

**DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT**

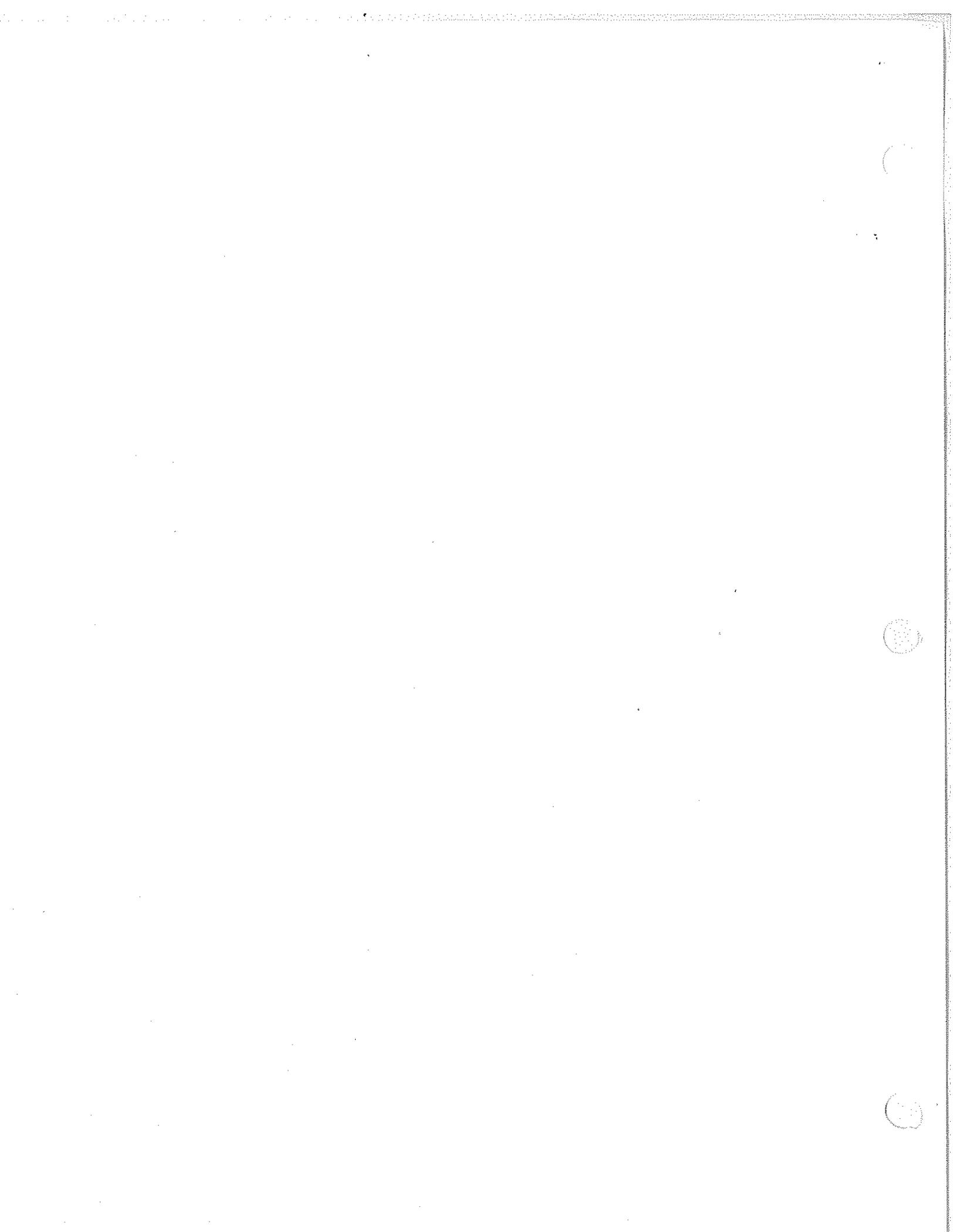
**CITY OF ADELANTO**

**GENERAL PLAN UPDATE**

**CITY OF ADELANTO  
PLANNING DEPARTMENT  
11600 AIR BASE ROAD  
ADELANTO, CALIFORNIA 92301**

**PATRICIA A. CHAMBERLAINE  
PLANNING DIRECTOR**

**PREPARED BY:  
MICHAEL J. WAGNER & ASSOCIATES, INC.  
2111 YUCCA AVENUE  
FULLERTON, CALIFORNIA 92635  
AUGUST 1994**



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## 1.0 INTRODUCTION AND SUMMARY

### 1.1 Introduction

This Program Environmental Impact Report (EIR) has been prepared in order to evaluate the environmental consequences resulting from the update and revision of the City of Adelanto General Plan. The EIR has been written in conformance with the California Environmental Quality Act (CEQA), and addresses those issues and concerns identified in the Notice of Preparation and responses to the Notice.

In terms of degree of specificity, the project addresses the impacts associated with implementing the revised General Plan goals, policies, and programs and the projects that are implemented pursuant to and in conformance with the General Plan Update. This document therefore, analyzes environmental effects of each project that will be undertaken to implement the General Plan Update. The analysis will consider the series of actions which may occur over the project's twenty year period in order to adequately assess the long-term impacts associated with the project.

The State EIR process requires the preparation of an objective, full-disclosure document to: (1) inform agency decision makers and the general public of the direct and indirect environmental effects of a proposed action, (2) provide mitigation measures to reduce or eliminate potential adverse impacts and, (3) identify and evaluate reasonable alternatives to the proposed project. This Program EIR also evaluates the general cumulative impacts of this Adelanto General Plan Update and the General Plans of the surrounding three cities, Victorville, Hesperia and Apple Valley. This EIR can be considered a "Program" EIR, in accordance with Section 15160 of the CEQA Guidelines. It will be used as a general framework against which subsequent activities will be examined in order to determine whether or not additional environmental documentation must be prepared. If later activities would have potential effects that were not examined in the Program EIR, then a new Initial Study, leading to either a Negative Declaration or an EIR, would have to be prepared. Conversely, if it is found that no new effects would occur, or no new mitigation measures would be required, the City can approve the activity as being within the scope of the original project (i.e., the General Plan Update and projects implemented in accordance with the General Plan Update), covered by this Program EIR, and no new environmental documentation will be required.

In order to evaluate land use and development issues adequately, it is necessary to have an inventory of the existing conditions in the City, including infrastructure capacities and environmental indicators. Therefore, included with the General Plan Update Elements, the City included environmental information, which

provides the inventory of existing conditions, describes the overall environmental characteristics of the City, and determines whether sufficient infrastructure capacities exist to accommodate anticipated growth.

This EIR has been prepared utilizing the information contained in the General Plan Update, and incorporates the appropriate Elements/Sections by reference, thereby eliminating the necessity of repeating the existing conditions information. Where necessary the existing conditions information is supplemented in this EIR. The EIR, also includes an independent analysis of the project impacts, including short-term and long-term effects, and cumulative impacts of other approved and/or proposed projects. Additionally, the EIR proposes mitigation measures to reduce any significant, adverse impacts associated with the proposed General Plan Update and any projects that conform to this General Plan Update. The City of Adelanto is the Lead Agency responsible for the preparation of environmental documentation in compliance with CEQA. Environmental consultation has been provided by Michael J. Wagner & Associates, Inc.

## **1.2 Summary**

A summary of the anticipated significant project impacts of the General Plan Update, proposed mitigation measures, and residual level of significance are indicated in Table 1-1.

The "No Project" alternative and the alternatives that propose less population would reduce the impacts discussed in this Program Environmental Impact Report. Alternatives that include more population, but which were rejected, would result in even greater impact to the environment.

Areas of controversy known to the City of Adelanto have been raised by the City of Victorville. The topics of controversy include (1) the availability of water, (2) the availability of low and moderate income housing, and (3) cumulative impacts. Each of these topics is discussed in detail in this Report.

The major issue to be resolved prior to implementation of the General Plan Update, beyond a population level of 25,000 persons within the project area, is the availability of water. This issue not only effects the City of Adelanto, but also all of the Victor Valley cities.

This Program Environmental Impact Report discusses all of the topical areas that should be considered in such a report. No topics were identified that were not potentially significant.

Table 1-1

SUMMARY OF SIGNIFICANT PROJECT IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE

IMPACTED AREA	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE
EARTH RESOURCES (Section 3.1)	<ul style="list-style-type: none"> <li>a. <u>Seismicity</u> Project area subject to potential seismic safety hazards</li> <li>b. <u>Liquefaction</u> Project area soils are potentially liquefiable.</li> </ul>	<ul style="list-style-type: none"> <li>a. New development to comply with seismic safety standards.</li> <li>b. Site specific soil studies and appropriate design measures may be required for new development.</li> </ul>	<ul style="list-style-type: none"> <li>a. Significant seismic.</li> <li>b. Less than significant.</li> </ul>
AIR QUALITY (Section 3.2)	<ul style="list-style-type: none"> <li>a. The impact from new development will create significant quantities of air pollutants.</li> </ul>	<ul style="list-style-type: none"> <li>a. 18 plus 36 mitigation measures recommended to reduce impacts, and Fugitive Dust Ordinance.</li> </ul>	<ul style="list-style-type: none"> <li>a. Significant particulates during construction. Significant with transport.</li> </ul>
WATER RESOURCES (Section 3.3)	<ul style="list-style-type: none"> <li>a. <u>Groundwater Quality</u> Potential for impacts to water quality from disturbance of any contaminated soils.</li> <li>b. <u>Surface Water</u> New development will impact absorption, and siltation.</li> </ul>	<ul style="list-style-type: none"> <li>a. Execute appropriate waste management plans permits.</li> <li>b. Drainage and erosion control plans will be prepared.</li> </ul>	<ul style="list-style-type: none"> <li>a. Less than significant.</li> <li>b. Less than significant.</li> </ul>
BIOLOGICAL RESOURCES (Section 3.4)	<ul style="list-style-type: none"> <li>a. 73,000 acres of desert habitat will be removed. 8,000 acres of Joshua Tree Woodland impacted.</li> </ul>	<ul style="list-style-type: none"> <li>a. 18 mitigation measures are included.</li> </ul>	<ul style="list-style-type: none"> <li>a. Less than significant for rare and endangered. Significant for habitat loss.</li> </ul>
NOISE (Section 3.5)	<ul style="list-style-type: none"> <li>a. George and new development will result in increased noise levels.</li> </ul>	<ul style="list-style-type: none"> <li>a. 41 mitigation measures are recommended.</li> </ul>	<ul style="list-style-type: none"> <li>a. Less than significant with Airport controls.</li> </ul>

Table 1-1 (Cont.)

SUMMARY OF SIGNIFICANT PROJECT IMPACTS, MITIGATION MEASURES  
AND LEVEL OF SIGNIFICANCE

IMPACTED AREA	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE
LIGHTING AND GLARE (Section 3.6)	a. Impacts from street lights, building materials and headlights.	a. Two mitigation measures reduce and redirect light.	a. Less than significant.
LAND USE (Section 3.7)	a. 73,000 acres will be urbanized. 32,196 acres are within existing City Limits. 17,196 acres are within Sphere of Influence, not including George AFB.	a. 59 mitigation measures are included.	a. Less than significant.
NATURAL RESOURCES (Section 3.8)	a. Construction will use fuels. 71,000 acres of open space will be lost.	a. Nine mitigation measures are included to reduce and conserve natural resources.	a. O.S. & Fuel consumption over Plan life is significant.
RISK OF UPSET (Section 3.9)	a. Potential for accidents and spills.	a. Four mitigation measures minimize and plan for accidents and spills.	a. Less than significant.
POPULATION (Section 3.10)	a. 52,000 residents by 2014. 156,000 residents at buildout.	a. Mitigations of other Sections.	a. Significant impacts discussed in other Sections.
HOUSING (Section 3.11)	a. 59,163 units at buildout, 19,712 units by 2014.	a. City will develop housing to meet needs and mitigations of other sections.	a. Significant impacts discussed in other Sections.
CULTURAL RESOURCES (Section 3.12)	a. 29 prehistoric and 26 historic archaeological sites in Planning Area	a. 10 mitigation measures proposed to reduce impact.	a. Less than significant.

Table 1-1 (Cont.)

SUMMARY OF SIGNIFICANT PROJECT IMPACTS, MITIGATION MEASURES AND LEVEL OF SIGNIFICANCE

IMPACTED AREA	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE
TRAFFIC AND CIRCULATION (Section 3.13)	a. 725,000 ADT in 2014.	a. 12 mitigation measures are proposed to reduce impacts.	a. Less than significant locally. Significant without regional facilities.
PUBLIC SERVICES (Section 3.14)	a. <u>Fire</u> By 2014, 50-55 full time firefighters and 4-6 new stations.	a. Five mitigation measures to reduce impact.	a. Less than significant
	b. <u>Police</u> By 2014, 65-70 full time police officers with support and facilities.	b. Four mitigation measures to reduce impact.	b. Less than significant.
	c. <u>Schools</u> By 2014, 16,000 students with 530+ total classrooms.	c. 10 mitigation measures to reduce impact.	c. Significant without funding.
	d. <u>Solid Waste</u> By 2014, 33,700 tons of waste per year.	d. 13 mitigation measures to reduce impact.	d. Significant without capacity.
	e. <u>Government</u> Needs increase with population.	e. No mitigation measures are proposed.	e. Less than significant.
UTILITIES (Section 3.15)	a. <u>Water</u> By 2014, 20,153 acre feet per year.	a. 15 mitigation measures to conserve water and Water Conservation Ordinance.	a. Significant beyond 25,000 population.

Table 1-1 (Cont.)

SUMMARY OF SIGNIFICANT PROJECT IMPACTS, MITIGATION MEASURES  
AND LEVEL OF SIGNIFICANCE

IMPACTED AREA	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE
UTILITIES (Cont.)	b. <u>Sewer</u> By 2014, 13 million gallons per day.	b. Ten mitigation measures to reduce impact.	a. Less than significant.
	c. <u>Drainage</u> Implement master plan, revise as necessary.	c. 12 mitigation measures reduce impact.	c. Less than significant.
	d. <u>Gas and Electricity</u> By 2014, 3 million KWH per day electricity and 12 million CF per day of gas.	d. Six mitigation measures reduce impact.	d. Less than significant.

## **2.0 PROJECT DESCRIPTION**

### **2.1 Project Location and Setting**

The City of Adelanto is located in the high desert region of San Bernardino County. The City is on the west end of the expansive Mojave Desert and on the eastern side of the San Gabriel Mountains, approximately 36 miles north of the City of San Bernardino (Figure 1). Other desert cities in the vicinity include Victorville to the east and south, Hesperia to the southeast, Apple Valley to the east, and Barstow to the northeast. George Air Force Base is located immediately adjacent to the City of Adelanto and forms the eastern edge of the community.

An important factor in Adelanto's growth potential is the enormous size of the Adelanto Planning Area. The Planning Area is comprised of approximately 80,000 acres, or approximately 20% of the land area of the Victor Valley (Figure 2). The Planning Area includes (1) all land within the City boundaries, (2) all land within the Sphere of Influence, (3) all of George Air Force Base, and (4) all land north to Shadow Mountain Road. This boundary is considered Adelanto's sphere of interest.

The City of Victorville has made application to LAFCO to reduce Adelanto's Sphere of Influence by 6,650 acres north of George Air Force Base. The City of Adelanto has conducted extensive planning for this area for the last 13 years and will actively contest the Victorville application.

The City is currently bisected by U.S. Highway 395, which runs north/south through Adelanto, providing excellent access to the regional highway network, including Interstate 15, Highway 18, and State Route 58. Surface travel time to the San Bernardino area is less than one hour.

Adelanto incorporated in 1972 and has experienced significant growth due to urban development. This growth has resulted in increased land area via several large annexations. Due to the changes in land development and State law, the Adelanto City Council determined the need for a major review of the current General Plan and to make appropriate revisions to accurately reflect the current development and anticipated growth patterns.

### **2.2 Project History and Objectives**

The proposed project includes the General Plan Update and all of the General Plan Elements. The proposed project also includes all subsequent projects that conform to the goals, policies and programs of the General Plan Update and the Elements, including, but not limited to, rezonings, use permits, variances, subdivisions, parcel maps, specific plans, redevelopment plans, surface mining and reclamation plans, public works projects, water facilities and acquisition, assessment districts, other financings, annexations, sphere of influence additions, and other similar activities.

