesses.
- Diversify the City’s economic base and associated jobs and wages.
- Boost and diversify public revenue sources.
- Develop a wide array of regional and local retail opportunities.
- Create destination retail/entertainment opportunities.
- Support and retain existing businesses.
- Develop and promote a strong, positive, brand identity, and image for Adelanto.
- Facilitate ongoing monitoring of the City’s economy by developing good economic data and timely indicators for decision makers.

Goals, Policies, and Implementing Programs

Goal ED 1 A diverse, sustainable economy.

Policy ED 1.1	Encourage economic development initiatives that support business attraction and retention. <ul style="list-style-type: none"> ▪ Foster emerging industries and businesses. ▪ Strengthen the City’s relationships with existing businesses.
Policy ED 1.2	Build upon the future employment expansion of the Southern California Logistics Airport (SCLA) and improvements to US 395 and the High Desert Corridor (HDC) as crucial drivers of local economic growth.
Policy ED 1.3	Look to attract and to capitalize on the City’s available land resources.
Policy ED 1.4	Pursue opportunities to expand existing correctional facility resources within industrial zones that provide both a local, well-paying job base and fiscal revenues to the City’s General Fund.



Policy ED 1.5
Sustainability Focus

Pursue opportunities in the industrial zones to attract green technology manufacturing, particularly building upon Adelanto's solar farm development activity.

Goal ED 2 A balanced and sustainable fiscal system for public services.

- Policy ED 2.1 Promote governmental strategies that enhance the major corridors as generators of both employment and revenue.
- Policy ED 2.2 Strengthen the City's retail base, particularly by facilitating the development of regional serving retail opportunities along major corridors and at new, high accessibility planned centers.
- Policy ED 2.3 Expand the City's entertainment and recreation attractions to enhance the tourism/visitor serving potential to increase retail sales and lodging occupancy taxes.
- Policy ED 2.4 Encourage the development of attractive residential communities that increase the local residential spending power and increase the property tax base.
- Policy ED 2.5 Evaluate the fiscal impact by land use to ensure that the planned residential and non-residential development is fiscally balanced.

Goal ED 3 A sustainable system for financing public infrastructure.



Policy ED 3.1
Sustainability Focus

Promote a self-sustaining financing system by ensuring that new development pays its fair share of public infrastructure construction, operation, and maintenance.

- Policy ED 3.2 Update the City's development impact fee (DIF) structure to ensure that the City's DIF fees are current.
- Policy ED 3.3 Consider a wide range of other financing approaches, such as assessments, special taxes and innovative techniques that promote economic development in a post-redevelopment agency setting.
- Policy ED 3.4 Prioritize capital improvements to reflect both public and private financing sources.

Goal ED 4 The City's primary commercial corridors are stimulated and marketed for economic activity.

- Policy ED 4.1 Encourage and facilitate new retail, office, and service business development within the commercial corridors and planned centers.

Policy ED 4.2 Work closely with Caltrans to ensure that planned US 395 corridor improvements and key intersections are constructed in a timely manner.

Policy ED 4.3 Encourage Caltrans to provide improved street design and beautification amenities within the planned centers and major commercial zones concurrent with the capital facility improvements.



Policy ED 4.4 Ensure multi-modal accessibility of the mixed-use zones.
Sustainability Focus



Policy ED 4.5 Promote infill development and infrastructure expansion in older areas and within Growth Area 1 as an incentive for economic revitalization.
Sustainability Focus

Goal ED 5 Economic activity is facilitated at strategic nodes.

Policy ED 5.1 Place high priority on implementing both on- and off-ramps at High Desert Corridor intersections to facilitate retail and lodging economic development activity.

Policy ED 5.2 Consult with Caltrans regarding improvements to US 395, including amenities that enhance the City's image and identity within the corridor between the planned Town Center and Adelanto Stadium.

Policy ED 5.3 Encourage visitor-serving activities around the Adelanto Stadium to attract lodging, restaurants, retail, and entertainment land uses.

Policy ED 5.4 Market the City's vacant land as a destination for alternative outdoor lifestyle activities without impacting habitat preservation goals.

Goal ED 6 Adelanto has a versatile workforce.



Policy ED 6.1 Promote diversified job opportunities, particularly in new technologies, to increase the opportunity for a more balanced number of City residents to work within City limits.
Sustainability Focus

Policy ED 6.2 Promote educational and training opportunities for workforce development.

Policy ED 6.3 Endorse health care, education, and child care policies and programs that lead to a healthy population of workers and youth in the City.

Goal ED 7 Improved jobs/housing balance.

Policy ED 7.1
Sustainability Focus

Ensure that housing programs plan for a range of workforce housing to support an improved jobs-housing balance.

Policy ED 7.2

Promote a workforce with a range of household incomes, commensurate with a range of housing types and affordability options.



Policy ED 7.3
Sustainability Focus

Encourage retail and local-serving activities in the Town Center to facilitate mixed-use and live-work development.

Goal ED 8 Improved City's communications infrastructure.

Policy ED 8.1

Encourage and plan for the provision of modern technological infrastructure necessary for a high-speed fiber optic network to support both business and residential communications.

Policy ED 8.2

Strengthen the City's current website by providing up-to-date economic data and videos that highlight the City's key features.

Policy ED 8.3

Improve the City's online social media presence in order to obtain feedback on potential economic issues from stakeholders.

Goal ED 9 Economic partnerships facilitate local and regional economy growth.

Policy ED 9.1

Increase participation with the development processes led by the SCLA and the Victor Valley Economic Development Authority, including the expansion of rail opportunities.

Policy ED 9.2

Work with major developers to facilitate the development of the industrial/business center adjacent to the SCLA and extending westerly to US 395.

Policy ED 9.3

Improve partnerships with the Adelanto Chamber of Commerce and the High Desert Hispanic Chamber of Commerce, particularly, if seed funding can be provided for new initiatives.

Policy ED 9.4

Continue to work with the Southern California Association of Governments (SCAG), the County of San Bernardino, and the San Bernardino Associated Governments (SANBAG) to leverage regional transportation funding of facilities, particularly for the High Desert Corridor and improvements to US 395.

Goal ED 10 Ongoing Economic Development Programs.

- Policy ED 10.1 Consult with the business community on a regular basis to understand its needs and requirements that can help guide the City in providing business support programs
- Policy ED 10.2 Consult with the business community in providing guidance on prioritizing investments in public infrastructure.
- Policy ED 10.3 Within current and future economic development zones, encourage businesses to jointly work together by establishing business improvement district organizations that are controlled by the participating businesses.

Goal ED 11 Expanded health care opportunities.

- Policy ED 11.1 Encourage the development of health care facilities that provide both jobs and better health care services to the community.

Goal ED 12 A strong local educational system.

- Policy ED 12.1 Continue to strengthen the local K-12 academic programs, and provide intern opportunities for local youth, particularly during the school vacation time periods.
- Policy ED 12.2 Encourage a community college or trade college to open a campus in the City and provide advanced training and skill development programs.



Community college or trade college

Implementing Programs

Procedures, Permits, Agreements, Ordinances

Program ED-1 **Organized Economic Development.** Organize economic development through the City Manager's Office and integrate the economic development strategy into the annual General Fund and CIP budgeting process.

Timeframe: As funds become available

Responsible Party: Administration

Funding Source: General Fund; Economic Development Grants

Program ED-2 **Synchronization with City Departments.** Synchronize economic development with planning, public works, public safety, and other City functions, as appropriate, through the City Manager's office.

Timeframe: As funds become available

Responsible Party: Administration

Funding Source: General Fund; Gas Tax Funds; Other CIP Funds

Plans and Studies

Program ED-3 **Fiber Optic Infrastructure Study.** Conduct research as necessary to determine the fiscal and technical feasibility of hosting a wider, high-speed fiber optic system in the City.

Timeframe: As funds become available

Responsible Party: Administration; Planning; Public Works

Funding Source: General Fund; Grants

Program ED-4 **Real Estate Market Feasibility Study.** Conduct a real estate market feasibility study to understand the current competitive market opportunities in the context of the neighboring communities.

Timeframe: As funds become available

Responsible Party: Administration

Funding Source: General Fund

Program ED-5 **Target Industry Analysis.** Conduct a target industry analysis to identify significant trends in manufacturing, healthcare, technology, retail, and professional-technical industries that provide marketing opportunities for the City.

Timeframe: As funds become available

Responsible Party: Administration

Funding Source: General Fund

- Program ED-6 **Development Impact Fee (DIF) Schedule.** Update and expand the development impact fee schedule to reflect new development's fair share of public facilities, at least annually, to review the adequacy of the DIFs.
- Timeframe:* As funds become available
Responsible Party: Administration and Development Services Department
Funding Source: General Fund; Development Impact Fees
- Program ED-7 **Research Other Financing Approaches.** In addition to DIFs, research and recommend other financing approaches that may be appropriate, including but not limited to: assessment districts, special taxes, parcel taxes, and others, as identified.
- Timeframe:* As funds become available
Responsible Party: Administration; Finance Department; Development Services Department
Funding Source: General Fund
- Program ED-8 **Prepare Capital Improvements Program (CIP).** Prepare a CIP that establishes capital expenditures for high priority public infrastructure for both existing deficiencies and new growth, and estimates a range of funding sources.
- Timeframe:* Ongoing
Responsible Party: Finance Department and Development Services Department
Funding Source: General Fund

Special Programs/Projects

- Program ED-9 **Business Improvement District.** Encourage and facilitate the establishment of a business improvement district (BID) among property owners with key business centers; establish clear functions for these BIDs, including increase marketing, public safety, small scale infrastructure improvements, and beautification programs
- Timeframe:* Mid Range; Long Range
Responsible Party: Administration
Funding Source: Funded by property owner assessments established on a majority vote basis.
- Program ED-10 **Federal, State, and Regional Funding Sources.** Conduct research to identify available grant funding opportunities that can support the goals of the City's sustainability plan.
- Timeframe:* As funds become available

Responsible Party: Administration
Funding Source: General Fund

Program ED-11 **Economic Development and Fiscal Monitoring System.** Develop a computerized system to track key economic development measures, such as employment change by sector, wages, square footage of development; and key fiscal measures, such as increased property, retail, and lodging taxes, and other important sources of revenue; evaluate these measures against established benchmarks.

Timeframe: As funds become available
Responsible Party: Administration and Finance Departments
Funding Source: General Fund; Grants

Physical Improvements

Program ED-12 **US 395 Corridor Improvements.** Consult with Caltrans regarding the widening of the US 395 corridor, including signage, landscaping, and other design features that would enhance the identity and entry into the City.

Timeframe: Mid-Range; Long Range
Responsible Party: Development Services Department and Public Works Department
Funding Source: Caltrans; Gas Taxes; Grants; Local Development Impact Fees; SANBAG regional transportation fees

Program ED-13 **High Desert Corridor Improvements.** Identify and enhance major commercial nodes for economic development by applying design and beautification techniques, such as signage, landscaping, public art, graffiti removal, and street cleanup.

Timeframe: Mid Range; Long Range
Responsible Party: Development Services Department and Public Works Department
Funding Source: Caltrans; Gas Taxes; Grants; Local Development Impact Fees; SANBAG regional transportation fees

Outreach, Education

Program ED-14 **Business Community and General Public Outreach.** Develop workshop programs, internet access, and other publicly-accessible forms of communication between the business community and City residents.

Timeframe: As funds become available
Responsible Party: Administration
Funding Source: General Fund; Grants

Inter-Agency and Other Organizations Consultation

Program ED-15 **Local and Regional Agency Consultation.** Increase participation with planning processes by the SCLA and the Victor Valley Economic Development Authority. Consult with the Adelanto Chamber of Commerce and the High Desert Hispanic Chamber of Commerce in expanding economic development opportunities and marketing strategies in the City.

Timeframe: Short Range; Mid Range; Long Range

Responsible Party: Administration and Planning Development Services Department

Funding Source: General Fund; Grants

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Implementation Program Matrix – Economic Development

Policy	Procedures, Permits, Agreements, and Ordinances		Plans and Studies			Special Programs/Projects						Physical Improvements		Outreach, Education	Inter-Agency and Other Organizations Consultation
	ED-1	ED-2	ED-3	ED-4	ED-5	ED-6	ED-7	ED-8	ED-9	ED-10	ED-11	ED-12	ED-13	ED-14	ED-15
	Organized Economic Development	Synchronization with City Departments	Fiber Optic Infrastructure Study	Real Estate Market Feasibility Study	Target Industry Analysis	Development Impact Fee (DIF) Schedule	Research Other Financing Approaches	Prepare Capital Improvements Program	Business Improvement District	Federal, State, and Regional Funding Sources.	Economic Development and Fiscal Monitoring System	US 395 Corridor Improvements	High Desert Corridor Improvements	Business Community and General Public Outreach	Local and Regional Agency Consultation
ED 1.1	■				■				■			■	■	■	
ED 1.2									■			■			
ED 1.3				■											
ED 1.4		■													
ED 1.5					■										
ED 2.1												■	■		
ED 2.2												■	■		
ED 2.3			■										■		
ED 2.4				■											
ED 2.5											■				■
ED 3.1						■			■						
ED 3.2						■									
ED 3.3							■			■					
ED 3.4								■							
ED 4.1												■	■		
ED 4.2												■			
ED 4.3												■	■		
ED 4.4		■													
ED 4.5	■														
ED 5.1												■			
ED 5.2												■			
ED 5.3												■			
ED 5.4															
ED 6.1					■										
ED 6.2	See PF-22														
ED 6.3	See PF-22														
ED 7.1				■											
ED 7.2	■			■	■									■	
ED 7.3	See LC-10														
ED 8.1			■												

Implementation Program Matrix – Economic Development																	
Policy	Procedures, Permits, Agreements, and Ordinances		ED-1	Organized Economic Development	ED 8.2	ED 8.3	ED 9.1	ED 9.2	ED 9.3	ED 9.4	ED 10.1	ED 10.2	ED 10.3	ED 11.1	ED 12.1	ED 12.2	
	Plans and Studies	ED-2	Synchronization with City Departments														
		ED-3	Fiber Optic Infrastructure Study														
		ED-4	Real Estate Market Feasibility Study	▣													
		ED-5	Target Industry Analysis	▣											▣		
	Special Programs/Projects	ED-6	Development Impact Fee (DIF) Schedule														
		ED-7	Research Other Financing Approaches														
		ED-8	Prepare Capital Improvements Program														
		ED-9	Business Improvement District												▣		
		ED-10	Federal, State, and Regional Funding Sources.								▣						
		ED-11	Economic Development and Fiscal Monitoring System														
		ED-12	US 395 Corridor Improvements														
	Physical Improvements	ED-13	High Desert Corridor Improvements					▣									
		ED-14	Business Community and General Public Outreach		▣							▣	▣				
Inter-Agency and Other Organizations Consultation	ED-15	Local and Regional Agency Consultation							▣								
See PF-22																	
See PF-22																	



Complete Streets for Adelanto North 2035

Mobility

Introduction

Circulation refers to all travel modes and routes people use to move within and beyond Adelanto: the local street system, via biking, walking, cars, or transit. Moving people and goods within Adelanto efficiently and effectively allows the community to function well economically and socially. Mobility describes people's ability to circulate from home to school, work, or shopping with ease and safety. Alternatives to the private car – transit, biking, and walking – can offer choice and convenience. Adelanto's overarching transportation goal is to establish and maintain a complete, multi-modal transportation network that provides sustainable options to the automobile.

Context

Adelanto consists of an existing street system with improved, unimproved, and incomplete street segments. US 395 is the main north and south connection. El Mirage Road, Chamberlaine Way, Bartlett Avenue, Air Expressway and Rancho Road provide east and west street connectivity. The City does not have any established bikeways due to the street system's limited connectivity. Additionally, Adelanto has not constructed trails nor formally adopted a non-motorized transportation plan.

Mobility Considerations

- **Limited Network Connectivity and Discontinuous Roadways.** Patchy development patterns and an incomplete roadway system have resulted in a disjointed roadway network thereby creating an inefficient transportation network. Expanses of vacant lands between residential neighborhoods and commercial areas and the lack of

sidewalks necessitates the need for vehicular travel. In addition, too much of the transportation system is dependent on US 395, which funnels traffic through one roadway.

- **Sidewalks are Sporadic and Discontinuous.** Sidewalks within the Adelanto North Planning Area are sporadic and discontinuous. They are mostly constructed within and along existing subdivisions that, at some points, can be spaced several miles apart. Some subdivisions do not have sidewalks.
- **Limited Pedestrian Access to Services and Attractions.** Very few key pedestrian attractions (local retail, schools, and parks) are within the walking distance (typically one-quarter mile) of other uses.
- **Lack of Bicycle Facilities and Amenities.** Bicycle facilities are not located within the City of Adelanto. Bike trails/paths and other facilities should be planned and implemented as the Adelanto North Planning Area grows.
- **Transit Access.** Victor Valley Transit Authority Bus Routes 32 and 33 connect west of US 395 and to the City of Victorville. While local north and south transit service are adequate on the west side of the Planning Area, it is inadequate on the east.

Key Sustainability Features

The Adelanto North 2035 Plan provides a network of streets, bicycle and transit routes, and trails that create a more sustainable transportation system to reduce greenhouse gases and air pollution. The following are the key sustainability features of the Mobility Chapter.

- **Complete Streets: Walking, Biking, and Transit.** The Adelanto North 2035 Plan includes a hierarchical network of streets that accommodates a variety of transportation modes and users. The entire Planning Area consists of major streets, boulevards, and collector streets designed in a gridded street pattern to facilitate mobility. Streets accommodate pedestrian, bicycling, and transit modes whereas activity streets include the design of buildings, streetscapes, and amenities working together to create a pedestrian-friendly atmosphere. These streets are designed safer, more livable, and welcoming to all modes beyond just driving.
- **Integrating Land Use and Transportation Principles.** The Town Center and Visitor Serving Center physical environments and planned uses are designed to promote walking and transit use. These Mixed Use Districts integrate residential and commercial uses within a compact setting that allows pedestrians to easily walk to community services. The Commercial and Activity Streets provide pedestrian-friendly streetscapes that are lively and comfortable for pedestrians and bicyclists.
- **Trail System.** The Adelanto North 2035 Plan is traversed by natural drainages, arroyos, and utility easements. The Plan takes advantage of these corridors by using them for a trail system. The trail system accommodates pedestrian and bicycle modes.

Complete Streets Vision and Strategies

A complete streets vision is a fundamental shift in how we think about, plan, and design the street system – recognizing the street as a public space and ensuring that the public space serves all users of the system (elderly, children, bicycles, pedestrians, etc.) within the context of that system (e.g. accounting for the adjacent land uses). Complete streets recognize that each street within the City is unique given its geographic setting, adjacent land uses, and the desired use of that facility.



The Adelanto North 2035 provides for new roadways to incorporate bike lanes and sidewalks

The Adelanto North 2035 Plan proposes to develop or retrofit the City's streets to better accommodate all users of the street system and interface appropriately with adjacent land uses, with the following proposed improvements:

- Major streets throughout the Adelanto North Area, including US 395 will now include Class II bike lanes.
- All roadways will have uninterrupted pedestrian facilities, including US 395.
- Numerous intersections within the residential core, designated as "Special Intersections," will have enhanced pedestrian and/or bicycle facilities.

Creating Complete Streets

The Adelanto North 2035 Plan envisions major changes to the roadway system. The planned street improvements are identified on the Proposed Roadway Network Map in Figure M-1. Proposed street cross sections for the new roadway classifications are shown on Figure M-1 and M-2.

Street Classification System

The Plan reclassifies all streets within the Plan Area with associated design characteristics appropriate for the surrounding land use. Classifications include:

- **Highways (6 lanes).** Provide regional mobility; includes Class I bike lanes

Highways include US 395

- **Major Streets/Boulevards (4 lanes).** Both Major Streets and Major Boulevards will connect core areas and will include Class II bike lanes. Both Streets and Boulevards will be landscaped; however, Boulevards will have a landscaped center median.

Major Streets includes portions of Adelanto Road, Bellflower Road, Caughlin Road, Daisy Road, El Mirage Road, Holly Street, Koala Road, Lynwood Avenue, Mojave Road, Rancho Road, and Seneca Road.

Major Boulevards includes portion of Adelanto Road, Aster Road, Bellflower Street, Colusa Road, Desoto Avenue, Holly Road, Koala Road, Lynwood Avenue, Mojave Drive, Rancho Road, and Richardson Road

- **Collector Streets (4 lanes).** Pedestrian-oriented design with Class II bike lanes

Collector streets include portions of Auburn Avenue, Beaver Road, Cactus Road, Chamberlaine Way, Jonathan Street, Raccoon Avenue, Stevens Street, and Victor Street

- **Activity Street - Commercial (2 lanes).** Intended for multiple retail and commercial areas; encourage pedestrian activity with wider sidewalks to accommodate cyclists as well. The Activity Street - Commercial within the Town Center includes two vehicular travel lanes, angled parking, mid-block crossings, and curb extensions.
- **Activity Street - Residential (2 lanes).** Intended for residential areas; encourage pedestrian activity with wider sidewalks to accommodate cyclists; alleyways will provide access to garages in the back

Includes portions of Aster Road, Bellflower Street, and Chamberlaine Way

- **Loop Street - One Way (2-3 lanes).** One-way couplet street that will serve Town Center and Business Park districts; includes a bike lane on one side



Activity Street – Commercial includes two travel lanes, angled parking, transit stops, and a bike route



Activity Street – Residential include two travel lanes, bus stops, driveway and garage access in the alley, and wider sidewalks and parkways to accommodate pedestrians

Key Roadway Improvements

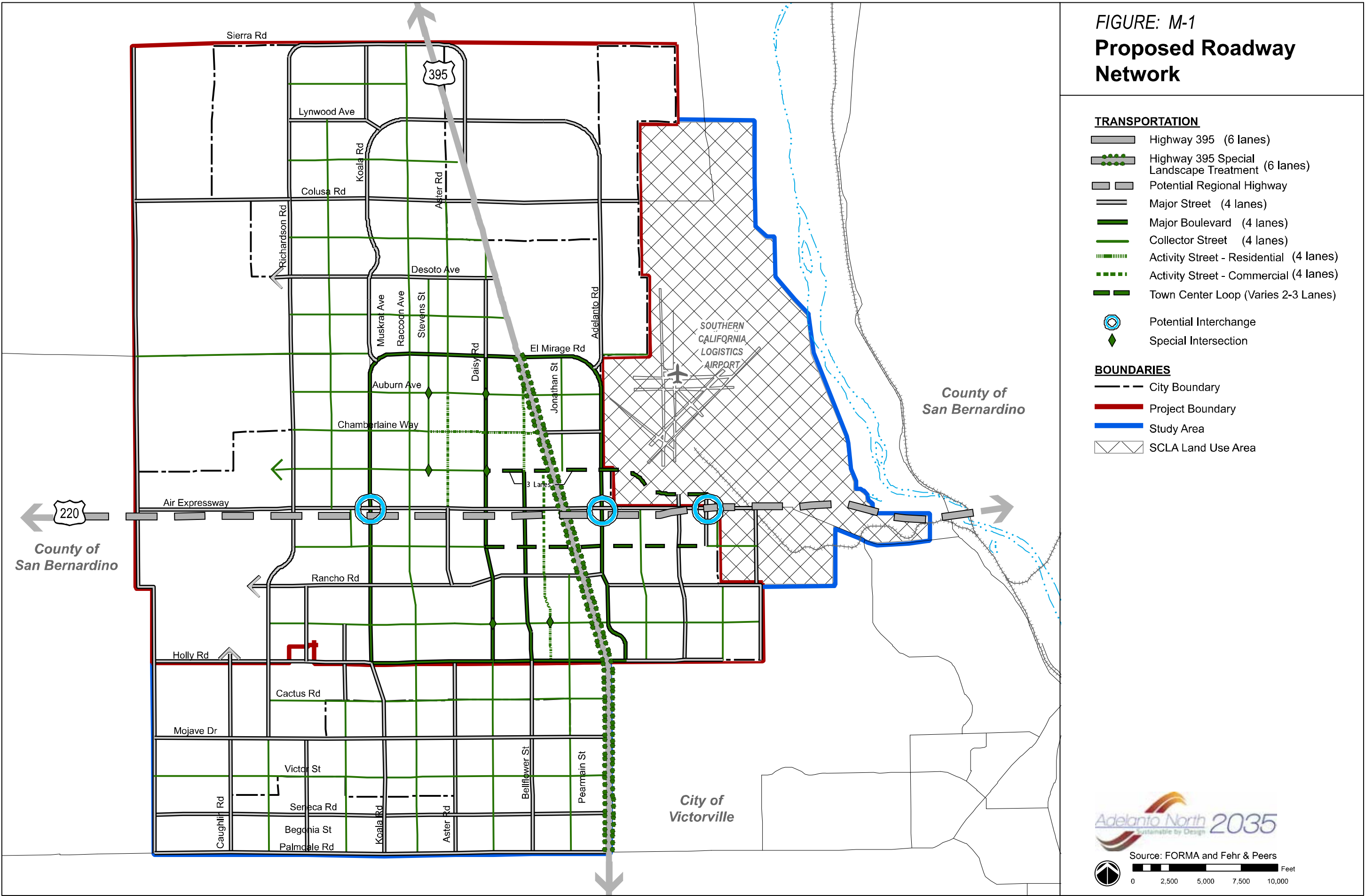
Key roadway improvements include:

- Increasing the number of lanes on proposed major and collector streets from two to four lanes and adding a Town Center one-way loop.
- US 395 will undergo special landscape treatment and widen to six lanes.
- A new multi-modal corridor, High Desert Corridor (220), is proposed to run east/west through the City just south of Air Expressway with three interchanges within Adelanto.
- A citywide traffic signal system program. This program re-times traffic signals, upgrading the controller and detection technology, and integrates the traffic control system to a single point traffic management center.

The proposed improvements will assist in facilitating mobility for the City and the region, especially with improvements to US 395 and the High Desert Corridor (HDC) project. Although these facilities will improve mobility for vehicles, the HDC may create a “barrier” within the City that could divide the City into two. Special care will need to be taken when the HDC project is designed to ensure local connectivity so that Adelanto can access the new facility, and ensure that safety along the corridor enhances the City’s quality of life.

Please note that, even with implementation of the roadway network, there may be locations where it will not be feasible to widen the facility to serve vehicles. This may happen on a case-by-case basis, where physical, environmental, or political constraints can limit the vehicle expansion potential at a location. As such, this Plan proposes to protect those intersections and roadway segments where it is deemed infeasible to implement widening to serve vehicles. This list will be adopted by City Council resolution and will be updated, as necessary.