Figure 1 REGIONAL LOCATION MAP

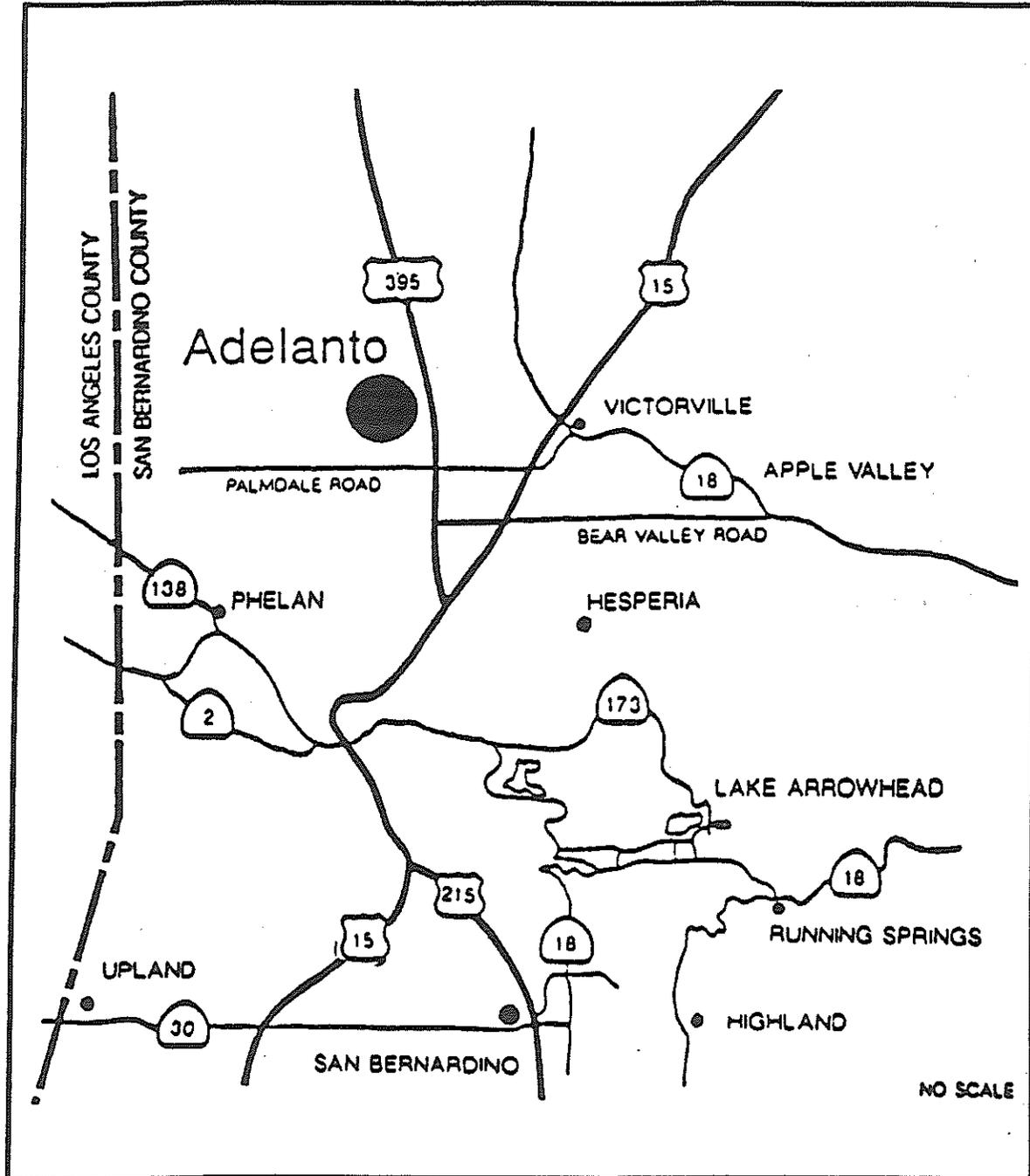
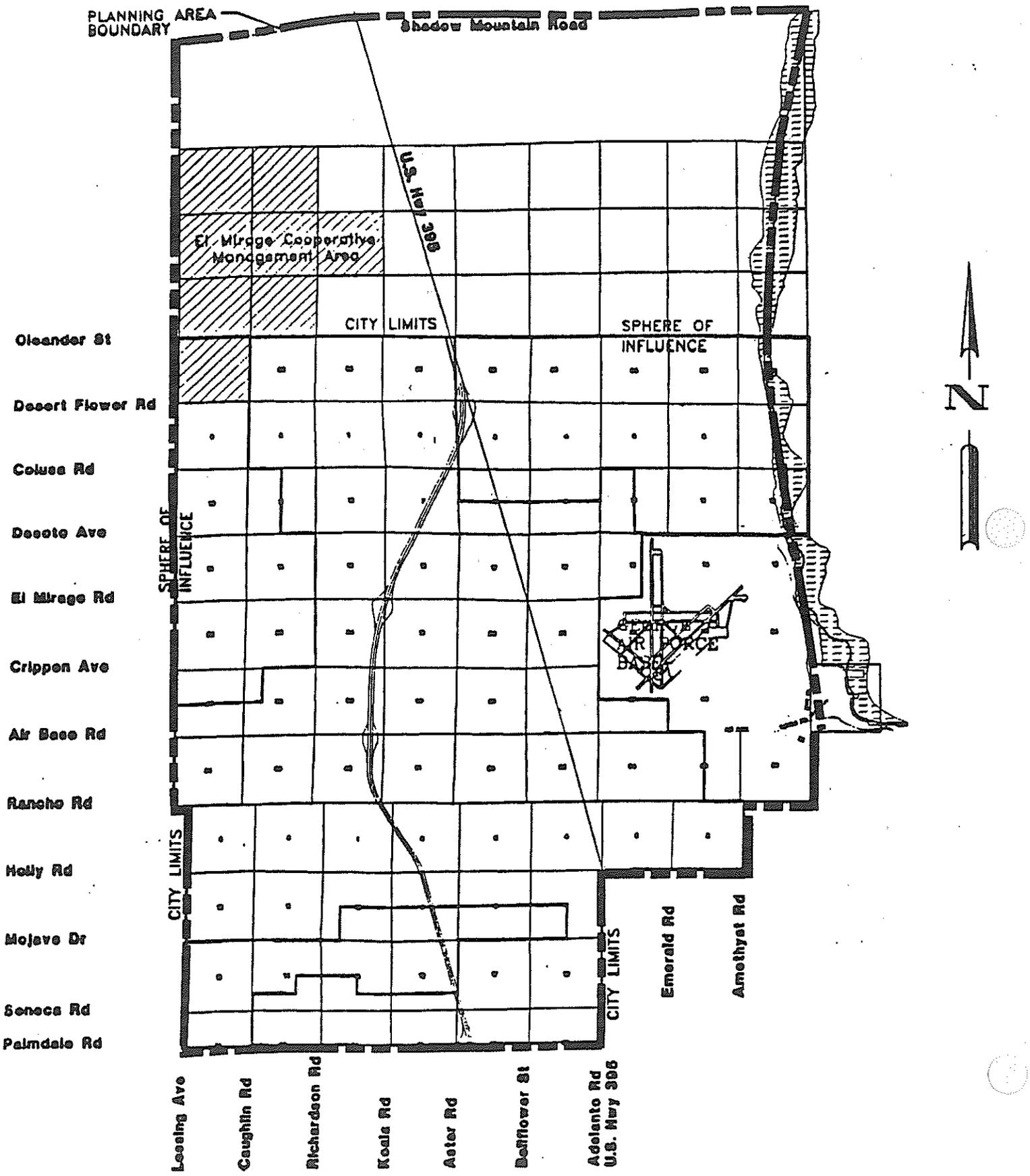


Figure 2 PLANNING AREA BOUNDARIES OF THE GENERAL PLAN UPDATE



The City of Adelanto first established a General Plan in 1973 which was prepared in accordance with the State of California's "General Plan Guidelines" which were in effect at that time. Since 1973 the State Guidelines have been revised, in 1980, and again in 1990. These revisions have addressed new state legislation which has altered the scope and content of local general plans.

The General Plan has been prepared in accordance with the requirements established under the Government Code of the State of California as presented in the State of California General Plan Guidelines, as amended by Chapter 1009, Statute of 1984, the Government Code requires that seven mandatory elements be included in a City or County General Plan. These elements are as follows:

Land Use	Conservation	Circulation
Noise	Housing	Safety
Open Space		

Since the proposed General Plan for the City of Adelanto is such a wide departure from the current General Plan, it shall include subjects which, in the opinion of the City, relate to the physical development of Adelanto. These subjects will relate to recreation, public services and facilities, historic preservation, and other development-related activity. Development standards for each land use district are incorporated herein. These standards are intended to act as a guide until the Zoning Code can be revised and adopted by the City Council.

The General Plan is visionary in its approach to land use policy and direction, relying on decisions that will be made by the City of Adelanto and others in regard to George Air Force Base, availability of water, etc. A 20 year planning horizon has been incorporated into this document in terms of population, employment, housing, circulation, and other issues.

The City of Adelanto has experienced a tremendous increase in economic growth. In the recent past the City has initiated numerous industrial park developments which have created a growing job base. This job base and the availability of inexpensive land has stimulated the development of "affordable" single family homes and other residential product types. This is presently occurring in many areas of the City and is anticipated to continue during the 20 year planning period.

In accordance with the State of California General Plan Guidelines and Government Code Section 65302 (c), the City has prepared a Housing Element. The Element was adopted December 14, 1993. On May 4, 1994 the State of California, Department of Housing and Community Development determined that "the City of Adelanto's adopted housing element update is now in full compliance with State housing element law (Article 10.6 of the Government Code)." The Element is included as an integrated part of this General Plan.

Recent changes in State law, have established new requirements to be met in the General Plan, such as the need to specify standards for population density, building intensity, and a number of items to be included in the Housing Element, such as the need to provide affordable housing and allocation of facilities for the homeless.

This General Plan document shall be utilized as a working development guideline for all projects which will occur within the General Plan Planning Area. The Development Standards will be considered as a guidelines for revision to the Zoning Code.

The General Plan will serve as a base document for implementation programs including zoning ordinances, specific plans, development plans, area plans, and other permit processes. In addition, the General Plan provides guidelines for the preservation and conservation of open space and natural resources, biotic habitats, as well as protection of life and property from natural and man-made hazards. It is a document which will lead the City of Adelanto into the 21st Century with a firm grasp of the needs of the residents, the Planning Commission, and the City Council, as well as the development community.

With such a dynamic climate in the high desert and the City of Adelanto, it is anticipated that the City will grow, building on past success and the vision of the future.

### **2.3 Project Characteristics**

The goals of the City of Adelanto are statements of the commitment of the Planning Commission, City Council, and Staff to establish the City as a leader of the high desert in regard to public policy and development planning. This General Plan is intended to act as a guide to future development and will incorporate a broad range of technical information that can be used by the development community, as well as, the citizens of Adelanto. This document consolidates the General Plan policies and requirements in order to create the framework and guidelines that will turn the goals into reality.

#### **City Goals**

Many public forums, presentations, hearings, and discussions have taken place throughout this planning effort. The ordinary form of urban development applies to a certain extent, but Adelanto is on the verge of setting new standards. The opportunity of the George AFB closure has generated tremendous momentum for the General Plan and the City is committed to the incorporation of the airport into the General Planning process. This commitment is part of the following basic goals, which are followed by specific objectives that suggest approaches toward achieving these goals.

**Goal 1:** Take advantage of the opportunity of the closure of George AFB and to maximize its potential by converting it into an aviation facility capable of accommodating Southern California's long term aviation needs. This

concept is a primary means of creating much needed jobs for the residents of Adelanto and the Victor Valley.

- Goal 2: Develop a General Plan and Development Standards that efficiently facilitates changes in land use policies. The Development Standards will form the basis of a revised Zoning Code, which will be formulated subsequent to the adoption of the General Plan. The General Plan document will be used as a "Development Manual" that can be used to assist developers and the planning staff of the City in the development approval process, including development standards and design guidelines for implementation of commercial, residential, business, industrial, and public works projects. This manual will function hand in hand with the new land use map which is included as part of the General Plan document.
- Goal 3: Create a balanced relationship between the number of jobs that occur within the City and the number of workers that reside in the nearby vicinity of those jobs. This balanced growth is of utmost concern to planning agencies in Southern California and is intended to lessen the environmental impacts created by long distance commuter travel via the automobile.
- Goal 4: Promote the continuation of the City-sponsored Industrial Park developments that have created a strong economic base for Adelanto. Additional industrial park locations will be the focus of the City during the next several years and will continue to generate jobs for the residents of the City and the High Desert.
- Goal 5: Take advantage of the availability of vacant land to incorporate a parks and open space system throughout the City. This system should link all of the current and proposed parks locations together via an open space/trails network. This network will be designed in conjunction with the master planned drainage channels that flow through Adelanto.
- Goal 6: Continue the implementation of redevelopment projects under the Adelanto Redevelopment Agency or a similar entity.
- Goal 7: Formulate a cohesive plan on the future relocation of incompatible land uses within the Airport Development District Area to other areas of the City. This plan will assist the City, as well as residents and businesses to relocate in the most cost effective and least painful manner. The program should incorporate alternative solutions to the implementation of the relocation process as well as community workshops designed to gather public input for how this process will be achieved.

## Objectives

Special objectives of immediate concern to the City that must be implemented to accomplish the desired goals include:

1. Adopt the new General Plan and certify the associated Program Environmental Impact Report which the development community and residents can use to understand the policy directions of the City. The General Plan Update will provide the guiding criteria for Precise Plans, Development Plans, Specific Plans, and Area Plans that can be created easily and efficiently with regard to design standards and site requirements.
2. Determine the "buildout" requirements for the roadway system in order to design and regulate community circulation routes and incorporate regional transportation facilities to assure a balance with land use intensity patterns. Emphasis will be placed on "through" vehicular traffic to the freeways and expressways, reserving surface streets for local traffic. Regional facilities adjacent to the freeways and "expressways will be designed with good access, appropriate "stacking distance", and adequate visibility for both visitors and local citizens. Alternate forms of transportation will be encouraged to reduce the importance on the automobile for local and regional travel. Pedestrian, equestrian, and bicycle parkways will be incorporated to link the City's existing and future activity centers.
3. Designate open space areas, as rapidly as possible, to assure that adequate linkage can be maintained between the City's activity centers, parks, and schools, creating an open space beltway throughout the City. The entrances to the City, streetscapes, parks, and public facilities such as the civic center and school sites should set the standards for quality development and maintenance throughout Adelanto. To the extent feasible, median islands should be planted and border area planting areas should be increased. Use of xerophytic (drought tolerant) landscape materials are to be emphasized. School children, public officials, and community organizations should be involved in the planting and care of trees at schools and playgrounds and families should be involved in neighborhood and park development programs.
4. Promote the City's Environmental Performance Standards to assure that the above efforts are meaningful and not defeated by conflicting actions and constraints. Business and industry must be regulated to contain and control pollutants generated by their operations. These industries shall be required to provide landscaping for areas which front public right-of-ways or dissimilar land uses. Environmental mitigation techniques are to

be implemented for uses which may tend to stress the natural and built environment.

5. Increase usable open space by establishing a park land acquisition program/policies and optimizing streets and utility right-of-ways. Linkage of all planned activity centers is encouraged by the Land Use Plan and must be aggressively pursued by the City in order to protect the viability of this concept.
6. Prevent "strip" commercial development along arterial streets by creating activity centers which are conveniently located, provide a concentration of goods and services, and are designed to blend with and complement the neighborhoods they serve. Strict signage and lighting requirements are essential.
7. Maintain a realistic Capital Improvement Program. Seek grants and special funding to hasten the development of necessary public improvements. Continue to seek methods to assure high quality development and maintenance with equitable distribution of costs and responsibilities.
8. Work with neighboring communities to resolve local problems such as health, safety, education, circulation, local ecology, land use and zoning where the actions of one agency affect the adjoining jurisdiction. Work with San Bernardino County to resolve regional problems such as jobs/housing, air quality, noise, solid waste, mass transit, water supply/quality, and other issues. Work with Caltrans to develop a quality design of the proposed Freeway 395 including berms, walls, and landscaping to reduce the negative impacts imposed by such activity.
9. Work with the Airport Authority and the San Bernardino Airport Land Use Commission to help provide solutions that will mitigate the impact of the airport on the surrounding communities. The design of the ultimate facility must be state-of-the-art and should be reviewed by the City to assure that the correct image of Adelanto is achieved. Special attention should be placed on the entries to the airport and should characterize a quality image for the City and the setting.

The objectives and contents of the individual Elements of the General Plan Update are summarized below.

### **2.3.1 Land Use Element**

The Land Use Element is perhaps the single most important element of the General Plan, and the accompanying Land Use Map provides the framework around which the

other elements are constructed. The Land Use Element indicates the location and extent of development in the City, and areas subject to development constraints. The element contains standards for population density and development intensity. The Land Use goals are intended to provide long-range guidelines toward which the City will proceed through the normal course of day-to-day planning, decision-making and administrative action. The supporting objectives will help to define the course of action the City will take in implementing these goals, and will provide a basis for policy decisions. (The Goal designations refer to the General Plan Goals, i.e. RE is Residential, CLU is Commercial, ADD is Airport Development District, AP is Airport Park, MI is Manufacturing Industrial, OPC is Open Space and SPA is Specific Plan Area). The general goals set forth in the Land Use Element update include:

- RE 1: To encourage a range of residential product types and price ranges.
- RE 2: To establish healthy, livable neighborhoods with adequate support uses including parks, schools, and neighborhood commercial centers.
- RE 3: Assure adequate infrastructure, circulation, and public services adequate to serve the residential developments.
- RE 4: To maintain a positive, high quality community image within the residential districts.
- CLU 1: Provide adequate commercial facilities to satisfy the business and service needs at the sub-regional, community and neighborhood levels.
- CLU 2: Assure provision of infrastructure, circulation and public services adequate to serve commercial areas.
- CLU 3: Minimize commercial intrusion on residential areas.
- CLU 4: Assure that compatible commercial land uses are provided within the overflight areas surrounding the Airport.
- ADD 1: Assure that the ADD is capable of containing and supporting the development of a major airport facility that will accommodate Southern California's current and future unmet air transportation demand.
- ADD 2: Assure the development of functional and attractive design of all structures, facilities, and landscaping located within the ADD.