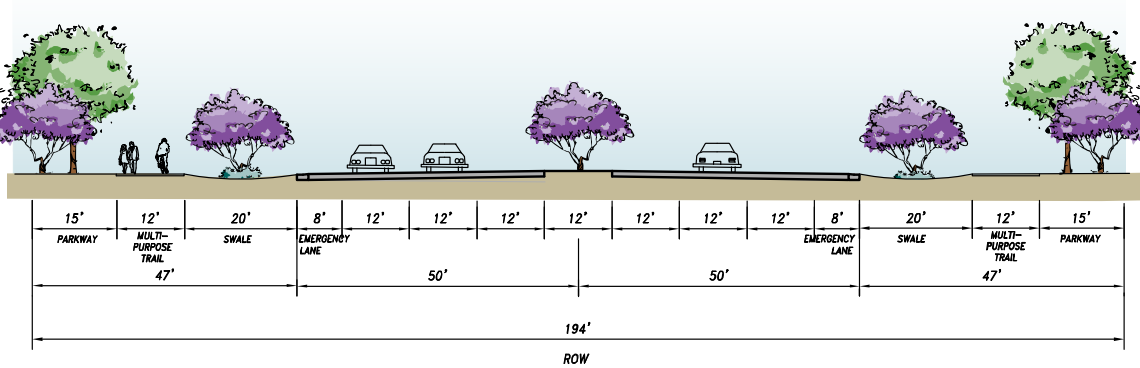
FIGURE: M-1
Proposed Roadway Network



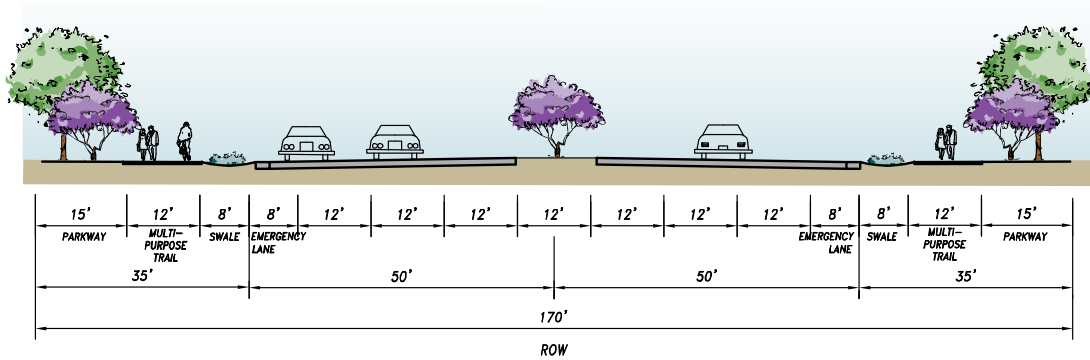
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Figure M-2: Proposed Roadway Network Street Cross Sections

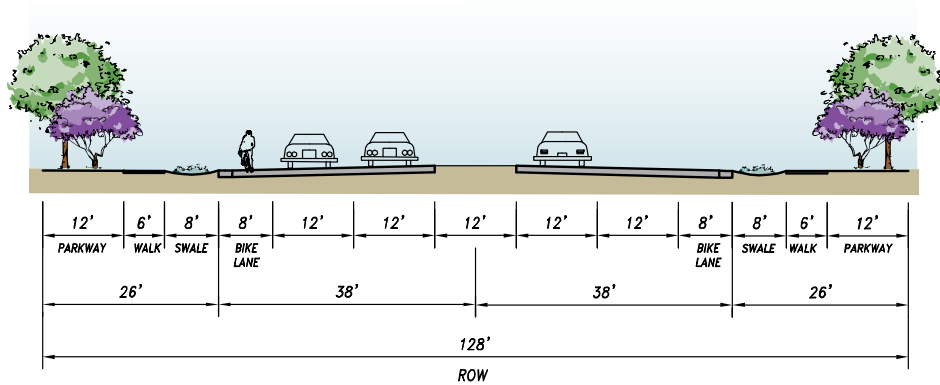
U.S. 395 – Special Landscape Treatment



U.S. 395



Major Street



Major Boulevard

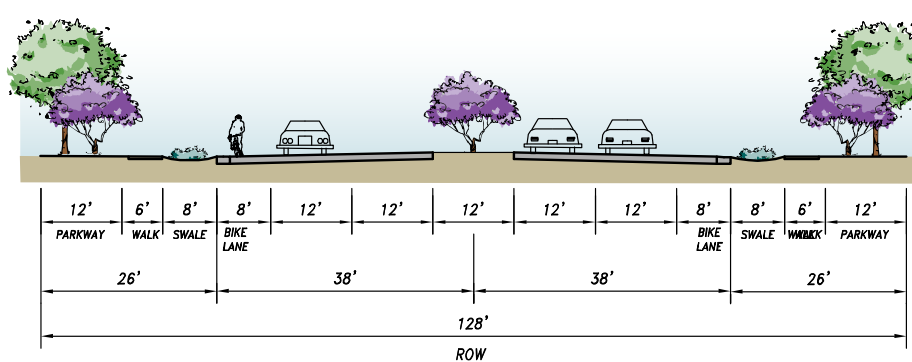
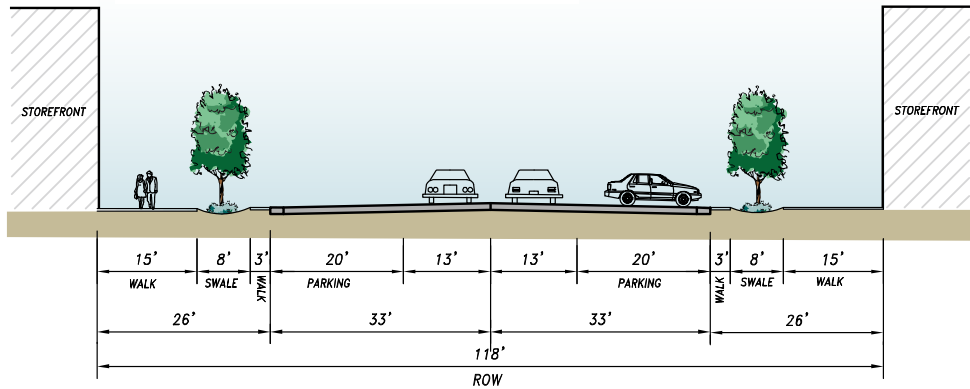
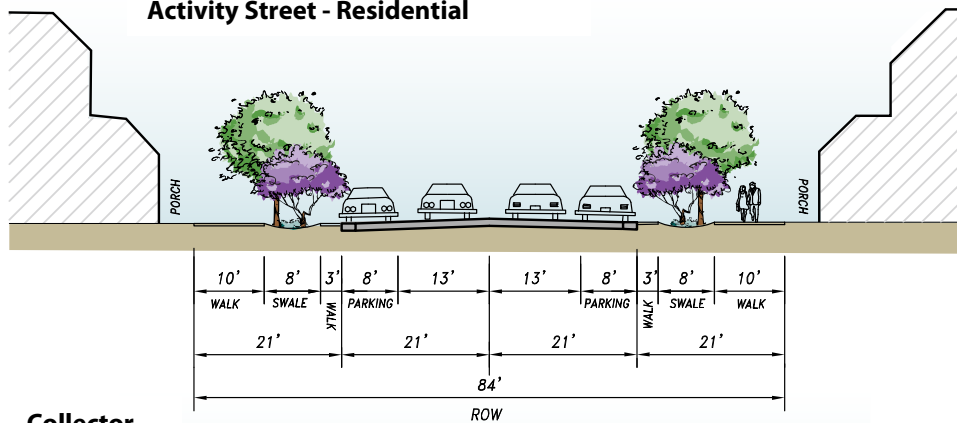


Figure M-2: Proposed Roadway Network Street Cross Sections (continued)

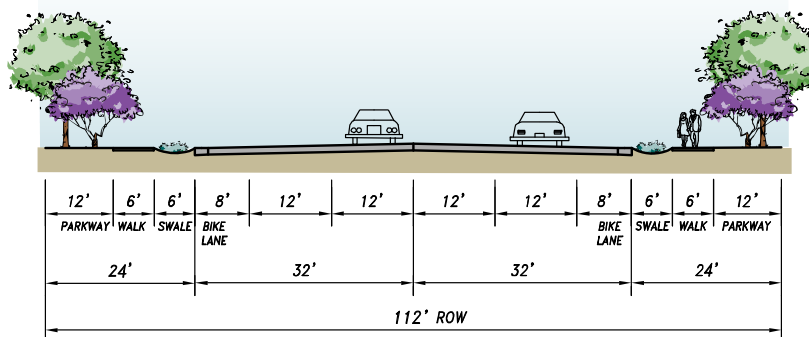
Activity Street - Commercial



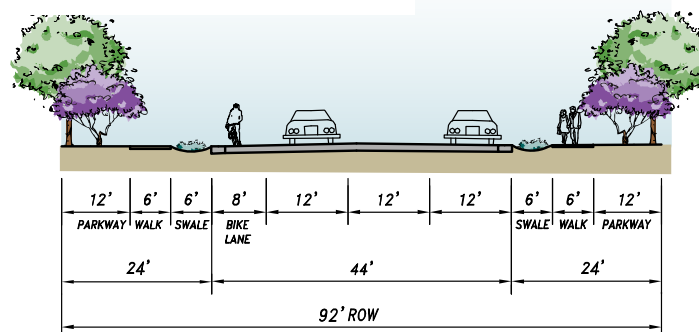
Activity Street - Residential



Collector



Loop Street



Planning for Pedestrians

Most trips begin and/or end with a person walking to/from a destination, at least for a short distance. Thus, the walking environment is one of the most basic elements of public space. Adelanto's pedestrian network will consist primarily of sidewalks provided along most roadways in commercial districts and residential neighborhoods. Sidewalks vary in width and physical conditions, making some more attractive to walking than others. Sidewalks also provide a primary transportation mode for mobility-impaired population groups such as youth, seniors, and disabled persons. In addition, Class I bicycle paths are designed as multi-use trails that pedestrians can also use.



Creating a comfortable environment for pedestrians is a key feature of the Adelanto North 2035 Plan

As part of the Adelanto North 2035 Plan, pedestrian paths will be interconnected throughout the street system, providing the following improvements:

- Pedestrian facilities will be located on all roadways within the Plan Area, including US 395.
- Commercial and Residential Activity Streets will have wider sidewalks to accommodate higher pedestrian traffic and cyclists.
- "Special Intersections" within the Residential Core North and Residential Core South will have enhanced pedestrian facilities as shown on Figure M-1.
- Drainage easements and retention basins will be used for drainage, treating water, and enhancing the pedestrian and bicyclist experience by providing facilities along those corridors.
- The roadway connectivity, when implemented with the pedestrian facilities, will better connect residents to locations they would want to walk (such as schools, commercial centers, other neighborhoods, and the Town Center).

Accommodating Bicycles

Bicycling is an increasing popular form of recreation as well as sustainable transportation option that produces no greenhouse gas emissions. Furthermore, there are many health benefits that are associated with cycling. Bicycles are a convenient means of transportation for short trips, especially those less than three miles in length.

The Adelanto North 2035 Plan has three classes of bicycle facilities, which mirror the standard classifications used by Caltrans and commonly adopted by other jurisdictions (see Figure M-3):

- Class I Bikeway (Bike Path): A completely separate facility designated for the exclusive use of bicycles and pedestrians, with vehicle and pedestrian cross-flow minimized.
- Class II Bikeway (Bike Lane): A striped lane designated for the use of bicycles on a street. Vehicle parking and vehicle/pedestrian cross-flow are permitted at designated locations.
- Class III Bikeway (Bike Route): A route designated by signs or pavement markings for bicyclists within the vehicular travel lane (i.e. shared use) of a roadway.

The Adelanto North 2035 Plan provides a complete network of bicycle facilities, including:

- Class I bike lanes added to US 395
- Class II all Major Streets, Major Boulevards, Loop Street and Collectors within the Plan Area.
- Pedestrian-friendly Activity Streets will complete the bicycle network. These streets will not have an on-street bike lane; however, the entire street, including the sidewalk, will be fully adequate for safe and efficient bicycle travel.



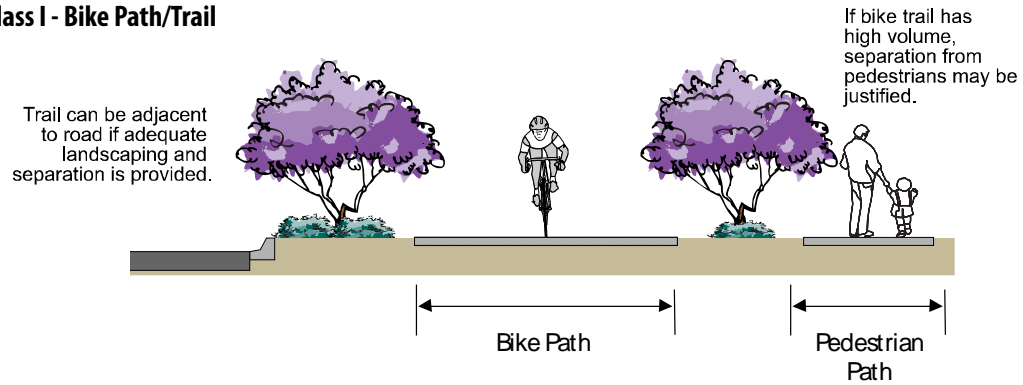
Class II bikeways are required on all major roads and create a more comfortable and safer experience for bicyclists



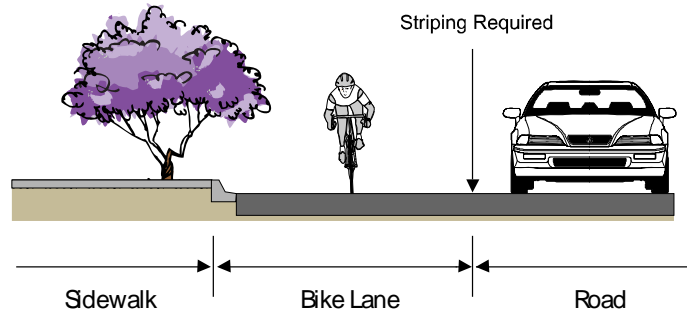
Bike racks and other bicycle amenities are encouraged in activity areas, such as schools, parks and commercial centers

Figure M-3: Bike Cross Sections

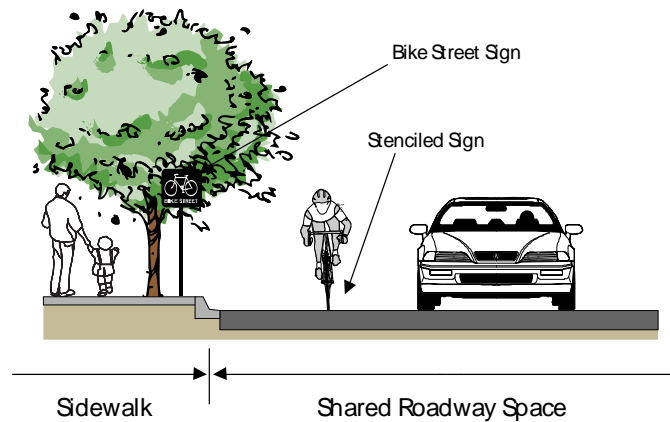
Class I - Bike Path/Trail



Class II - Bike Lane



Class III - Bike Street





The Town Center and Visitor Serving Center will provide bike sharing facilities

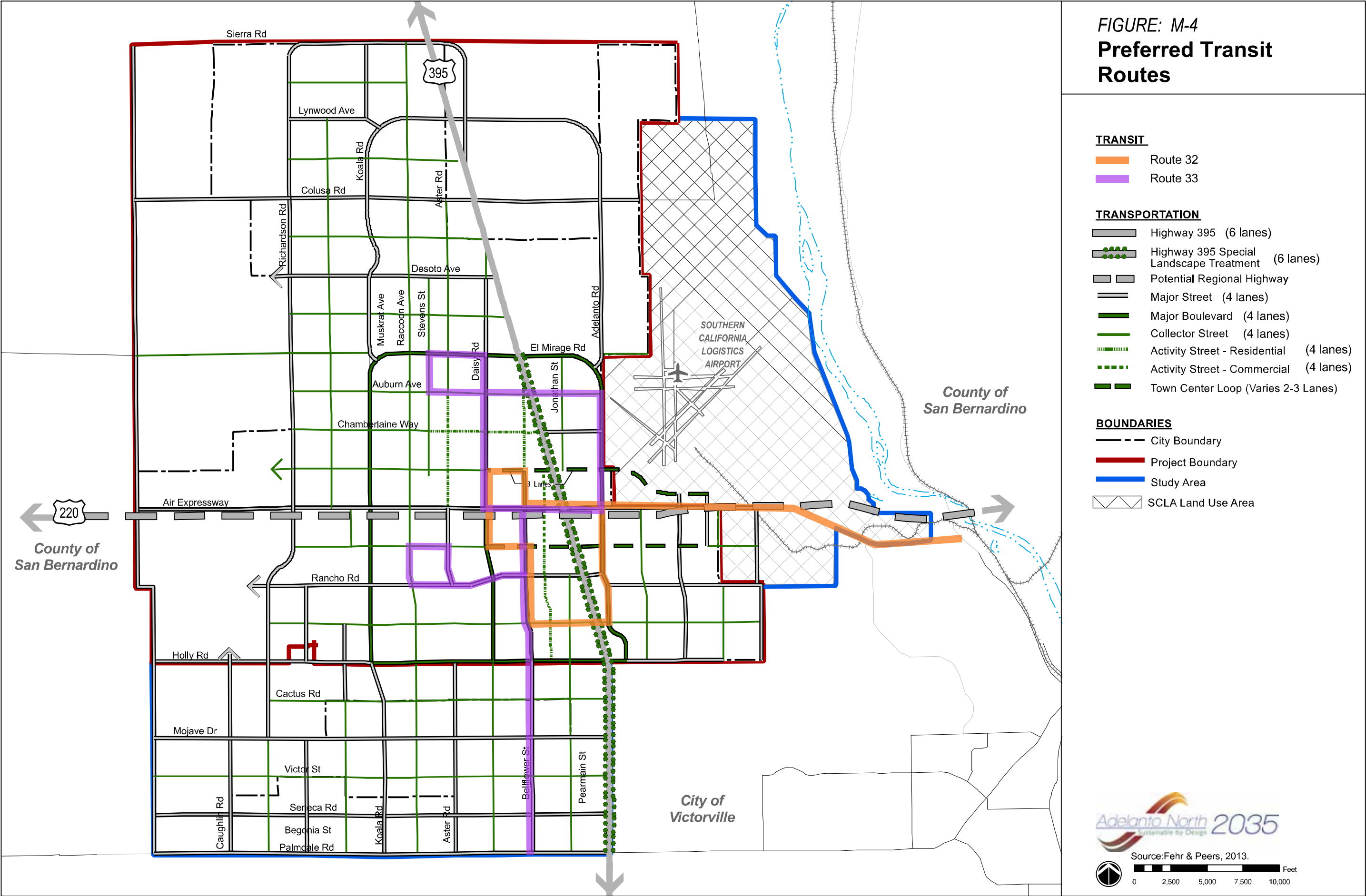
Integrating Transit

Public transit takes many forms, including high-speed rail, bus, shuttle, and paratransit. The Victor Valley has an extensive and expanding transit network. With Adelanto's focus on environmental sustainability, creating easier access to all types of transit is a key goal.



Covered bus shelters provide comfortable access to bus and shuttle networks

FIGURE: M-4
Preferred Transit Routes



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Public transportation services and facilities in Adelanto consist of the Victor Valley Transit Authority (VVTa) provided bus service. The Adelanto North Planning Area is served by two routes (32 and 33). These two bus routes are fairly extensive given Adelanto's current population, and transit headways are adequate for providing frequent service in the area. However, with the implementation of the Adelanto North 2035 Plan, more extensive transit routes will be needed to improve transit connections in the City.

The VVTa's Comprehensive Transit Plan proposes the following service improvements and addresses general changes that can benefit the entire VVTa network:

- **Route 32.** Change cycle time to two hours; extend service to Muskrat Avenue and El Mirage Way; operate to SCLA.
- **Route 33.** Extension to serve Adelanto High School; eliminate service on Muskrat Avenue, El Mirage Road, Jonathan Street, parts of Chamberlaine Way, Jonathan Street, and on Air Expressway beyond Aster Road.

Other general transit recommendations include:

- Late evening service to serve students and employees working past 9:00 P.M. and more frequent service on all routes.
- Adding a new line along Mojave Drive between Victorville and Adelanto, due to the steady growth of this corridor that is currently only served by one bus route, Route 31.
- Employ limited stop service, such as a Bus Rapid Transit line to improve transit travel times and reduce crowding on other buses. This type of line would operate during peak hours and serve larger volume stops.

The proposed High Desert Corridor (HDC) includes a center median built with a right-of-way for rail facilities. METRO has proposed an extension of the "DesertXpress" Las Vegas to Victorville high-speed rail line to run 63 miles further west to Palmdale along the HDC. Alternatively, the Corridor could also accommodate a Metrolink line.

As shown in Figure M-4, the Adelanto North 2035 Plan suggests route changes to both Route 32 and 33 to better serve the improved roadway network and new commercial, business, and residential areas. A major multi-modal transit station will be located at the Town Center near the US 395/Air Expressway interchange, which will provide a major connection point for both VVTa bus routes, and any future rail line along the HDC. These proposed routes, along with similar or improved transit frequency, will provide better service for the City.

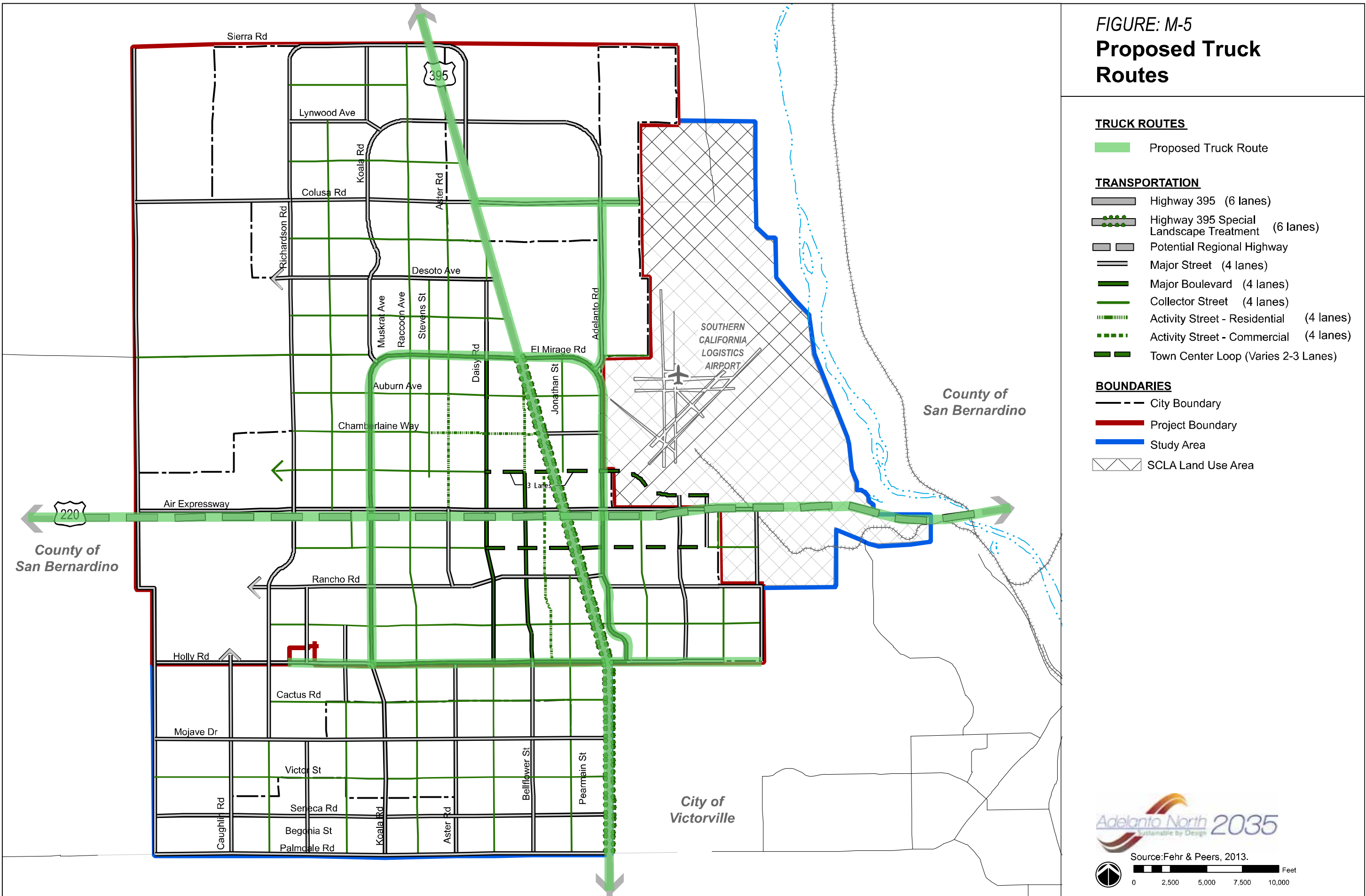
Truck Routes

Interstate 15, US 395, Palmdale Road (Highway 18), Rancho Road, Koala Road, Air Expressway Road, and Adelanto Road are designated truck routes that connect with commercial and industrial areas in the City. The truck routes provide appropriate connections along the highway and major corridors to the logistics center and other industrial areas of the City.

Based on the Adelanto North 2035 Plan roadway network and land use plan, Figure M-4 displays an updated truck route system. The new routes will address the changes to the roadway network and new manufacturing and airport development districts, as well as the proposed High Desert Corridor.



FIGURE: M-5
Proposed Truck Routes



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Goals, Policies, and Implementing Programs

Goal M 1 A Complete Streets network that provides a safe, balanced, cost-effective, multi-modal transportation system to accommodate the mobility needs of all residents



Policy M 1.1
Sustainability Focus

Apply Complete Streets strategies whenever practicable and feasible. Encourage development designs that integrate multiple modes of access and integrate Complete Streets in all capital improvement projects and new development projects.



Policy M 1.2
Sustainability Focus

Encourage VTA to implement regional transportation solutions that reduce vehicle miles traveled and to provide enhanced bus service to employment areas outside of the City, such as Victorville or other nearby areas in the County of San Bernardino.



Policy M 1.3
Sustainability Focus

Encourage METRO and VTA to create a multimodal center to include automobile, park-n-ride, rail, transit, bike, and pedestrian facilities.

Policy M 1.4

Coordinate with VTA to improve the quality of bus stop facilities in the City.



Policy M 1.5
Sustainability Focus

Identify and implement necessary pedestrian improvements with special emphasis on providing safer access to schools, parks, community and recreation centers, shopping districts, and other appropriate facilities.

Policy M 1.6

Support Safe Routes to School (SR2S) and Safe Routes to Transit programs that focus on bicycle and pedestrian safety improvements near local schools and transit stations. Prioritize schools with access from arterial roadways for receiving SR2S projects.

Policy M 1.7

Require new nonresidential development to provide secure bicycle parking on-site. Major employers should provide shower and changing rooms for employees, as appropriate. Work with existing employers to provide secure bicycle parking on-site and, where appropriate, work with them to provide shower and changing rooms for employees.



Policy M 1.8
Sustainability Focus

Support bicycle lanes and facilities along US 395 and HDC.

Policy M 1.9

Require developers to construct or pay their fair share toward improvements for all modes consistent with this Mobility Chapter, and specific impacts associated with their development.

- Policy M 1.10 Consult with Caltrans and other agencies to design the HDC consistent with the values and goals of the City.
- Policy M 1.11 Consult with appropriate agencies to ensure local connectivity to any potential high capacity transit service along the HDC.

Goal M 2 Improve transportation performance and connectivity for residents, visitors, and businesses.



- Policy M 2.1** Pursue funding to assist in implementing the transportation system by expanding its roadway capacity, pedestrian sidewalk facilities, bicycle facilities, and trail facilities, including the provision of bike and pedestrian trails along drainage and other easements.
- Policy M 2.2** Strive to maintain vehicle level of service (LOS) D on local roadways and LOS E on highways and major arterials.
- Policy M 2.3** Protect right-of-ways for state highways, major arterials, collectors, residential streets, and for all other planned infrastructure as shown on the figures above.
- Policy M 2.4** Work with Caltrans to widen US 395 to six lanes through the City with expanded right-of-way to accommodate identified Complete Streets features within the City.
- Policy M 2.5** Develop and maintain a list of protected intersections and streets approved by the City Council. For protected intersections and streets, the City will not implement motor vehicle capacity improvements to maintain the LOS goal outlined in Policy M 2.2 if such improvements are beyond what is identified as appropriate at buildout of the Plan; however, other non-vehicle capacity-building improvements may be required to improve mobility, to the extent feasible, and/or to implement the Complete Streets goals and policies of this Mobility Chapter. To be considered protected, an intersection or street must be identified as built-out by the City Council because:
- Acquiring the rights of way is not feasible; or
 - The proposed improvements would significantly impact the environment in an unacceptable way and mitigation would not contribute to the goals of this Mobility Chapter; or
 - The proposed improvements would result in unacceptable impacts to other community values or General Plan policies; or
 - The proposed improvements would require more than three through travel lanes in each direction.
- Policy M 2.6** Design designated truck routes such that the pavement, roadway width, and curb return radii support anticipated heavy vehicle use,

particularly on routes to and from SCLA and the Logistics Centre. Suggested truck routes are shown on Figure M-5.

Policy M 2.7 Consult with the SCLA and the surrounding Airport Development District to ensure that their plans are consistent with the goals and policies of the City.

Goal M 3 Inviting and livable streetscapes that encourage walking.



Policy M 3.1
Sustainability Focus

Consider innovative design and program solutions to improve the mobility, efficiency, connectivity, and safety of the transportation system. Innovative design solutions include, but are not limited to:

- traffic calming devices (in neighborhoods with straight streets to minimize speeding);
- roundabouts (at any location where an all-way stop is considered or where a “typical” signalized intersection (single left-turn lane, one through lane, and one right-turn lane is considered) with an ADT less than 20,000);
- separated bicycle infrastructure along drainage ways and along major facilities;
- high visibility pedestrian treatments and infrastructure (in high pedestrian areas such as retail areas and schools); and
- traffic signal coordination.

Innovative program solutions include, but are not limited to:

- web pages with travel demand and traffic signal management information (coordinated through SANBAG);
- a bike share program;
- active transportation campaigns; and
- intergenerational programs around schools to enhance safe routes to schools.



Policy M 3.2
Sustainability Focus

Require sidewalk improvements be constructed concurrent with new development where commercial and school uses are planned and where residential densities exceed two units per acre, or as required by the Planning Commission.



Policy M 3.3
Sustainability Focus

Create pedestrian friendly Residential and Commercial Activity Streets that include pedestrian amenities, sidewalks, and landscaping, and design commercial and residential building frontages that face toward the street.

Goal M 4 Improved mobility through transportation demand and traffic signal management techniques.

Policy M 4.1 Prioritize low-cost transportation enhancements, such as signal

timing improvements, that maximize the City's return on infrastructure investment related to the efficiency of the transportation system.



Policy M 4.2
Sustainability Focus

Develop flexible parking requirements to provide the "right amount" of on-site vehicle parking. Such requirements will include innovative parking techniques, effective Transportation Demand Management (TDM) programs to reduce parking demand, and consideration of other means to "right size" the parking supply.



Policy M 4.3
Sustainability Focus

Encourage VVTA to work with area religious facilities or other sites where underutilized parking or hours of operation could provide opportunities for shared park-and-ride facilities.



Policy M 4.4
Sustainability Focus

Consider supporting new development and existing businesses with various incentives (such as parking standards modifications) for implementing TDM programs that minimize the reliance on single-occupant automotive travel during peak commute hours.

Policy M 4.5

Pursue funding to pave all roadways within the City.



Policy M 4.6
Sustainability Focus

Encourage employers to support TDM techniques, such as bus transit passes or other measures that reduce the reliance of the single occupant vehicle.



Policy M 4.7
Sustainability Focus

Require new development that increases traffic to protected locations (consistent with Program M-1) to implement TDM strategies that reduce the reliance on the automobile and assist in achieving the City's mobility vision.

Policy M 4.8

Maintain truck routes throughout the City for efficient freight transportation service to businesses and industry while limiting impacts to residents and visitors.

Implementing Programs

Procedures, Permits, Agreements, Ordinances

- Program M-1 **Protected Intersections.** Develop and maintain a list of the City's protected intersections and roadways where:
- Acquiring the right-of-way is not feasible;
 - The improvements would negatively impact the environment;
 - The improvements would negatively impact other community values or policies; and/or
 - Other physical or fiscal factors limit the implementation of the proposed mitigation measure.

Timeframe: Ongoing
Responsible Party: Development Services Department
Funding Source: General Fund

Program M-2 **VVTA Expansion.** Work with VVTA to create a program to expand ridership in Adelanto.

Timeframe: Mid Range
Responsible Party: Development Services Department
Funding Source: General Fund and VVTA

Program M-3 **Truck Routes.** Update Truck Routes designations as indicated in the Plan.

Timeframe: Ongoing
Responsible Party: Development Services Department
Funding Source: General Fund

Program M-4 **Airport Consultation.** Consult with the SCLA to provide appropriate level of supporting transportation infrastructure connecting to the Airport and Logistics Centre.

Timeframe: Long Range
Responsible Party: Development Services Department
Funding Source: General Fund

Program M-5 **Landscaping and Signage.** Establish right-of-way landscaping, signage, and lighting requirements and guidelines to provide an attractive, user-friendly, and safe environment for all users.

Timeframe: Mid Range
Responsible Party: Development Services Department
Funding Source: Grants or General Fund

Program M-6 **Parking.** Establish flexible parking requirements and demand management strategies to reduce parking demand and maximize the efficiency of parking facilities.

Timeframe: Mid Range
Responsible Party: Development Services Department
Funding Source: Grants or General Fund

Plans and Studies

Program M-7 **Improve Bus Service.** Work with VVTA to plan and provide enhanced bus service to employment areas inside and outside of the City.

Timeframe: Long Range

Responsible Party: Development Services Department

Funding Source: Grants or General Fund

Special Programs/Projects

Program M-8 **Caltrans Funding.** Work with Caltrans to pursue funding for and implement low-cost transportation improvements such as traffic signal coordination where applicable.

Timeframe: Mid Range

Responsible Party: Public Works; or Planning

Funding Source: Grants

Program M-9 **Unpaved Roads.** Pursue funding to pave unpaved roadways. Establish a timeframe and parameters for paving unpaved roadways.

Timeframe: Mid Range

Responsible Party: Public Works; or Planning

Funding Source: Grants and Development Impact Fees

Program M-10 **Transportation Demand Management.** Work with businesses to develop TDM strategies help that reduce single-occupancy vehicle commuting.

Timeframe: Mid Range

Responsible Party: Development Services Department

Funding Source: General Fund

Physical Improvements

Program M-11 **Roadway Improvements.** Prioritize and implement the proposed changes to the circulation system in Adelanto consistent with the Roadway Classification Map. Ensure roadways operate acceptably and that right-of-ways are maintained and protected.

Timeframe: Long Range

Responsible Party: Development Services Department

Funding Source: Grants, Development Impact Fees

Program M-12 **Non-Motorized Improvements.** Provide signs and improve trails, bicycle, and pedestrian connections consistent with the Adelanto North 2035 Plan based on available funding.

Timeframe: Mid Range

Responsible Party: Development Services Department

Funding Source: Grants

Program M-13 **Sidewalk Improvements.** Close gaps in the existing sidewalk network and provide sidewalks adjacent to schools.

Timeframe: Long Range

Responsible Party: Development Services Department

Funding Source: Grants

Program M-14 **Local and Regional Transit Improvements.** Consult with METRO and VTA for regional and local transportation and transit improvements. Consult with VTA for bus route location and service area, and bus stop placement, improvement, and design.

Timeframe: Long Range

Responsible Party: Development Services Department

Funding Source: Grants

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Implementation Program Matrix - Mobility

Policy	Procedures, Permits, Agreements, Ordinances						Plans and Studies	Special Programs/Projects			Physical Improvements			
	M-1	M-2	M-3	M-4	M-5	M-6	M-7	M-8	M-9	M-10	M-11	M-12	M-13	M-14
	Protected Intersections	VTA Expansion	Truck Routes	Airport Consultation	Landscaping and Signage	Parking	Improve Bus Service	Caltrans Funding	Unpaved Roads	Transportation Demand Management	Roadway Improvements	Non-Motorized Improvements	Sidewalk Improvements	Local and Regional Transit Improvements
M 1.1	☐				☐				☐		☐	☐	☐	
M 1.2		☐					☐							☐
M 1.3														☐
M 1.4														☐
M 1.5					☐								☐	
M 1.6									☐		☐		☐	
M 1.7										☐				
M 1.8												☐		
M 1.9										☐				
M 1.10								☐						
M 1.11				☐										
M 2.1								☐	☐					
M 2.2											☐			
M 2.3	☐													
M 2.4								☐						
M 2.5	☐													
M 2.6			☐											
M 2.7				☐										
M 3.1					☐							☐		
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Sustainable Park Design for Adelanto North 2035

Parks and Recreation

Introduction

Parks and recreation are valuable and necessary features in a community as they create a sense of place, improve the quality of life, and make communities more livable and desirable. Public parks and trails provide residents with the opportunity to be physically active, a major component of the Healthy Communities concept. Parks also facilitate social interactions critical to creating community and civic pride. Recreational programs augment park facilities by providing organized, structured activities for all ages that enrich the recreational experience. Public spaces, such as town squares, plazas, trails (both natural and man-made) provide social gathering spaces for recreation, health purpose, tourism, rainwater retention, natural beauty, and views.

Context

As of 2013, the City maintains and operates six public park facilities totaling approximately 36 acres. All the parks are within the Adelanto North Planning Area, except for Sierra Park and Mgrdichian Park, which are located in the southern portion of the City. The City has not constructed trails nor formally adopted a non-motorized transportation plan. The City does not have any established bikeways due to the street system's limited connectivity. The City desires to provide a wide range of park types and sizes including community parks and accessible trails that meet the needs of Adelanto's population.

Parks and Recreation Considerations

- **Parkland Deficiency.** The City of Adelanto is deficient in providing parkland at the ratio of three acres per 1,000 residents per the Recreation Element of the General Plan. In 2013, 57 additional acres of parkland are needed to meet this goal. Through various methods, the City will have to provide a significant parks/recreation/open space component to help alleviate the current deficit and to provide three acres per 1,000 residents.
- **Funding and Maintenance.** Funding and maintaining public parks and recreation facilities are difficult and expensive. Available programs to fund and acquire parklands include parkland dedications, in lieu fees, financing strategies, and grants.
- **Recreation and Cultural Programs.** The City does not provide recreational and cultural programs. A cultural and recreational program, as well as a cultural resource center could provide the community with dance, art, adult, senior, health, and various other public programs. Meals on Wheels provides mid-day meals for seniors at the community center north of City Hall.
- **Joint-Use Agreements.** The City has an existing joint-use agreement with the Adelanto School District and has initiated negotiations for use of the new high school with Victor Valley Union High School District. New joint-use agreements could create additional recreational opportunities for Adelanto residents. Continued coordination with the local school districts will be essential in meeting park needs for the existing population.
- **Park Opportunities.** With the majority of the City's land undeveloped, there is an opportunity to provide for parks, recreational areas, and trails. The greenbelt corridors can be used as non-motorized transportation corridors. In addition, easements and public rights-of-way are also potential candidates for a multi-use trail system.
- **Bike System.** The proposed roadway system provides an opportunity for an integrated bike lane system along arterial and collector roadways throughout the Planning Area.
- **Turf Irrigation.** Typical sports fields and large turf areas require significant irrigation and water use. The City should consider alternative groundcovers for sports fields, such as synthetic turf or artificial grass. In addition, the use of reclaimed water for irrigation could reduce water demand. For passive recreation areas, desert-responsive groundcover materials requiring limited or no irrigation should be considered.

Key Sustainability Features

The Adelanto North 2035 Plan provides a network of recreational park facilities to meet the need of the current and future populations. The following are the key sustainability features of the Parks and Recreation Chapter.

- **Accessible Parks.** The Adelanto North 2035 Plan requires that parks, trails, and public spaces to be built concurrent with new development, sized adequately with a variety of amenities to meet the need and desires of the community, and built in locations that are accessible to all residents within a neighborhood.

- **Comprehensive Trail System.** The Adelanto North 2035 Plan accommodates a multi-modal trail system that provides greater connectivity to residential neighborhoods, parks, and schools. Trails will also be sensitively integrated with open space drainage and easement corridors.
- **Public Spaces.** The Adelanto North 2035 Plan provides public spaces where the community can come together and socialize, and provide areas for special events such as farmers' markets.
- **Sustainable Park and Trail Design.** Parks and all recreational facilities will be sustainably designed to incorporate features that shield and cool residents from the desert heat, such as the use of shading features, splash pads or other water features that can be used for play. Recreational areas will be designed with windbreaks and other landscape features to protect users from high winds. In addition, parks and trails will also be designed to blend in with the desert environment by minimizing site disturbances, using desert-friendly landscaping for visual improvements, incorporating desert-responsive architecture, and limiting turf to play fields only.

Park and Recreation Facilities

Park design shall emphasize the Mojave Desert environment through minimal site disturbance, desert-responsive architecture and landscaping. Lighting should be sensitively placed to protect dark skies and minimize light intrusion to neighboring residential or habitat areas. Energy efficient lighting and solar energy are encouraged to illuminate parks and trails. Site planning and landscape design should include ways to provide shelter from desert winds.

Park Types

Pocket Parks

Pocket parks serve the immediate neighborhood. Pocket parks are no larger than one acre, address limited recreation needs, and offer limited amenities. They are intended to offer a small-open space/recreational venue within a residential neighborhood. They are not intended to serve residents citywide. Amenities should include picnic, sitting areas, and children's



Pocket park with social gathering spaces and passive spaces



Park design shall emphasize the Mojave Desert environment

playgrounds.

Neighborhood Parks

Neighborhood parks are one to ten acres and accommodate spaces for informal activities and active recreation. These parks are the basic unit of the City's park system, serving as a social and recreational feature for neighborhoods.

Community Parks

Community parks shall be a minimum of 10 acres, a maximum of 25 acres, and accommodate facilities for organized recreational activities. In general, community parks are designed to support the social and recreational needs of multiple neighborhoods and designed to serve users of all ages and abilities. To maximize resources, this type of park can be located adjacent to open space or a community facility such as a library or school.



Neighborhood Park



Community Parks provide a variety of recreational amenities and ample parking

Park Size and Service Area

New park facilities shall be built and located based on the standards identified in Table PR-1. Park facilities should be distributed throughout the Planning Area to maximize connectivity. Several pocket parks and/or smaller neighborhood parks are recommended to meet the service area requirements. Parks shall be centrally located in the neighborhood it serves. Additionally, sites selected should have good visibility from public streets and walkways provide adequate safety.

Table PR-1: Park Type Size and Service Area Standards

Park Type	Size Requirement (Acres)			Service Area Requirements	
	Min.	Desirable	Max.	Distance	People
Pocket Parks	3,000 sq. ft.	0.5	1	Less than ¼ mile	500 to 1,000
Neighborhood Parks	1	4	10	¼ mile to ½ mile	2,500 to 5,000
Community Parks	10	15	25	1 to 2 miles	20,000

Figure PR-1 illustrates how parks and trails can be distributed within a neighborhood to maximize the service area. Both neighborhood and pocket parks are located throughout the neighborhood. The neighborhood street pattern, multiple trails, and pedestrian shortcuts increase the connectivity to the parks. Cul-de-sacs include pedestrian access points, which limit vehicular access but allow pedestrian access.

Figure PR-1: Example of Park and Trail Distribution and Pedestrian Access Points



Trail System

With several transmission lines, gas pipelines, and natural drainage courses crisscrossing the Planning Area, it is envisioned that these features will provide the backbone of an off-street trail system. Soft trails can provide traditional hiking experience. Additionally, major and collector street sidewalks and landscaped meandering paths can provide an on-street trail system, complementing and connecting the off-street trails. Neighborhood trails will provide linkages within a neighborhood, providing greater connectivity for residents. These trails provide opportunities to link neighborhoods to key parks, school sites, and activity centers. In addition to offering beautiful views and an opportunity to lead a healthy lifestyle, the paths and trails—with many routes and intersections—provide another way for residents to enjoy their community.

The Adelanto North 2035 Plan envisions four different recreational trail types:

- Drainage Trails
- Easement Trails
- Neighborhood Trails
- Street Trails



Multi-use Trails are envisioned for Adelanto North

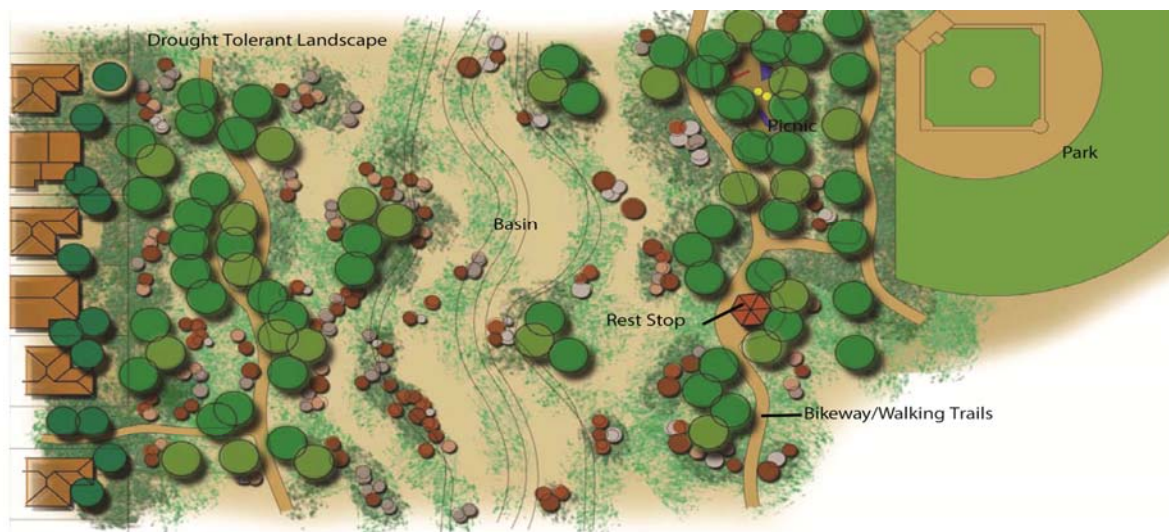
Drainage Trails

The Mojave Desert stream beds or drainage courses are usually dry except after sufficient rain. The drainage courses, also called arroyos, provide unique habitat and natural drainage. When development occurred in the past, an arroyo would be channelized or eliminated. However, new development can be designed to complement existing arroyos, see Figure PR-2. Soft or paved trails can be constructed sensitively within arroyos and major drainage corridors. Hydrology, specifically how water is going to interact with the trail, is critical in designing a sustainable trail — one less susceptible to erosion. Drainage crossing should be handled sensitively, and where appropriate above grade crossing should be encouraged. Drainage Trail widths should be wide enough to accommodate drainage. Coordination with the Drainage Master Plan will be required to ensure that drainages can accommodate trail systems. Please also see the Utilities section regarding requirements for natural drainages.



A Drainage Trail traversing two residential neighborhoods. These trails are wide enough to accommodate drainage courses.

Figure PR-2: Drainage Trail Conceptual Illustration



Drainage Trail



Easement Trails

Multi-use walking and biking trails will be integrated along utility easement corridors, including electrical transmission lines and underground gas pipelines. Like arroyo trails, easement trails will also be sensitively designed to minimize impact to undisturbed, native vegetation. The City and developers must work with property owners and easement owners to provide enough land area to accommodate trails.



A paved trail is provided along this electrical transmission easement corridor. Paved paths also connect to adjoining park facilities and residential neighborhoods.



Easement trails provide additional recreational opportunities and connectivity

Neighborhood Trails

Neighborhood trails provide access within a neighborhood, typically connecting to surrounding uses, schools, parks, and adjoining neighborhoods. Streets and cul-de-sacs provide pedestrian access points to create greater pedestrian connectivity within a neighborhood. Neighborhood trails have narrower widths compared to Arroyo Trails. Cul-de-sacs must provide pedestrian and bicycle connectivity to adjacent arroyos, trails, streets, paths, and commercial and recreational facilities.



A Neighborhood Trail provides connectivity within a neighborhood with linkages to sidewalks. Open ended cul-de-sacs and pedestrian access points provide connectivity to the trail.

Street Trails

Adelanto North 2035 Plan will provide Street Trail improvements to encourage walking and biking, particularly between residential neighborhoods, schools, parks, commercial activity centers and Town Center. Improvements will take the form of landscaped buffers between the road and sidewalk, meandering paths, bike routes, and/or dedicated multi-use trails (pedestrian and bicycle paths). Sidewalks should be wide and spacious, with decorative accent paving materials located at Special Intersections and pedestrian crosswalks along the route. Key roadways to receive such treatment include:

- US 395
- HDC
- Major Streets
- Major Boulevards
- Collector Streets
- Activity Streets: Residential and Commercial
- Town Center Loop

Specific improvements for each of these roadways are illustrated in the Mobility Chapter,

Figure M-2 Street Sections.



A Street Trail provides connectivity to surrounding neighborhood streets with meandering sidewalks on both side of the street. Cul-de-sacs provide access to the street trail



Street Trails can accommodate vehicles, drainage, landscaping, and trails (pedestrian and/or bicycle path)

Park and Trail Needs Analysis

Although the City has an adopted standard of 3 acres of park land for every 1,000 residents, it currently has only 36.4 acres. The City needs an additional 57 acres is required to satisfy the current need. A minimum of three acres of parkland for every 1,000 persons is required for new residential development. Based on the land use plan, 237 acres of parkland are required for the projected development. Almost 300 new acres of park land would be needed to satisfy the demands of new residents and alleviate the current deficit. Park types that can provide credit towards this standard include community parks, neighborhood parks, arroyo trails, easement trails, and other parks. Golf courses and unimproved natural habitat areas do not satisfy park credit. Active, improved park land and minimum 100-foot-wide trail corridors through open space enhanced with activity nodes may be credited toward meeting this policy. Private amenities such as recreation centers and clubhouses may be considered for fee credits but do not count toward the park credit.

Public Spaces

Public spaces are important in the community as they allow places where people can congregate for informal or special events. Public places include outdoor plazas, courtyards and squares, and community gardens. Large public spaces can also accommodate public events, such as concerts, holiday celebrations, farmers' markets, and other special events.



Public spaces in a Town Center

Town Center Public Spaces

The Mixed Use Town Center District, envisioned as the heart and main focal point of the City, will include a large town square. The town square consists of hardscapes suitable for open markets, music concerts, and other public gathering events. The town square will be surrounded by retail, restaurants, entertainment uses and residential uses. The center may include a fountain, monument, or other form of public art.



Other public spaces in the Mixed Use Town Center District can include outdoor plazas and courtyards, outdoor dining areas, pedestrian-friendly streetscapes, promenade, and possible outdoor amphitheater. The "Main Street Character" will facilitate pedestrian activities and amenities in the form of sidewalk

vendors, outdoor cafes, and farmer's markets. Theming through cohesive landscape planting, textured paving, shaded seating areas or street furniture, wayfinding signage, street lighting, fountains/water features, and public art displays are some examples of pedestrian amenities that bring continuity and emphasize a sense of place in the Town Center.

Community Gardens

A community garden is a single piece of land gardened collectively by a group of people. They provide fresh produce and plants as well as neighborhood improvement, sense of community, and access to fresh fruit and vegetables. Community gardens in a desert setting should have special considerations such as heat and sun shields. Community gardens are a sustainable way to access local fresh fruits and vegetables and provide a gathering space for neighbors and the community to share ideas and work together.



Community gardens increase a sense of community and stewardship

Sustainable Parks, Trails, and Public Spaces

Sustainable parks and trails are designed, constructed, and maintained in a manner that addresses environmental issues such as stormwater management, improving air quality by promoting alternative transportation, reducing motor vehicle trips, and even planting trees. Sustainable Parks can significantly decrease water use by reducing irrigation needs through the use of rain gardens and recycled water.



Park design to reflect desert landscape

Conserving Water

- Rain water cisterns
- Recycled irrigation
- Desert-friendly landscaping irrigation
- Integrate with desert environment
- Limited use of turf

Conserving Resources

- Recyclable materials
- Sensitive siting within desert landscape
- Protect and enhance habitat areas
- Green building techniques (e.g., solar power, natural lighting)



Desert-friendly landscaping minimizes irrigation

Increasing Access

- Parks located along trails
- Neighborhood parks within walking distances of most homes
- Street network, blocks, and pedestrian access points designed to increase accessibility to parks

Maintenance

- Facilities designed to ensure sustainability and maintenance affordability
- Shade facilities to protect users and facilities from sun and heat/cold
- Green buildings techniques for community facilities (e.g., solar panels, recycled materials)
- Efficient lighting equipment for outdoor lighting



Sustainable lighting equipment for night use

Partnerships and Community Engagement

- Involve the public as partners, customers, volunteers, participants, and stakeholders in the design and operation process
- Encourage partnerships with various organizations
- Pursue funding opportunities (e.g., grants, fundraising, and partnerships)

Goals, Policies, and Implementing Programs

Goal PR 1 Park facilities will meet the needs of residents and workers.

- | | |
|---------------|---|
| Policy PR 1.1 | Provide 3.0 acres of parkland per 1,000 persons. |
| Policy PR 1.2 | Require parks to meet the size and service area requirements identified earlier in this chapter. |
| Policy PR 1.3 | Require parkland dedications and/or provision of on-site usable public space for development projects involving new residential construction. |
| Policy PR 1.4 | Provision of required parks and/or expenditure of in lieu fees shall occur at the time of the residential subdivisions occupation. |
| Policy PR 1.5 | Prohibit the construction of new neighborhoods or subdivisions without park facilities that meet the minimum standards. |
| Policy PR 1.6 | Maintain development fee programs to accumulate funds for the acquisition and improvement of parks and public/community places and facilities. |
| Policy PR 1.7 | Maximize opportunities for joint-use of school facilities, particularly with community parks. |
| Policy PR 1.8 | Plan and build park facilities and provide recreational services that meet the needs and desires of the community, including seniors and youth. |

Goal PR 2 Parks and open space will be integrated within neighborhoods and will be accessible to the public.



- | | |
|---------------|--|
| Policy PR 2.1 | Require parks to be centrally located and accessible to all residential areas. |
|---------------|--|

Sustainability Focus





- | | |
|---------------|---|
| Policy PR 2.2 | Design neighborhood streets, block patterns, and edges to include pedestrian access points and short cuts to increase accessibility to parks, trails, schools, and neighborhood commercial centers. |
|---------------|---|









Sustainability Focus

- | | |
|---------------|--|
| Policy PR 2.3 | Encourage siting parks along Drainage and Easement Trails to increase connectivity and efficiently utilize land. |
|---------------|--|

Goal PR 3 Connectivity will be established throughout Adelanto North through the use of trails and other non-vehicular trail system.

- | | |
|---|--|
| Policy PR 3.1 | Use drainages, easement corridors, and other open space for trails and passive recreation opportunities. |
| Policy PR 3.2 | Encourage bridge crossing over arroyos for major trails routes and tunnels under major roadways. |
|  Policy PR 3.3
Sustainability Focus | Develop a pedestrian and bicycle trail system that connects residential neighborhoods to major activity areas, town center, schools, parks, open spaces, and employment centers. |
|  Policy PR 3.4
Sustainability Focus | Require neighborhood multi-use trails to provide direct walkable access to parks. |
| Policy PR 3.5 | Establish trailheads at highly visible locations and with improvements that provide access for persons with disabilities. |

Goal PR 4 Flexible park and trail facilities include sustainability features and are designed for the desert environment.

- | | |
|---|---|
|  Policy PR 4.1
Sustainability Focus | Encourage use of innovative methods to conserve water in parks and recreation facilities. |
|  Policy PR 4.2
Sustainability Focus | Require drought-tolerant, native plant materials in landscaped areas. |
|  Policy PR 4.3
Sustainability Focus | Limit turf exclusively to athletic fields, open play areas. |
|  Policy PR 4.4
Sustainability Focus | Include shade structures over playgrounds and equipment to minimize sun exposure throughout the day. |
|  Policy PR 4.5
Sustainability Focus | Protect park users from the strong desert winds through site planning and landscape design. |
|  Policy PR 4.6
Sustainability Focus | Encourage integrating parks with other facilities, such as schools, community centers, and storm drainage facilities. |
|  Policy PR 4.7
Sustainability Focus | Require lighting equipment to be designed to light parks and trails without creating light intrusion on residential uses and natural habitat areas, and to minimize impact on dark, desert skies. |
|  Policy PR 4.8
Sustainability Focus | Use sustainability measures to reduce maintenance and operating costs of park facilities. |



Policy PR 4.9 Design Drainage Trails to minimize impact on native vegetation.
Sustainability Focus

Goal PR 5 A variety of quality public spaces are integrated into all development projects.

- Policy PR 5.1 Require a variety of public gathering spaces including outdoor plazas, courtyards and squares, community gardens, wide landscaped sidewalks and parkway areas, outdoor dining areas, pedestrian street amenities, promenades, and an outdoor amphitheater.
- Policy PR 5.2 Require street amenities such as shaded benches and seating at points of interest, landscaping and shade trees along Activity Streets: Residential and Commercial and the Town Center Main Street.
- Policy PR 5.3 Establish a town center with a “Main Street” setting that includes outdoor dining spaces, benches, sitting areas with umbrellas, walkway shaded features, public art, fountains and water features in the Mixed Use Town Center District.
- Policy PR 5.4 Maximize public facility use by sharing with nonprofit organizations, school districts, and community organizations.
- Policy PR 5.5 Require quasi-public spaces be accessible to the public and transit stops and include shaded benches and bicycle facilities.
- Policy PR 5.6 Develop guidelines and standards for non-residential development projects to incorporate accessible plazas, paseos, and other public places.

Implementing Programs

Procedures, Permits, Agreements, Ordinances

Program PR-1: **Pre-Application Submittal Meeting.** Require pre-application meeting with large residential development project applicants to discuss park, recreation, trail, and public gathering space requirements.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: Developer Fees

Program PR-2: **Park Impact Fees.** Evaluate park development impact fees. Periodically update fees to ensure nexus and appropriateness.

Timeframe: Short Range

Responsible Party: Development Services Department
Funding Source: General Fund

Program PR-3: **Non-Residential Park and Public Facility Impact Fee.** Investigate the feasibility of adopting a park and public facility impact fee for non-residential development. Adopt such a requirement if demonstrated to be achievable and practical.