- ADD 3: Assure that the ADD can function properly and effectively without creating severe adverse impacts on the surrounding community.
- AP 1: Provide a continued use of the airfield for private aviation.
- AP 2: Assure provision of infrastructure, circulation and public services adequate to serve new uses within the AP.
- AP 3: Continue to permit residential development within the AP Zone.
- MI 1: Assure that the manufacturing/industrial development in the City continues to thrive.
- MI 2: Assure the provision of infrastructure, circulation and public services adequate to serve the MI district.
- MI 3: Minimize MI intrusion on surrounding residential neighborhoods.
- MI 3: Minimize MI intrusion on surrounding residential neighborhoods.
- MI 4: Attempt to plan for the inclusion of mass transit systems linking residential areas to the Manufacturing/Industrial district.
- MI 5: Encourage the introduction of "clean industry" to the Manufacturing/Industrial district and Light Manufacturing district.
- OPC 1: Provide a comprehensive open space system throughout the City utilizing the drainage courses that are identified in the Master Drainage Plan for Adelanto.
- OPC 2: To provide the residents with quality public facilities that will keep pace with projected growth.
- OPC 3: Encourage the development of parks and open space facilities that are of high quality design and construction to promote the health, safety, and welfare of the citizens.
- OPC 4: Encourage development of public and semi-public facilities including prisons, auto racing, moto-cross, etc., in compliance with commonly accepted environmental standards.
- SPA 1: To provide for the incorporation of a future specific plan district within the Planning Area.

### 2.3.2 Housing Element

The purposes of the Housing Element are to identify local housing problems and the necessary mitigation measures to meet housing needs for all economic segments of the community. Provision of adequate housing is a goal of state housing policy with which local jurisdictions must comply. The Housing Element update builds upon the foundation provided by the existing Housing Element, including the following goals:

## CONSTRUCTION

### Rental Ownership Scattered Site (5 Units)

This program will encourage renters to purchase affordable housing scattered throughout the City. With interest rates at a 20 year low and housing prices as low as \$68,000 the City will encourage renters to purchase existing available new single family homes located in the City. As additional CDBG Funds become available, as a result of population growth, they may be used, if necessary to supplement this program. Because the ownership limitation is \$35,000-\$40,000 for Very Low Incomes the program will probably encourage the purchase of existing mobile homes in the City. The City will also investigate the availability of Federal HOME funds through the County of San Bernardino.

Responsible Agency: City of Adelanto

City Role: Encourage Ownership, Investigate Supplemental Down Payment Assistance

Financing Source: Future CDBG, HOME

Time Frame: 1994-1996

### Multi Family Units (10 Units)

This program will provide 10 units of multi family housing within the City. Two units will be Low Income and 8 units will be Very Low Income. Existing multi family land uses in the City are developed on approximately 125 acres. Vacant, water and sewer served (within 1/2 mile) properties outside the 65 CNEL Zoned for multi family development total over 1,000 acres. Very Low Income rentals for a two person family are \$360 per month or less and \$576 for Low Income households. At this level local developers can develop market rate rental housing to meet the needs of this program. Because of the existing high vacancy rate the market may not support this program at this time. To assist public assistance relievers the City will request additional Section 8 Certificates from the County of San Bernardino.

Responsible Agency: City of Adelanto

City Role: Encourage Developers, Continue Existing Zoning, Request Additional Section 8 Certificates

Financing Source: Market Rate Financing, Section 8

Time Frame: 1994-1996

**Density Bonus Program (30 Units)**

This program will provide 30 units of rental housing within the City. Five units are expected to be Low Income and 25 units should be Very Low Income. This program will consist of allowing and encouraging developers to construct high density projects currently permitted by the Zoning Code. The current Zoning Code permits up to 16 units per net residential acre which is substantially higher than other areas in the region.

Responsible Agency: City of Adelanto  
City Role: Inform Developers at Counter  
Financing Source: Market Rate Financing  
Time Frame: 1994-1996

**First Time Homebuyers (30 Units)**

This program will assist 30 renters to become homeowners within the City. The City will work with relocates and developers to provide down payment assistance to five units of Low Income and 25 units of very Low Income. This program will consist of relocation of renters from within the 65 CNEL Noise Contour of the major airport that is to be developed adjacent to the City of Adelanto. State and Federal Relocation Guidelines will be followed.

Responsible Agency: Airport Authority (to be formed), City of Adelanto  
City Role: Negotiate Funding, Relocation Assistance Program  
Financing Source: FAA, Airport Authority, Landing Fees  
Time Frame: 1995-1996

**Affordable Housing Market Rate (50 Units)**

This program will provide 50 units of ownership housing within the City. All fifty units will be Low Income. This program will consist of encouraging developers to construct affordable housing including single family homes, modular housing and trailer parks. Approximately 1,000 acres of appropriately zoned vacant land with available water and sewer service are available for multi-family developments. Over 9,500 single family units have been tentatively approved of which 50 percent will be in the price range of Low Income households.

Responsible Agency: City of Adelanto  
City Role: Inform Developers at Counter of Demand  
Financing Source: Market Financing  
Time Frame: 1994-1996

**REHABILITATION**

**Loans, Grants, Community Cleanup (115 Units)**

This program will assist 115 units of rental and ownership housing within the City. Thirty five units will be Low Income and 80 units will be Very Low Income. This program will consist of City sponsored, with support from other community groups, for clean up and painting of units throughout the City. As the population of the City grows the CDBG entitlement will also grow and these funds will be used to supplement and support the program. Senior citizen and handicapped households will be given high priority. The City is also investigating the possibility of purchasing distressed apartments and rehabilitating them for Low and Very Low Income households. Redevelopment funds would be used for acquisition and rehabilitation. Other funds from the County Housing Authority and the availability of Mortgage Revenue Bonds will also be investigated.

Responsible Agency: City of Adelanto

City Role: Organize Paint and Clean-up Day, Acquire Multi family Property

Financing Source: Citizen Participation, CDBG, Redevelopment, County  
Housing, Mortgage Revenue Bonds

Time Frame: 1994-1996

**Code Enforcement (43 Units)**

This program will rehabilitate 43 units of rental and ownership housing within the City. This continuing program is administered by the Assistant Redevelopment Director and consists of proceedings to enforce the Municipal Code of the City. This program usually involves absentee landowners who have neglected their properties.

Responsible Agency: City of Adelanto

City Role: Notify Owners of Action

Financing Source: General Fund for Administration, Owner Financing for  
Rehabilitation

Time Frame: 1993-1996

**CONSERVATION****Weatherization Program (30 Units)**

The City will pursue the use of energy conservation measures in Very Low, Low and Moderate Income households through a "weatherization" program. The City will encourage the utility companies that provide these types of programs.

Responsible Agency: City of Adelanto, Utility Companies

City Role: Encourage Utility Companies

Financing Source: Special Utility Funding Programs, County Winterization Programs

Time Frame: 1994-1996

## EDUCATION

### Public Information Program

The City will provide a public information program to residents of the housing programs described above through a variety of distribution methods including public discussion at City Council meetings, public hearings on the Housing Element and General Plan Update, press releases to the local newspapers and biannual inserts in the water billings informing owners and renters of the housing programs that are available. Information on the housing programs will also be available to residents at the public counter at City Hall and from City Planning Staff.

Responsible Agency: City of Adelanto

City Role: Meetings, Public Counter

Financing Source: General Fund

Time Frame: 1993-1996

### Fair Housing Program

The City will make available to the public at the Information Counter in City Hall copies of the Fair Housing (HUD 1260 - FHEO) flyers. Copies of this brochure will also be made available at the library, community center, police station and the fire stations. Once per year notice of the Fair Housing information will be included in the City water billings. Fair Housing Month is April.

Responsible Agency: City of Adelanto

City Role: Distribute Fair Housing Brochures in Public Places, Water Bill Insert

Financing Source: General Fund

Time Frame: 1994-1996

## ANNUAL REVIEW OF HOUSING ELEMENT

The Planning Commission and the City Council will conduct an annual review of the Housing Element Programs. The review will include the analysis of residential development permits and completion reports, an update or inventory on approved projects, the annual estimate of population from the State Department of Finance and a vacant land and Zoning Map survey.

The Housing Element has already received environmental clearance and has been adopted by the Adelanto City Council. It is included in this Program Environmental Impact Report to make the General Plan Update comprehensive and to relate to any

Subsequent Projects. In the event the prior adoption and environmental documentation is successfully challenged, this EIR includes the Housing Element and will be used in place of the prior environmental documentation.

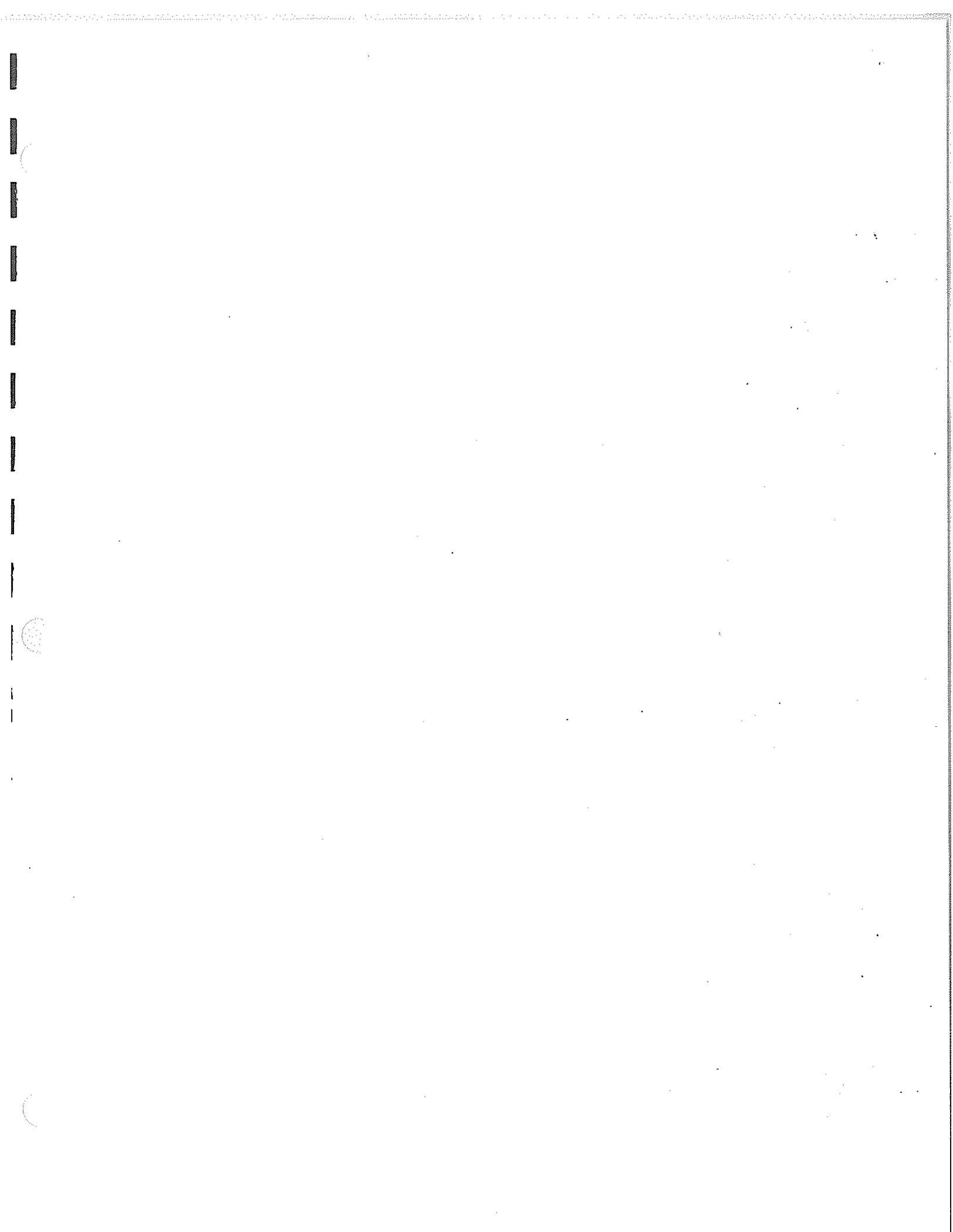
### **2.3.3 Circulation Element**

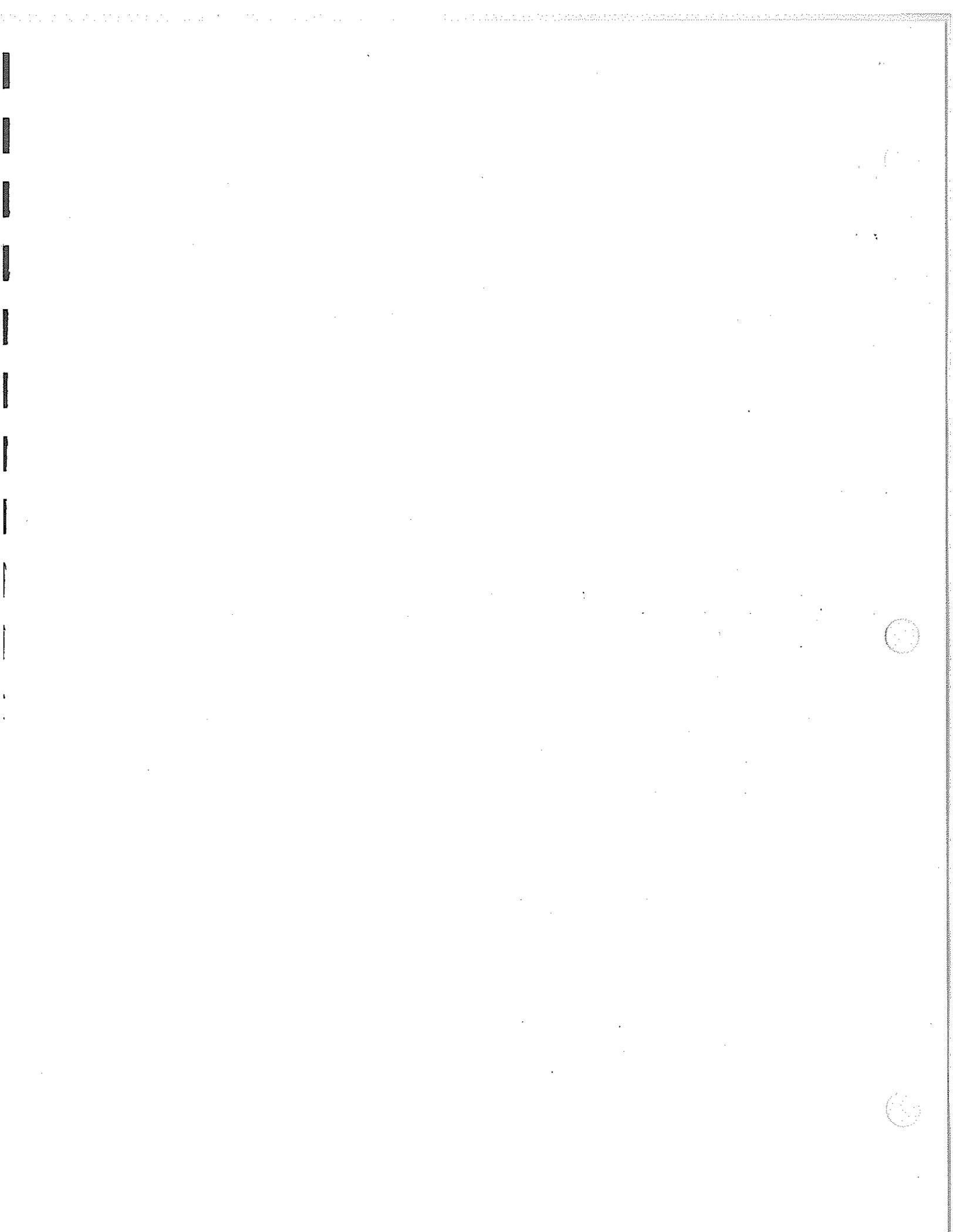
The Circulation Element has been designed to insure internal consistency with the proposed Land Use Element, and allows for the integration of traffic information into the formal General Plan Update and adoption process. In addition, it integrates regional policies required under the Congestion Management Program (CMP). The general goals of the Circulation Element include:

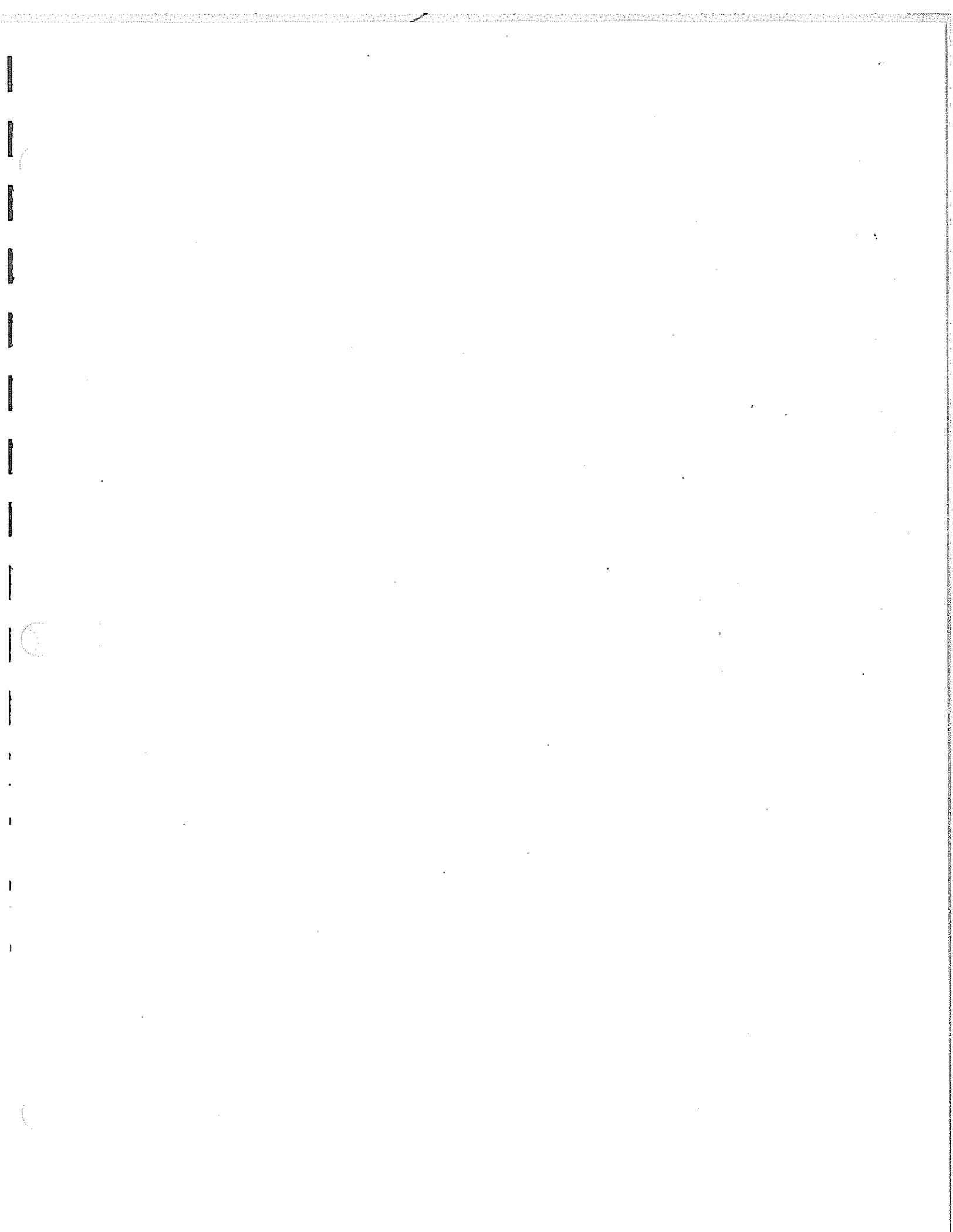
- CIR 1: Improved circulation system that accommodates the projected growth of the City/community.
- CIR 2: Enhanced quality of the visual corridor through Adelanto.
- CIR 3: Adequate capacity of roadways to handle buildout of the entire City.
- CIR 4: Safe, durable and aesthetic roadway construction design that will provide a long-lasting surface for vehicular transportation.
- CIR 5: Improved access/visibility to Adelanto's primary commercial, business and industrial sectors, including a new major airport.
- CIR 6: Integrated street and signage design criteria.
- CIR 7: Improved east/west and north/south circulation through Adelanto.
- CIR 8: Coordinated transportation master plan for Adelanto and surrounding communities.
- CIR 9: Long-range outlook for the incorporation of mass transit, conventional rail, high speed rail and air transportation needs of the High Desert and Southern California.

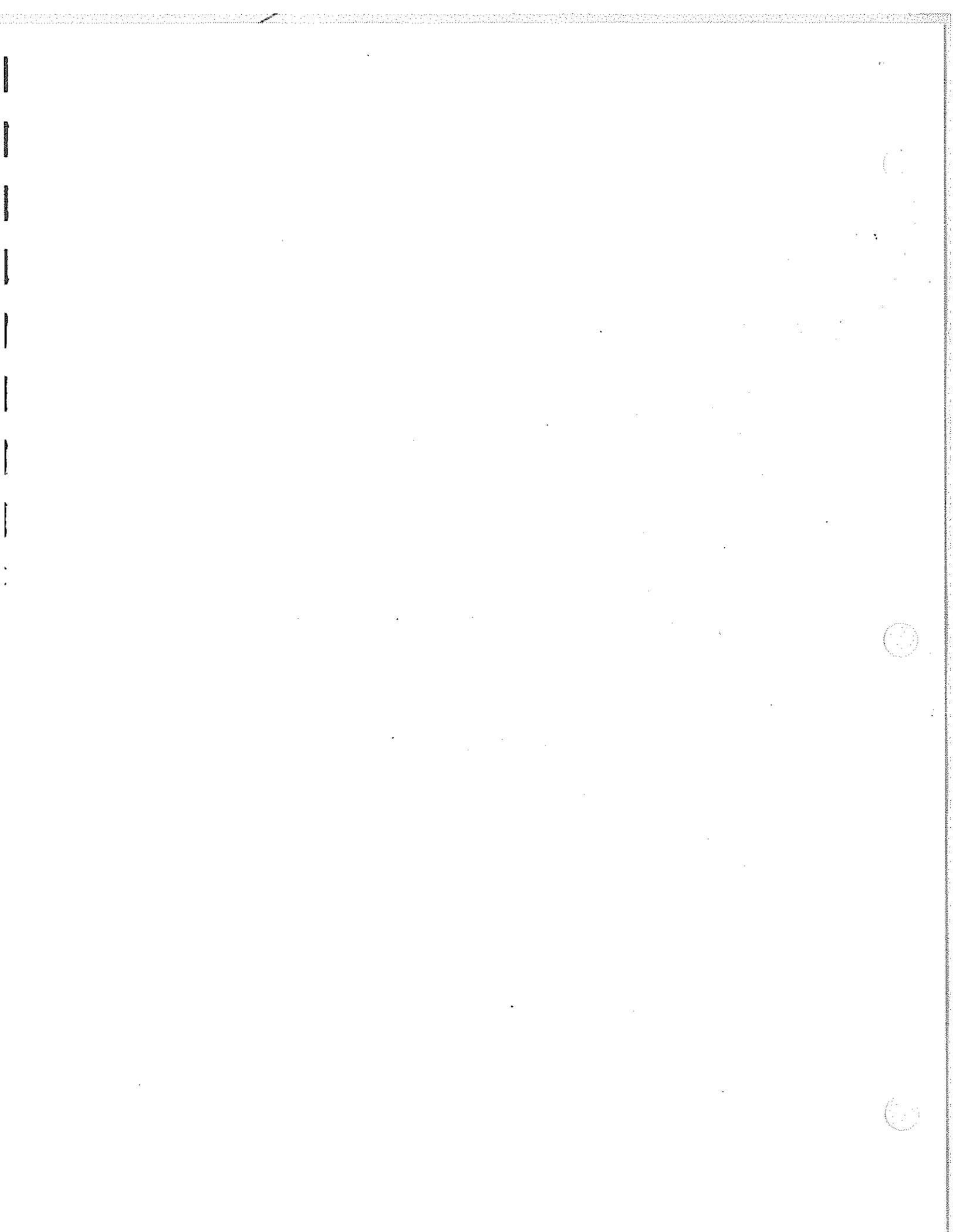
### **2.3.4 Parks and Recreation Element**

The Parks and Recreation Element identifies open space areas in the City, including existing parks, utility easements, and open space reserved for public recreation. This element also includes standards for existing and new parks and for landscaping and other improvements in new developments. The general goals of the Parks and Recreation Element include:









- REC 1: To provide a minimum of 3 acres of parkland and recreational facilities for every 1,000 residents in Adelanto. This parks system will include a combination of local parks, trails, school playgrounds and other public facilities which meet part of the need for local recreational facilities.
- REC 2: Continue to utilize a number of strategies in financing future park activities and development.
- REC 3: To provide readily accessible recreational facilities to meet the needs of persons of all ages, physical conditions and socioeconomic situations.
- REC 4: To provide an adequate system of multi-use trails.

### **2.3.5 Conservation/Open Space Element**

The Conservation/Open Space Element addresses a wide-range of issues that relate to the conservation, preservation, or management of natural resources and open space areas in the City. The Conservation/Open Space Element identifies goals and policies that are consistent with regional programs dealing with air pollution and solid waste management, and open spaces including the following:

- BIO 1: To protect and conserve its natural, cultural and historic resources to the greatest extent possible.
- BIO 2: To assure adequate protection and conservation of all native vegetation and wildlife habitats within the Planning Area.
- BIO 3: To plan for the most energy efficient use of natural resources for activities which take place within the Planning Area.
- BIO 4: To provide recreational and open space facilities to meet the needs of all segments of the community for both active and passive recreational uses.
- BIO 5: To provide pedestrian access to all parks and open space areas utilizing linear parkways and the natural and man made drainage corridors that traverse the City.
- CUL 1: To preserve any known or undiscovered archaeological sites and/or artifacts which may be present within the Planning Area.
- CUL 2: To assure that proposed development policies will not eliminate any significant archaeological or historic resources.

- CUL 3: To provide a mechanism for the identification and preservation of archaeological or historic resources within the Planning Area.
- CUL 4: To provide to the extent feasible cultural facilities (libraries, museums, historic sites, etc.) within the Planning Area to meet the needs of new and current residents of Adelanto.
- NR 1: To preserve and protect the area's renewable and non-renewable resources to the maximum extent possible.
- NR 2: To reduce the rate of consumption per capita of renewable and non-renewable natural resources which are located within and outside the Planning Area.
- AQ 1: Support local and regional efforts to improve air quality throughout the region.
- AQ 2: To assist in improving air quality in accord with the San Bernardino Air Quality Attainment Plan.
- AQ 3: Implementation of control measures which apply to Adelanto as an employer and contractor.
- AQ 4: To reduce air pollutant emissions to the greatest extent feasible by monitoring air quality mitigation measures developed for new development projects.
- WQ 1: To provide, extend, maintain, and improve a safe and efficient wastewater collection system and treatment facilities that maximize water recharge and minimize the consumption needs and prevents groundwater contamination.
- WQ 2: To assure that an adequate supply of water is made available to residents and businesses without the depletion of local (Victor Valley) groundwater sources.
- WQ 3: To assure that storm runoff in industrial sectors of the Planning Area does not contaminate the groundwater resources of the Planning Area.
- OS 1: To provide a comprehensive open space system throughout the City utilizing existing drainage courses.

- OS 2: To preserve the natural open space areas in their existing state, while providing public access and recreational needs.

### **2.3.6 Noise Element**

The Noise Element describes the existing and future noise environments, based on existing and projected traffic and land use patterns, and establishes policies and standards aimed at reducing noise levels and/or mitigating the effects of noise. The goals of the City of Adelanto, in relation to noise, are:

- NS 1: To reduce the number of persons and land uses exposed to excessive noise levels within the Planning Area.
- NS 2: To provide a safe and comfortable living environment for new residential, business, and commercial developments in Adelanto which are minimally affected by noise.

### **2.3.7 Safety Element**

The Safety Element addresses local safety and health issues, including the identification of those areas within the City that will be subject to seismic hazards, fire, flooding and other potential risks and hazards. The Safety Element focuses on policies that will be effective in reducing the damaging effects of those hazards that cannot be controlled, and policies to mitigate the occurrence of hazards, where this is possible. Finally, the Safety Element establishes goals, policies, implementation programs, and standards that will be effective in reducing the potential loss of life, injury, and property damage in the event of a major disaster, including the following:

- S 1: To preserve and protect the overall health, safety, and well being of the community's residents, businesses, and visitors.
- S 2: To minimize potential hazards to public health, safety and the well being of the community resulting from natural and man-made hazards.
- S 3: To provide assurance to the community that all solid waste and hazardous materials are disposed of according to all applicable local, state and federal standards.

### **2.3.8 Public Facilities Element**

An inventory and analysis of existing infrastructure and constraints to development was conducted, including but not limited to sewer, water, drainage, schools and public facilities. Long- and short-range Capital Improvement Programs are recommended that will be necessary to serve development within the area. The potential sources of

funding, both private and public, is also included in this Element. The general goals of this Element include:

- PF 1: The City shall encourage and participate with the local water authorities to:
- a. Achieve a balanced hydrological system in terms of withdrawal and replenishment of water from groundwater basins.
  - b. Continue and expand the importation of water to sustain the existing population and projected growth; actively support the completion of the State Water Project improvements in the Sacramento/San Joaquin Delta and to the Colorado River Aqueduct System, and the use of water transfers and water marketing techniques.
  - c. Achieve a reduction in the existing consumption of water by implementing conservation measures prior to approving new development in areas experiencing water supply shortages.
  - d. Plan and construct new water distribution and treatment systems on the basis of the City's adopted growth forecast.
  - e. Maximize the use of existing water resources through conservation programs and efficient ground and surface water management programs.
  - f. Improve and rehabilitate water distribution systems to prevent losses from leakages and to maximize efficient water use.
  - g. Achieve conservation, reclamation, reuse, and other refinements in water management practices as an essential part of all water supply programs, whether in urban, rural, or agricultural sectors.
  - h. Protect and maintain high quality water with the objective being the protection of surface and groundwater from degradation, with drinking water being the highest and most beneficial use.
  - i. Achieve the approval of new development conditioned on the availability of adequate and reliable water supplies and conveyance systems.
- PF 2: The City shall encourage and participate with VVWRA and other local responsible agencies to:

- a. Require wastewater collection and treatment systems which are consistent with the protection of public health and water quality.
  - b. Promote activities/measures that facilitate the reclamation and reuse of wastewater.
  - c. Plan and construct new wastewater treatment and collection facilities on the basis of the City's adopted growth forecast and in conjunction with new development.
- PF 3: The City shall encourage the development and construction of a local flood control system to:
- a. Protect life and property from flood hazards.
  - b. Allow for joint use facilities for wildlife migration and recreational corridors.
  - c. Protect the quality of storm waters from urban runoff.
- PF 4: Work with the School District to:
- a. Provide quality education to all students.
  - b. Achieve unification in order to maximize bonding capabilities.
  - c. Expand service to K - 12 to provide a full range of educational opportunities within the Adelanto School District.
  - d. To achieve the cooperation between the School District and all affected communities to best meet the needs of all agencies within the School District boundaries.

### **2.3.9 Community Design Element**

The goal of the Community Design Element of the General Plan is to establish a set of policies as to the appearance of the City of Adelanto both now and in the future. These policies are intended to relate the physical elements of the community in a way that produces an overall environment that is visually pleasing, as well as efficient and functional.

### **2.4 Subsequent Projects**

Projects that conform to the goals, policies and programs of this General Plan Update and also conform to the requirements of the Adelanto Zoning Code and the Standard

Conditions of the City including residential projects, subdivisions, commercial projects, industrial projects and capital improvement projects including water facility projects and water acquisition rights are intended to be included in this Program Environmental Impact Report.

## **2.5 Intended Use of the Environmental Impact Report**

The City of Adelanto, as the Lead Agency, will use this Program EIR in consideration of the proposed General Plan Update, pursuant to Government Code Section 65759 and subsequent projects that conform to the goals, policies and programs of the General Plan Update and the Elements, including, but not limited to, rezonings, use permits, variances, subdivisions, parcel maps, specific plans, redevelopment plans, surface mining and reclamation plans, public works projects including water facility projects and water acquisition rights, assessment districts and other financings, annexations, additions to the sphere of influence, and other similar activities. This document will also provide environmental information to other agencies which are affected by, or are likely to have an interest in the project and subsequent activities. These agencies may include, but are not limited to, California Department of Transportation (CALTRANS), California Air Resources Board (CARB), State Department of Water Resources (DWR), California Environmental Protection Agency (CalEPA), Public Utilities Commission, Regional Water Quality Control Board, Lahontan Region (RWQCB), Mojave Desert Air Quality Management District (MDAQMD), County of San Bernardino, Departments of Public Works and Health Services, Southern California Association of Governments (SCAG), the Local Agency Formation Commission (LAFCO), San Bernardino County, and other surrounding jurisdictions.

These Agencies may use this Program EIR in their approvals of projects/permits within the Planning Area.

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These Agencies may use this Program EIR in their approvals of projects/permits within the Planning Area.

### 3.0 ENVIRONMENTAL ANALYSIS

This section of the Program EIR is intended to describe the existing setting of the project area, to analyze the aspects of the environmental impacts of the Adelanto General Plan Update, and to recommend general mitigation measures that reduce significant impacts to levels of insignificance. Unavoidable adverse impacts and constraints on the project implementation will also be identified.

#### Existing Setting

In furtherance of the CEQA Guidelines to reduce paperwork (Section 15006), the existing conditions information contained in the General Plan Elements, are hereby incorporated by reference into this Draft Program EIR. As directed in Section 15150 of the CEQA Guidelines, the incorporated part of the referenced document will be briefly summarized in the appropriate section of this Program EIR, and the source of the incorporated data will be indicated. The referenced documents are available for public review at the City of Adelanto, Planning Department, 11600 Air Base Road, Adelanto, California.

#### Environmental Impacts

Quantification and analysis of the future and ultimate "worst case" land use scenario for the project area forms the basis for estimating the environmental impacts of the project. The Program EIR will analyze the impacts of the proposed land use plan based on the "maximum reasonable" future development, long range economic potential, and future estimates of densities. The methodology for developing this information is as follows:

1. Based upon the proposed land uses within the Planning Area, the various environmental impacts such as traffic, sewage, and water and power consumption, are estimated using standard use/generation factors. Many impacts are estimated at the year 2014, the 20 year time frame of the General Plan. Some impacts are also estimated for complete "buildout" of the General Plan Consultations with economists and review of current commercial and industrial absorption rates indicate General Plan "buildout" may not be achieved for 70-80 years, if then.
2. The total of all projects within the Adelanto Planning Area together with the impacts of the General Plans of the surrounding cities of Victorville, Hesperia and the Town of Apple Valley are then analyzed as the cumulative impacts which can reasonably be expected to occur. Only topics of regional concern will be evaluated.