Timeframe: As funding permits
Responsible Party: Development Services Department
Funding Source: General Fund

Program PR-4: **Public Gathering Space Zoning Revisions.** Update Title 17 of the Adelanto Zoning Ordinance to require quasi-public gathering spaces be accessible to the public, in addition to residents of a mixed-use project. Public open space shall be accessible and fully visible from the public right-of-way (including street, sidewalk, or trail). Public open space shall be located in front of buildings, and shall not be located where views of the quasi-public space from the public right-of-way would be obstructed by buildings or other structures. The provision of quasi-public open space shall be required at the discretion of the responsible review authority.

Timeframe: As funding permits
Responsible Party: Development Services Department
Funding Source: General Fund

Plans and Studies

Program PR-5: **Parks, Recreation and Trails Master Plan.** Develop a Parks, Recreation and Trails Master Plan that is responsive to the Adelanto North 2035 Plan, and includes standards and guidelines for new park and trail development, sustainable design features, and other park and trail planning and development. Require public participation in the form of charrettes and other outreach methods to gain an understanding of residents' needs and desires in park facilities.

Timeframe: As funding permits
Responsible Party: Development Services Department
Funding Source: Grants

Special Programs and Projects

Program PR-6: **Park and Recreation Grants.** Actively pursue available funding sources, such as grants and private partners. Develop measures, programs, and fundraising strategies to ensure the City qualifies for available funding sources. Provide staff training in the fundamentals of best practices and principles of effective and strategic fundraising. The focus of the training should be on the process of successful solicitation from private sources

of funds, particularly foundations and corporations.

Timeframe: Ongoing

Responsible Party: Administration Department

Funding Source: General Fund

Program PR-7:

Public Use of Private and Quasi-Private Properties Liability Issues.

- Comprehensively address any liability issues associated with public use of private and quasi-public properties, and determine whether the City could or should be a partner in such endeavors.
- Consult with the property owners and other interested persons early in the process.
- Provide grants for the development of small, infill public places on public or private lands, including for such uses as community gardens, neighborhood participation activity, or other projects that bring people together and build community.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: Grants

Inter-Agency and Other Organizations Consultation

Program PR-8:

Regional Recreation System Planning. Consult with San Bernardino County, Adelanto Elementary School District, easement holders, and other agencies that have a stake in parks and trails regarding park and trail planning.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Implementation Program Matrix – Parks and Recreation

Policy	Procedures, Permits, Agreements, Ordinances				Plans and Studies	Special Programs and Projects		Inter-Agency and Other Organizations Consultation
	PR-1	PR-2	PR-3	PR-4	PR-5	PR-6	PR-7	PR-8
	Pre-Application Submittal Meeting	Park Impact Fees	Non-Residential Park and Public Facility Impact Fee	Public Gathering Space Zoning Revisions	Parks, Recreation and Trails Master Plan	Park and Recreation Grants	Public Use of Private and Quasi-Private Properties Liability Issues	Regional Recreation System Planning
PR-1.1				▣				
PR-1.2					▣			
PR-1.3	▣			▣				
PR-1.4		▣						
PR-1.5				▣				
PR-1.6		▣	▣					
PR-1.7							▣	
PR-1.8					▣			
PR-2.1				▣	▣			
PR-2.2				▣	▣			
PR-2.3				▣	▣			
PR-3.1					▣			
PR-3.2					▣			
PR-3.3					▣			
PR-3.4					▣			▣
PR-3.5					▣			
PR-3.6				▣	▣			
PR-4.1					▣			
PR-4.2					▣			
PR-4.3					▣			
PR-4.4					▣			
PR-4.5					▣			
PR-4.6							▣	
PR-4.7					▣			
PR-4.8					▣			
PR-4.9					▣			
PR-5.1				▣				
PR-5.2	See LC-2, LC-4, LC-6, LC-11							
PR-5.3	See LC-2, LC-4, LC-6, LC-11							
PR-5.4						▣	▣	
PR-5.5				▣				
PR-5.6				▣				

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Open Space and Conservation for Adelanto North 2035

Open Space and Conservation

Introduction

Adelanto is characterized by vast desert open spaces, native vegetation and habitat, natural drainages and washes, and abundance of sunlight. By conserving open space, the City can achieve the preservation and conservation of these natural resources. In addition to open space, this Chapter also focuses on the natural resources: energy, water, and air.

Context

The Adelanto North 2035 Planning Area is located in the Western Mojave Desert, an arid region of southeastern California and portions of Nevada, Arizona and Utah, which occupies more than 25,000 square miles. Within the Planning Area, the Mojave Desert consists of natural dry drainages, desert habitat and wildlife, and the potential for cultural resources related to nearby mining operations and other historical structures and archaeological sites.

Open Space and Conservation Considerations

- **Sensitive Wildlife Resources.** The Adelanto North 2035 Planning Area may include the presence of sensitive resources, which may require additional permitting and should be recognized as a possible constraint in the planning process. The sensitive resources include the Desert tortoise (Federal Endangered Species Act Section 10 Incidental

Take Permit), Mohave ground squirrel (Fish and Game Code 2081 Incidental Take Permit), and Burrowing owl (mitigation requirements—on-site artificial burrow construction or off-site conservation area).

- **Highway Construction.** Presently, the High Desert Corridor is proposed to bisect the Planning Area and may intrude into areas with a high habitat value for sensitive species. This could lead to direct loss of habitat within the area due to development, indirect impacts to the remaining habitat due to degradation attributed to human activities, and create barriers that would divide areas that could potentially be preserved as part of the planning process.
- **Natural Drainages.** New large-scale development can change natural site hydrology. Typically, development substantially increases the volume of and level of pollutants within storm water runoff and greatly decreases infiltration to groundwater. In the past the focus has been on storm water drainage rather than retention. In other areas, this focus has resulted in channelization of natural drainage courses.
- **Cultural Resources.** The Adelanto North 2035 Planning Area is considered highly sensitive for previously unrecorded cultural resources. Cultural resources likely to be encountered include prehistoric artifacts, bedrock milling features, and temporary and long-term habitation sites; historical structures, mining features, or artifact scatters; and other historical and prehistoric resource types.
- **Scenic Corridors and Viewsheds.** The Adelanto North 2035 Planning Area is comprised of a vast amount of vacant/open space land that has scenic value. These resources include the beauty of the desert landscape and the views of the Shadow Mountains along the western boundary of the Planning Area. Sensitive design and placement of new development will ensure that these corridors and viewsheds remain as an important aesthetic resource for future residents of the City as well as travelers passing through.
- **Air Quality and Greenhouse Gases (GHGs) Emissions.** The Adelanto North 2035 Plan proposes a variety of new large scale development. With this new development comes new sources of air pollution and GHGs due to an increase in population, traffic and new industrial and commercial uses.
- **Energy Conservation.** Adelanto has abundant sunshine and wind throughout the year, making it an ideal location for harnessing solar and wind energy.

Key Sustainability Features

The Adelanto North 2035 Plan provides a network of spaces to protect natural habitat and natural drainage courses. The Plan incorporates energy and water conservation methods to conserve natural resources over the long term. The following are the key sustainability features of the Open Space and Conservation Chapter.

- **Open Space and Habitat Preservation.** The Adelanto North 2035 Plan accommodates nearly 10,000 acres of open space area with limited residential opportunities (see Land Use and Community Design Chapter). This designated area is intended to protect

habitat area for sensitive species and preserve natural drainage courses, such as Fremont Wash. Open space can also be preserved in perpetuity through a habitat mitigation program.

- **Air Quality and Greenhouse Gases.** The Adelanto North 2035 Plan supports and encourages sustainable land use and mobility planning practices to ensure a reduction in air pollution and GHGs within the Planning Area.
- **Renewable Energy Production - Solar and Wind Power.** The Adelanto North 2035 Plan supports and requires the use of solar and wind renewable energy systems at both the large scale through solar and wind generation facilities within the industrial designated areas or small-scale rooftop solar panels on residential, commercial, or industrial buildings.
- **Water Conservation Solutions.** The Adelanto North 2035 Plan encourages water conservation through landscape irrigation and recycled water and greywater programs.

Open Space Plan

The Adelanto North 2035 Plan accommodates open space that respects the natural desert environment through the Open Space designation. The designation includes areas that are to be permanently maintained in a substantially natural state, natural drainages and washes, sensitive biological resources, hillside areas, cultural resources, and regional utility corridors.



Natural drainage traversing Adelanto North can provide natural open space

Within the Planning Area, the most significant open space is located west of Richardson Road. This area encompasses the majority of Fremont Wash and Shadow Mountain hillside areas. The area designated as Open Space also includes a portion of the El Mirage Dry Lake Off-Highway Vehicle Recreation Area, which is owned and managed by the U.S. Department of the Interior, Bureau of Land Management (BLM).

Ideal natural resources conservation areas or habitat replacement areas within the Adelanto North Planning Area should be large, continuous areas of desert scrub communities within the northern and western portions of the Planning Area. These areas have ephemeral streams, including Fremont Wash, and have the highest potential of supporting both desert tortoise and Mohave ground squirrel populations.

Open Space Designations

Adelanto North 2035 Plan introduces the Open Space and Greenbelt Corridor designations for natural drainages and easement corridors. Land within the Open Space designation will remain largely undeveloped within the timeframe of this plan. Open Space areas with sensitive habitat, hillside, or considered archaeologically significant, may be purchased by developers or conservation organizations to serve as a mitigation bank as described in the Multi-Species Habitat Conservation Plan discussion below. These areas will be re-vegetated, restored, or enhanced to increase their habitat and drainage value. Other suitable open space areas may be used for renewable energy improvements, given, the improvements do not impact or disturb natural habitat. Residential development is allowed in the Open Space designation, with a maximum density of one unit per 50 acres. The Open Space designation and Greenbelt Corridors designations are identified in Figure OS-1.

Greenbelt Corridors

Greenbelt Drainage Corridor

The Greenbelt Drainage Corridor areas will function as part of the storm water drainage and storm water detention areas. The Drainage Corridors may also include bicycle and hiking trails, and recreational park areas. The naturally vegetated channels can provide natural habitat, potential wildlife corridors, and pedestrian trail linkages.



Natural drainage traversing Adelanto North can provide natural open space

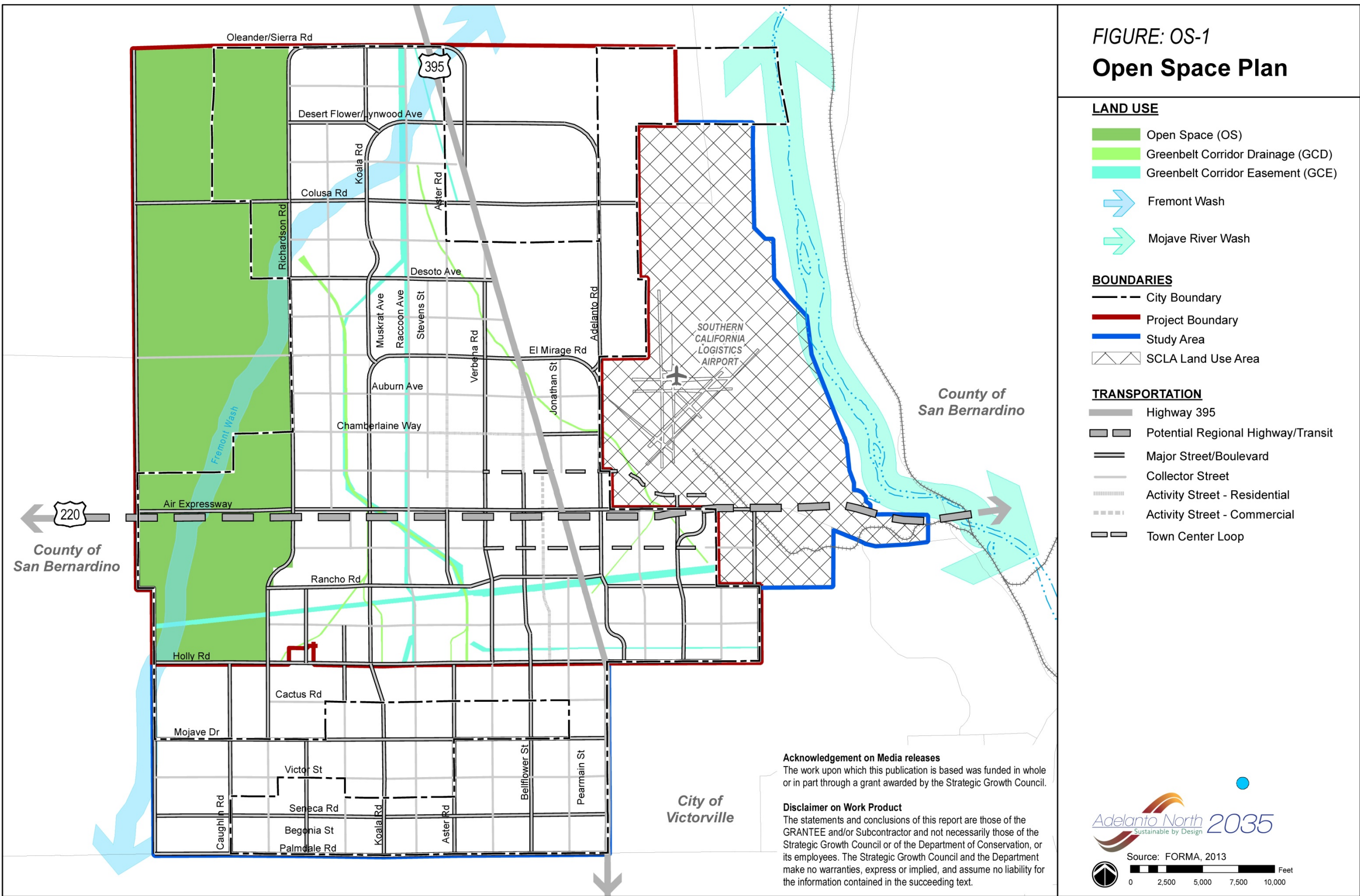
Green Belt Drainage Corridor areas shall be maintained, in their natural condition with limited exceptions to allow for pedestrian access and enhanced aesthetic value. Pervious trails will complement the natural setting and will provide safe walking, jogging, and bicycling along designated paths that minimize human disturbance to existing vegetation, biology, and soils.



Regional energy transmission can also provide open space resources

Greenbelt Easement Corridor

Many transmission and power lines crisscross the City of Adelanto. The Greenbelt Easement Corridors are envisioned to form a network of hiking and biking trails linking residential neighborhoods, open space areas, and recreational areas.



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Multiple Species Habitat Conservation Plan

To balance development growth with protecting Mojave Desert habitat and its sensitive species, the Adelanto North 2035 Plan recommends establishing a mitigation bank and habitat preserve area. Mitigation banking is the permanent restoration, creation, and enhancement of habitat, which offsets expected adverse impacts to similar nearby ecosystems cause by new development. The mitigation bank's goal is to replace the function and value of the specific habitats that would be adversely affected by the proposed development. The guidelines of the mitigation banking and habitat preserve area are facilitated by a Multiple Species Habitat Conservation Plan (MSHCP). A



Desert tortoises (Gopherus agassizii and Gopherus morafkai) are species of tortoise native to the Mojave desert

MSHCP is a comprehensive conservation planning process addressing the needs of multiple plant and animal species through a planning program designed to create, manage, and monitor an ecosystem preserve. When established, the habitat preservation areas or mitigation bank area will serve as a key component of the Adelanto's smart growth efforts by preserving habitat and open space and by directing forecasted growth into appropriate areas. The benefits of the MSHCP include:

- Preserves the Adelanto native desert wildlife and creates a comprehensive system of open space, parks, trails, and wildlife reserves.
- Safeguards significant habitat area that enables wildlife to thrive without being encroached by new development.
- Assures critical highway projects and new development growth can be built without delays resulting from endangered species conflicts.
- Offers certainty for the business and development community ultimately making the Adelanto a more attractive place for businesses to relocate or expand.

The MSHCP will serve as a habitat conservation plan (HCP) and as a Natural Communities Conservation Plan (NCCP). The MSHCP can then be used to allow participating jurisdictions to authorize "take" of plant and wildlife species identified within the Planning Area. Under the MSHCP, California Department of Fish and Game and U.S. Fish and Wildlife will grant "take" authorizations for public and private development that may incidentally take or harm listed species or their habitat outside of the conservation area within the Adelanto North 2035 Planning Area that is assembled and managed by the established MSHCP.

Conservation: Air Quality, Viewsheds, Energy, and Water

For an area to thrive as a community and attract new businesses and development, it must rely on energy. To operate vehicles, run household and business appliances, and heat and cool buildings in a desert climate, the community relies heavily on fossil fuels as an energy source. However, burning fossil fuels to power these daily activities results in greater air pollution, greenhouse gases emissions, and further depletion of these natural resources.

Air Quality and Greenhouse Gases

Adelanto is located within the Mojave Desert Air Basin (MDAB). Air quality within a region is affected by the amount of air pollution generated from stationary, mobile, area, and natural sources located within that region. Examples of stationary sources are factories, industrial facilities, and power plants. Mobile sources include cars, trucks, airplanes, and off-road vehicles including trains, construction equipment, and recreational vehicles. Area-wide sources are small emission sources, such as dry cleaners, restaurants, aerosols, consumer products, residential water heaters, and automotive shops located in a general vicinity of each other. Natural sources include forest fires, pollens, and wind-blown dust. In addition, air pollution is transported from adjacent air basins during certain meteorological conditions and contributes to air pollution problems for neighboring basins.

The Adelanto North 2035 Plan supports and encourages sustainable land use and mobility planning practices to ensure a reduction in air pollution and GHGs within the Planning Area.

Viewsheds

Prominent viewsheds within the Adelanto North 2035 Planning Area are comprised primarily of undeveloped desert land, the Mojave River, and distant views of the mountains. The Adelanto North 2035 Plan acknowledges the aesthetic and historical importance of these natural resources and provides various strategies to ensure the continued enjoyment and conservation of these views through the placement of structures and the location of trails and parks.

Renewable Energy Production- Solar and Wind Power

Solar Energy

Renewable energy production captures energy from natural processes such as sunshine, wind, and geothermal heat flow.

As a desert community, Adelanto has abundant sunshine throughout the year, making it an ideal location for harnessing solar energy through the use of solar panels and ever-evolving technologies.



The LA Department of Water and Power's Adelanto Solar Project can produce an average of 20,000 megawatt hours annually for the next 25 years

The energy consumed by buildings in Adelanto accounts for nearly one third of all Adelanto's greenhouse gas emission totals, according to the San Bernardino County Regional Greenhouse Gas Reduction Plan. With renewable solar energy, newer buildings can reduce the fossil fuel consumption and greenhouse gas emissions, thus becoming more sustainable.

The Adelanto North 2035 Plan supports and encourages renewable energy facilities, including solar through the following strategies and requirements:

- Accommodate large-scale solar generation facilities in the Manufacturing and Light Manufacturing Districts.
- Encourage solar panels on warehousing, industrial, and large commercial retail building roofs.
- Require new residential development to be designed to support solar panels.
- Encourage residential street design, parcel patterns, and building roofs to maximum solar exposure to roofs.



Solar panels are ideal for large rooftops on warehouses and industrial buildings



Adelanto's sunny conditions are also ideal for solar panels on residential homes

Wind Energy

Wind energy is an electricity source produced when specially designed wind turbines capture wind and generate electricity. The most wind power is produced at large-scale wind farms. However, potential for individual properties or buildings to host wind turbines exists. The Adelanto North 2035 Plan supports and encourages renewable wind energy.

Energy Conservation Practices

To reduce air pollutant and greenhouse gas emissions, and nonrenewable natural resource and fossil fuels consumption, energy conservation is imperative. Residents, businesses, and institutions can use less energy through simple conservation techniques.



Adelanto North 2035 Plan endorses land use and transportation approaches that encourages walking, biking and transit

Green Building Approaches

Green buildings and green infrastructure lessen water, air quality, and natural resource consumption. Green building strategies integrate building materials and methods into the design, construction, and operation of our built environment. The Adelanto North 2035 Plan proposes a number of strategies to reduce energy consumption including adequate insulation, energy-efficient appliances and equipment, and on-site renewable sources.

Energy Conservation through Land Use/Transportation Approaches

One of the most significant ways to conserve energy and minimize greenhouse gas emissions is to reduce automobile use and vehicle miles traveled. The Adelanto North 2035 Plan endorses land use and transportation approaches that encourage walking and using alternative transportation. Many of these approaches are detailed in the Land Use and Urban Design Chapter. They include mixed-use development, pedestrian friendly centers and neighborhoods; pedestrian and bicycle trails linkages between homes, commercial uses, parks, and schools; and transit facilities.

Water Conservation

As the Adelanto North 2035 Plan envisions housing, population, business, and employment growth that will increase water demand, water conservation efforts are essential. Water conservation measures discussed in this section are supplemented by water conservation efforts described in the Public Facilities and Infrastructure Chapter.

Landscaping and Irrigation

Much of the water used to nourish high water-demanding non-native landscapes is wasted through inefficient use. To minimize excessive water use, landscapes should be designed with selected plant materials that thrive in the desert heat with minimal water. The Adelanto North 2035 Plan recommends sustainable landscaping and irrigation strategies be incorporated to include native drought-tolerant species, limited turf areas, grouping of plants that have similar water need, and water retention soil improvements.



Appropriate landscaping can reduce water consumptions significantly



Residential yards can be aesthetically pleasing with the appropriate selection of plantings that require limited irrigation

Recycled Water and Greywater

The City of Adelanto is upgrading their wastewater treatment plant to allow for a recycled water system. The recycled water can irrigate public parks, schools and golf course turf; provide construction and dust control; and be used in industrial and manufacturing operations. Additional information on recycled water is found in the Public Facilities and Infrastructure Chapter.

Greywater is wastewater originating from washing machines, bathtubs, showers, or bathroom sinks. It does not include wastewater from kitchen sinks, dishwashers, or toilets. Greywater can be rerouted at residences to irrigate the homes' landscaping. Recycled and greywater systems are sustainable methods in utilizing water efficiently.

Cultural Resources

The Planning Area is considered highly sensitive for previously unrecorded cultural resources. Cultural resources likely to be encountered include prehistoric artifacts, bedrock milling features, and temporary and long-term habitation sites; historical structures, mining features, or artifact scatters; and other historical and prehistoric resource types. The Adelanto North 2035 Plan provides policies to protect and preserve cultural resources that are discovered.

Goals, Policies, and Implementing Programs

Goal OS 1 Natural resources including land features, viewsheds, and drainages are strategically preserved.



Policy OS 1.1
Sustainability Focus

Designate open space areas to preserve natural desert landscape and habitat.



Policy OS 1.2
Sustainability Focus

Preserve drainages and washes in their natural state or limit concrete-lined channels to protect the community from flooding hazards and enhance conservation.



Policy OS 1.3
Sustainability Focus

Preserve views of the desert landscape and existing topography and landforms including Shadow Mountains.

Goal OS 2 Open spaces, sensitive biological resources, native habitat, and vegetation communities that support wildlife species are identified, protected, and restored.



Policy OS 2.1
Sustainability Focus

Survey and map potential habitat for sensitive biological resources, including special-status plant and wildlife species and sensitive natural communities.



Policy OS 2.2
Sustainability Focus

Develop a habitat conservation plan that establishes a mitigation banking program and habitat preserve aimed at protecting sensitive biological resources and native habitat area.



Policy OS 2.3
Sustainability Focus

Ensure that new development and major transportation projects minimize encroachment into sensitive desert habitats, and minimize direct or indirect impact to sensitive biological resources while optimizing the potential for mitigation.

Goal OS 3 Energy conservation and renewable energy production is maximized to reduce natural resources and fossil fuels consumption.



Policy OS 3.1
Sustainability Focus

Promote the use of renewable energy and support efforts to develop small-scale, distributed energy (e.g., solar power and wind power) to reduce the amount of electricity drawn from the regional power grid, while providing Adelanto with a greater degree of energy self-sufficiency.



Policy OS 3.2
Sustainability Focus

Encourage new warehousing, manufacturing, industrial, and large commercial retail buildings to be designed to accommodate future rooftop solar panel systems.



Policy OS 3.3
Sustainability Focus

Encourage new residential development to be designed to support solar panels.



Policy OS 3.4
Sustainability Focus

Encourage the use of rooftop solar power systems on new public buildings (City, County, State, Federal, School District).



Policy OS 3.5
Sustainability Focus

Require all new development to provide site design and building orientation that take into account passive solar design to reduce heating and cooling loads through energy-efficiency strategies.



Policy OS 3.6
Sustainability Focus

Encourage orientation of new residential street blocks, parcel patterns, and building roofs to maximum solar exposure to roofs.



Policy OS 3.7
Sustainability Focus

Incorporate, where feasible, the use of energy conservation strategies in City projects and operations to maximize energy efficiency and serve as a role model to the community and the region.



Policy OS 3.8
Sustainability Focus

Conserve energy by promoting efficient and cost-effective lighting that reduces glare and light pollution.



Policy OS 3.9
Sustainability Focus

Streamline the solar panel installation process by issuing permits over the counter.

Goal OS 4 Water consumption is reduced through aggressive implementation of conservation policies and programs.



Policy OS 4.1
Sustainability Focus

Require the use of water conserving appliances and fixtures in new development per CALGreen building requirements.



Policy OS 4.2
Sustainability Focus

Encourage the use of drought-tolerant, desert-friendly, and low-

water consuming landscaping as a means of reducing overall and per capita water demand.



Policy OS 4.3
Sustainability Focus

Continue to develop and implement water conservation programs in response to community input and to keep pace with changing technology.



Policy OS 4.4
Sustainability Focus

Provide recycled water facilities at the Adelanto Wastewater Treatment Plant in the future.



Policy OS 4.5
Sustainability Focus

Provide for recycled water distribution by requiring recycled water dual piping in new developments, retrofitting existing landscaped areas, and constructing recycled water pumping stations and transmission mains to reach areas far from the treatment plants.



Policy OS 4.6
Sustainability Focus

Encourage residential development to incorporate greywater recycling systems.

Goal OS 5 Land use and water supply planning processes are coordinated so that adequate water supplies are available for proposed development.



Policy OS 5.1
Sustainability Focus

Require new development outside of the boundary of Growth Area 1 to demonstrate that adequate water is available before project approval and to fund its fair-share costs associated with the provision of water service.



Policy OS 5.2
Sustainability Focus

Access reliable data and information on water use and supply to thoroughly evaluate the potential water supply impacts and needs of proposed development projects and promote effective decision-making.

Goal OS 6 Local air quality is good; local contributions of airborne pollutants to the air basin is reduced.



Policy OS 6.1
Sustainability Focus

Pursue efforts to reduce air pollution and greenhouse gas emissions by promoting the use of renewable energy (e.g., solar and wind power), and implement effective energy conservation and efficiency measures.



Policy OS 6.2
Sustainability Focus

Integrate air quality planning with land use, economic development, and transportation planning.



Policy OS 6.3
Sustainability Focus

Require projects that generate potentially significant levels of air pollutants and odors to incorporate the most effective air quality mitigation into project design, as feasible.

Goal OS 7 The volume of pollutants generated by motorized vehicles is reduced.



Policy OS 7.1
Sustainability Focus

Minimize vehicle emissions by reducing automobile use and encouraging alternative means of transportation, including transit, walking, and biking.



Policy OS 7.2
Sustainability Focus

Support programs that decrease vehicle emissions by increasing the number of housing units located near jobs and transit, and encouraging commuting via transit, walking, and bicycling; thereby decreasing vehicle miles traveled (VMT).



Policy OS 7.3
Sustainability Focus

Purchase fuel efficient vehicles and equipment for the City's fleet and equipment, whenever feasible.

Goal OS 8 Greenhouse gas emissions are minimized due to the efficient use and management of energy resources.



Policy OS 8.1
Sustainability Focus

Promote compact development within and adjacent to the Town Center and Visitor Serving Center that focus on mixed use, walkable neighborhoods with trail system, and on-site renewable energy generation.



Policy OS 8.2
Sustainability Focus

Reduce greenhouse gas emissions caused from the use of electricity and natural gas by residential, commercial, industrial, and municipal buildings.

Goal OS 9 Sustainable neighborhood development principles, green infrastructure, and green buildings are found throughout Adelanto North.



Policy OS 9.1
Sustainability Focus

Encourage and support green building principles in Adelanto.



Policy OS 9.2
Sustainability Focus

Encourage infrastructure systems and facilities that reduce energy consumption and integrate sustainable design features.

Goal OS 10 Cultural and historical resources are protected and preserved.

Policy OS 10.1

Identify, protect, and minimize impacts to archaeological and paleontological resources.

Policy OS 10.2

Review proposed development for the possibility of cultural resources and for compliance with the cultural resources program.

Implementing Programs

Procedures, Permits, Agreements, and Ordinances

- Program OS-1 **Zoning Ordinance Update.**** Update Title 17 of the Adelanto Zoning Ordinance text and map to complement and include the Open Space district and Greenbelt Corridors identified in this Plan.
- Timeframe:* Concurrent with Plan adoption
Responsible Party: Development Services Department
Funding Source: General Fund, Sustainable Communities Grant Funds
- Program OS-2 **Solar Guidelines and Standards.**** Develop guidelines and standards to address solar requirements for new residential, commercial and industrial development projects. These guidelines and standards are to include strategies for accommodating future rooftop solar power systems, address passive solar design to reduce heating and cooling loads, and include guidelines for the design of residential street blocks, parcel patterns, and building roofs to maximum solar exposure. Any standards or requirements shall be codified into Adelanto's Title 17 Zoning Ordinance.
- Timeframe:* As funds become available
Responsible Party: Development Services Department
Funding Source: Grants, General Fund
- Program OS-3 **Development Impacts on Viewsheds.**** For new development proposals, analyze existing viewsheds and scenic resources. Where possible, provide for the protection of enhancement of the viewsheds and scenic resources.
- Timeframe:* Ongoing
Responsible Party: Development Services Department
Funding Source: Developer Fees
- Program OS-4 **Multiple Species Habitat Mitigation Credits.**** Based on the Multiple Species Habitat Conservation Plan, establish a habitat mitigation credit or banking system within the Planning Area. The system should allow for a project applicant to purchase mitigation credits in a "mitigation bank area" in exchange for development rights on another parcel.
- Timeframe:* Mid Range
Responsible Party: Development Services Department
Funding Source: Mitigation Fees; Grants; Infrastructure Funding
- Program OS-5 **Water Supply.**** Through development review, project applicants must provide documentation from water providers indicating the water provider has adequate water supply to support the proposed project over the long term within areas that are outside of Growth Area 1.

Timeframe: Ongoing
Responsible Party: APUA: Water Department
Funding Source: Developer Fees

Program OS-6 **Water Conservation Programs.** Pursue a range of conservation programs and tools, including but not limited to the current California Urban Water Council's "Best Management Practices".

Timeframe: Ongoing
Responsible Party: APUA: Water Department
Funding Source: Grants; Water Fees; General Fund

Program OS-7 **Potable and Recycled Water System Fee Requirements.** Review and update ordinances, policies, and other requirements establishing the payment of fees and charges to ensure new development pays its fair share of operating and maintenance of the City's potable and reclaimed water systems.

Timeframe: Short Range
Responsible Party: APUA: Water Department
Funding Source: General Fund

Program OS-8 **Historical Resources Assessment.** Prior to any construction activities that may affect historical resources, a historical resources assessment shall be performed by an architectural historian or historian who meets the PQS in architectural history or history. This shall include a records search at the SBAIC to determine if any resources that may be potentially affected by the project have been previously recorded, evaluated, and/or designated in the NRHP or CRHR. Following the records search, the qualified architectural historian or historian shall conduct a reconnaissance-level and/or intensive-level survey in accordance with the California Office of Historic Preservation guidelines to identify any previously unrecorded potential historical resources that may be potentially affected by the proposed project. Resources shall be evaluated pursuant to CEQA Guidelines and Public Resources Code Section 21083.2.

Timeframe: Ongoing
Responsible Party: Community Development Department
Funding Source: Developer Funded

Program OS-9 **Alteration to Historical Resource.** To ensure that projects requiring the relocation, rehabilitation, or alteration of a historical resource not impair its significance, the Secretary of the Interior's Standards for the Treatment of Historic Properties shall be used to the maximum extent possible. The application of the standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. Prior to any construction activities that may affect the historical resource,

a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City of Adelanto.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-10

Historical Resource Demolition. If a proposed project would result in the demolition or significant alteration of a historical resource, it cannot be mitigated to a less than significant level. However, recordation of the resource prior to construction activities will assist in reducing adverse impacts to the resource to the greatest extent possible. Recordation shall take the form of Historic American Building Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation, and shall be performed by an architectural historian or historian who meets the PQS. Documentation shall include an architectural and historical narrative; medium- or large-format black and white photographs, negatives, and prints; and supplementary information such as building plans and elevations, and/or historic photographs. Documentation shall be reproduced on archival paper and curated with a qualified scientific or educational repository, as defined by the Guidelines for the Curation of Archaeological Collections. The specific scope and details of documentation are determined for each project.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-11

Archaeological Sensitivity. To determine the archaeological sensitivity of a proposed planning area, archaeological resources assessments shall be performed under the supervision of an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards (PQS) in either prehistoric or historic archaeology. Assessments shall include a CHRIS records search at the SBAIC and of the Sacred Lands File maintained by the NAHC. The records searches will determine if the proposed planning area has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. A pedestrian survey shall be undertaken in undeveloped areas of the planning area to locate any surface cultural materials. By performing a records search, consultation with the NAHC, and a pedestrian survey, a qualified archaeologist will classify the planning area as having High, Medium, or Low sensitivity for archaeological resources.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-12

Archaeological Significance Evaluation. If potentially significant archaeological resources are identified through an archaeological resource assessment, and impacts to these resources cannot be avoided, an Archaeological Significance Evaluation investigation shall be performed by an archaeologist who meets the PQS prior to any construction-related ground-disturbing activities to determine significance under CEQA and/or Section 106 of the NHPA. If resources are determined to be significant or unique through significance evaluation, and site avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. This might include an archaeological data recovery program that would be implemented by a qualified archaeologist and performed in accordance with the Office of Historic Preservation's Archaeological Resource Management Reports (ARMR).

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-13

Disturbances of Archaeological Resources. If the archaeological assessment did not identify potentially significant archaeological resources in the proposed planning area, but indicates the area to be of medium or high sensitivity for archaeological resources, an archaeologist who meets the PQS shall be retained on an on-call basis. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) area exposed during ground disturbing activities, construction activities within a 50-foot radius of the discovery shall be halted while the on-call archaeologist is contacted. If the resource is determined to be significant or unique through significance evaluation, and site avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These might include an archaeological data recovery program that would be implemented by a qualified archaeologist and performed in accordance with the Office of Historic Preservation's Archaeological Resource Management Reports (ARMR). If the discovery proves to be significant, it shall be curated with a qualified scientific or educational repository, as defined by the Guidelines for the Curation of Archaeological Collections.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-14

Paleontological Resources. Future development proposals subject to environmental review pursuant to the California Environmental Quality Act (CEQA) are subject to the following provisions at the expense of the project proponent, as directed by the Development Services Director.

Paleontological Assessment. In areas containing middle to late Pleistocene era sediments (Qof) where it is unknown if paleontological resources exist, prior to grading an assessment shall be made by a qualified paleontological professional to establish the need for paleontologic monitoring. Should paleontological monitoring be required after recommendation by the professional paleontologist and approval by the Development Services Director, paleontological monitoring shall be implemented.

Paleontological Monitoring. A project that requires grading plans and is located in an area of known fossil occurrence or that has been demonstrated to have fossils present in a paleontological field survey or other appropriate assessment shall have all grading monitored by trained paleontologic crews working under the direction of a qualified professional, so that fossils exposed during grading can be recovered and preserved. Paleontologic monitors shall be equipped to salvage fossils as they are unearthed, to avoid construction delays, and to remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. Monitors shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens. Monitoring is not necessary if the potentially fossiliferous units described for the property in question are not present or if present are determined upon exposure and examination by qualified paleontologic personnel to have low potential to contain fossil resources. Should significant paleontological resources be discovered, paleontological recovery, identification, and curation shall be implemented.

Paleontological Recovery, Identification, and Curation. Qualified paleontologic personnel shall prepare recovered specimens to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Qualified paleontologic personnel shall identify and curate specimens into the collections of the Division of Geological Sciences, San Bernardino County Museum or a similar established, accredited museum repository with permanent retrievable paleontologic storage. The paleontologist must have a written repository agreement in hand prior to the initiation of mitigation activities. This measure is not considered complete until curation into an established museum repository has been fully completed and documented.

Paleontological Findings. Qualified paleontologic personnel shall prepare a report of findings with an appendix of itemized specimens subsequent to implementation of paleontological recovery,

identification, and curation. A preliminary report shall be submitted to and approved by the Development Services Director before granting of building permits, and a final report shall be submitted to and approved by the Development Services Director before granting of occupancy permits.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-15

City Energy Efficient Fleet. Purchase, as feasible, energy-efficient automobiles, equipment and other vehicles, including hybrid vehicles, for the City's equipment and automotive fleet.

Timeframe: As funds become available

Responsible Party: Finance Department

Funding Source: Grants; General Fund

Program OS-16

Alternative Energy Sources. As part of the development review process and community outreach, encourage and promote the use of alternative energy sources such as solar panel arrays, photovoltaic cells, cogeneration, and solar generation facilities for new residential, commercial and industrial development projects.

Timeframe: As funds become available

Responsible Party: Development Services Department

Funding Source: General Fund

Program OS-17

Green Building. Continue to implement the California Green Building Code for all new construction projects. Consider implementing higher green building standards (e.g. LEED certified) for public buildings and facilities.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program OS-18

San Bernardino County Regional Greenhouse Gas Reduction Plan. Implement the strategies identified in the San Bernardino County Regional Greenhouse Gas Reduction Plan to reduce its community greenhouse gas emissions (GHG) to a level that is 30 percent below its projected GHG emissions level in 2020.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program OS-19

Air Quality Impacts to Sensitive Receptors. During the City's standard environmental and development review processes and prior to approval

of entitlements, potential air quality impacts to sensitive receptors shall be analyzed. Screening procedures may be implemented based on emissions source/sensitive receptor proximity or using other reasonable methods promulgated by the Mojave Desert Air Quality Management District, the California Air Resources Board, or other qualified source. A detailed analysis shall be required when a project fails screening procedures to include dispersion modeling and detailed receptor inventories. Mitigation shall be incorporated where potentially significant impacts are identified that may include, but is not limited to, project siting and proximity changes, mechanical filtration and/or scrubbing, and increased equipment and/or vehicle fleet efficiency. The analysis shall be reviewed and approved by the Development Services Director (or designee) and the results incorporated into the project environmental documentation.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Development Fees

Program OS-20

Odor Impacts. The City shall determine if there is a potential for the use to be located in an area with negative odors or if the use will generate negative odors. If it is determined that an odor issue may occur, potential odor impacts shall be analyzed. Screening procedures may be implemented based on land use or using other reasonable methods promulgated by the Mojave Desert Air Quality Management District, the California Air Resources Board, or other qualified source. A detailed analysis shall be required when a project fails screening procedures that may include American Society of Testing Materials Standard Method D-1391, E-679-79, or other applicable method. Mitigation shall be incorporated where potentially significant impacts are identified that may include, but is not limited to, project siting and proximity changes, mechanical filtration and/or scrubbing, and operational restrictions. The analysis shall be reviewed and approved by the Development Services Director (or designee) and the results incorporated into the project environmental documentation.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Development Fees

Program OS-21

Biological Assessments. The City will require biological assessments and reports for projects in known or suspected natural habitat areas prior to project approval. These reports will be used to establish significant natural habitat areas and ecologically sensitive zones in order to prevent disturbance and degradation of these areas. Recommended mitigation measures as identified in the reports will be required to be implemented as development occurs.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-22

Desert Tortoise Protection. For future development projects proposed within desert scrub habitats in the Project Area, informal consultation with the US Fish and Wildlife Service (USFWS) and CDFW shall be undertaken by the project proponent to determine the need for desert tortoise surveys. The surveys will be performed in accordance with USFWS (2010) protocols.

The project proponent shall retain a qualified biologist with demonstrated expertise with desert tortoise to monitor all construction activities and assist the project proponent in the implementation of the monitoring program. The biologist will be approved by the US Fish and Wildlife Service prior to the commencement of project activities and will be the authorized Biologist for the project. The Authorized Biologist will be present during all activities immediately adjacent to or within habitat that supports desert tortoise.

Prior to the onset of construction activities, the project proponent shall provide a workers environmental awareness program (WEAP) training regarding desert tortoise for all personnel who will be present on work areas within or adjacent to the project area. The WEAP shall cover the natural history of the species, its legal protection, repercussions for violating the legal protection, protective measures being implemented to protect the species, and a guidelines and point of contact if the species is observed on the project site.

If construction occurs within an area where desert tortoise numbers are considered high by USFWS, then work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The Authorized Biologist will assist in determining the boundaries of the area to be fenced in consultation with the USFWS and CDFW. All workers will be advised that equipment and vehicles must remain within the fenced work areas. Installation of the fencing and any necessary surveys will be directed and/or conducted by the Authorized Biologist in concurrence with the USFWS and CDFW.

If desert tortoises are found within an area that has been fenced to exclude the species, activities will cease until the Authorized Biologist moves the desert tortoises. If desert tortoises are found in a construction area where fencing was deemed unnecessary, work will cease until the Authorized Biologist moves the individual(s). Any desert tortoises found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable undisturbed habitat. The Authorized Biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-23

Swainson's Hawks Protection. To assure that nesting Swainson's hawks are not disturbed by construction activities, a qualified ornithologist shall conduct pre-construction surveys within one mile of the proposed project in regions with suitable nesting habitat for Swainson's hawks. The survey periods and schedule shall follow those described in the CDFW's staff report.

Nest trees affected by a proposed project shall not be removed unless avoidance measures are determined to be infeasible. If a nest tree must be removed, a Management Authorization (including conditions to offset the loss of the nest tree) must be obtained from the CDFW. The Management Authorization will specify the tree removal period, generally between the first of October and the first of February. If construction or other project-related activities that may cause nest abandonment or forced fledging are necessary within the specified buffer zone, monitoring of the nest site (funded by the applicant) by a qualified biologist shall be required to determine if the nest is abandoned. If the nest is abandoned, and if the nestlings are still alive, the applicant shall fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).

Loss of foraging habitat for Swainson's hawks shall be mitigated by providing Habitat Management (HM) land as described in the CDFW's staff report because the site is known foraging habitat for Swainson's hawks. The final acreage of HM lands to be provided on site shall depend on the distance between the proposed project area and the nearest active nest site, as determined by nest surveys conducted in the spring prior to project implementation. The acreage of HM lands provided shall be derived from the recommendations included in the 2010 CDFW staff report.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-24

Burrowing Owl Protection. In conformance with Federal and State regulations regarding the protection of burrowing owls, a preconstruction survey for burrowing owls, in conformance with CDFW guidelines, shall be completed no more than 30 days prior to the start of construction within suitable habitat at the project site(s) and buffer zone(s). Three additional protocol level surveys shall also be completed per CDFW guidelines prior to construction. Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through

noninvasive methods that either 1) the birds have not begun egg-laying and incubation or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Eviction outside the nesting season may be permitted pending evaluation of eviction plans and receipt of formal written approval from the CDFW authorizing the eviction. A 250-foot buffer, within which no new activity will be permissible, shall be maintained between project activities and nesting burrowing owls during the nesting season. This protected area shall remain in effect until August 31, or at the CDFW's discretion and based upon monitoring evidence, until the young owls are foraging independently.

If surveys determine that burrowing owls occupy the site and avoiding development of occupied areas is not feasible, then habitat compensation on off-site mitigation lands shall be implemented. Habitat Management lands comprising existing burrowing owl foraging and breeding habitat shall be acquired and preserved. An area of 6.5 acres (the amount of land found to be necessary to sustain a pair or individual owl) shall be secured for each pair of owls, or individual in the case of an odd number of birds. As part of an agreement with CDFW, the project proponent shall secure the performance of its mitigation duties by providing CDFW with security in the form of funds that would: 1) allow for the acquisition and/or preservation of 6.5 acres of habitat management lands per pair of owls. 2) provide initial protection and enhancement activities on the habitat management lands, potentially including, but not limited to, such measures as fencing, trash clean-up, artificial burrow creation, grazing or mowing, and any habitat restoration deemed necessary by CDFW, and 3) establish an endowment for the long-term management of the habitat management lands.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-25

Habitat Suitability. Future project applicants shall have a qualified biologist ascertain the suitability of the project site to support burrowing owl, ferruginous hawk, California horned lark, loggerhead shrike, Le Conte's thrasher and pallid San Diego pocket mouse if the proposed project site is located in an area suitable for these fauna. If the biologist determines that the habitats are unsuitable, then no further mitigation is necessary. If one or more of these species is observed, known to occupy the site, or suitable habitat is present, avoidance and minimization measures shall be developed and implemented by the project proponent.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-26

Nest Surveys. If construction or vegetation removal activities must occur during the bird breeding season (February through mid-September) in areas identified as habitat for burrowing owl, ferruginous hawk, California horned lark, loggerhead shrike, and the Conte's thrasher, surveys for active nests shall be conducted by a qualified biologist no more than 30 days prior to the start of construction. A minimum no-disturbance buffer of 250 feet shall be established around active nests and demarcated with fencing or flagging. No project-related activities shall occur within the buffer zone until a qualified biologist has determined that the birds have fledged and are no longer reliant on the nest or parental care for survival. The buffer distance may be reduced, depending on the sensitivity of the species and nest location, in consultation with the CDFW.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-27

Special-Status Plant Species Surveys. Future project sites located in areas where suitable habitat occurs, the applicant will have a qualified biologist conduct florist surveys of the project site for the thirteen special-status plant species that have potential to occur in the Project Area. The surveys will be conducted according to CDFW protocols and shall occur throughout the blooming season for each species. If any of the species are found to occur in the proposed impact area, a report shall be prepared in accordance with the CNPS Botanical Survey Guidelines and submitted to the CDFW prior to commencement of maintenance activities. The report shall recommend measures to avoid significant impacts to populations of the species and offer mitigation to reduce any impacts to less than significant levels. Depending on the abundance of individuals within the proposed impact area, mitigation measures could include a salvage program, which would involve the transplantation and propagation of the species, or acquiring/preserving land with similar population structure.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-28

Jurisdictional Waters Delineation. Future project applicants will have a qualified biologist survey the areas to be impacted for the occurrence of hydrological features on the project site. Should hydrological features be found during the initial surveys, a formal jurisdictional waters delineation will be conducted. The formal delineation will be used along with the proposed project plans for the particular site to determine if waters of the State or US will be impacted by project implementation. The results of the jurisdictional delineation will be submitted to the USACE for a formal determination of the jurisdictional status. If it is determined that waters of the US are present and will be impacted, then

a permit will be acquired from the USACE. For most discharges that will have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or State basis for particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met.

If jurisdictional riparian resources or Waters of the State on a particular project site will be impacted by the implementation of the proposed project, then a report of water discharge will be submitted and, if deemed necessary, Waste Discharge Requirements will be obtained. A Notification of Lake or Streambed Alteration will be submitted to the CDFW and, if deemed necessary, a Lake or Streambed Alteration Agreement will be obtained. Conditions for the certification and agreement may require offsite mitigation.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Program OS-29

Western Mojave Plan Program. Should future development be proposed on parcels managed by the Bureau of Land Management, then mitigation measures will be required to ensure the Western Mojave Plan's conservation strategies for specific species are implemented. Project proponents will be required to implement mitigation measures that focus on the protection of sensitive species to comply with the Western Mojave Plan.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded

Plans and Studies

Program OS-30

Multiple Species Habitat Conservation Plan. Prepare a Multiple Species Habitat Conservation Plan (MSHCP) focusing on the conservation of species and their associated habitats in the Mojave Desert. The goal of the plan is to maintain the biological and ecological diversity while accommodating development growth. The MSHCP will allow Adelanto to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of State and Federal Endangered Species Acts.

Timeframe: Mid Range, as funding permits

Responsible Party: Development Services Department

Funding Source: Mitigation Fees and Grants

Program OS-31 **Recycled Water System.** Consider developing a plan that identifies approaches to expanding the production, supply, and distribution of recycled water system in Adelanto. The Plan should identify priority areas for distribution systems, allowed uses for recycled water, capital improvement needs, and procedures and requirements for projects to connect to the system.

Timeframe: Mid Range, as funds become available.

Responsible Party: APUA: Water Department

Funding Source: Grants, General Fund

Program OS-32 **Natural Drainages Study.** Initiate a study to identify a hierarchy of drainage waterways within the Plan Area by defining and surveying the ephemeral streams, natural drainages, and washes. Develop a set of guidelines for the preservation and management that includes incentives for limiting development in and around these designated areas. The guidelines should balance the preservation of natural drainages with development growth and flood protection priorities.

Timeframe: Mid Range, as funding permits

Responsible Party: Development Services Department and Public Works Department

Funding Source: Grants

Physical Improvements

Program OS-33 **Adelanto Wastewater Treatment Facility Recycled Water.** Update and maintain the Wastewater Treatment Facility to include a recycled water component to irrigate parks, schools, large landscaping areas, industrial business, and recharging of the groundwater basin.

Timeframe: As funds become available

Responsible Party: APUA: Water Department

Funding Source: Grants and User Fees

Inter-Agency and Other Organizations Consultation

Program OS-34 **Wildlife Agency Consultation.** On development related projects, consult with regulatory agencies, nonprofit groups, and other organizations in the conservation, maintenance, acquisition, and restoration of open space lands.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund, Developer Fees, Grants

Program OS-35 **Protect, Preserve, And Manage Biological Resources.** As an overall effort to minimize cumulative impacts to natural resources in the Project Area from increased development proposed by the Plan, the City shall

continue to work on identifying critical habitat areas, biological corridors, and ecosystems functions that must be preserved to maintain a healthy, self-sustaining environment. The City shall work with local, state, and regional agencies to protect, preserve, and manage biological resources, especially threatened, endangered, and sensitive plants and wildlife species and their habitats. Areas containing valuable habitat shall be managed accordingly for the preservation and protection of their biological and natural resources, and if not already designated as Open Space such lands shall be considered for an open space land use designation as appropriate.

Timeframe: Ongoing

Responsible Party: Community Development Department

Funding Source: Developer Funded, Grants, General Plan

Implementation Program Matrix – Open Space and Conservation

Policy	Procedures, Permits, Agreements and Ordinances																												Plans and Studies			Physical Improvements	Inter-Agency and Other Organizations Consultation			
	OS Programs																												OS Programs			OS Programs	OS Programs			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
	Zoning Ordinance Update	Solar Guidelines and Standards	Development Impacts on Viewsheds	Multiple Species Habitat Mitigation Credits	Water Supply	Water Conservation	Potable and Recycled Water System Fee Requirements	Historical Resources Assessment	Alteration to Historical Resource	Historical Resource Demolition	Archaeological Sensitivity	Archaeological Significance Evaluation	Disturbances of Archaeological Resources	Paleontological Resources	City Energy Efficient Fleet	Alternative Energy Sources	Green Building	San Bernardino County Regional Greenhouse Gas Reduction Plan	Air Quality Impacts to Sensitive Receptors	Odor Impacts	Biological Assessments	Desert Tortoise Protection	Swainson’s Hawks Protection	Burrowing Owl Protection	Habitat Suitability	Nest Surveys	Special-Status Plant Species Surveys	Jurisdictional Waters Delineation	Western Mojave Plan	Multiple Species Habitat Conservation Plan	Recycled Water System	Natural Drainages Study	Adelanto Wastewater Treatment Facility Recycled Water	Wildlife Agency Consultation	Protect, Preserve, And Manage Biological Resources	
OS 1.1	■																																			
OS 1.2																											■					■				
OS 1.3			■																																■	
OS 2.1																					■	■	■	■	■	■	■	■	■	■					■	■
OS 2.2				■																	■	■	■	■	■	■	■	■	■	■					■	■
OS 2.3				■																	■	■	■	■	■	■	■	■	■	■					■	■
OS 3.1		■																■																		
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OS 4.5																																■				
OS 4.6							■										■															■				
OS 5.1	See LC-8, ED-6																																			
OS 5.2					■																															
OS 6.1		■															■	■																		
OS 6.2																		■	■	■																■

Implementation Program Matrix – Open Space and Conservation

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Sustainable Public Facilities for Adelanto North 2035

Public Facilities and Infrastructure

Introduction

An efficient and reliable infrastructure system is vital to any city's health, safety, livability, and economic well-being. The Public Facilities and Infrastructure Chapter addresses the physical facilities needed for the conveyance of vital services and functions such as water supply and distribution; wastewater collection and treatment; storm drainage and flood control; education and public facilities; and safety services. These infrastructure systems and services represent the support network upon which residents and businesses rely to maintain daily activities. To preserve high levels of service in Adelanto, ongoing maintenance, improvement, and replacement are required; new development must ensure that new needs are met without burdening the current users.

Over the next 20 years, key infrastructure considerations and concerns will be intricately tied to sustainability. This Chapter's goals, policies, and implementation programs focus on utilizing sustainable practices, maintenance, and educating users to maintain service levels. Furthermore, by improving infrastructure in the growth priority areas, we can support development consistent with smart growth principles.

Context

The City of Adelanto, along with municipal agencies and utility providers, make available infrastructure systems and public services to keep the City operating. The following are key considerations regarding public facilities and infrastructure that will influence future growth in Adelanto.

Public Facilities, Services, and Infrastructure Considerations

- **Water Costs and Capacity.** Adelanto's water rates are costly and could affect long-term development growth.

Groundwater Supply and Distribution System Capacity. Adelanto's groundwater pumping capacity is near its maximum and should not be considered a sustainable source of water for future demands. Additionally, water infrastructure is only available south of Auburn Avenue, which will affect the location of new development.

- **Water Pressure.** Adelanto's current water pressure is moderately low; if the water pressure is not improved, water supply may be problematic for taller buildings or structures requiring higher fire flow.
- **Wastewater System and Treatment.** Due to frustrated expansion efforts for several years, the Adelanto Domestic Wastewater Treatment Plant could not accommodate demand. However, improvements have been made to the plant and facilities to accommodate up to 4.0 MGD which will handle current demand.
- **Continuing Education.** A key City objective is to provide many avenues for continuing education, both to allow people to develop new employment skills and for intellectual enrichment. Continuing education responsibilities lie primarily with the public school district.

Key Sustainability Features

The Adelanto North 2035 Plan provides guidance on how public services and infrastructure systems can be more sustainable over the long term to meet new development growth. The following are the key sustainability features of the Public Facilities and Infrastructure Chapter.

- **Water Conservation and Recycled Water.** The Adelanto North 2035 Plan encourages water conservation through aggressive conservation programs and expanded the use of recycled water.
- **Recycled Water.** Recycled water will play an important role in the Adelanto North 2035 Plan. The Plan recommends the installation of recycled water mainlines parallel to domestic water lines in streets that can be connected to the City's recycled water system in the future.
- **Storm Water Management.** The Adelanto North 2035 Plan promotes storm water management not only from a traditional flood control perspective but also water

resources perspective. Drainage courses will be designed and used to replenish the groundwater aquifer. It will also meet water quality requirements by keeping potential pollutants from concentrating in the natural watercourses during storm events.

- **Open Drainage Channels Opportunities.** Open drainage channels provide sustainable opportunities. First, open channels with soft earthen bottoms provide the environmental benefit of promoting infiltration and providing natural habitat. Second, proposed open drainage channels can be combined with the Adelanto North 2035 pedestrian and bicycle circulation plan by providing a multi-use drainage channel. Channels with larger rights-of-way provide greater opportunities for recreational uses.
- **Dual Purpose Storm Water Detention/Retention Facilities.** The Adelanto North 2035 Plan includes a program to use recreational areas as dual purpose detention/retention facilities to assist with groundwater recharge goals. Parks, fields, pedestrian trails, and other open areas will provide an opportunity for dual purpose recreation and storm water detention/retention facilities.
- **Sustainable Facilities and Services.** The construction and operation of new public facilities will be encouraged to be certified under the Leadership in Energy & Environmental Design (LEED) green building standards. The Plan also requires the City to include a procurement and purchasing program to discourage the use of toxic products throughout the City and promote the use of sustainable or green materials, equipment, and products.

Water System

Potable water is provided by the Adelanto Public Utility Authority (APUA), an independent agency responsible for water and wastewater services in the City. The water service area encompasses about 50 square miles and provides potable water and water for fire protection. This is accomplished with a network of water wells, pumps, storage tanks, and water transmission lines. The Adelanto North 2035 Plan provides long-term policy direction in providing sustainable water services for current and future residents. The Plan focuses on water conservation methods, the use of recycled water, upgrading water systems and facilities to meet future demands, and supplying clean, affordable water. Figure PF-1 identifies the proposed water system, including location of proposed water mains.

Recycled Water

In order to diversify its water supply portfolio and prevent future reliance on water supplies from regional water sources, Adelanto is seeking to expand its recycled water system at the Adelanto Wastewater Treatment Facility. The recycled water system requires both a recycled water treatment facility and a separate system of pipes to distribute recycled water to customers. Adelanto North 2035 Plan encourages expansion of the recycled water distribution system in parallel with new development growth. As new water main lines are constructed to support new development, it is recommended that recycled water lines be installed concurrently.