#### Mitigation Measures

The mitigation measures contained in this EIR are those policies contained in the General Plan Update. Many of the mitigation measures contain phrases such as "will encourage", "will promote", "will consider", "will evaluate", "will support", etc. While many of these may be useful in mitigating environmental impacts, they may not be specific enough to actually reduce environmental impacts to the extent required by law. In those cases the City of Adelanto acting as Lead Agency has proposed additional mitigation measures for the General Plan Update.

### **Future Projects**

It is anticipated that further environmental analyses will be necessary for future individual projects that require amendment to this General Plan Update. These will be reviewed by the Adelanto Planning Department, when these projects are proposed:

### **3.1 Earth Resources**

#### **3.1.1 Setting**

##### **Seismic Activity**

The City of Adelanto is located in a seismically active portion of Southern California. The Helendale and San Andreas Faults are located within close proximity to the City of Adelanto and may generate potentially damaging earthquakes that could result in property damage, injury and/or loss of life.

##### **Geology/Soils**

The topography within the Planning Area is relatively flat (1% or less) with the exception of the Shadow Mountains to the north. Erosion potential is considered minimal except for areas adjacent to the Mojave River, natural drainage channels, and the Shadow Mountains.

#### **3.1.2 Impacts**

##### **Seismicity**

The Planning Area is susceptible to disturbances from regional seismic activity. Local seismic faults have been identified in the vicinity of Adelanto. However, no seismic faults are located within the City or the General Plan Planning Area. The San Andreas Fault, located south and west of the Planning Area, and the Helendale Fault, north and east of the Planning Area, may pose a potential threat to urban development within Adelanto. Urban development along active seismic faults is not an issue. Protection against damage by major regional seismic events is addressed through local building code requirements which adhere to the Uniform Building Code.

The intensification of urban uses as a result of the proposed Land Use plan may, to some degree, increase susceptibility to seismic events. Although the potential for damage resulting from future earthquakes cannot be ignored, Adelanto is characterized by a number of factors which tend to reduce earthquake hazards. Foremost among these is the comparatively high level of seismic hazard awareness on the part of residents of the community and public officials. Future intensification trends will benefit from modern seismic design and construction technology, creating a positive environment for the total community.

The following impacts may result through the implementation of land use policies contained in the General Plan:

1. Increased soil disturbance and erosion due to new development construction and grading.

2. New development occurring adjacent to sensitive landforms and features.
3. Increased urban development within proximity to major regional geologic hazards.
4. Encroachment into sensitive hillside and drainage features within the Planning Area.

Figure IX-1 in the General Plan shows the proximity of major fault systems to the General Plan Planning Area, and Figure IX-2, shows the potential hazardous zones in regard to urban development.

In the event of a major earthquake along one of these nearby faults, Adelanto may sustain property damage, possibly resulting in injury and loss of life. In particular, an earthquake occurring along the San Andreas Fault has the potential to cause widespread upset. The level of impact on Adelanto will ultimately depend on a number of factors: the distance of the City from the quake's epicenter, the magnitude of the quake, the characteristics of soils and subsurface geology of the affected area.

Geological studies conducted for the Southern California region indicate that an 8.0 Richter magnitude earthquake on the San Andreas Fault is likely to occur in the next 30 years. Such an event will result in significant physical and property damage.

### Topography and Soils

Conditions that contribute to the lack of potential for adverse geologic impacts in the proposed Project Area include the low profile build out of the City, and its location on a generally level flood plain. The only major slopes within the City are the engineered berms and natural water ways of the drainage facilities. For these reasons, the City is not susceptible to the dangers from slope instability, general subsidence, differential settling, or erosion. Because of the lack of extreme topographic variations in the City of Adelanto, little or no modification of the topography will be required to accommodate any future projects envisioned in the Land Use plan. Any grading that may occur will be subject to precise review and implementation of necessary mitigation measures.

Some former land uses may have contributed to some soil contamination in the project area. Prior to implementation of individual projects on suspect parcels, an assessment of the type and extent of soils contamination will be performed if necessary to determine if any remediation is necessary. This study would include research of existing hydrogeologic data, including ground water flow and direction, and well data, and review with local water purveyors, as well as the RWQCB. Additional investigation prior to site development may include field visits and supplemental research to identify any underground tanks, disposal sites, and other land use facilities. Sampling and analysis of soils may also be performed, as well as requisite remediation activities. As

a result of individual project development, contaminated soil conditions in the project area would be remediated. The long-term impact on project area soils is, therefore, considered to be beneficial.

### Liquefaction

Some of the land within the Planning Area may be susceptible to surface liquefaction. Liquefaction results when water-saturated, sandy, unstable soils are subjected to intense shaking, such as that caused by an earthquake. These soils lose cohesiveness, causing structures to fail. Detailed studies have not been prepared to indicate the location of liquefaction prone soils in Adelanto, therefore the extent of potential impact cannot be stated definitely at this time. Liquefaction conditions are most likely to exist along the Mojave River, or in sandy areas with high water tables. Geologic studies can detect liquefaction problems prior to the construction of any new building. If liquefaction is found to be a problem, standard engineering techniques can reduce the level of potential impact to less than significant levels. Reduction of groundwater levels has probably reduced the potential for liquefaction in most of the Planning Area.

#### **3.1.3 Mitigation Measures**

1. All grading within the project area must be accomplished in accordance with the appropriate requirements set forth in the City of Adelanto Grading Ordinance and Standard Conditions as approved by the City Engineer including dust control measures.
2. The sampling, analysis, and remediation of any contaminated soils must be performed in accordance with all State and Federal regulations pertaining to the methods for evaluating solid and hazardous wastes.
3. Site specific soil studies may be necessary to evaluate the potential for liquefaction at any given building site. For new construction, most liquefaction problems can be resolved by proper identification of the problem and appropriate foundation design. Specific guidelines shall be developed for the collection of data for determination of liquefaction potential at a site. The guidelines should include: minimum depth of bore holes, minimum lapse time for observation of water level, sample types and frequencies, and the appropriate soils test for evaluation of suspect soil types.
4. Review as necessary, site design and construction requirements for proposed facilities, and encourage the strengthening of selected facilities not meeting current standards.

5. All new development must comply with the Building Code, the Zoning Ordinance, the Subdivision Ordinance, and established seismic safety standards.
6. The City operates its own Police Department, allowing for immediate expansion capability as the need arises.
7. The City operates its own fire/rescue services and can expand these resources as demand increases.
8. The City will restrict development in those areas where slope exceeds 15 percent and in those areas subject to flooding.
9. Any development which is proposed in the Mojave Corridor area (liquefaction) will be required to complete a site specific geologic study.
10. The City will require all proposed developments to submit a soils and geologic report prepared by a certified geologist which shall include mitigation if any geologic hazards are identified.
11. The City will require all residents to pay a pro rata share of the costs for public safety needs to be generated by the development.
12. The City will adopt a program designed to implement State requirements for the identification and reinforcement of any and all unreinforced masonry buildings.
13. The Zoning and Building Codes will be updated and maintained to reflect current seismic information and development standards. The Uniform Building Code shall be utilized as the basis for construction standards relating to seismic safety.
14. Require special soils and structural investigation for all proposed structures of large scale buildings or, involving large groups of people.
15. Continue the Code Enforcement Program and require correction or demolition of structures found to be dangerous.

#### **3.1.4 Unavoidable Adverse Impacts**

The only unavoidable adverse impacts which may not be reduced to insignificance and for which no mitigation measures are proposed are the seismic safety hazards to the project area population, structures, and infrastructure.

## **3.2 Climate and Air Quality**

### **3.2.1 Setting**

The Adelanto Planning Area is located within the Southeast Desert Air Basin, which comprises most of San Bernardino and Riverside Counties, and portions of Los Angeles, Kern, and San Diego Counties. The general climate of the region is controlled by a semi-permanent high pressure center which limits the frequency of storms occurring here. Winds, which emanate from the mountains to the west, are often at high velocity and often contain pollutants from the heavily urbanized areas located in the South Coast Air Basin.

Existing ambient air quality of the Adelanto Planning Area is relatively good, especially compared to that of regions in the Los Angeles Basin. The South Coast Air Quality Management District and the Mojave Desert Air Quality Management District operate an air quality monitoring station on the high desert. Data indicates that the Southeast Desert Air Basin is in "attainment" for the State Ambient Air Quality Standard for carbon monoxide (CO) and sulfates. It is "unclassified" for nitrogen dioxide and sulfur dioxide, and designated "non-attainment" for ozone and hydrogen sulfide. Some of the data used for these determinations was collected from the Victor Valley monitoring stations operated by the then San Bernardino Air Pollution Control District.

The 1991 Air Quality Management Plan (AQMP) requires that local governments adopt an air quality element or its equivalent addressing air pollution control measures and growth management issues. Non-compliance with the AQMP could result in some level of preemption by the South Coast Air Quality Management District. It is required that the City of Adelanto make reasonable progress in implementing local government responsibilities as outlined in the AQMP and the San Bernardino Air Quality Attainment Plan.

## **DISTRICT AIR QUALITY**

### **Geographical Setting**

The Mojave District encompasses all of that portion of the County of San Bernardino within the Southeast Desert Air Basin (SEDAB). Generally, this encompasses the desert areas of the county, extending north and east of the San Bernardino Mountain ranges to the Arizona and Nevada border. This vast region covers an area of approximately 19,236 square miles or 95 percent of San Bernardino County. The rest of SEDAB includes Imperial, and the desert portions of Kern, Los Angeles and Riverside counties. The physical terrain is complex, with the desert landscape dotted with numerous mountain peaks and hills. The San Gabriel and San Bernardino Mountain ranges serve as a physical barrier to the urban Southern California region, thereby separating the neighboring air basins.

## Meteorological Aspects Of Air Pollution

The prevailing meteorological patterns account for the majority of the air pollution impacting the Southeast Desert Air Basin. Generally, the prevailing winds, coming from the South Coast and San Joaquin Valley Air Basins, blow into the SEDAB region. Along with the prevailing winds, come pollutants that travel many miles to impact the desert's ambient atmosphere. In particular, certain mountain passes (e.g. Cajon, Soledad Canyon, San Gorgonio and Tehachapi Pass) on the borders of SEDAB assist in channeling the prevailing winds containing transported air pollution. The desert climate, with hotter temperatures and increased solar radiation, contributes to the conversion of precursor pollutants to ozone.

## Assessment of Relative Contribution of Transport

The Air Resources Board (ARB) made assessments on the transport of pollution occurring in the state and officially recognized the SEDAB as a receptor of ozone pollution. An official finding, adopted in August 1990, concluded that both the South Coast and the San Joaquin Valley Air Basins were responsible for the "overwhelming" ozone pollution impacting the SEDAB. However, the ARB also determined that ozone exceedances could also occur solely as a result of locally generated pollutant emissions.

## Transport Mitigation Requirements

The ARB adopted on August 10, 1990, specific mitigation requirements for upwind districts contributing to ozone exceedances in downwind regions. Both the South Coast and San Joaquin Valley Air Basins are bound by these requirements to mitigate their transported pollution by implementing "best available retrofit control technology on all existing sources and no net increase in ozone precursor emissions for all new or modified sources, unless the state board approved an alternate method of mitigation.

## Air Pollution Control District (APCD) Position on Transport Issue

It can be inferred from a case study day of April 29, 1989 in Barstow, that the SEDAB should be classified as "moderate". This is further supported by the District design value and the estimated reductions achievable by the end of 1994. Yet the neighboring jurisdictions, the Kern County Air Pollution Control District and the South Coast Air Quality Management District, have declared their portions of SEDAB as "severe". The APCD feels this is problematic for several reasons. One, the APCD feels that this would create a conflict in achieving the principle of "uniformity" of control measures for regional pollutants. Secondly, it would require the imposition of "severe" control measures in the downwind desert areas that have no control over pollution from upwind areas. As proposed, this would be unfairly burdensome and unnecessary to the "downwind" districts. It is the APCD's position that all areas of SEDAB should be classified as "moderate". But, most importantly, the pollutant-transport basin(s) should

bear a burden that is commensurate with their pollution contribution and not expect the recipients of transported pollution to be "double impacted".

The primary concern within the airshed of the Victor Valley, is that of ozone. The Federal hourly ozone standard is exceeded frequently, causing the high desert to be in non-attainment for ozone. Most studies indicate that the primary source of the high levels of ozone is the LA Basin, which is heavily populated and contains a large amount of industrial activity. Until emissions are reduced in those areas, the high desert will continue to receive high levels of photochemical pollutants. The Air Quality Attainment Plan (AQAP) for San Bernardino County does recognize the interaction between the two areas and is attempting to coordinate efforts to improve air quality for the entire region.

### Ozone Formation

Ozone is not directly emitted into the atmosphere. It is generally formed by the reaction of oxides of nitrogen and reactive organic gases in the presence of sunlight. A multitude of sources, including vehicles, railroads and factories, may emit precursor pollutants which form ozone. "Smog", the bane of urban pollution and a direct result of human activities, is composed mostly of ozone.

### Health Effects Of Ozone

Substantial research studies have documented a wide range of adverse health effects attributable to even low concentrations of ozone. As a result, health based ambient air quality standards have been developed by the federal and state governments. The California State standards are more stringent than federal standards because most parts of the state experience air pollution in excess of federal standards on a more frequent basis.

Ozone is a strong irritant that can adversely affect many organs and tissues like eyes, nose, throat and lungs. Such aggravation may impair the mechanical functioning of the body by causing a tightness in the chest, coughing and choking. Ozone can produce headaches and fatigue. Research has also suggested that ozone may reduce the body's resistance to colds and other respiratory diseases. Persons whose health is already compromised with pulmonary disorders such as asthma, emphysema or bronchitis, are especially sensitive to the adverse effects and may experience symptomatic respiratory distress. Even healthy exercising adults and children at play can suffer from the harmful effects of ozone, with some lung impairment even at low concentrations.

### Environmental Effects Of Ozone Pollution

Ozone is also responsible for damaging effects on property, vegetation and animal life. Substantial evidence exists documenting the adverse effects ozone can have on a wide variety of plants. Millions of dollars have been lost on crops in California due to reduced yields from ozone pollution. In addition, ornamental plants and forests have also suffered damage, with yellowing leaves, lower reproduction and death of weakened plants. Such vegetative destruction can lead to reduced plant habitats for wildlife. Ozone, a photo chemical oxidant, can contribute to the degradation of such materials as rubber, paints, plastics and textiles. Identifying all adverse effects of ozone at the local level is problematic. As such, research is continuing at the state and national levels. Millions of dollars are lost annually due to damage to property and lives, as a result of ozone.

The State standard for ozone of .09 ppm was exceeded on 150 days during 1989 for the San Bernardino County portion of the Southeast Desert Air Basin. The Victor Valley has the most frequent number of violations during the years of 1985 and 1990.

The Victor Valley is impacted by transported air contaminants moving through Cajon Pass, Soledad Canyon and Tehachapi Pass. The Victor Valley Area includes the cities of Adelanto, Apple Valley, Hesperia, and Victorville, and the communities of El Mirage, Baldy Mesa, Helendale, Oak Hills, Oro Grande, Phelan and Silver Lakes. Based on peak hourly concentration data collected by District monitoring stations in Hesperia and Phelan, the highest concentrations appear significantly later in the day (4:00 - 7:00 p.m.) than would be expected from only local sources and normal solar irradiation daily cycle.

Precursors to ozone formation are sunlight, reactive gases (ROGs) and oxide of nitrogen (NOx). The major sources of these precursor compounds are the mobile and stationary sources. ROGs react with other pollutants in the presence of sunlight to form photochemical oxidants and ozone. Presently, there are no specific ambient air quality standards for ROG emissions because they are not considered criteria pollutants. ROGs present a widely variable chemistry, but consist primarily of hydrocarbons. The precise chemistry depends on the total of the available constituents of the air mass at a particular moment in time. Cooler ambient air temperatures in the winter months retard ozone formation and encourage the build up of higher concentrations of ROGs in the atmosphere. Sunlight and increasing air temperature drive the smog forming photochemical reactions. ROG emissions also contribute to violations of the PM10 standards. The District has identified ROG control strategies which will require increased regulation of both stationary and indirect/mobile sources.

### Particulates

Particulate matter is suspended particulate matter of ten microns or less in diameter. It is a complex mixture of natural and man-made substances. Contributors include sulfates, nitrates, soil, organics, elemental carbon, metals, and biological materials. Approximately 90% of the total particulates are less than ten microns in diameter.

Particulates sampling reveals about 48% by weight, to be particles larger than ten microns in diameter. In areas with close proximity of farming, mineral mining/processing and land clearance for development, particulate concentrations are higher than in areas of natural, undisturbed terrain. Indirect (mobile) and area-wide sources contribute particulates from the burning of fossil fuels, tire wear and road dust. The particulate load varies seasonally with changing meteorological conditions, less particulates after winter rains and much more during the spring and summer windy season.

The purpose of the 1991 Air Quality Attainment Plan (AQAP) is to provide a comprehensive course of action to improve the air quality of the Southeast Desert portion of San Bernardino County (District). The AQAP has been specifically designed by the Air Pollution Control District (APCD) to enable the region to achieve and maintain state and federal ambient air quality standards for ozone (O<sub>3</sub>) by 1994. The strategy formulated by the APCD includes new programs and control measures to be implemented in the current planning cycle. All emission sources under the jurisdiction of the APCD shall be subject to the plan's provisions.