Water Conservation

Water conservation is discussed in the Open Space and Conservation Chapter.

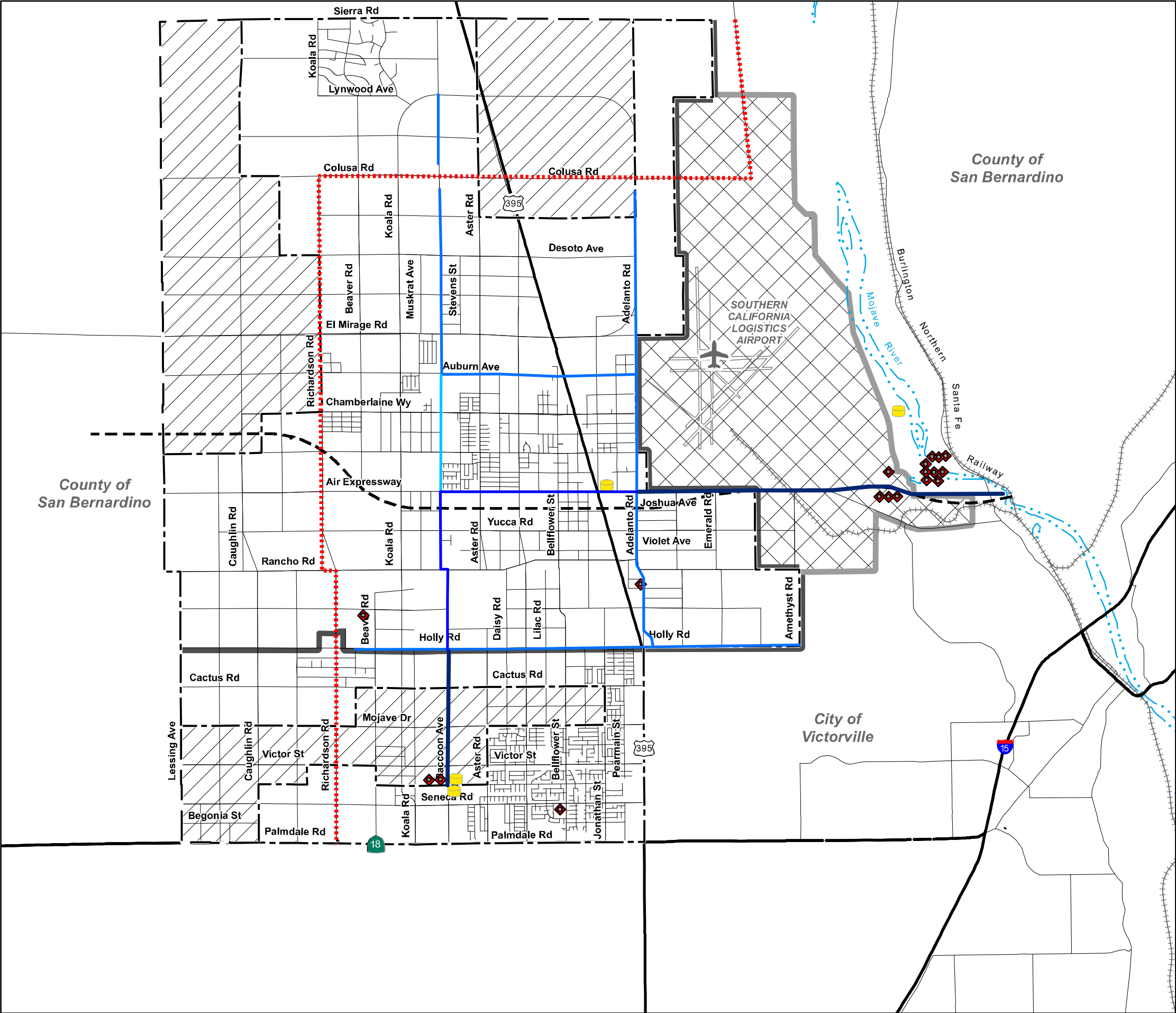
Wastewater

Wastewater is the water that drains from our showers, sinks, and toilets into the sewers. In Adelanto, wastewater is collected and conveyed through a sewer pipeline system operated and maintained by the Adelanto Public Utility Authority (APUA), which is responsible for treating and disposing of the City's sewage. The Adelanto North 2035 Plan recommends future expansion of the Adelanto Wastewater Treatment Facility and distribution lines to support development growth for residential, commercial, industrial, and public facilities identified in this Plan. It also ensures that the treatment plan has the capacity to provide for current users, and expansion can occur feasibly if it is supported by revenues and fees from new development. Figure PF-2 identifies the proposed wastewater system, including location of a proposed wastewater treatment plant, lift stations, and sewer mains.



The Adelanto Wastewater Treatment Plan has undergone improvements to include recycled water system and upgrades that increase the wastewater treatment capacity and that could, in the future, include recycled water.

Figure PF-1
Proposed Water System



WATER

- Proposed 12 Inch Water
- Proposed 16 Inch Water
- Proposed 18 Inch Water
- Proposed 24 Inch Water
- Existing Reservoir
- Existing Well
- MWA Water Lines

BOUNDARIES

- City Boundary
- Sphere of Influence
- Project Boundary
- Study Area
- SCLA Land Use Area

TRANSPORTATION

- Prop. Hwy E220 Corridor

Refer to Figure LC-4 Growth Areas



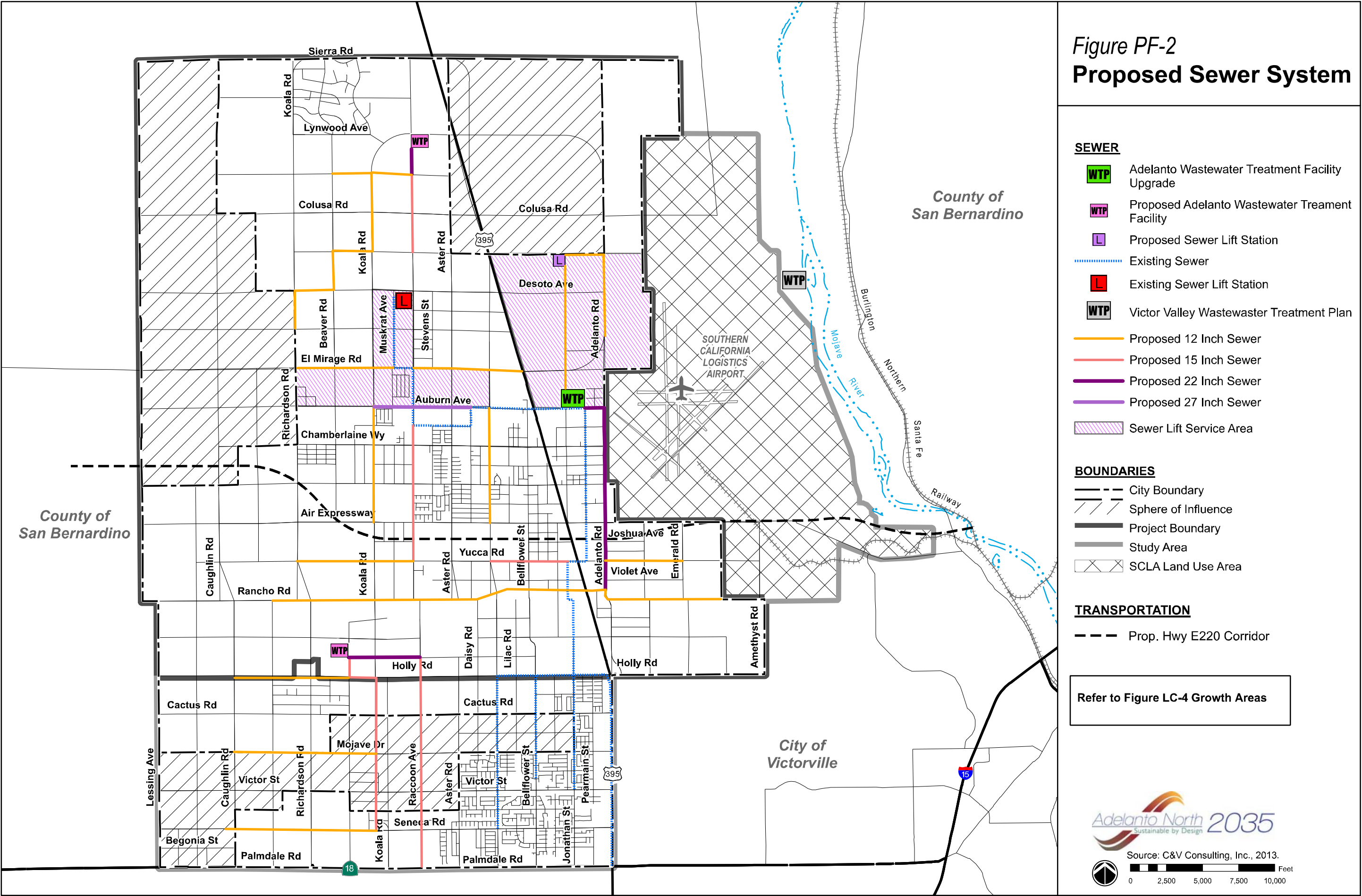
Source: C&V Consulting, Inc., 2013.



0 2,500 5,000 7,500 10,000 Feet

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Figure PF-2
Proposed Sewer System



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Drainage

Storm water management in the City of Adelanto has historically been centered on flood protection, conveying storm water runoff safely through the City with the intent of minimizing damage to structures and other improvements such as roadways and pipelines. In the Adelanto North 2035 Plan, storm water management has expanded to include more sustainable methods of storm runoff by reducing the adverse impacts of development on the Mojave River Watershed. Such methods include minimizing runoff pollutants and replenishing the Mojave River Groundwater Basin. As the City's primary source of potable water, maintaining groundwater levels through infiltration is critical to the long-term growth of Adelanto. The Plan recommends implementing best management and sustainable practices for the design of drainage facilities including:

- Use of vegetated swales along streets and parking lots to filter pollutants and increase stormwater infiltration to contribute to the groundwater supply.
- Minimize impervious surfaces in new developments to reduce storm water runoff and increase flood protection.
- Combine drainage facilities with recreation facilities, such as recreational areas with detention/retention facilities, and drainage channels with multi-use trail system.
- Promote open channels with soft earthen bottoms allowing for increased infiltration and preserve natural habitat.
- Ensure the City enforces policies and requirements for new developments to limit the discharge of pollutants in the Mojave River Watershed.



Parking lot vegetated swales collect rainwater and filter out toxic pollutants such as oils



Permeable surfaces help water filter down to groundwater system



Detention basins can double as passive recreational areas for residential neighborhoods

Public Facilities and Services

Schools and Library

Education leads to community success. Education drives economic prosperity and security; it channels creativity and enriches lives. Adelanto values and promotes education and lifelong learning in recognition of these benefits. Parents have supported changes to the education system that benefit and support Adelanto's children. The City branch library, public schools, and continuing education centers are essential because they can lead to greater opportunities. The Adelanto North 2035 Plan supports the expansion of the schools and the Adelanto Branch Library concurrently with new development.

Public Facilities and City Services

The Adelanto North 2035 Plan provides guidance for the City of Adelanto to become more sustainable regarding City operations, maintenance, and procurement activities. The Plan requires new public facilities to be constructed using green building practices, it recommends reducing greenhouse gases by purchasing cleaner fleet vehicles, encourages sustainable practices in capital improvement projects and the maintenance and operations of public facilities, and recommends a green procurement program for the purchasing of City products and equipment.

Goals, Policies, and Implementing Programs

GOAL PF 1 Sufficient water sources and quality to meet current and projected use requirements.



Policy PF 1.1
Sustainability Focus

Improve the level of service, affordability, reliability, quality, and life cycle of the City's potable and recycled water distribution system.



Policy PF 1.2
Sustainability Focus

Consider sustainable sources for water. Ground water injection and storm water infiltration are considered sustainable sources in replenishing groundwater.

Policy PF 1.3

Consult with and consider connections to the Mojave Water Agency line to supply up to 8,000 additional acre-feet per year to satisfy future water needs. The City is participating in the R-cubed project, a Mojave Water Agency program to bring additional sources of water to High Desert communities including Adelanto.

Policy PF 1.4

Upgrade citywide water infrastructure to an estimated near build out condition.



Policy PF 1.5
Sustainability Focus

Require developers to minimize water use through the use of efficient irrigation methods, drought tolerant plants, and water re-use systems.



Policy PF 1.6
Sustainability Focus

Protect and improve the water quality of the City's water supply.

GOAL PF 2 Reliable recycled water distribution system.



Policy PF 2.1
Sustainability Focus

Consult with the Adelanto Public Utility Authority (APUA) in the production of Title 22 tertiary treated recycled water for use throughout the City, including the irrigation of parks, schools, industrial uses, and heavily landscaped areas.



Policy PF 2.2
Sustainability Focus

Support the expansion of the City's recycled water service area, and actively promote widespread use of recycled water in and around Adelanto.



Policy PF 2.3
Sustainability Focus

Require developers to construct recycled water systems and connect to the existing infrastructure.

GOAL PF 3 Adequate and appropriately designed wastewater collection and treatment facilities to meet current and future capacity requirements.

Policy PF 3.1

Ensure that adequate wastewater collection and treatment

capacity is available for the City and developments while meeting local and state requirements.



Policy PF 3.2
Sustainability Focus

Maintain wastewater facilities tributary to the existing Adelanto Wastewater Treatment Facility.

Policy PF 3.3 Minimize wet-weather infiltration into wastewater collection system.

GOAL PF 4 Wastewater treatment system that conserves and protects our natural water resources.

Policy PF 4.1 Provide tertiary treatment capability (recycled water production) to wastewater effluent at the existing Adelanto Wastewater Treatment Facility.

Policy PF 4.2 For future wastewater treatment plants, incorporate a design that is flexible enough to incorporate future treatment technologies such as improved treatment processes for both Title 22 and water reuse.

Policy PF 4.3 Reduce dependence on private septic tanks that occur in less dense portions of the City by extending the public sewer main lines in accordance with the Growth Area classification and as regulated through the State Water Resources Control.

GOAL PF 5 Storm drainage and flood control facilities provide life protection and structure protection against flooding.

Policy PF 5.1 Prioritize and implement recommendations outlined in the City of Adelanto Drainage Master Plan. Construction shall be prioritized based on City growth.

Policy PF 5.2 Upgrade Citywide storm drain infrastructure to minimize standing water and provide adequate drainage facilities for existing streets. Improvements should include lines with greater capacity and catch basins to capture storm water.

Policy PF 5.3 Assure that storm infrastructure is designed to carry flows as outlined in the Drainage Master Plan.



Policy PF 5.4
Sustainability Focus

Encourage developers to minimize impervious surfaces to reduce storm water runoff and increase flood protection.



Policy PF 5.5
Sustainability Focus

Combine and design recreational areas into the flood control system to act as retention facilities.

Policy PF 5.6 Enforce requirements for new constructions' protection against flooding.



Policy PF 5.7
Sustainability Focus

Require street and parking lot vegetated swales to filter stormwater pollutants and allow stormwater infiltration.

GOAL PF 6

Sustainable storm water management practices.



Policy PF 6.1
Sustainability Focus

Promote open channels with soft earthen bottoms allowing for increased infiltration and provide a natural habitat.



Policy PF 6.2
Sustainability Focus

Combine proposed drainage channels with pedestrian circulation facilities to create mixed use drainage channels. Elevate pedestrian ways above flood levels.



Policy PF 6.3
Sustainability Focus

Ensure the City's Storm Water Management Practices meet quality goals as defined by state and local water board recommendations and requirements.



Policy PF 6.4
Sustainability Focus

Ensure developers comply with current standards for stormwater management and consistent with State Water Resources Control Board requirements.



Policy PF 6.5
Sustainability Focus

Ensure that the City enforces policies and requirements for new developments to limit the discharge of 303(d) listed pollutants of concern to the Mojave River watershed.



Policy PF 6.6
Sustainability Focus

Encourage storm water sustainable designs by developers.



Policy PF 6.7
Sustainability Focus

Familiarize residents with the importance of storm water runoff quality.

GOAL PF 7

High-quality education and learning services for residents of all ages and backgrounds.

Policy PF 7.1 Partner with local public school and community college districts to maintain effective educational programs for all ages.

Policy PF 7.2 Consult with private and public community service organizations to coordinate educational and community services, including child care/early education, classes to learn English, after-school programs, and recreational activities.

Policy PF 7.3 Consult with San Bernardino County Library to ensure that the City's branch library is located in a facility that adequately meets the demand of the existing and future population, and that the facility is equipped with the proper technologies and tools to

support evolving ways of learning.

- Policy PF 7.4 Assist and support lifelong learning for adults through computer training, programs, and library collections.
- Policy PF 7.5 Help all community members to reach an appropriate level in computer training, math, reading, writing, and critical thinking skills in English.
- Policy PF 7.6 Use development impact fees to fund library facilities, equipment, and programs that are needed as a result of new development projects.
- Policy PF 7.7 Support the development of a community center that provides programs and activities for Adelanto's youths.

GOAL PF 8 Sustainable Public Facilities.



Policy PF 8.1
Sustainability Focus

Encourage new municipal construction to achieve Leadership in Energy & Environmental Design (LEED) certification and all existing municipal facilities to achieve LEED certification wherever feasible.



Policy PF 8.2
Sustainability Focus

Reduce greenhouse gas emissions by increasing the use of new technologies as alternatives and supplements to the consumption of gasoline in City vehicles and equipment.



Policy PF 8.3
Sustainability Focus

Encourage sustainability principles in capital improvement projects, City programs, and the maintenance and operations of public facilities that minimize long-term administrative and maintenance costs.



Policy PF 8.4
Sustainability Focus

Consider developing a sustainable and green procurement program for the City of Adelanto to decrease the use of toxic products, utilize recycled products, reduce vehicle and equipment fuel consumption, use renewable energies, and requires the procurement of sustainable and green products and equipment.

Implementing Programs

Procedures, Permits, Agreements, Ordinances

- Program PF-1 **Citywide Domestic and Reclaimed Water Design Manual.** Prepare and implement a citywide domestic and reclaimed water design manual to guide and familiarize design professionals on how to implement water designs. This will also guide in the selection of acceptable material and construction methods for water.
- Timeframe:* Short Range, as funds become available
Responsible Party: Development Services Department, APUA
Funding Source: General Fund
- Program PF-2 **Monitor Domestic and Reclaimed Water.** Adopt policies in coordination with the APUA in the sampling and monitoring of domestic and reclaimed water quality.
- Timeframe:* Upon completion of treatment plants
Responsible Party: Development Services Department, APUA
Funding Source: General Fund
- Program PF-3 **Water Efficient and Sustainable Designs.** Through the development review process and community outreach programs, encourage developers and residents to utilize water and stormwater efficient practices. Developers shall implement water efficient irrigation and the use of drought tolerant plants. Residents should be encouraged to minimize irrigation and consider landscaping that requires less irrigation.
- Timeframe:* Ongoing
Responsible Party: Development Services Department, APUA
Funding Source: General Fund and Developers
- Program PF-4 **Adopt and Implement a Citywide Sewer Design Manual.** Produce and implement a citywide sewer design manual to guide and familiarize design professionals on how to implement sewer designs. The manual should address best material selection, adequately sizing pipes based on Adelanto's specific loading criteria, and minimum pipe slopes required to achieve desired service life of the facility.
- Timeframe:* Short Term, as funds become available
Responsible Party: Development Services Department, APUA
Funding Source: General Fund
- Program PF-5 **Monitor 303(d) List Pollutants.** Limit the discharge of 303(d) listed pollutants of into the Mojave River Watershed by requiring developers to implement permanent best management practices (BMPs).

Timeframe: Ongoing

Responsible Party: Public Works Department

Funding Source: General Fund

- Program PF-6 **Storm Water Sustainability.** Through the development application review process, strongly encourage the treatment and re-use storm water on site through bio-filtration, bio-retention, and storm water re-use.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund and Developers

- Program PF-7 **Water Quality Management.** Through the development application review process, ensure future development complies with the latest water quality standards. For applicable projects, builders, developers, or agencies engaging in construction must prepare a Storm Water Pollution Prevention Plan (SWPPP), implement Best Management Practices (BMPs), and monitor storm water discharges against specified water quality standards.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

- Program PF-8 **Environmentally Preferable Purchasing Program.** Develop and implement a City of Adelanto procurement program that includes policies for toxic use reduction, recycled products procurement, reduced emissions fuel procurement, renewable energy purchase policy, and related sustainable purchasing policies.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Plans and Studies

- Program PF-9 **Water Master Plan.** Update and implement a Water Master Plan. The master plan should address design and construction aspects of domestic and reclaimed water systems. It should develop recommendations to ensure proper development of facilities to produce and transmit water within the City.

Timeframe: Short Range, as funds become available

Responsible Party: Development Services Department, APUA

Funding Source: General Fund

- Program PF-10 **Drainage Master Plan.** Update City Drainage Master Plan per updates to the San Bernardino County Hydrology Manual. The Master Plan

should address storm drainage concerns and develop recommendations to ensure proper development of storm drainage facilities within the City to accommodate planning changes and new construction activity within the City.

Timeframe: Short Term, as funds become available

Responsible Party: Development Services Department

Funding Source: General Fund

- Program PF-11 **Open Space Program.** Use recreational areas such as parks and athletic fields as dual purpose detention/retention facilities to assist with groundwater recharge goals and to aid in flood protection.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

- Program PF-12 **Water Quality Management Plan.** Become aware of and work with Regional Water Quality Boards regarding Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs).

Timeframe: Short Range, as funds become available

Responsible Party: Development Services Department

Funding Source: General Fund

- Program PF-13 **Flooding Information and Maps.** Update and complete flooding information as provided by FEMA and regional agencies. Provide flood elevations to FEMA in order to update flood hazard maps.

Timeframe: Short Term

Responsible Party: Development Services Department

Funding Source: General Fund

Physical Improvements

- Program PF-14 **Upgrade Domestic Water Facilities.** As appropriate, allocate funds for the construction of domestic water distribution system, including the construction of tanks, pump stations, and distribution mains. Ensure that sufficient capacity and flow exist for fire protection purposes. Construction of water infrastructure shall be based on planned development growth. Priorities shall be determined based on the Water Master Plan, city staff input, and from community feedback.

Timeframe: Ongoing

Responsible Party: Development Services Department, APUA, and Fire Department

Funding Source: General Fund

- Program PF-15 **Wastewater Treatment Facilities with Reclaimed Water Production Capability.** Build and expand wastewater treatment facilities to generate reclaimed water to be used throughout the City. Where applicable and appropriate, utilize reclaimed water facilities in place of domestic water facilities for irrigation and fire protection purposes.

Timeframe: Long term

Responsible Party: Development Services Department, APUA

Funding Source: General Fund

- Program PF-16 **Storm Water Facilities.** As appropriate, allocate funds for storm drain construction, maintenance, and upgrade. Priorities shall be determined based on an updated Drainage Master Plan, city staff input, and community feedback.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Outreach, Education

- Program PF-17 **Water Conservation Community Outreach and Education.** Educate the general public on the importance of water conservation. Promote water conservation policies throughout the City.

Timeframe: Ongoing, as funds become available

Responsible Party: Development Services Department, Building and Safety Department

Funding Source: General Fund, Development Fees

- Program PF-18 **Storm Water Discharge Community Outreach and Education.** Develop and distribute pamphlets regarding storm water quality. Require developers to include such information in water quality reports to be distributed to new home owners as part of their homeowners manual.

Timeframe: Ongoing, as funds become available

Responsible Party: Development Services Department, Building and Safety Department, Developers

Funding Source: General Fund, Development Fees

Inter-Agency and Other Organizations Consultation

Program PF-19 **Interagency Domestic and Reclaimed Water Coordination.** Consult with APUA regarding the domestic and reclaimed water distribution and reclaimed water production efforts. Set goals and requirements with the State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB)-Region 6 Lahontan Region.

Timeframe: Ongoing

Responsible Party: Public Works Department, APUA, and Engineering Department

Funding Source: General Fund

Program PF-20 **Water Supply.** Consult with the Mojave Water Agency regarding the domestic water supply to the City. Consider Inter-Agency connections to MWA's Mojave River Pipeline. Assist in efforts with MWA regarding the R-cubed program.

Timeframe: Ongoing

Responsible Party: Development Services Department, APUA, and Engineering Department

Funding Source: General Fund

Program PF-21 **Interagency Stormwater Consultation.** Meet with representatives of The State Water Resources Control Board (SWRCB) and Regional Water Quality Control Board (RWQCB)-Region 6 Lahontan Region to better implement the goals set by the Clean Water Act and the National Pollution Discharge Elimination System (NPDES). The most recent goals and requirements were adopted by statewide Construction General Permit (2009-0009-DWQ).

Timeframe: Ongoing

Responsible Party: Development Services Department and Engineering Department

Funding Source: General Fund

Program PF-22 **Lifelong Learning Consultation.** Consult with local public schools and community college districts, private and public community service organizations, and library agencies to maintain effective and adequate lifelong learning programs, facilities, equipment, and materials for use by existing and future Adelanto residents, including children and adults.

Timeframe: Ongoing

Responsible Party: Administration and Recreation Department

Funding Source: General Fund and Development Fees

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Implementation Program Matrix – Public Facilities and Infrastructure

Policy	Procedures, Permits, Agreements, Ordinances								Plans and Studies					Physical Improvements			Outreach, Education		Inter-Agency and Other Organization Consultation			
	PF-1	PF-2	PF-3	PF-4	PF-5	PF-6	PF-7	PF-8	PF-9	PF-10	PF-11	PF-12	PF-13	PF-14	PF-15	PF-16	PF-17	PF-18	PF-19	PF-20	PF-21	PF-22
	Citywide Domestic and Reclaimed Water Design Manual	Monitor Domestic and Reclaimed Water	Water Efficient and Sustainable Designs	Adopt and Implement a Citywide Sewer Design Manual	Monitor 303(d) List Pollutants	Storm Water Sustainability	Water Quality Management	Environmentally Preferable Purchasing Program	Water Master Plan	Drainage Master Plan	Open Space Program	Water Quality Management Plan	Flooding Information and Maps	Upgrade Domestic Water Facilities	Wastewater Treatment Facilities with Reclaimed Water Production Capability	Storm Water Facilities	Water Conservation Community Outreach and Education	Storm Water Discharge Community Outreach and Education	Interagency Domestic and Reclaimed Water Coordination	Water Supply	Interagency Stormwater Consultation	Lifelong Learning Consultation
PF 1.1	☐	☐												☐	☐							
PF1.2						☐																
PF 1.3																				☐		
PF 1.4														☐	☐	☐						
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Implementation Program Matrix – Public Facilities and Infrastructure

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Safeguarding Against Flooding for Adelanto North 2035

Public Health and Safety

Introduction

Public health and safety are fundamental aspects to sustainable communities. The health and safety policies work in conjunction with the Plan's other key approaches to create a more livable and sustainable community, and improve Adelanto residents' quality of life.

Context

Health and safety issues include planning for and responding to natural and human-induced disasters, such as earthquakes, fires and floods, and minimizing exposure to hazardous materials. Additional concerns relate to reducing potential over-flight impacts and noise.

Public Health and Safety Considerations

- **Ground Shaking and Geologic Hazards.** Ground shaking as a result of nearby seismic faults, particularly San Andreas and Helendale faults, have the potential to cause serious damage to buildings and facilities in the Planning Area. Liquefaction conditions are more likely to exist along the Mojave River, and in other sandy areas with high water tables.
- **Fire.** A majority of the Planning Area is in a Moderate Fire Hazard Severity Zone, indicating that areas are not highly vulnerable to wildfire, but the potential for wildfire does exist. Adelanto's urban areas are designated as a Non-Wildland/Non-Urban Zone, which has minimal fire hazards.

- **Flooding.** Much of the Adelanto North Planning Area is in the 500-year flood zone area; a small area near Jonathan Street and Lee Avenue is in the 100-year floodplain area. Flash floods can occur because there are a limited number of dry river and creek bed crossings and the lack of flood control infrastructure.
- **Hazardous Materials.** A number of businesses generate, handle, or transport hazardous waste in the Adelanto North Planning Area. Many of these businesses are concentrated in the area between Koala Road, Rancho Road, Jonathan Avenue, and Raccoon Avenue. The SCLA on the east side of the Planning Area is a Superfund site that is expected to continue to undergo clean-up processes for the next 25 years.
- **Aviation Impacts.** SCLA may create potential safety, airspace protection, noise, and over-flight impacts on the land surrounding the airport.
- **Noise.** Noise-sensitive uses (residences, parks, schools, and churches) located adjacent to or near Palmdale Road and US 395 are exposed to noise levels above the City's 65 dB standard. Noise-sensitive residential properties located adjacent to portions of Bellflower Street, Chamberlaine Way, and Rancho Road are also exposed to noise levels above the City's 65 dB standard. High noise levels such as these can lead to physical and psychological health issues if people are exposed to them for long periods of time.
- **Criminal and Gang Activities.** Criminal and gang activity in Adelanto and the Victor Valley continues to be a major threat to Adelanto resident's property, businesses, and law enforcement officials.

Key Sustainability Feature

- **Minimize the Use of Toxic Materials.** The North Adelanto Plan 2035 promotes the use of sustainable or green materials and products. The Plan encourages the education of residents and business owners about household hazardous wastes and the dangers of improper disposal. It also encourages residents and business owners to reduce the use of pesticides and herbicides through integrated pest management strategies.

Public Health and Safety Plan

The Adelanto North 2035 Plan seeks to minimize the risks posed by environmental and human-induced hazards that may impact Adelanto residents' health and welfare. Public health and safety responsibilities evolve as a community's needs change. Today, there is greater emphasis on health and wellness, carbon production reduction, hazardous materials, technology, and planning for major disasters. The Plan promotes prevention, public education, and emergency preparedness as key approaches that will allow the community to minimize risks to life and property. The goals, policies, and implementing programs outlined in this Chapter also underscore sustainability where relevant, and support a healthy environment through tactics such as:

- The most up-to-date technologies in flood risk assessment, construction materials and practices, and communications;

- Best practices in stormwater management, green infrastructure and building, and energy conservation;
- Identification of land uses, sites, and structures that are highly susceptible to hazards, and abatement or modification to diminish levels of risk;
- Remediation of contaminated sites to prevent the spread of toxins;
- Building and site design to maximize natural surveillance and facilitate crime prevention; and
- Regulations, land use, and site planning to minimize noise impacts and support a high quality of life.

By focusing on a range of innovative strategies, the City can achieve a more livable and sustainable community for Adelanto residents.

Safety Services

Law enforcement services are provided by the San Bernardino County Sheriff's Department, with a patrol station located at 11613 Bartlett Avenue. The Sheriff's Department is committed to providing community policing and creating partnerships with City leaders, business owners, and residents to reduce and prevent crime. Their overall goal is to provide a safe and family oriented environment for all residents.

The City of Adelanto contracts with County of San Bernardino for fire protection safety services. The County Fire Department is dedicated to providing emergency services for the health and well-being of Adelanto residents.

The Adelanto North 2035 Plan promotes maintaining police and fire services to meet current and future growth demands. The Plan also encourages consulting with surrounding jurisdictions and outside groups and organizations to prevent criminal activities and gang violence in Adelanto. It also encourages youth programs to keep Adelanto youths out of trouble.

Goals, Policies, and Implementing Strategies

Goal HS 1 Potential damage to structures and loss of life that can result from earthquakes and other geologic hazards are minimized.

- Policy HS 1.1 Identify structural types, land uses, and sites that are highly sensitive to earthquake activity and other geological hazards, and seek to abate or modify them to achieve acceptable levels of risk.
- Policy HS 1.2 Enforce the most recent building codes governing seismic safety and structural design to minimize damage from earthquakes.
- Policy HS 1.3 Inform the public about proactive steps to reduce risks from seismic events.

Goal HS 2 Property damage, injuries, and loss of life from fire are minimized.

- Policy HS 2.1 Enforce building fire codes and ordinances, and continue to research and adopt best practices pertaining to fire management and fire hazards.
- Policy HS 2.2 Ensure sufficient peak-load water supply to address fire and emergency response needs when approving new development.
- Policy HS 2.3 Continue to disseminate information regarding fire prevention measures and resident response to emergency situations.

Goal HS 3 Storm drainage and flood management minimize the risk of flooding.

- Policy HS 3.1 Consult with public agencies responsible for flood protection, including the U.S. Army Corps of Engineers, FEMA, the California Department of Water Resources, and the County Flood Control District to maintain the most current flood hazard and floodplain information. The most up-to-date information shall be used as a basis for project review, and to guide development in accordance with local, State, and Federal standards.
- Policy HS 3.2 Prioritize improvements to Adelanto's storm drain system in flood-prone areas; encourage use of preventative and low-impact measures; and maintain, upgrade, and construct new flood prevention infrastructure where necessary to reduce the risk of flooding.

Goal HS 4 City residents, businesses, and employees are protected from potential hazards associated with the use, production, storage, disposal, and transport of hazardous materials.

Policy HS 4.1 Comply with all applicable local, State, and Federal regulations regarding the transport, use, and disposal of solid and hazardous waste.



Policy HS 4.2 Identify and remediate contamination.
Sustainability Focus



Policy HS 4.3 Discourage the use of toxic products throughout the City. Promote the use of sustainable or green materials and products.
Sustainability Focus



Policy HS 4.4 Educate residents and business owners about household hazardous wastes and the dangers of improper disposal. Provide information about proper disposal methods and toxic material substitutes. Encourage residents and business owners to reduce the use of pesticides and herbicides through integrated pest management strategies.
Sustainability Focus



Policy HS 4.5 Discourage the use of herbicides and pesticides on City property. Control and prevent invasive weeds and pests using integrated pest management on all City property.
Sustainability Focus

Goal HS 5 Adelanto is well-prepared for natural and human-induced disasters and emergencies.

Policy HS 5.1 Strengthen inter-jurisdictional consultation and communication regarding disaster and emergency response planning.

Policy HS 5.2 Ensure emergency preparedness for all critical infrastructure including potable water, wastewater, stormwater, recycled water, telecommunications, energy, and streets.

Policy HS 5.3 Conduct ongoing public outreach regarding procedures and plans to be followed in the event of an emergency.

Goal HS 6 High-caliber public safety services.

Policy HS 6.1 Provide a high levels of community safety with police, fire, and emergency response services that meet or exceed industry-accepted service standards.

Policy HS 6.2 Consult with the San Bernardino County Sheriffs' Department to determine and meet community needs for law enforcement services.

Policy HS 6.3 Consult with the San Bernardino County Fire Department to determine and meet community needs for fire protection and related emergency services.



Policy HS 6.4 Identify alternative water sources for fire fighting use during a disaster.

Policy HS 6.5 Consult with other Victor Valley jurisdictions in determining the feasibility of developing a regional police and fire agency that is more cost effective.

Policy HS 6.6 Continue to monitor gang activities in the community, and consult with surrounding jurisdictions and outside groups and organizations to prevent criminal activities and gang violence. Continue to provide youth programs. Aggressively respond to criminal and gang activity in the community, and work collaboratively on local and countywide programs to reduce crime and prevent gang violence.

Goal HS 7 Crime prevention through design of the built environment.

Policy HS 7.1 Encourage clear visibility into and out of public spaces, provide well-lighted public streets and sidewalks, and implement other Crime Prevention Through Environmental Design (CPTED) strategies to increase safety and “eyes on the street.”

Policy HS 7.2 Educate residents about Crime Prevention Through Environmental Design (CPTED) strategies that they can implement in their neighborhoods to reduce crime.

Goal HS 8 Noise levels throughout the community support public health and welfare, and contribute to a high quality of life.

Policy HS 8.1 Continue to enforce City and State noise regulations to protect residents from excessive noise levels.

Policy HS 8.2 Require noise-sensitive land use development to incorporate measures to reduce interior and exterior noise levels.

Policy HS 8.3 Require mixed-use structures to be designed to account for noise from adjacent uses, and minimize transfer of noise and vibration from commercial/retail to residential use.

Policy HS 8.4 Use site planning and project design strategies to achieve acceptable noise level standards as outlined in the noise/land use compatibility guidelines. The use of noise barriers shall be considered after all practical design-related noise measures have been integrated into project design.

- Policy HS 8.5 Require a detailed analysis of proposed noise reduction measures to determine whether the proposed use is compatible when a project is to be located in an area that exceeds normally acceptable noise thresholds.
- Policy HS 8.6 Minimize noise impacts on noise-sensitive land uses (“sensitive receptors”), such as residential uses, schools, hospitals, child care facilities, wildlife habitat areas, and other noise sensitive areas.
- Policy HS 8.7 Restrict noise levels from stationary sources through enforcement of the Noise Ordinance.
- Policy HS 8.8 Continue to consider noise impacts as part of the development review process.

Implementing Programs

Procedures, Permits, Agreements, and Ordinances

- Program HS-1 **Seismic Safety/CEQA.** Require environmental documents prepared in connection with CEQA to address seismic safety issues and provide adequate mitigation for existing and potential hazards.
- Timeframe:* Ongoing
Responsible Party: Development Services Department
Funding Source: Development fees
- Program HS-2 **Geotechnical Analysis.** Require a geotechnical analysis for construction in areas with potential geological hazards and implement appropriate mitigation recommendations.
- Timeframe:* Ongoing
Responsible Party: Development Services Department
Funding Source: Development fees
- Program HS-3 **International Building Code.** Continue to implement seismic safety standards for construction of new buildings as specified by the currently adopted International Building Code, and update the City's codes as needed to respond to new information, standards, and technology.
- Timeframe:* Ongoing
Responsible Party: Development Services Department
Funding Source: General Fund
- Program HS-4 **Construction Technologies.** Require the use of available technologies and earthquake-resistant materials in the design and construction of all infrastructure projects.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: Developer Fees, General Fund

Program HS-5

New Development Protected from Flooding. Require new development to be designed to provide protection from potential impacts of flooding resulting from significant flood events, consistent with State and Federal guidelines and as directed by City building/engineering officials.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-6

Stormwater System Maintenance and Upgrade Funding. As appropriate and in coordination with the updated Storm Drainage Master Plan, allocate increased funding in Adelanto's Capital Improvement Program to upgrade and/or replace stormwater drainage facilities where needed and implement floodway, floodplain, and drainage improvements.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-7

Flooding Information and Map Update. As new and updated flooding information is provided by FEMA and other regional agencies, update the maps and information in the General Plan and in data that is maintained by the City to reflect current conditions.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-8

Environmental Assessments. Applications for new development projects requiring City discretionary approval shall include the results of a Phase I Environmental Site Assessment (ESA), prepared in accordance with the latest ASTM protocol for such assessments. If the Phase I ESA indicates some evidence of site contamination exists that could require cleanup to avoid danger to people or damage to the environment, a Phase II level review shall be completed to fully characterize the nature and extent of such contamination, and the scope of required clean up procedures. The results of the Phase II assessment shall be considered as part of the CEQA compliance process prior to any action on the project.

	<p><i>Timeframe:</i> Ongoing <i>Responsible Party:</i> Development Services Department, Fire Department <i>Funding Source:</i> Development Fees</p>
Program HS-9	<p>Hazardous Waste Materials Buffer. Require a buffer zone between areas where significant quantities of hazardous materials are present and sensitive receptors, such as residences, hospitals, nursing/convalescent homes, lodging, schools, and day care centers.</p> <p><i>Timeframe:</i> Ongoing <i>Responsible Party:</i> Development Services Department, Fire Department <i>Funding Source:</i> General Fund</p>
Program HS-10	<p>Resource Recovery Program. Implement a comprehensive resource recovery program to minimize impacts on existing and future disposal sites and to foster conservation of natural resources.</p> <p><i>Timeframe:</i> Ongoing <i>Responsible Party:</i> Development Services Department <i>Funding Source:</i> General Fund</p>
Program HS-11	<p>Household Waste Round-Up Program. Sponsor household hazardous waste round-ups to encourage residents and business owners to bring pesticides, cleaning fluids, paint cans, and other common household toxics to a centralized location for proper disposal.</p> <p><i>Timeframe:</i> Ongoing <i>Responsible Party:</i> Development Services Department <i>Funding Source:</i> General Fund</p>
Program HS-12	<p>Emergency Response Preparedness Programs and Plan. Maintain and update, as needed, the City's emergency response preparedness programs and Plan to protect the health and safety of the community, and provide the most effective and timely recovery of affected areas in the event of a disaster.</p> <p><i>Timeframe:</i> Ongoing <i>Responsible Party:</i> Development Services Department <i>Funding Source:</i> General Fund</p>
Program HS-13	<p>Adequate Public Safety Services. Provide funding for the San Bernardino County Sheriff Department and Fire Department to maintain sufficient personnel and the highest level of technology and equipment to meet service requirements of new growth and other specific needs, as appropriate.</p> <p><i>Timeframe:</i> Ongoing <i>Responsible Party:</i> Development Services Department <i>Funding Source:</i> General Fund</p>

- Program HS-14** **Crime and Drug Prevention Programs.** Continue to implement existing volunteer programs, after-school activities such as DARE, police activities within local schools, Neighborhood Watch programs, and school resource and outreach programs for crime and drug prevention. Encourage programs that give Sheriff deputies one-on-one time with these youths and give a positive reinforcement to the way life should be lived and how to become a productive member of society.
- Timeframe:* Ongoing
Responsible Party: Sheriff Department
Funding Source: Grants, General Fund
- Program HS-15** **CPTED Strategies.** Encourage use of Crime Prevention Through Environmental Design (CPTED) strategies to maximize visibility and allow for formal or informal surveillance of public spaces from surrounding areas. Potential design features include: doors and windows that look onto streets and other common areas, front porches, low landscaping, adequate lighting, transparent fencing, windowed stairwells, among others.
- Timeframe:* Ongoing
Responsible Party: Development Services Department
Funding Source: General Fund
- Program HS-16** **Adequate Lighting.** Require new development to provide adequate, low-energy usage lighting in pedestrian areas, parking lots and other publicly accessible areas. Provide well-lighted public sidewalks and streets, and provide pedestrian-scale street lighting in public areas targeted for improvement of pedestrian comfort and safety.
- Timeframe:* Ongoing
Responsible Party: Development Services Department
Funding: Developer Fees, General Fund
- Program HS-17** **Noise Standards.** Modify noise level standards as appropriate for all land uses, including those put forth in the Adelanto North 2035 Plan.
- Timeframe:* Short Range
Responsible Party: Development Services Department
Funding: General Fund
- Program HS-18** **Noise Ordinance.** Modify Noise/Land Use Compatibility Guidelines to recognize the special conditions of mixed-use development and other special use adjacency conditions as envisioned in the Adelanto North 2035 Plan.

	<p><i>Timeframe:</i> Short Range <i>Responsible Party:</i> Development Services Department <i>Funding:</i> General Fund</p>
Program HS-19	<p>Vibration Standards. Consider adopting vibration standards and codify acceptable levels within the City.</p> <p><i>Timeframe:</i> Short Range <i>Responsible Party:</i> Development Services Department <i>Funding:</i> General Fund</p>
Program HS-20	<p>Noise/Vibration Reduction Measures. Require development that will be affected by aircraft noise and/or vibration to include appropriate measures to minimize adverse effects on residents and businesses.</p> <p><i>Timeframe:</i> Short Range <i>Responsible Party:</i> Development Services Department <i>Funding:</i> Development fees</p>
Program HS-21	<p>Noise Suppression Techniques. Require all exterior noise sources (such as construction operations, air compressors, leaf blowers, among others) to use available noise suppression devices and techniques to reduce noise to acceptable levels that are compatible with adjacent uses.</p> <p><i>Timeframe:</i> Ongoing <i>Responsible Party:</i> Development Services Department <i>Funding:</i> General Fund</p>
Program HS-22	<p>Quiet Pavement Surfaces. Consider quiet pavement surfaces in the City's paving and repaving plans in order to reduce traffic noise along city streets.</p> <p><i>Timeframe:</i> Ongoing <i>Responsible Party:</i> Development Services Department <i>Funding:</i> General Fund</p>
Program HS-23	<p>Equipment Restrictions. Consider restricting certain types of heating, ventilating and air conditioning systems (HVAC) and/or maintenance equipment (such as leaf blowers).</p> <p><i>Timeframe:</i> Ongoing <i>Responsible Party:</i> Development Services Department <i>Funding:</i> General Fund</p>

Plans and Studies

Program HS-24 **Hazardous Waste Management Plan.** Develop a Hazardous Waste Management Plan to guide future hazardous waste management planning efforts.

Timeframe: Mid Range

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-25 **Hazards Safety Plan.** All proposals for businesses involved in hazardous materials use, storage, or transport areas must submit a Hazards Safety Plan to appropriate City agencies and the Fire Department for review of potential hazards.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-26 **Integrated Pest Management Plan.** Develop an Integrated Pest Management Plan to reduce the use of pesticides and herbicides throughout the City.

Timeframe: Mid Range

Responsible Party: Development Services Department

Funding Source: General Fund

Outreach/Education

Program HS-27 **Seismic/Emergency Preparedness and Fire Prevention Outreach.** Inform the public about emergency preparedness measures, proactive steps to reduce risks from seismic events, and fire prevention practices. Continue to disseminate information using a variety of communication channels.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-28 **Household Hazardous Waste Education.** Educate residents and business owners about less toxic materials that can be used in place of hazardous materials. Inform residents and businesses about integrated pest management techniques, and provide guidelines for disposal of household hazardous waste.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-29 **Public Outreach Technology.** Use effective technologies to inform the community about potential hazards and emergency response.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-30 **CPTED Information.** Make information available to residents about Crime Prevention Through Environmental Design (CPTED) principles that they can implement in their neighborhoods to reduce crime.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Inter-Agency and Other Organizations Consultation

Program HS-31 **Flooding Consultation.** Consult with public agencies that have responsibility for flood protection regarding data, flood hazard zones, and emergency response.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-32 **Remediation Consultation.** Consult with local, State and Federal oversight agencies to encourage remediation of contamination, and protection of public and environmental health and safety.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-33 **Trucking Company Consultation.** Consult with trucking companies to ensure that transport of hazardous materials does not threaten life or property.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-34 **Transportation Noise Consultation.** Consult with other governmental agencies to minimize transportation-related noise including noise from major arterials, freeways, rail lines, and airports.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Program HS-35 **Aircraft Noise Consultation.** Consult with San Bernardino County and the Federal Aviation Administration (FAA), and Pilots Association to promote “fly neighborly” programs that minimize noise impacts from airport take-offs and other low-altitude aircraft operations associated with SCLA.

Timeframe: Ongoing

Responsible Party: Development Services Department

Funding Source: General Fund

Implementation Program Matrix – Health and Safety

Policy	Procedures, Permits, Agreements, and Ordinances																							Plans and Studies			Outreach/Education				Inter-Agency and Other Organizations Consultation				
	HS-1	HS-2	HS-3	HS-4	HS-5	HS-6	HS-7	HS-8	HS-9	HS-10	HS-11	HS-12	HS-13	HS-14	HS-15	HS-16	HS-17	HS-18	HS-19	HS-20	HS-21	HS-22	HS-23	HS-24	HS-25	HS-26	HS-27	HS-28	HS-29	HS-30	HS-31	HS-32	HS-33	HS-34	HS-35
	Seismic Safety/CEQA	Geotechnical Analysis	International Building Code	Construction Technologies	New Development Protected from Flooding	Stormwater System Maintenance and Upgrade Funding	Flooding Information and Map Update	Environmental Assessments	Hazardous Waste Materials Buffer	Resource Recovery Program	Household Waste Round-Up Program	Emergency Response Preparedness Programs	Adequate Public Safety Services	Crime and Drug Prevention Programs	CPTED Strategies	Adequate Lighting	Noise Standards	Noise Ordinance	Vibration Standards	Noise/Vibration Reduction Measures	Noise Suppression Techniques	Quiet Pavement Surfaces	Equipment Restrictions	Hazardous Waste Management Plan	Hazards Safety Plan	Integrated Pest Management Plan	Seismic/Emergency Preparedness and Fire Prevention Outreach	Household Hazardous Waste Education	Public Outreach Technology	CPTED Information	Flooding Consultation	Remediation Consultation	Trucking Company Consultation	Transportation Noise Consultation	Aircraft Noise Consultation
HS 1.1		■																																	
HS 1.2	■		■	■																															
HS 1.3																										■		■							
HS 2.1	See PF-14																																		
HS 2.2	See PF- 9 and PF -14																																		
HS 2.3							■																				■			■			■		
HS 3.1					■																														
HS 3.2						■																													
HS 4.1								■																■									■		
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HS 6.1													■																						
HS6.2													■																						
HS 6.3													■																						
HS 6.4	See PF-14																																		
HS 6.5																																			
HS 6.6														■																					
HS 7.1																■															■				
HS 7.2															■																■				
HS 8.1															■	■																			
HS 8.2															■																■				
HS 9.1																	■	■																	
HS 9.2																	■	■		■	■														

Implementation Program Matrix – Health and Safety									
Policy									
HS-1	Seismic Safety/CEQA	HS 9.3							
HS-2	Geotechnical Analysis								
HS-3	International Building Code								
HS-4	Construction Technologies								
HS-5	New Development Protected from Flooding								
HS-6	Stormwater System Maintenance and Upgrade Funding								
HS-7	Flooding Information and Map Update								
HS-8	Environmental Assessments								
HS-9	Hazardous Waste Materials Buffer								
HS-10	Resource Recovery Program								
HS-11	Household Waste Round-Up Program								
HS-12	Emergency Response Preparedness Programs								
HS-13	Adequate Public Safety Services								
HS-14	Crime and Drug Prevention Programs								
HS-15	CPTED Strategies								
HS-16	Adequate Lighting								
HS-17	Noise Standards								
HS-18	Noise Ordinance								
HS-19	Vibration Standards								
HS-20	Noise/Vibration Reduction Measures								
HS-21	Noise Suppression Techniques								
HS-22	Quiet Pavement Surfaces								
HS-23	Equipment Restrictions								
HS-24	Hazardous Waste Management Plan								
HS-25	Hazards Safety Plan								
HS-26	Integrated Pest Management Plan								
HS-27	Seismic/Emergency Preparedness and Fire Prevention Outreach								
HS-28	Household Hazardous Waste Education								
HS-29	Public Outreach Technology								
HS-30	CPTED Information								
HS-31	Flooding Consultation								
HS-32	Remediation Consultation								
HS-33	Trucking Company Consultation								
HS-34	Transportation Noise Consultation								
HS-35	Aircraft Noise Consultation								

Glossary

Access: A way of approaching or entering a property, including ingress (the right to enter) and egress (the right to leave).

Acreage, Gross: The total land area in acres within a defined boundary, including any area for rights-of-way, public streets, and dedications of land for public use.

Acreage, Net: That portion of gross acreage exclusive of public streets, rights-of-way, and dedications of land for public uses.

Air Basin: A geographical area in California defined as a distinct air basin for the purpose of managing the air resources of the State on a regional basis. An air basin generally has similar meteorological and geographic conditions throughout.

Air Pollutants: Amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects on humans, animals, vegetation, and/or materials.

Airport Land Use Compatibility Plans (ALUCPs): Airport Land Use Compatibility Plans help guide property owners and local jurisdictions in determining what types of proposed new land uses are appropriate around airports. They are intended to protect the safety of people, property, and aircraft on the ground and in the air in the vicinity of an airport. They also protect airports from encroachment by new incompatible land uses that could restrict their operations.

Air Quality Standards: The prescribed (by the Environmental Protection Agency and the California Air Resources Board) level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

Alluvial: Loose, unconsolidated (not cemented together into a solid rock) soil or sediments, which is then eroded, deposited, and reshaped by water in some form in a non-marine setting.

Ambient Air: The air occurring at a particular time and place outside of structures. Often used interchangeably with "outdoor air."

Ambient Air Quality Standards: Health- and welfare-based standards for clean outdoor air that identify the maximum acceptable average concentrations of air pollutants during a specified period of time.

Ambient Noise Level: The level of noise that is all-encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the receiver.

Annexation: The incorporation of a land area into an existing city with a resulting change in the boundaries of that city.

AQMP (Air Quality Management Plan): A plan prepared by an air pollution control district or air quality management district, for a county or region designated as a “nonattainment” area, for the purpose of bringing the area into compliance with the requirements of the national and/or California Ambient Air Quality Standards. AQMPs are incorporated into the State Implementation Plan (SIP).

Archaeological: Relating to the material remains of past human life, culture, or activities.

Arroyo: A steep-sided gully cut by running water in an arid or semiarid region.

Arterial: A major street carrying the traffic of local and collector streets to and from freeways and other major streets, with controlled intersections and generally providing direct access to nonresidential properties.

Average Daily Trips (ADT): Average daily trips made by vehicles in a 24-hour period.

Average Sound Level: See Equivalent-Continuous Sound Level (Leq).

A-Weighted Decibel (dBA): A unit measuring the magnitude of a sound using the A-weighted scale. The A-weighted scale reduces the effects of low and high frequencies in order to simulate human hearing. See also “Decibel.”

Bike Lane: A corridor expressly reserved by markings for bicycles existing on a street or roadway in addition to any lanes for use by motorized vehicle (Class II Bikeway)

Bike Path: A paved route not on a street or roadway and expressly reserved for bicycles. Bike paths may parallel roads but typically are separated from them (Class I Bikeway).

Bike Route: A facility shared with motorists and identified by signs or pavement marking symbols. A bike route does not have lane stripes (Class III Bikeway).

Buffer: Land and/or improvement designated to protect one type of land use from another where there could be compatibility issues. Where a commercial district or agricultural use abuts a residential district, for example, additional use, yard, or height restrictions may be imposed to protect residential properties. The term may also be used to describe any zone that separates two unlike zones such as a multi-unit housing zone between single-unit housing and commercial uses.

Building Envelope: The physical interface between the interior of a building and the outdoor environment (including walls, roof, and foundation) that serves as a thermal barrier.

Bulb Out: A curb extension intended to slow the speed of traffic and increase driver awareness, particularly in residential neighborhoods. They also allow pedestrians and vehicle

drivers to see each other when vehicles parked in a parking lane would otherwise block visibility.

California Building Code: A standard building code that sets for minimum standards for construction. The California Building Code is outlined in Title 24 of the California Code of Regulations and includes the Uniform Plumbing Code, Uniform Mechanical Code, National Electric Code, California Fire Code, and the California Energy Code.

California Environmental Quality Act (CEQA): A State law enacted in 1971 that requires governmental agencies at all levels to consider the impact proposed projects have on the environment, including cultural resource impacts.

California Department of Transportation (Caltrans): California department whose mission is to improve mobility across the State. It manages the State highway system and is actively involved with public transportation systems within the State.

California Strategic Growth Council: Formed with the passing of California Senate Bill 732, the California Strategic Growth Council (SGC) was created to coordinate and promote the activities of California state agencies and by providing funding, coordination, and general support, to achieve the following objectives: improve air and water quality; promote public health; promote equity; increase housing affordability; promote infill and compact development; revitalize urban and community centers; protect natural resources and agricultural lands; reduce automobile usage and fuel consumption; improve infrastructure systems; promote water conservation; promote energy efficiency and conservation; and strengthen the economy.

California Sustainable Communities Planning Grant and Incentives Program: Administrated by the California Strategic Growth Council, the Sustainable Communities Planning Grant and Incentives Program has the primary goal of funding the development and implementation of plans that lead to significant reductions in greenhouse gas emissions. It is designed to help local governments meet the challenges of adopting land use plans and integrating strategies to transform communities and create long-term prosperity.

Capital Improvement Program (CIP): A proposed timetable or schedule of future capital improvements (i.e., government acquisition of real property, major construction project, or acquisition of long lasting, expensive equipment) to be carried out during a specific period, together with cost estimates and the anticipated means of financing each project.

Carbon Footprint: A measure of the impact human activities have on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide.

Centers: Nodes of activity that generally encompass areas with a predominant single use or mix of land uses.

City: City, with a capital "C," generally refers to the government or administration of the City of Adelanto. City, with a lower case "c" may mean any city or the general boundaries of Adelanto.

Climate Change (see also Global Warming): Climate change refers to any significant change in measures of climate (such as temperature, precipitation or wind) lasting for an extended period (decades or longer). Climate change may result from:

- Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun
- Natural processes within the climate system (e.g., changes in ocean circulation)
- Human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization and desertification)

Climate Responsive Materials: Construction materials which take advantage of the heating/cooling effects of natural elements such as sunlight and wind.

Collector: A street for traffic moving between arterial and local streets, generally providing direct access to properties.

Community Noise Equivalent Level (CNEL): The noise metric originally adopted by the State of California for evaluating airport noise. It represents the weighted average noise level during a 24-hour day, to the weighting accounts for the lower tolerance of people to noise during evening and nighttime periods relative to the daytime period. See also "A-Weighted Decibel."