#### APCD Authority

The San Bernardino County Air Pollution Control District evolved from state legislation which provided for the creation of local air pollution control agencies (H & S 40002 et seq.). Such local entities, together with the California Air Resources Board, share primary responsibility for air quality management in the state. The APCD governing board, known as the Air Pollution Control Board (Board) is the Board of Supervisors of San Bernardino County. All regulations and programs proposed by the APCD must meet the approval of the Board before adoption and implementation. The final AQAP will undergo a complete public review process and will need to be approved by the Board before adoption. In addition, all new rules and programs arising from provisions of the AQAP will be reviewed and approved by the Board before implementation.

#### CCAA Mandates

This AQAP has been prepared to satisfy the legal mandates of the California Clean Air Act (CCAA) of 1988. Pursuant to the CCAA and because the Southeast Desert Air Basin (SEDAB) has been designated non attainment for ozone, the APCD is required to prepare and submit a plan for attaining and maintaining the state standards. Since the SEDAB was determined by the California Air Resources Board (ARB) to be a receptor of transported air pollutants, this plan must be submitted on or before June 30, 1991. Based on the APCD's estimate that attainment in the District will be achieved by the end of 1994, the ozone problem has been classified as "moderate". The CCAA has established specific mandates and policies to direct the development of District attainment plans.

Only a small portion of San Bernardino County was covered by its inclusion in the federal non attainment planning area. The plan focused on ozone and particulate control, but was very limited in scope. To date, no revision was required by the Federal government. However, recent amendments to the Federal Clean Air Act will require planning efforts to meet EPA promulgated regulations. At that time only a few measures were needed (e.g., New Source Review, Phase One Vapor Recovery) and they were adopted and implemented.

### **3.2.2 Impacts**

The most profound impact due to implementation of land use policies is the increased development, which will stimulate a significant increase in energy consumption and vehicle miles traveled. As a result, significant increases of on site and off site air emissions will be generated. Off site emissions will be realized at power generation facilities, which provide electricity to the residences and businesses within the planning area. Natural gas used for heating and cooling will contribute slightly to on site emissions. However, the major source of on site emissions will be generated by additional motor vehicle trips resulting from short-term construction activities and long-term vehicle trips associated with new residences and businesses.

Air emissions from current land uses are relatively insignificant when evaluating regional air quality impacts. A Regional Air Quality Attainment Plan (AQAP) has been adopted by San Bernardino County which considers existing emissions and anticipated emissions generation based upon projected land uses. The previous Adelanto General Plan was used in the preparation of regional AQAP. Land use designations and overall densities have changed considerably from the previous plan. Therefore, general impacts resulting from development within the Planning Area must be incorporated into regional air quality management planning. Air emission impact mitigation measures are included in the AQAP and will be implemented as part of the regional program.

Tables VII-2, -3, -4, and -5 of the Conservation/Open Space Element portray the projected levels of pollution produced by the proposed General Plan for 2014 and buildout. Air quality impacts of 63 tons per day in 2014 and 188 tons per day at General Plan Buildout are substantial and significant in relation to the MDAQMD's 25 tons per year regional significance threshold.

The air quality impacts of the proposed Airport, although exceeding the regional significance threshold, will be relatively small compared to other mobile sources within the region. This is true since the aircraft which will be utilizing the facility are not themselves major polluters. Vehicle use and support activities will constitute the highest level of impact to air quality. Commercial passenger airports (including motor vehicles, aircraft operations and ground access), as a rule, contribute approximately 3% of the total emissions in the airshed in which they are located. This is true of the LAX, Long Beach, John Wayne, Ontario, as well as Denver Airport airsheds. In fact, with a smaller airport, there will be fewer additional jobs located in the high desert.

This will mean more air pollution and traffic congestion on the circulation systems due to increased commuting to major job centers located in the LA Basin.

In the Mojave Desert Air Quality Management District portion of the SEDAB, the effort to develop and implement Transportation Control Measures (TCM) has focused on implementing the 10 measures amended into the 1991 AMP. Rule 1701 helps provide a foundation for much of the AQMD's current TCM framework.

In response to California Air Resources Board (CARB) comments on its 1991 Air Quality Attainment Plan and information from its newly reformed board, staff at the Mojave Desert AQMD are reexamining the area's attainment strategy, including TCMs. Efforts to date have focused on attempting to better identify what proportion of the emission and traffic problem are within the Mojave Desert AQMD's sphere of regulatory influence and attempting to identify appropriate strategies.

### **3.2.3 Mitigation Measures**

Mitigation measures to reduce impacts to the air quality environment are as follows:

1. The City shall continue to work with the Mojave Desert Air Quality Management District and any other agencies in order to enforce and implement regional air quality plans.
2. The City will review, as necessary, all new developments to determine the potential air quality impacts, as well as any other environmental analysis deemed appropriate by the City.
3. The City will continue to work with the California State Air Resources Board and the Air Quality Management District to improve the implementation of the California Clean Air Act.
4. The City will organize land uses wherever possible to create a desirable jobs/housing balance for the region.
5. The City will consider dedicated truck routing in circulation plans and delivery scheduling for new and existing industries which are separated from the peak traffic hours.
6. The City will consider all feasible means of reducing vehicle miles traveled by City employees and residents.
7. The City will encourage the use of support facilities in office complexes and commercial areas to promote pedestrian commuting.

8. The City will require projects to consider land use alternatives that include mixed uses and pedestrian access improvements.
9. The City will monitor approved projects to determine conformance to the San Bernardino County Air Quality Attainment Plan.
10. Initiate contact with other cities in the high desert and San Bernardino County to coordinate sub-regional efforts for air quality planning.
11. Review those measures of the Air Quality Management Plan (AQMP) which call for local government implementation.
12. Participate with San Bernardino County on efforts to implement the AQMP, which will help the City toward achieving better air quality.
13. The City will evaluate the San Bernardino Air Quality Attainment Plan (AQAP) to assess the possible implications that each measure in the AQAP will have to the economic conditions of Adelanto. For AQAP measures that the City feels are unacceptable or otherwise detracting from City objectives, the implications of non-compliance must be further identified and, if possible, mitigated.
14. Develop and distribute a list of actions based on the AQMP, that employers and citizens should use to assist in air quality improvement.
15. The City will monitor efforts of the Mojave Desert Air Quality Management District, South Coast Air Quality Management District, and the State of California Air Resources Board in improving air quality in the Los Angeles Basin.
16. The City will promote the inclusion of "clean industry" within the Manufacturing/Industrial District of Adelanto.
17. The City will provide a comprehensive open space/trails network that links residential areas with the job rich industry park areas, allowing more opportunity for residents to walk or bicycle to work.
18. Improved air quality includes coordination between the City and the MDAQMD, incorporating appropriate policy direction. The goal is to participate at the regional level in order to establish the most cost effective emissions reductions.

Other mitigation measures that the City will pursue to reduce air quality impacts include the following:

1. Participate with regional transit agencies in a cooperative program to increase transit services with existing equipment, and expand services through transit facility improvements.
2. Coordinate with regional transit agencies to increase funding for transit improvements to supplement other means of travel.
3. Require new development to incorporate design features which facilitate transit service and encourage transit ridership such as bus pull-out areas, covered bus stop facilities, efficient trail system through projects to transit stops, designation of special on-site parking spaces beyond base requirements for commuter park-n-ride purposes, and incorporation of pedestrian walkways that pass through subdivision boundary walls.
4. Support efforts to establish a region-wide bus transit pass.
5. To the extent feasible, implement staggered, flexible and compressed work schedules in public agencies.
6. Implement home-based telecommuting programs in public agencies.
7. Encourage the use of the telecommunication center in Apple Valley.
8. Encourage a video conferencing facility in new industrial park developments.
9. Limit the provision of on-street (curbside) parking along principal arterial roadways to increase the traffic carrying capacity of the roadway.
10. Identify and prioritize system improvements needed to increase mobility, such as signal synchronization and establish a program for the orderly implementation of such improvements.
11. Require circulation improvements prior to, or concurrent with development.
12. Remove illegally parked and stalled cars and accidents from roadways to immediately minimize blockage.
13. Require specific plans and other mixed-use projects to provide an internal system of trails linking schools, shopping centers, transit and other public facilities with residential areas.
14. Require bicycle parking facilities as a percentage of auto parking spaces or as a ratio to square feet in new non-residential development.

15. Require pedestrian walkways and bicycle lanes to connect each building in new non-residential development with the local system of pedestrian/bicycle paths.
16. Contribute to a bicycle route system, either by contributions from new development or provision of bike way segments.
17. Require new residential subdivisions over 160 acres to include supportive commercial uses, including retail uses and services, that are conveniently accessible to pedestrians and bicyclists.
18. Incorporate strategies into design guidelines and development standards which promote a pedestrian scale environment, encourage the use of transit, and reduce dependency on the automobile.
19. Implement plans and programs to phase in energy conservation improvements, equipment and facilities.
20. Adopt incentives and regulations to encourage energy conservation for private development, including the use of site planning techniques, landscaping, building orientation, and building design.
21. Manage paved roads to produce the minimum practicable level of particulates.
22. Minimize particulate emissions during road, parking lot and building construction phase.
23. Control particulate emissions from unpaved roads, vehicle maneuvering areas and parking lots.
24. Establish cooperative programs to improve the business climate and competitive edge of cities within the High Desert area, as well as improving jobs/workers balance by considering cooperative economic development programs and cooperative agreements to improve area wide jobs/workers balance through mutually acceptable efforts.
25. Support the accelerated use of reformulated or cleaner-burning gasoline.
26. Support County, regional, and State efforts to increase emissions inspections of motor vehicles and the required maintenance to bring emissions up to standards.

27. Support legislation that requires pollution control equipment on construction vehicles.
28. Support legislation that expedites the ability of phone companies to create the infrastructure required for teleconferencing facilities.
29. Support legislation that provides tax credits for investments in home computers to enable employees to work at home.
30. Support legislation that provides tax credits and other incentives for setting-aside land or providing facilities for telecommunication centers.
31. Establish an ongoing air quality implementation program, adapting it as necessary to local circumstances, resources and procedures.
32. Participate with regional transit agencies in defining and implementing a Congestion Management Program for the High Desert area by November 1994.
33. Identify existing sources of State and Federal funds for air quality planning and public education, including the federal funds associated with the Intermodal Surface Transportation Efficiency Act (ISTEA).
34. Identify and remove barriers to the use of State and Federal funds for air quality improvement purposes.
35. Seek to increase the overall funding availability for local emissions reduction programs.
36. Seek to insure 100 percent funding of State and Federal air quality program mandates.

#### **Mitigation Measures Added By Lead Agency**

The City of Adelanto acting as Lead Agency will adopt a Fugitive Dust Ordinance within the Fiscal Year that will include the following reasonably available control measures for high winds:

1. Earth-moving dust: (a) cease all active operations; or (b) apply water to soil not more than 15 minutes prior to moving such soil.
2. Disturbed surface areas: on the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days; (a) apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the

- concentration required to maintain a stabilized surface for a period of six months; or (b) apply chemical stabilizers prior to wind event; or (c) apply water to all unstabilized disturbed areas 3 times per day; or (d) establish vegetative cover within 30 days after active operations have ceased; or (e) maintain soil moisture content at 12 percent; or (f) continue watering to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless area is inaccessible to watering vehicles due to slope conditions or other safety conditions; or (g) apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface.
3. Unpaved roads: (a) apply chemical stabilizers prior to wind event; or (b) apply water once per hour during active operation; or (c) stop all vehicular traffic.
  4. Open storage piles: (a) apply water once per hour, or (b) install temporary coverings.
  5. Paved road track-out: (a) cover all haul vehicles; or (b) comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.

The Ordinance will also include provisions for large operations and exemptions as follows:

1. Any person who conducts or authorizes the conducting of a large operation shall either: (a) take the actions specified above in 1 through 5 and (i) notify the City Engineer not more than 7 days after qualifying as a large operation, (ii) maintain daily records to document the specific actions taken; (iii) maintain such records for a period of not less than 6 months; and (iv) make such records available to the City Engineer upon request; or (b) prepare a fugitive dust plan for submittal to the City Engineer which includes the name address and phone number of the person responsible for the submittal and implementation of the plan, a description of the operation including a map depicting the site, a listing of all sources of fugitive dust emissions within the property lines, and a description of reasonable available control measures that will be utilized and/or installed during periods of active operations. A large operation will include any active operation which contains in excess of 100 acres of disturbed surface area or any earth moving which exceeds daily earth moving or throughput of 10,000 cubic yards three times in any 365 day period. Any person who elects to obtain an approved fugitive dust emission control plan must submit the plan to the City Engineer no later than 30 days after the activity becomes a large operation.

2. The fugitive dust ordinance will not apply to unpaved roads, provided such roads: (i) are used for the maintenance of wind-generating equipment; or (ii) meet all of the following criteria: [a] are less than 30 feet in width at all points along the road; [b] are within 25 feet of the property line; and [c] have a traffic volume less than 20 vehicle-trips per day.
  
3. The fugitive dust ordinance will not apply to: (a) any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the Federal Endangered Species Act; (b) to non-routine or emergency maintenance of flood control channels and water spreading basins; (c) blasting operations which have been permitted by the California Division of Industrial Safety; and (d) motion picture, television, and video production activities when dust emissions are required for visual effects. (In order to obtain this motion picture etc. exemption, the City Engineer must receive notification in writing at least 72 hours in advance of any such activity).

As an additional mitigation measure the City will not issue Building Permits without proof of compliance with MDAQMD requirements.

#### **3.2.4 Unavoidable Adverse Impacts**

The General Plan Update will have significant adverse impacts because it exceeds the MDAQMD's regional significance threshold and will exceed Federal requirements. The mitigation measures proposed are expected to reduce local impacts, as much as is feasible, and to levels that are not significant in relation to State air quality requirements by the end of the year. Implementation of the General Plan Update will result in significant unavoidable adverse impacts due to the transport of air pollution from the SCAQMD.

### **3.3 Water Resources**

#### **3.3.1 Setting**

##### **Surface Water and Drainage**

Figure X-8 of the General Plan Update illustrates the major and minor drainage courses that traverse the City of Adelanto. The 1985 Master Plan of Regional Storm Drain Channels was utilized to develop the basis of the proposed system. The proposed drainage facilities correlate with existing drainage courses as much as possible. Also taken into consideration is the configuration of existing parcels within the City. The location of the proposed facilities are determined so as to minimize the impacts on the development potential of the property. The City Council has adopted a policy requiring that the proposed drainage facilities adhere to the adopted Master Plan as closely as possible. City policy will allow minor deviations that may be necessary due to geographic or development constraints. The size of the facilities are based on the 1985 hydrology study prepared for the City. Flood hazards are mitigated by the construction of the facilities. The drainage facilities shown are facilities that are more feasible to construct as open channels. Secondary facilities are not illustrated. Secondary facilities are those necessary to convey storm water to the major facilities. These consist of conveyance above ground by streets, small open channels or below ground with storm drain pipes. Secondary facilities are determined and constructed as development occurs.

The primary facilities are regional in nature. These facilities carry storm waters that originate outside the City and from within the City and transmit the storm waters to the north through the City to the Fremont Wash, and ultimately into the Mojave River. The right-of-way width requirements of the primary facilities range from 150 to 400-feet. This width allows the facility to be used as open space/recreation corridors. It is recommended that the flood control facility be left in it's natural state to the greatest extent possible. That is, the channel should have a natural soil bottom. The side of the channel in certain areas will require additional protection from erosion. This can be accomplished by concrete lining the sides or placement of rock materials also known as "Rip-Rap". The reasons for this are three-fold; first, the natural bottom allows for infiltration of the storm waters to be used for groundwater recharge (though it has a very minimal impact for recharge); second, the natural bottom channels allow for the migration of existing wildlife, and thirdly, the cost of the facility is much less than that of a fully lined channel.

#### **Flood Conditions**

Except for the Shadow Mountains rising approximately 300 feet above the general terrain in the northwest portion of the Planning Area, the topography is relatively gentle with the uniform slopes. The elevation of the southwest portion of the Planning Area is approximately 3,275 feet. The Fremont Wash in the central portion of the Planning

Area is approximately 2,670 feet, or a difference of 605 vertical feet over an 11 mile horizontal distance. Thus, the average slope is 1.04 percent. The southwesterly area is approximately 2 percent, becoming relatively flat with percentages of less than 1 percent in the central to northern portions of the community. The majority of storm runoff within the City drains into the Fremont Wash, which in turn drains into the Mojave River northeast of the Planning Area.

The General Plan Planning Area is affected by two major drainage areas, of which, the Baldy Mesa Drainage Area is the most significant, affecting the most densely populated area of the City. It encompasses 86 square miles immediately south of the planning area and about 75% of the existing incorporated City limits and sphere of influence area. The Phelan drainage area affects the extreme western portion of the Planning Area. Both areas drain in a northeasterly direction into the Fremont Wash, which also traverses to the northeast and drains into the Mojave River near the northeastern corner of the Planning Area. Figure IX-3 of the General Plan Update shows the drainage areas that affect the Adelanto General Plan Planning Area.

#### Water Availability

The availability of water is discussed under Utilities, Section 3.15 of this Program EIR.

### **3.3.2 Impacts**

#### Surface Water

At present, the City does not have an extensive storm drainage system in place. Drainage improvements are constructed on a project by project basis, according to the 1985 Master Drainage Plan. The improvements are installed to mitigate specific drainage impacts imposed by the individual projects. This typically involves routing a major drainage course through a project by concentrating the flow into an acceptable drainage facility. This facility is typically some type of channel, be it natural or concrete lined, depending on the drainage parameters of the area. In most cases, drainage channels have been identified in the General Plan to remain in as natural a state as possible to promote the continuation of natural wildlife corridors.