Compatibility: The characteristics of different uses or activities that permit them to be located near each other in harmony and without conflict. The designation of permitted and conditionally permitted uses in zoning districts is intended to achieve compatibility within the district. Some elements affecting compatibility include: intensity of occupancy as measured by dwelling units per acre; pedestrian or vehicular traffic generated; volume of goods handled; and such environmental effects as noise, vibration, glare, air pollution, or the presence of hazardous materials. On the other hand, many aspects of compatibility are based on personal preference and are much harder to measure quantitatively, at least for regulatory purposes.

Complete Streets: A comprehensive approach to the practice and related policies of mobility planning. The complete street concept recognizes that transportation corridors have multiple users with different abilities and mode preferences (e.g., pedestrians, bicyclists, transit riders, and drivers) that need to be accounted for.

Conservation: The management of natural resources to prevent waste, destruction, or neglect.

Consistent: Free from contradiction.

Coverage: The proportion of the area of the footprint of a building in relation to the area of the lot on which it stands.

Cultural Resource: The sites and remains associated with human activities and include the following: prehistoric and ethnohistoric Native American archaeological sites; historic

archaeological sites; historic buildings; elements or areas of the natural landscape which have traditional cultural significance.

Curb Extension: See Bulb Out.

Decibel (dB): A unit measuring the magnitude of a sound, equal to the logarithm of the ratio of the intensity of the sound to the intensity of an arbitrarily chosen standard sound, specifically a sound just barely audible to an unimpaired human ear. For environmental noise from aircraft and other transportation sources, an A-weighted sound level (abbreviated dBA) is normally used. The A-weighting scale adjusts the values of different sound frequencies to approximate the auditory sensitivity of the human ear.

Density: The number of dwelling units per unit of land. The Adelanto North 2035 Report refers to density in terms of dwelling units per acre (du/ac).

Desert Sensitive Design: The design of a community and landscape that carefully takes into account the desert and natural environment, including but not limited to native vegetation, topography, habitat, wildlife, climate, natural resources, and hydrology.

Desert Tortoise: The desert tortoise (*Gopherus agassizii*) is a species of tortoise native to the Mojave desert and Sonoran desert of the southwestern United States and northern Mexico. The species name *agassizii* is in honor of Swiss-American zoologist Jean Louis Rodolphe Agassiz.

Developer: An individual or business that prepares raw land for the construction of buildings or causes to be built physical building space for use primarily by others, and in which the preparation of the land or the creation of the building space is in itself a business and is not incidental to another business or activity.

Development: Development has the meaning of §65927 (California Government Code) and is also any human-caused change to improved or unimproved real estate that requires a permit or approval from any agency of the city or county, including but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of materials. "Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with §66410 of the Government Code), and any other division of land except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations that are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with §4511 of the Public Resources Code). As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume conduit,

siphon, aqueduct, telephone line, and electrical power transmission and distribution line. "Development" does not mean a "change of organization," as defined in Government Code §56021 or a "reorganization," as defined in Government Code §56073.

Diversity: The variation among a particular group of things or people; for example various social and cultural identities among people existing together.

Domestic Water, Potable: Water that has undergone adequate treatment and is considered suitable for human drinking and cooking uses.

Drought: An extended period of months or years when a region notes a deficiency in its water supply. Generally, this occurs when a region receives consistently below average precipitation.

Dwelling Unit: A structure or portion of a structure used exclusively for human habitation.

Dwelling Unit per Acre (du/ac): Number of dwelling units per one acre of land; denotes residential density.

Easement: A recorded right or interest in the land that belongs to someone else, which entitles the holder to some use, privilege, or benefit out of or over said land.

Endangered Species: A species of animal or plant is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes.

Energy Conservation: Reduction or elimination of unnecessary energy use and waste.

Entitlement: A permit granted to a landowner or other authorized party giving it the right to improve a property. Such right is usually expressed in terms of a use and intensity allowed under a development agreement, subdivision or tract map, use permit, variance, building permit, or other similar permit. For example, an entitlement may specify the maximum number of residential dwelling units permitted on a site or the maximum square footage of non-residential development permitted on a site.

Environment: The sum of all external conditions and influences affecting the life, development, and ultimately, the survival of an organism.

Environmental Protection Agency (EPA): The United States agency charged with setting policy and guidelines and carrying out legal mandates for the protection of national interests in environmental resources.

Ephemeral: Typically used in association with streams in arid environments. An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round and groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Erosion: 1) The loosening and transportation of rock and soil debris by wind, rain, or running water; 2) The gradual wearing away of the upper layers of the Earth.

Essentially Unimproved Land: See "Unimproved Land."

Fault: A fracture in the Earth's crust forming a boundary between rock masses that have shifted.

FEMA: Federal Emergency Management Agency.

Fire Flow: A rate of water flow required to halt and reverse the spread of a fire.

Fire Hazard Severity Zones (FHSZ): Fire Hazard Severity Zones map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones then define the application of various mitigation strategies to reduce risk associated with wildland fires.

Floodplain: A lowland or relatively flat area adjoining the banks of a river or stream that is subject to a one percent or greater chance of flooding in any given year (i.e., 100-year flood).

Gateway: A point along a roadway entering a city or county at which a motorist gains a sense of having left the environs and of having entered a particular city or county.

General Plan: A legal document that takes the form of a map and accompanying text adopted by the local legislative body. The plan is a compendium of policies regarding the long-term development of a jurisdiction. The State requires the preparation of seven elements or divisions as part of the plan: land use, housing, circulation, conservation, open space, noise, and safety. Additional elements pertaining to the unique needs of an agency are permitted.

Global Warming (see also Climate Change): An increase in the average temperature of the atmosphere near the Earth's surface and in the troposphere, which can contribute to changes in global climate patterns. Global warming can occur from a variety of causes, both natural and human-induced. In common usage, "global warming" often refers to the warming that can occur as a result of increased emissions of greenhouse gases from human activities. Source: U.S. Environmental Protection Agency

Goal: The ultimate purpose of an effort stated in a way that is general in nature and immeasurable; a broad statement of intended direction and purpose. (For example, "Provide a diverse mix of land uses to meet the future needs of all residents and the business community.")

Grade: The vertical location of the ground surface.

Grading: Any excavating, filling of land, or combination thereof.

Green Building: The practice of increasing the efficiency with which buildings and their sites use and harvest energy, water, and materials, and reducing building impacts on human health and the environment through better siting, design, construction, operation, maintenance, and removal—the complete building life cycle.

Greenhouse Gases: Gases in the Earth's atmosphere that produce the greenhouse effect. Changes in the concentration of certain greenhouse gases, due to human activity such as fossil fuel burning, increase the risk of global climate change. Greenhouse gases include carbon dioxide, methane, nitrous oxide, halogenated fluorocarbons, ozone, perfluorinated carbons, and hydro fluorocarbons.

Green Streets: A street that uses vegetated facilities to manage stormwater, improve water quality, and enhance watershed health.

Grey Water: Wastewater generated from baths, sinks, washing machines and other appliances which can be recycled for secondary non-drinkable applications, such as irrigation or flushing toilets.

Ground Failure: Mudslide, landslide, liquefaction, or the compaction of soils due to ground shaking from an earthquake.

Ground Shaking: Ground movement resulting from the transmission of seismic waves during an earthquake.

Groundwater: The supply of fresh water under the ground surface in an aquifer or soil that forms a natural reservoir.

Habitat: The physical location or type of environment in which an organism or biological population lives or occurs.

Hazardous Materials: An injurious substance, including pesticides, herbicides, toxic metals and chemicals, liquefied natural gas, explosives, volatile chemicals, and nuclear fuels.

Headworks: A component of a wastewater treatment facility which typically consists of a series of grates which filter large solids from entering the wastewater treatment process.

Healthy Community(ies): Communities that are improving their physical and social environments and expanding and/or improving those community resources that enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential.

High-Voltage Transmission Lines: High-voltage transmission lines are used to transmit electric power over relatively long distances, usually from a central generating station to main substations. They are also used for electric power transmission from one central station to another for load sharing.

Household: According to the Census, a household is all persons living in a dwelling unit, whether or not they are related. Both a single person living in an apartment and a family living in a house are considered households.

Impervious surfaces: Artificial structures—such as pavements (roads, sidewalks, driveways and parking lots) that are covered by impenetrable materials such as asphalt, concrete, brick, and stone—and rooftops.

Implementation: An action, strategy, procedure, program, or technique that carries out goals and policies.

Improvement: As defined in the Adelanto Municipal Code, any building, structure, place, parking facility, fence, gate, wall, work of art, or other object constituting a physical betterment of real property, or any part of such betterment.

Indirect Source: Any facility, building, structure, or installation, or combination thereof, which generates or attracts mobile source activity that results in emissions of any pollutant (or precursor) for which there is a State ambient air quality standard. Examples include employment sites, shopping centers, sports facilities, housing developments, airports, commercial and industrial development, and parking lots and garages.

Infrastructure: The physical systems and services that support development and population, such as roadways, railroads, water, sewer, natural gas, electrical generation and transmission, telephone, cable television, storm drainage, and others.

Intensity: A measure of the amount or level of development often expressed as the ratio of building floor area to lot area (floor area ratio) for commercial, business, and industrial development, or dwelling units per acre of land for residential development (also called "density"). For the purposes of this document, the intensity of non-residential development is described through the use of floor-area ratio.

Inter-agency: Indicates consultation between or among two or more discrete agencies in regard to a specific program.

Intersection: Where two or more roads cross at grade.

Irrigation: Artificially supplying land with water by means of ditches, piping, and other distribution systems.

Issue: A problem, constraint, or opportunity that becomes the basis for community action.

Landscaping: Planting, including but not limited to, trees, shrubs, and ground covers that are suitably designed, selected, installed, and maintained to enhance a site or right-of-way.

Land Use: A description of how land is occupied or used.

Land Use Plan: A plan showing the allowed location, extent, and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational, and other public and private purposes or combination of purposes.

Landslide: A general term for a falling or sliding mass of soil or rocks.

Leadership in Energy and Environmental Design (LEED): A rating system developed by the U.S. Green Building Council to certify buildings with sustainable features.

Light Pollution: Excessive or obtrusive artificial light.

Liquefaction: A process by which water saturated granular soils transform from a solid to a liquid state due to groundshaking. This phenomenon usually results from shaking from energy waves released in an earthquake.

Local Street: A street providing direct access to properties and not designed for through traffic.

Local/ Regional Materials: Products extracted, harvested and produced within a specific distance from a building sit, usually less than 500 miles.

Lot: A legally recognized parcel of land abutting on one or more public or City-approved private streets.

Level of Service (LOS): A measure by which transportation planners reckon the quality of service of roadway and intersection operations. LOS may be applied to vehicular travel or other modes of transport, including transit, bicycle, and walking.

Magnitude: Magnitude is a measure of the energy released by an earthquake; it is assessed by seismographs.

Mitigate: To ameliorate, alleviate, or avoid to the extent reasonably feasible.

Mixed Use: Different types of complementary land uses located in close proximity within one or more buildings and/or developments within the same district, planned and constructed to complement each other. Such uses may include, but are not limited to, residential, office, retail, public, or entertainment uses. "Mixed use development, " per §65089 of the California Government Code, means development that integrates compatible commercial or retail uses, or both, with residential uses, and which, due to the proximity of job locations, shopping opportunities, and residences, will discourage new trip generation.

Mobile Sources: Sources of air pollution such as automobiles, motorcycles, trucks, off-road vehicles, boats, and airplanes. (Contrast with stationary sources.)

Modified Mercalli Intensity Scale: A scale used for measuring the intensity of an earthquake. The scale quantifies the effects of an earthquake on the Earth's surface, humans, objects of nature, and man-made structures on a scale of I through XII, with I denoting not felt, and XII one that causes almost complete destruction. The values will differ based on the distance to the earthquake, with the highest intensities being around the epicenter.

Mojave Desert: The transition from the hot Sonoran Desert to the cooler and higher Great Basin is called the Mojave Desert. This arid region of southeastern California and portions of Nevada, Arizona and Utah, occupies more than 25,000 square miles.

Multi-Modal: The utilization of all available modes of travel that enhance the movement of people and goods, including, but not limited to, highway, transit, nonmotorized, and demand

management strategies including, but not limited to, telecommuting. The availability and practicality of specific multimodal systems, projects, and strategies may vary by county and region in accordance with the size and complexity of different urbanized areas. (Government Code §65088)

National Flood Insurance Program: A federal program that authorizes the sale of federally subsidized flood insurance in communities where such flood insurance is not available privately.

National Pollutant Discharge Elimination System (NPDES): As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The State Water Resources Control Board issues permits to jurisdictions with the objectives to attain and protect the beneficial uses of water bodies in the State; reduce pollutants in stormwater to the maximum extent practicable; and to evaluate compliance with the objectives and requirements contained in the permit.

Natural Daylight: The use of windows and skylights to bring more natural light into a home. Can also refer to architectural design that makes significant use of natural light.

Neighborhood: A geographically localized community within Adelanto.

Neighborhood Context: The background and surrounding information that enhances understanding of a particular neighborhood.

Noise: Any unwanted or disagreeable sound. Excessive noise is any sound that exceeds the appropriate actual or presumed ambient noise level that annoys or tends to disturb humans, or that causes or tends to cause an adverse psychological or physiological effect on humans. See also "Sound."

Noise Contours: Continuous lines of equal noise level usually drawn around a noise source, such as an airport or highway. The lines are generally drawn in five-decibel increments so that they resemble elevation contours in topographic maps.

Nonconforming Use: An established use of a building or land that was legally initiated but which does not conform to the present code because of subsequent changes in land use regulations.

Open Space (general descriptive term and used with lowercase letters in the Plan): Land without buildings. This is a general, descriptive term that places no restrictions on the use of the land.

Open Space: (State of California definition): Any parcel or area of land or water that is essentially unimproved and devoted to an open-space use as defined in this section, and that is designated on a local, regional or state open-space plan as any of the following:

1. Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.
2. Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers and streams that are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.
3. Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas that serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.
4. Open space for public health and safety, including, but not limited to, areas that require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, floodplains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.
5. Open space in support of the mission of military installations that comprises areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities and complement the resource values of military lands.
6. Open space for the protection of places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code.

Ordinance: A law or regulation set forth and adopted by a governmental authority, usually a city or county.

Parcel: The basic unit of land entitlement. A designated area of land established by plat, subdivision, or otherwise legally defined and permitted to be used or built upon.

Particulate Matter (PM₁₀): Particulate Matter less than 10 microns. A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes and aerosols. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the air sacs in the lungs where they may be deposited, resulting in adverse health effects. PM₁₀ also causes visibility reduction and is a criteria air pollutant.

Policy: Statements guiding action and implying clear commitment found within each element of the General Plan (e.g., "Maintain a balance or surplus between the generation of public revenues and the cost of providing public facilities and services.").

Pollution: The presence of matter or energy whose nature, location, or quantity produces undesired environmental effects.

Potable Water: Water that is of sufficiently high quality so that it can be consumed or used without risk of immediate or long term harm.

Post-consumer content: Material from products that were used by consumers and would otherwise be discarded as waste. These materials are recovered through consumer recycling, and include items such as newspapers, cardboard, aluminum, glass, and plastics (see also Pre-consumer Content).

Pre-consumer Content: Excess byproducts, or damaged materials, generated during manufacturing processes that are recovered and used as inputs in a manufacturing process, for instance rejected materials or packaging trimmings (see also Post-consumer Content).

Private: Of or concerning a particular person or group; not owned by a government body.

Program: A coordinated set of specific measures and actions (e.g., zoning, subdivision procedures, and capital expenditures) the local government intends to use in carrying out the policies of the General Plan.

Public: Of the people as a whole, or for the use and benefit of all.

Public Space: Land or structures that are open to anyone without restrictions; may include public or private property; also referred to as "public realm."

Rapidly Renewable Materials: Agricultural products, both fiber and animal, that have a harvest cycle of 10 years or less. Examples include bamboo, agrifiber, cork, wool and more.

Reclaimed Water: See Recycled Water.

Recycled-Content Materials: Materials that contain pre- or post-consumer recycled content (see Post-Consumer Content and Pre-Consumer Content).

Recycling: The act of processing used or abandoned materials for use in creating new product.

Recycled Water (Reclaimed Water): Former wastewater (sewage) that has been treated to remove solids and certain impurities, and then allowed to recharge the aquifer rather than being discharged to surface water. This recharging is often done by using the treated wastewater for irrigation.

Regional: Pertaining to activities or economies at a scale greater than that of a single jurisdiction and affecting a broad homogeneous area.

Regional Transportation Plan (RTP): long-term blueprint of a region's transportation system.

Regulation: A rule or order prescribed for managing government.

Renewable Energy: The term renewable energy generally refers to electricity supplied from renewable energy sources, such as wind and solar power, geothermal, hydropower and various forms of biomass. These energy sources are considered renewable sources because their fuel sources are continuously replenished.

Resources Conservation and Recovery Act (RCRA): The Resources Conservation and Recovery Act (RCRA) is the principal Federal law that regulates the generation, management, and transportation of waste materials.

Retrofit: To add materials and/or devices to an existing building or system to improve its operation or efficiency.

Reused and Repurposed Materials: Byproducts and waste that have value "as is" to a second, unrelated application or industry.

Right-of-Way: Any place that is dedicated to use by the public for pedestrian and vehicular travel. A right-of-way may include, but is not limited to, a street, sidewalk, curb, and gutter. A right-of-way may be a crossing, intersection, parkway, median, highway, alley, lane, mall, court, way, avenue, boulevard, road, roadway, railway, viaduct, subway, tunnel, bridge, thoroughfare, park square, or other similar public way.

San Bernardino Association of Governments (SANBAG): The Metropolitan Planning Organization for San Bernardino County. It deals with land use, housing, environmental quality, and economic development.

Sanitary Sewer: A system of subterranean conduits that carries refuse liquids or waste matter to a plant where the sewage is treated, as contrasted with storm drainage systems (that carry surface water) and septic tanks or leach fields (that hold refuse liquids and waste matter on site).

Scenic Corridors/Viewsheds: Land that is visible from the highway right of way, and is comprised primarily of scenic and natural features. Topography, vegetation, viewing distance, and/or jurisdictional lines determine the corridor boundaries. See also Viewshed.

Second Dwelling Unit: An accessory dwelling unit that is subordinate to and on the same lot or parcel of property as another single dwelling unit in a residential district. It includes a kitchen and sanitary facilities for the exclusive use of one household.

Seismic: Caused by or subject to earthquakes or Earth vibrations.

Sensitive Species: Includes those plant and animal species considered threatened or endangered by the U.S. Fish and Wildlife Service and/or the California Department of Fish and Game, according to Section 3 of the Federal Endangered Species Act. Endangered - any species in danger of extinction throughout all, or a significant portion of, its range. Threatened - a species likely to become an endangered species within the foreseeable future throughout all, or a portion of, its range. These species are periodically listed in the Federal Register and are therefore referred to as "federally listed" species.

Setback: The distance from a defined point of line governing the placement of buildings, structures, parking, or uses on a lot.

Sewer: Any pipe or conduit used to collect and carry away wastewater from the generating source to a treatment plant or discharge outfall.

Site: A parcel of land used or intended for one use or a group of uses and having frontage on a public or an approved private street. A lot.

Smart Growth: Smart growth is a compact, efficient, and environmentally sensitive pattern of development that provides people with additional travel, housing, and employment choices by focusing future growth away from rural areas and closer to existing and planned job centers and public facilities.

Specific Plan: A tool authorized by Government Code §65450 et. seq. for the systematic implementation of the General Plan for a defined portion of a community's planning area. A specific plan must specify in detail the land uses, public and private facilities needed to support the land uses, phasing of development and use of natural resources, and a program of implementation measures, including financing measures.

Soil: Naturally occurring superficial deposits overlying bedrock.

Solar Energy: Energy from the sun that is converted into thermal or electrical energy.

Solid Waste: All solid, semi-solid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, dewatered, treated, or chemically fixed sewage sludge that is not hazardous waste, manure, vegetable of animal solid and semi-solid wastes, and other discarded solid and semi-solid waste.

Sound: A physical disturbance in the air that is discernible to the human ear.

Source Control Treatment Program: A Program typically initiated at a City level requiring commercial and industrial developments which produce wastewater containing contaminants harmful to the City's wastewater treatment plant or collection system to pre-treat the wastewater prior to entering the public system.

Southern California Association of Governments (SCAG): A regional planning agency incorporating various local governments in the Southern California area of California. It deals with land use, housing, environmental quality, and economic development.

Southern California Logistic Airport (SLCA): The conversion of the former George Air Force Base to SCLA was designed to provide major corporations with logistics needs, access to a global intermodal logistics gateway to the Western United States. Located near Interstate 15 in California's Victor Valley, the 5,000 acres (2,000 ha) complete intermodal business complex is approximately 20 mi (32 km) north of downtown San Bernardino, and 23 mi (37 km) north of San Bernardino International Airport.

Sphere of Influence: The probable physical boundaries and service area of a local government agency as determined by the Local Agency Formation Commission.

Sprawl: Sprawl includes the spreading outwards of a city and its suburbs to its outskirts to low-density and auto-dependent development on rural land, high segregation of uses (e.g. stores and residential), and various design features that encourage car dependency.

Standards: (1) A rule or measure establishing a level of quality or quantity that must be complied with or satisfied. The California Government Code (§65302) requires that General Plans describe "standards." Examples of standards might include the number of acres of parkland per 1,000 population that the community will attempt to acquire and improve. (2) Requirements in a Zoning Ordinance that govern building and development as distinguished from use restrictions; for example, site design regulations such as lot area, height limit, frontage, landscaping, and floor area ratio.

Stationary Sources: Non-mobile sources such as power plants, refineries, and manufacturing facilities that emit air pollutants and/or noise.

Street Typology: A method of classifying streets by relating them to the adjacent land use and their function for pedestrians, bicyclists, and transit. The design of a street, its intersections, sidewalks, and transit stops should reflect the adjacent land uses since the type and intensity of the adjacent land use directly influences the level of use by other modes. The street typology attempts to strike a balance between functional classification, adjacent land use, and the competing travel needs.

Structure: Anything constructed or erected that requires location on the ground or attachment to something having location on the ground, including swimming pools, but excluding driveways, sidewalks, patios, or parking spaces.

Subdivision: The division of any improved or unimproved land, shown on the latest equalized county assessment roll as a unit or as contiguous units, for the purpose of sale, lease, or financing, whether immediate or future. Properties shall be considered as contiguous units even if it separated by roads, streets, utility easements, or railroad rights-of-way. "Subdivision" includes a condominium project, as defined in Section 1350 of the California Civil Code, or a community apartment project, as defined in Section 11004 of the California Business and Professions Code. Any conveyance of land to a governmental agency, public entity, or public utility shall not be considered a division of land for purposes of computing the number of

parcels. "Subdivision" shall not include the financing or leasing of apartments, offices, stores, or similar space within apartment buildings, industrial buildings, commercial buildings, mobile home parks or trailer parks; mineral, oil or gas leases; or land dedicated for cemetery purposes under the Health and Safety Code of the State.

Subsidence: The sinking or downward settling and compaction of soil and other surface material with little or no horizontal motion. Subsidence may be caused by a variety of human and natural activity, including earthquakes.

Sustainability: The ability for the city and residents of Adelanto to meet the needs of the present economy, society, and environment while preserving the ability of future generations to meet their needs.

Sustainable Building: A building approach that integrates building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction, and operation of the built environment. Sustainable building merges sound, environmentally responsible practices into one discipline that looks at the environmental, economic, and social effects of a building or built project as a whole. Sustainable building design encompasses the following broad topics: efficient management of energy and water resources, management of material resources and waste, protection of environmental quality, protection of health and indoor environmental quality, reinforcement of natural systems, and the integration of the design approach.

Sustainable Development: Sustainable development merges the planning, design, and construction of communities with the natural setting and vegetation of an area to reflect the needs and aspirations of the local residents.

Swales: Swales are constructed open-channel drainage ways used to convey stormwater runoff. Swales are often used as an alternative to, or an enhancement of, traditional storm sewer pipes. They do not pond water for a long period of time and induce infiltration. Vegetated swales generally have a trapezoidal or parabolic shape with relatively flat side slopes. Individual vegetated swales generally treat small drainage areas

Switching Station: A switching station connects two or more transmission lines.

Topography: Configuration of a surface, including its relief and the position of natural and human-made features.

Townhouse: A dwelling unit occupying its own lot but which is physically attached to at least one other dwelling unit.

Traffic Calming: The combination of policies and measures that reduce the negative effects of motorized vehicle use by improving livability in the surrounding neighborhood. With traffic calming, accessibility and mobility are not reduced, they are modified to fit needs of neighborhood. Traffic calming achieves this by modifying the design of streets to serve a broad range of transportation, social and environmental purposes.

Transmission Line: An interconnected group of electric lines located on poles or underground which transfer energy, in bulk, between points of supply and points of delivery.

Transit: The conveyance of persons or goods from one place to another by means of a local public transportation system (e.g., Victor Valley Transit Authority buses and HDC).

Transit-Oriented Development (TOD): Moderate- to higher-density development, located within an easy walk of a major transit stop (HDC station or bus stops), generally with a mix of residential, employment, and shopping opportunities designed for pedestrians without excluding the auto. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use.

Trip: A one-way journey that proceeds from an origin to a destination via a single mode of transportation; the smallest unit of movement considered in transportation studies. Each trip has one "production end" (or origin) and one "attraction end" (destination).

Unimproved Land: Land in its natural state with no man-made changes in its appearance. "Essentially unimproved" means minor changes such as benches or a small number of access roads, or some brush clearance for safety.

Urban Design: The attempt to give form, in terms of both beauty and function, to selected urban areas or to whole cities. Urban design is concerned with the location, mass, and design of various urban components and combines elements of urban planning, architecture, and landscape architecture.

Urban Form: Urban form addresses the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. Urban form guidelines endeavor to create a predictable public realm primarily by controlling physical form, with a lesser focus on land use.

Urban Runoff: Stormwater from city streets and adjacent domestic or commercial properties that carries pollutants of various kinds into the sewer systems and receiving waters.

Use: The purpose for which land or a building is designed, arranged, or intended, or for which the land or building may be occupied or maintained.

Vacant: Lands or buildings that are not actively used for any purpose.

Vegetative Communities: Unique groupings of plants determined primarily on elevation and climate.

Vehicle Miles Traveled (VMT): The total distance traveled in miles by all motor vehicles of a specific group in a given area at a given time.

Victor Valley Transit Authority (VVTa): The transit service provider for the entire Victor Valley, including the City of Adelanto.

Viewshed: A viewshed is an area of land, water, or other environmental element that is visible to the human eye from a fixed vantage point.

Volatile Organic Compounds (VOC): Organic chemicals that have a high vapor pressure at, ordinary room temperature. More simply, these are chemicals that can easily evaporate into the air and affect indoor air quality.

Walkability: A measure of how friendly an area is to walking. Factors affecting walkability include, but are not limited to: land use mix; street connectivity; residential density (residential units per area of residential use); "transparency" that includes amount of glass in windows and doors, as well as orientation and proximity of homes and buildings to watch over the street; plenty of places to go to near the majority of homes; placemaking, street designs that work for people, not just cars; and nonresidential floor area ratio. Major infrastructural factors include access to mass transit, presence and quality walkways, buffers to moving traffic (planter strips, on-street parking, or bike lanes) and pedestrian crossings, aesthetics, nearby local destinations, shade or sun in appropriate seasons, street furniture, and traffic volume and speed.

Walking Shed: The walkable area around a particular point of interest (also known as a pedshed).

Water Capture: The collection and storage of rainwater, often reused for non-potable uses.

Water Conservation: Using water wisely and efficiently so that it is not wasted.

Water Quality: The physical, chemical and biological characteristics of water. It is most frequently used by reference to a set of standards against which compliance can be assessed. The most common standards used to assess water quality relate to drinking water, safety of human contact, and for health of ecosystems.

Watershed: The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse that drains into a lake, or reservoir.

Wayfinding: All of the ways in which people orient themselves in physical space and navigate from place to place, including signage and other graphic communication.

Wind Turbines: A rotating machine that converts the kinetic energy in wind into mechanical energy. If the mechanical energy is used directly by machinery, such as a pump or grinding stones, the machine is usually called a windmill. If the mechanical energy is then converted to electricity, the machine is called a wind generator or wind turbine.

Window Glazing: Window treatment used to create a weather tight seal and better control heat gain or heat loss of buildings.

Window Shading: Any device used to reduce unwanted heat gain from a window.

Zoning: A police power measure, enacted primarily by units of local government, in which the community is divided into districts or zones within which permitted and special uses are established as are regulations governing lot size, building bulk, placement and other development standards. Requirements vary from district to district, but they must be uniform within the same district. The Zoning Ordinance consists of a map and text.

Zoning Map: The officially adopted zoning map of the City specifying the location of zoning districts within all geographic areas of the city.