Scattered development in the City has created a fragmented drainage system. As development occurs within the City, the drainage system will become complete, eliminating gaps that may cause potential drainage problems.

The County of San Bernardino, in cooperation with the City of Adelanto, is updating the drainage information for the High Desert area. The new study will take into account the existing and proposed land use designations in the Baldy Mesa/Phelan area upstream of Adelanto, and those land uses under consideration within the Planning Area. The results of this study will allow the City of Adelanto to make decisions or any revisions that may be necessary to the Drainage Master Plan.

Portions of the Planning Area are subject to Flooding during heavy rainfall, especially those areas adjacent to natural drainage courses. The Mojave River, located along the eastern boundary of the Planning Area is the major regional surface channel and is subject to periodic flooding. Development in unprotected flood hazard areas may be significantly impacted. Severe flooding may result in property damage and losses of life if development is permitted and not protected. Figure IX-2, Potential Hazard Zones, identifies these areas which are subject to periodic flooding.

The following impacts to the surface hydrologic system of the Planning Area may result from implementation of land use policies:

1. Increased urban development will reduce the water absorption capabilities of the land within the Planning Area, generating more surface runoff into the existing natural drainage system.
2. Increased development will generate a significant amount of siltation that will affect the natural drainage channels adversely.
3. Urban encroachment may result in substantial erosion near sensitive geologic features, including drainage channels and sensitive watershed areas.
4. The inclusion of a substantial amount of industrial land use area may generate a significant amount of potentially toxic storm runoff, which could eventually percolate into the potable water supply system of the City.

Surface discharge of hazardous materials and or chemicals by occupants within the Project Area could result in a negative impact to surface water quality. However, future development in the Project Area will include paving of currently unpaved industrial and commercial lots, thereby reducing the potential for future soil contamination and subsequent surface water contact. Paving and permitted development will also increase the volume of good quality storm water runoff.

Another concern of the City Drainage System is the urban runoff within the manufacturing/ industrial areas. These areas constitute a major concern due to contaminants that could infiltrate into the flood control facilities. Since the General Plan update is encouraging the use of natural bottoms for the flood control facilities, the potential adverse impacts to wildlife within the facility and the groundwater basins exist. A system of Detention/Retention basins and treatment facilities are recommended to be placed within the manufacturing/industrial areas of the City to mitigate any contamination impacts that could occur.

#### Groundwater

Industrial and commercial development in the Project Area could increase the likelihood of soil contamination, which could negatively impact aquifers via percolation through such soil. Poor hazardous materials handling practices, accidental surface discharge, or leaking underground storage tanks could lead to such impacts.

Controlled releases to surface waters are specifically permitted and/or monitored by the Lahontan RWQCB. The quality of industrial waste water released to surface waters is controlled via RWQCB tentative waste discharge requirements and the National Pollutant Discharge Elimination System permitting. Also, prior to commencement of site specific construction, appropriate grading and drainage plans and use permits are approved by the City of Adelanto to ensure adequate management. Once in operation, industrial facilities will be required to develop a hazardous materials inventory and an associated Emergency Response and Spill Containment Plan (Health and Safety Code, Chapters 25500 through 25521). Adherence to appropriate hazardous materials storage and handling plans will also be required per exposure limitations set by the Occupational Safety and Health Administration (Title 29, CFR) and per storage and disposal requirements set by the U.S. EPA (Title 40, CFR).

The potential for adverse short-term or cumulative impacts to ground water quality can be mitigated to a level of insignificance via careful execution of required waste management procedures as described for surface waters.

### **3.3.3 Mitigation Measures**

Since the FEMA mapping and studies do not yet identify all flood hazard areas in the entire City, the following shall be required:

1. Programs for the continuous evaluation and designation of floodway, floodplain and drainage areas shall be identified and financed.
2. The City will increase public awareness in regard to the potential hazards resulting from storm runoff, use of storm water for ground water recharge, and emergency measures during flood disasters.
3. The City will coordinate land use and flood control planning through continued improvement of staff contacts between the County Flood Control District and cities within the area.

Since drainage from adjacent development contributes to flood hazards, the following shall be required:

1. Surface run-off from new development shall be controlled by proper facilities to reduce downstream flood hazards.

2. Structural controls and restrictions regarding changes in topography, removal of vegetation, creation of impervious surfaces, and periods of construction, such that the need for off site flood and drainage control improvements is minimized and such that run-off from the development will not result in downstream flood hazards.

Flood control and drainage measures are part of the overall community improvement program and should advance the goals of recreation, resource conservation, preservation of natural riparian vegetation and habitat, and the preservation of the scenic values of the City's streams and creeks. The City shall:

1. Consider ecological significance and aesthetic quality of natural drainage channels in the design of all drainage projects.
2. Preserve designated drainage channels and water courses such as creeks and river beds as resource management areas or linear parks and recreation trails, when possible.

Since the funding of necessary flood control and drainage facilities is a major concern, the City shall continue to develop local area drainage plans and establish appropriate funding mechanisms.

Since individual developments may be subject to spot flooding from small streams or unmapped areas adjacent to mapped flood areas, the City shall require specific hydrology and hydraulic studies to be prepared at the time the developments are proposed. These studies shall:

1. Identify existing buildout drainage conditions of the General Plan update and measures which must be taken within the development project or downstream from the project to preclude impacts on the proposed development or increase impacts to downstream development. This includes the identification of primary (Master Plan) and secondary drainage facilities. These studies should be submitted and reviewed by the City Engineer and the City Manager.
2. Fully account for all planned flood-control facilities within or adjacent to the project site. When sections of flood-control facilities cannot be constructed, provision should be made for their ultimate construction, that is rights-of-way reserved and construction funds secured. Additionally, interim facilities must be provided which will be able to handle the additional runoff from the proposed development until the planned flood control facilities are constructed.
3. Develop the drainage system in a natural state where possible.

Mitigation measures for groundwater include:

1. Adherence to appropriate hazardous materials storage and handling plans will also be required per exposure limitations set by the Occupational Safety and Health Administration (Title 29, CFR) and per storage and disposal requirements set by the U.S. EPA (Title 40, CFR).
2. A system of Detention/Retention basins and treatment facilities are recommended to be placed within the manufacturing/industrial areas of the City to mitigate any contamination impacts that could occur.

As public education plays a vital role in minimizing flood hazard, the City shall:

1. Establish a public information system through the Fire and Police Departments outlining emergency operations plans and measures to reduce losses in the event of a flood disaster.
2. Encourage property owners to check with the Engineering Department at City Hall to review flood hazard information.
3. Require the storm waters be used for groundwater recharge when possible.

Since flood protection is both local and regional in nature, the City shall:

1. Continue the development of intergovernmental coordination with adjacent cities, County Flood Control District, the Army Corps of Engineers, and other agencies which have an interest in flood control projects that cross jurisdictional boundaries.
2. Coordinate land use and flood control planning through continued improvement of staff contacts between the County Flood Control District, and cities within the areas, and through annual review of the Capital Improvements Program.

#### Mitigation Measures Added By Lead Agency

As an additional mitigation measure the City Fire Department will require adherence to appropriate hazardous materials storage, and handling plans will also be required per exposure limitations set by the Occupational Safety and Health Administration (Title 29, CFR) and per storage and disposal requirements set by the U.S. EPA (Title 40, CFR).

**3.3.4 Unavoidable Adverse Impacts**

During individual project construction, the potential exists for unavoidable short-term and cumulative adverse impacts to water quality due to the disturbance of in-place contaminated soils. The significance of this impact can be mitigated to acceptable levels via execution of appropriate waste management plans and permit requirements.

### 3.4 Biological Resources

#### 3.4.1 Setting

The Adelanto Planning Area contains a variety of wildlife species and habitats. Several of these species are listed by the State of California or the Federal Government as threatened or endangered. The City of Adelanto must ensure that these species are protected in order to preserve the existence and diversity of desert and riparian habitats located within the Planning Area.

#### Riparian Areas (Mojave River Corridor)

The Mojave River forms the eastern boundary of the Adelanto Planning Area and is arguably the most significant and sensitive resource in the planning area, as well as the entire high desert region. Rare stretches of year-round surface water flow are found along this corridor of the planning area. Future development of the river corridor must be carefully considered in order to assure the preservation of the area's sensitive riparian habitat and water resources.

#### Desert Preservation

The existing desert setting is a unique and ever changing environment which can be easily damaged or destroyed. Destruction of fragile environment may cause negative environmental impacts, such as increased temperature, air pollution, and humidity, as well as erosion and flooding.

#### Open Space Areas

Natural open space areas are a major component of the long term survival of native plant and animal species. In addition, they serve as a critical link between humans and the natural environment. While most of the planning area is currently undeveloped, many of these sensitive resources and open spaces will be lost if not identified and preserved. These areas may serve as wildlife preserves, or as passive recreational areas. Other less fragile open space areas may provide unstructured recreational opportunities as well. The Recreation Element identifies strategies for the development of active parks within the City.

Alluvial fans and floodplains support a distinctive scrub vegetation within the planning area containing an assortment of plant materials characteristic of both Mojave creosote bush scrub, Mojave wash scrub, and Joshua tree woodland communities. Such areas are known habitat for a variety of wildlife, including the desert tortoise and Mojave ground squirrel. Mojave riparian forest habitat is found along the Mojave River, as well as, in some of the natural drainage courses throughout the planning area. A variety of animal species may use the stream courses as a movement corridor. The Mojave River has cut a deep canyon into the hills to the west of the river course, forming a steep

bluff. The face of the bluff affords nesting habitat for a variety of small birds and raptors.

The City of Adelanto recognizes that certain plant and animal species, and sometimes whole communities of these may be considered to be sensitive for one or more reasons related to rarity, limited habitat and pending threats. In some instances, the threat to such species or their habitats warrants official state and/or federal endangered status. Table VII-1 of the General Plan Update lists the sensitive biological resources within the Adelanto General Plan Planning Area.

### Plant Life

Plant life in the Planning Area is abundant and diverse. During the Spring months, the desert provides a colorful display of annual flowers. In addition, there are many plant habitats, several of which are very sensitive, that exist within the planning area. The major plant communities (habitats) are described below:

Mojave Creosote Bush Scrub, dominated by creosote (*Larrea tridentata*) and burro-weed (*Ambrosia demosa*), is found in areas of well-drained secondary soils with very low available water holding capacity on slopes, fans, and valleys. Growth usually occurs during spring if rainfall is sufficient.

Mojave Wash Scrub is a low, shrubby, open community with a scattered to locally dense overstory of small-leaved trees. Characteristic species of Mojave Wash Scrub include catclaw (*Acacia gregii*), desert willow (*Chilopsis linearis*), and the many-fruited saltbush (*Atriplex polycarpa*). This community is found in sandy washes, arroyos, and canyons of intermittent streams throughout the Mojave Desert region.

Mojave Riparian Forest is found along larger desert rivers such as the Mojave, where the vegetation has not been cleared for irrigated agriculture or dehydrated by upstream diversions. Mojave riparian forest is a relatively open, broadleaved, winter-deciduous streamside forest dominated by cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), and red willow (*S. laevigata*). A dense understory of rabbitbrush (*Chrysothamnus nauseosus*), Torrey's saltbush (*Atriplex torreyi*), and other shrubby species grows below the open canopy. Riparian habitats, never common in dry Southern California, are becoming increasingly rare due to the pressures of development. As a result, riparian areas, and especially the waters that support them, are vigorously protected by CDFG Code 1600 and Section 404 of the The Clean Water Act.

Streamcourses, often with only seasonal or intermittent surface water in Southern California, are becoming increasingly rare due to the pressures of development. As a result these areas are also protected by CDFG Code Chapter 1600 and Section 404 of the Clean Water Act. Several of the streamcourses in the planning area are USGS

designated "blue line" streams and are considered "Waters of the U.S." by the U.S. Army Corps of Engineers (COE) which administers Section 404.

#### Additional Sensitive Resources

The Adelanto Planning Area is within the California Desert Conservation Area which is managed by the Bureau of Land Management (BLM) in accordance with guidelines set in the California Desert Conservation Area Plan (1980). A portion of the northernmost part of the Adelanto planning area is within the Desert Conservation Area Plan's "Western Mojave Desert" critical habitat area, for which a Habitat Management Program (HMP) is scheduled to be created. Although the California Desert Conservation Area encompasses the entire California desert region, the plan only applies to federally administered public lands and those lands directly adjacent to and affecting public lands.

San Bernardino County has a "Plant Protection and Management" Ordinance (#3175), which outlines native plant and tree removal permitting requirements, applicable to all private land within the unincorporated areas of the county and on county lands.

The inclusion of an expanded airport facility at the George Air Force Base site will affect the biological resources of the area to some degree. However, the impacts will not be significantly different than those already existing from the Base and its operations. The expanded airport facility and the associated development that is likely to occur will cover a much larger land area. Thus, it is assumed that careful consideration must be taken to assure that sensitive biological species and habitats are preserved and/or relocated. These impacts have been considered in the Final Environmental Impact Statement for Disposal and Reuse of George Air Force Base.

The following species of plants are known to exist within the Adelanto planning area and are considered to be sensitive plant species:

Mojave Buckwheat/Spineflower (*Chorizanthe spinosa*), is a California Native Plant Society (CNPS) list 4 species. This species grows in dry sandy or gravelly soil, in creosote bush scrub and Joshua tree woodland habitats. Mojave Buckwheat is found at elevations between 2500 and 3500 feet and may be found within the Planning Area.

The Mojave Monkeyflower (*Mimulus mohavensis*) is a reddish-purple annual, blooms in April-June, and grows in sandy and gravelly areas at 2,000 to 3,000 feet.

This species is found in association with creosote bush scrub, and is threatened by development and off-road vehicles. Most historic occurrences in the Barstow area have been extirpated or negatively impacted. This species is listed as a Federal

Category C2 (Candidate for Federal Listing) and a CNPS Category 1B (California Native Plant Society).

Because the Planning Area is in a desert area, it is also subject to the California Desert Native Plant Act (CDNPA; California Flood and Agriculture Code, 1986). The CDNPA lists several plant families, genera and/or species that are to receive special consideration due to their uniqueness individually and as a part of the California desert ecosystem. The affected species found in the Planning Area include the Joshua Tree, catclaw, and members of the Agave, Cactus, and Mesquite families.

### Riparian Corridors

The Planning Area of the City of Adelanto extends easterly to the Mojave River. The flood hazard area of the Mojave River, extending to the top of the bluffs on the western side of the river will be retained as open space. There are many sensitive animal species known or suspected to be found within the Planning Area that depend upon the Mojave River and the riparian and grassland habitat associated with it. In addition, raptors and other bird species are known to nest in the bluffs overlooking the river. (Figure VII-1 of the General Plan Update).

The following uses are permitted within riparian corridors:

- Passive (non-mechanized) recreation;

- Education and research, excluding; structures;

- Interpretive trails;

- Fish and wildlife management activities;

- Necessary water supply projects;

- Pipelines;

- Flood control projects where no other methods are available to protect the public safety;

- Resource consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code; and

- Bridges when supports are not in significant conflict with corridor resources.

Development adjacent to riparian corridors shall minimize removal of vegetation; minimize erosion, sedimentation and runoff by appropriate protection or vegetation and landscape; provide for sufficient passage of native and anadromous fish as specified

by the California Department of Fish and Game; wastewater discharges and entrapment; prevent groundwater depletion or substantial interference with surface and subsurface flows; and provide for natural vegetation buffers.

#### Natural Drainage Channels/Blueline Streams:

As identified on the Land Use Map and the Proposed Drainage Facilities Map, there are numerous drainage channels that traverse the Planning Area in a northerly direction. The natural drainage courses that will remain provide additional migration and habitat for wildlife, as well as the most prolific occurrence of scrub (Mojave creosote and Mojave wash scrub) species. These areas are to be maintained as natural drainage channels, unless it is determined that man-made structures are critical for the safety of life and property.

#### Animal Life

Several animal species are known to exist in the above mentioned habitat areas that typify the Adelanto Planning Area. The following summary is a comprehensive list of those species which are known to exist, may exist, or have been seen in the vicinity. Each is identified, including any pertinent state or federal classification relating to current status.

The gastropod known as *Helminthoglypta mohaveana* is a Category 2 candidate for Federal listing. This species has been reported on the banks of the Mojave River on the eastern edge of the Planning Area.

The Mojave Tui Chub (*Gila bicolor mohavensis*) is both State and Federally listed as endangered. This fish once reported in the Mojave River near Victorville, was reported extirpated from this site in 1980, but may occur in other sections of the river.

Red Legged Frog (*Rana aurora draytoni*) is a Category 2 candidate for Federal listing. This pond frog inhabits humid forests, woodlands, grasslands, and streamsides, and is most common in lowland and foothills. The red-legged frog has been reported in the vicinity and may be in the Planning Area.

The Desert Tortoise (*Xerobates agassizi*) is listed as "Endangered" by DFG, and was listed as "Threatened" by the U.S. Fish and Wildlife Service (USFWS) on August 4, 1988 on an emergency basis. The desert tortoise ranges mainly in desert scrub, sand washes, and throughout creosote bush scrub habitats. Desert tortoises have been found within the Planning Area, and may occur wherever appropriate habitat areas exist. (Figure VII-2 of the General Plan Update)

The Desert Tortoise was afforded full protection under the Endangered Species Act of 1973, as amended. This protection entails a federal taking prohibition regarding the tortoise. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or to attempt to engage in any such conduct. Activities that have a negative impact on habitat occupied by an endangered species constitutes a "taking" of that species. If a taking of the desert tortoise would result from activities proposed for any portion of the Planning Area, a Section 10(a) permit would be required prior to the initiation of said activities. Therefore, prior to site alteration in any area where appropriate habitat for the desert tortoise exists, the status of the tortoise on the project site must be determined.

Southwestern Pond Turtle (*Clemmys marmorata pallida*), a Category 2 candidate for Federal listing, is thoroughly aquatic, and inhabits ponds, marshes, rivers, streams, and irrigation ditches that typically have a rocky or muddy bottom. This turtle may inhabit some portions of the Mojave River within the subject planning area.

San Diego Coast Horned Lizard (*Phrynosoma coronatum blainvillei*) is a Category 2 candidate for Federal listing. The preferred habitat of the San Diego coast horned lizard is open sandy areas within the coastal sage or chaparral communities as well as in dry washes and along roads. The San Diego coast horned lizard has been reported in the planning area and its presence is likely wherever appropriate habitat exists.

The Yellow-Breasted Chat (*Icteria virens*) is a DFG Species of Special Concern, second priority. This bird is an uncommon local summer resident in dense riparian thickets of the lowlands and lower portions of foothill canyons, especially in the vicinity of lowland watercourses. The clearing of much of this habitat has caused a noticeable decline in the number of breeding birds. In addition, the brown-headed cowbird (*Molothrus*), a nest parasite that lays its eggs in other birds' nests, has been a major contributor to this decline. In 1987, a singing male yellow-breasted chat was observed high in a *Populus fremontii* in the Mojave Narrows Regional Park, southeast of Victorville.

The Summer Tanager (*Piranga rubra*), also a DFG Species of Special Concern, second priority, nests in mature riparian groves dominated by cottonwoods. Summer tanagers have been reported in recent years in two different areas along the Mojave River in the vicinity of the planning area. These populations are threatened by off-road vehicle use in the riverbed and adjacent riparian habitat, prolonged flooding, and removal of vegetation.

Bendire's Thrasher (*Toxostoma bendirei*), a DFG Species of Special Concern, third priority, breeds primarily in Joshua Tree woodlands with scattered shrubs (creosote, etc.) and patches of grassland. In some areas, it also breeds in areas

where *Opuntia* cactus is plentiful (up to 1500m). The Bendire's Thrasher is a fairly common summer resident in the Cima Dome-Lanfair Valley area of northeastern San Bernardino County, and a very scarce summer resident in the Joshua Tree National Monument-Yucca Valley area of southwestern San Bernardino County. The total population within California is under 200 pairs.

Le Conte's Thrasher (*Toxostoma lecontei*) is another third priority Species of Special Concern by the State of California, this bird inhabits very sparse desert scrub, especially around small washes. This species is a widespread but rare permanent resident in the western and southern San Joaquin Valley, Upper Kern River Basin, Owens Valley, Mojave Desert, and Colorado Desert. California is a major population center for this species. This shy species has been greatly affected by off-road vehicle use. The Le Conte's thrasher has been reported at various points north and northwest of Adelanto.

The Least Bell's Vireo (*Vireo bellii pusillus*) is State and Federally listed as an endangered species. Least Bell's vireos require an extensive and dense riparian woodland habitat. The decline of the species is related to the widespread removal of this habitat in Southern California. Cowbird parasitism has also played a significant role in their decline. Least Bell's vireos have been reported in the vicinity of the Planning Area, and may occur in areas of suitable habitat.

The Willow Flycatcher (*Empidonax traillii*) is a CDFG Bird Species of Special Concern, Highest Priority (considered to be potentially endangered due to small population size and habitat loss), as well as Federal (BLM and USFS) Sensitive Species. The species requires dense riparian woodlands for nesting. It has been virtually extirpated from the region by brown-headed cowbirds and habitat loss; however, migrants may still be seen in Spring and Fall in appropriate habitat on the site.

The Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*) is state listed as Endangered, as well as a Category 2 candidate for Federal listing. This species is a very rare summer transient in the majority of Southern California. The natural nesting habitat of the western yellow-billed cuckoo is in deciduous riparian forest and woodland of a cottonwood-willow composition.

A western yellow-billed cuckoo was observed in the "upper narrows" area southeast of Victorville in an extensive willow and cottonwood forest bordering the Mojave River.

The Prairie Falcon (*Falco mexicanus*) is a DFG Species of Special Concern, third priority, was at one time a common permanent resident throughout most of California. Pesticide residues, robbing of eyries by falconers, shooting, and human activity near nest sites have all taken a toll on prairie falcon populations,

resulting in a very small and vulnerable total population within California. These birds prefer open desert scrub and grasslands for foraging, and require adjacent cliffs or rocky outcroppings for nesting. An active nest site has been reported within the Planning Area boundaries.

The Swainson's Hawk (*Buteo swainsoni*) is a Category 2 candidate for Federal listing, and Threatened in California. It is a medium-sized buteo with relatively long, pointed wings and a long square tail. The diet of the Swainson's hawk includes the California vole (*Microtus californicus*), as well as a variety of birds and insects. These hawks require large, open grasslands with abundant prey in association with suitable nest trees. Nest sites may be found in mature riparian forest, lone trees or groves of oaks and other species in agricultural fields and mature roadside trees.

The Cooper's hawk (*Accipiter cooperii*) is considered by CDFG to be a widespread and declining species (Species of Special Concern, 3rd priority). Once considered a common nester throughout California, the Cooper's hawk has been much reduced in recent decades. This hawk occupies a variety of woodland and semi - open habitats, though breeding populations are generally restricted to riparian groves and mountain canyons.

The Golden Eagle (*Aquila chrysaetos*), although not listed as rare or endangered, is afforded Fully Protected status in California (CDFG Code, Section 3511) and receives additional protection under amendments to the Bald Eagle Protection Act (PL, 92-5351). It is considered sensitive by Federal agencies and CDFG due to its requirements for isolated nesting sites and very large foraging areas. Golden eagles are known to have nests to the north of the Adelanto Planning Area, and are expected to forage over the site.

The Mojave Ground Squirrel (*Spermophilus mohavensis*), State listed as Threatened, and a Federal Category 2 candidate for listing, is cinnamon-gray in color, with white underparts. The species lives in underground burrows, in which it spends about seven months of the year (usually August to February) in estivation. Mojave ground squirrels inhabit plant communities which are dominated by either creosote, Joshua tree, or shadscale, the fruit of the Joshua tree being its favorite food. The species suffers from piecemeal loss of habitat and resulting isolation of the populations. The Adelanto Planning Area is in the middle of the Mojave ground squirrel's range, and it has been reported in the areas of Oro Grande and Victorville.

The Mojave Vole (*Microtus californicus mohavensis*), a grass eating mouse found in grassy areas along the Mojave River, in the vicinities of Victorville, Oro Grande, and Helendale.

## Wildlife Movement Corridors

Wildlife movement corridors are important for the free movement of animals between population centers, for access to food and water sources during drought, as escape routes from brush fires, and, in the longer term, for dispersal of genetic traits between population centers. A wildlife corridor is a strip of land connecting two or more larger land areas that is free of barriers which would seriously curtail or prevent wildlife passage. It typically provides refuge and ease of movement, and often follows ridgelines or drainageways.

### 3.4.2 Impacts

Proposed land use policy allows the development of over 73,000 acres of the Planning Area and quasi-urbanized land uses. The remaining 8,500 acres, or 11% of the Planning Area is dedicated to open space, either natural (4,026 acres of open space and 2,414 acres flood control and power easements) or recreational. This percentage represents a substantial dedication by the City to the preservation of open spaces and creates a vast amount of recreational opportunities for residents.

#### Mojave River Corridor

The Mojave River corridor, as previously discussed, is undoubtedly the most significant natural open space resource of the high desert, providing refuge for numerous plant and animal species. The Land Use Element policies limit development to passive recreation and open space, in order to preserve the sensitive habitat. This area is home to some of the City's wells, which provide water to George AFB and Adelanto. The river has intrinsic scenic qualities, with dense cottonwood stands and occasional surface water flow.

#### El Mirage Cooperative Management Area

The El Mirage Cooperative Management Area is located in the northwest portion of the Planning Area, surrounding the Shadow Mountains. This area is owned by the Bureau of Land Management and provides space for recreational vehicle use, including ATV's, motorcycles, and off road trucks. It is used year-round by enthusiasts throughout Southern California.

#### Natural Drainage Channels

The natural drainage channels that traverse the Planning Area provide natural storm water flow across Adelanto to the Mojave River. The Fremont Wash is the most prominent of the drainage channels and provides a significant habitat area for plant and animal species. These channels present a unique opportunity to create a comprehensive trails network throughout the Planning Area linking other active recreational facilities as well as the natural environment. Although corresponding to

the Drainage Master Plan, these channels are to remain in their natural state unless alteration is necessary to protect life and property.

### Utilities Rights of Way

Another open space resource which the City can utilize is the utility rights of way that criss-cross the Planning Area. These utility corridors can provide additional linkage to the open space and parks system, in addition to facilitating stormwater detention/retention needs. Agreements with the utility companies can be made to allow multiple use of these rights of way.

### The Conservation/Open Space Map

Figure VII-3 of the General Plan Update portrays the areas which are designated as open space on Land/Use Map. These natural resource areas are to remain dedicated to their existing use or as passive recreational sites.

Land Use Policies contained in the General Plan will stimulate an increase in urbanization within the Planning Area, increasing the potential impacts to the natural environment. All natural resources, including plants, animals, natural materials, air and water will be affected to varying degrees due to implementation of these policies. The intent of the City is to carefully integrate both the natural and man-made systems within the framework of the General Plan. Accommodation for natural wildlife corridors, preservation of potential cultural resource areas, stimulating greater water preservation and recharge efforts, and implementing actions for better air quality are the primary measures proposed by the plan, while weaving the urban fabric into the setting.

### Flora and Fauna

Implementation of land use policy will have potential impacts on native plant life within the Planning Area. The Planning Area contains over 8,000 acres of Joshua Tree Woodland, of which the Joshua Tree (*Yucca brevifolia*) is a protected species (California Desert Native Plant Act, 1986). Other species on this list are Agave, Mesquite and various cactus species.

Due to the extensive development proposed in the General Plan, many native and sensitive plant materials may need to be removed and relocated according to State and Federal guidelines. The most significantly impacted area within the Planning Area is located in the northeastern portion of the Planning Area and contains Joshua Tree Woodland. The General Plan identifies programs and actions which will be implemented in order to mitigate impacts to plant life in the Planning Area due to increased development.

Increased development will also have a significant impact on the fauna that may exist within the General Plan Planning Area. Endangered species such as the Desert

Tortoise (*Gopherus agassizi*) may be negatively impacted and potential habitat lost due to implementation of proposed land uses. State and Federal regulations will require the careful relocation/rehabilitation of such species that are found within the Planning Area.

Over 8,000 acres of sensitive habitat area will be significantly altered due to the implementation of the proposed land uses of the General Plan. The fauna, namely the Desert Tortoise must be relocated according to State and Federal statutes. The General Plan establishes policies and actions that are intended to comply with these requirements. In addition programs for the preservation of large portions of habitat areas are contained within the document.

### **3.4.3 Mitigation Measures**

Mitigation measures incorporated into the General Plan Update to reduce impacts on the environment include the following:

1. The City will encourage the use of native vegetation and drought tolerant trees to enhance the environment within the City.
2. Maintain drainage courses and utility rights of way in open space uses that do not conflict with those needs, but provide an attractive open space for the community, such as linear parks, trails, etc.
3. Require clean-up and maintenance of vacant parcels before development to avoid visual blight.
4. Areas of the Shadow Mountains shall be retained as open space to protect their integrity as a unique habitat as well as wildlife movement corridor.
5. The Mojave River, as well as other major streamcourses, shall remain as open space to be managed as wildlife movement corridors.
6. All land development projects shall be reviewed for consistency with the Land Use Map, which incorporates the above-mentioned mitigations/implementation strategies. The City may consider the offer of preferential assessments on real property as an incentive for retaining open space or conservation easements to protect sensitive species and their habitats.
7. The City shall require the applicant for a proposed project within or potentially affecting the resources of a Riparian Corridor or the Planning Areas natural drainage channels to enter into an agreement with the California Department of Fish and Game, as applicable, pursuant to Chapter 6 of Division 2 of the Fish and Game Code.

8. The City shall consult with the California Department of Fish and Game on any project that could affect a species which is listed or in fact rare, threatened or endangered (CEQA Guideline Section 15380, as identified by the biological survey).
9. The City will only allow development which minimizes or eliminates destruction of or damage to any and all significant biotic resources. i.e., the Mojave River corridor, Fremont Wash.
10. The City will require the development of open space and recreation areas within all new residential developments as determined by the City.
11. The City shall designate, as may be appropriate, washes, drainage channels, utility easements and transportation rights of way as linear parkways. These linear parkways shall, to the extent feasible, provide linkages and access to the other open space and recreational areas within the City.
12. To the extent feasible, the City shall acquire and maintain up to date information concerning County, State, and Federal ordinances, codes, laws, and studies in the area of biological resources. This information is to be available for public use.
13. The City shall implement measures to ensure the protection and safety of all natural environments, especially those along the Mojave River corridor.
14. In an effort to guide citizens and developers towards greater understanding of biological environment and the values of integrating wildlife into the planning process, an information booklet on desert native plants, sensitive animal species, and their habitats shall be secured and made available to land owners. This is particularly important for the Desert Tortoise and Mojave Ground Squirrel, which are both State listed, and likely to be found in areas of potential development.
15. The City of Adelanto shall acquire and maintain current available data regarding the status and location of sensitive biological elements (species and natural communities) within the Planning Area.
16. The City of Adelanto will consider available options and work with other government agencies and public utilities for the acquisition, protection, and maintenance of open space and other financial assistance from appropriate public agencies at each level of government and private entities to acquire necessary open space lands and to provide for their

continued maintenance. Additional alternatives include (1) acquisition of easement interests; (2) leasing; (3) tax incentives; (4) lease-purchase agreements; (5) joint acquisition; (6) purchase and resale; and (7) land swapping. Funding sources may include the General Fund, exactions from new development projects, wildlife enhancement assessment districts, private donations, and State programs (Land and Water Conservation Fund, Environmental License Plate Fund, Wildlife Conservation Board Program).

17. The City shall prohibit unnecessary activities and uses that could endanger the environmental quality and natural character of all open space areas.
18. Implement a Relocation Program per the California Desert Native Plant Act (CDNPA).

#### **Mitigation Measures Added By Lead Agency**

As an addition to Mitigation Measure No. 7 above, the City shall require that any development adjacent to riparian corridors minimize removal of vegetation; minimize erosion, sedimentation and runoff by appropriate protection or vegetation and landscape; provide for sufficient passage of native and anadromous fish as specified by the California Department of Fish and Game regarding wastewater discharges and entrapment; prevention of groundwater depletion or substantial interference with surface and subsurface flows; and provision of natural vegetation buffers.

#### **3.4.4 Unavoidable Adverse Impacts**

The proposed project will result in the unavoidable loss of 73,000 acres of natural habitat which can not be mitigated to a level of insignificance. Since every development project requiring planning approval within the City has a biological report, any rare or endangered species identified within the Planning Area will be relocated in accordance with State and Federal regulations and will not result in significant unavoidable adverse impacts to these biological resources.

### **3.5 Noise**

#### **3.5.1 Setting**

Noise has long been an accepted part of modern civilization and the urbanization process. The general background level of noise, however, seems to be rising as modern transportation systems develop and human dependence upon machines increases. As society becomes increasingly mobile and mechanization continues to increase, so does the need for a better understanding of the effects of noise exposure in the environment.

Noise has not received the degree of social attention and concern that has been given to air and water pollution, partially because noise cannot be seen (and its cumulative effects are still being studied), and partially because it is often a temporary noise event that causes annoyance. Interestingly, it is the noise of others that typically bothers us, not the noise we make ourselves. Not until recently have governmental agencies become vitally concerned about noise and its effects on the health and welfare of people.

The planning process has not traditionally been concerned with noise. In many instances, noise problems were identified only after the noise sources were allowed to establish in a community. It is now evident that these situations could have been avoided by considering noise generators and noise sensitive receptors as part of the comprehensive planning process.

#### **Definition of Noise**

The characteristics of sound include parameters such as amplitude, frequency, and duration. The decibel (db), a logarithmic units that accounts for the large variations in amplitude, is the accepted standard unit measurement of sound. When measuring sound to determine its effects on a human population, weighted sound levels are typically used to account for the response of the human ear. Weighted sound levels represent the sound level according to a prescribed frequency response established by the American National Standards Institute.

Noise is usually defined as sound that is undesirable because it interferes with speech communication and hearing, is intense enough to damage hearing, or is otherwise annoying. Noise levels often change with time; therefore, to compare levels over different time periods, several descriptions were developed that take into account this time varying nature. These descriptors are used to assess and correlate the various effects of noise on humans and animals, including land use compatibility, sleep interference, annoyance, hearing loss, speech interference, and startle effects. Descriptors for noise levels include CNEL (California Noise Equivalency Level), DNL (Day-Night Average Sound Level), and SEL (Sound Exposure Level).

The CNEL and DNL descriptors are virtually identical in that each system was developed to evaluate the total community noise environment. The descriptors weight sound levels (acoustical energy) during a 24 hour period with a 10 dB adjustment added to the nighttime levels (between 10 p.m. and 7 a.m.). This adjustment is an effort to account for the increased sensitivity to nighttime noise events. For purposes of the General Plan and EIR, the CNEL descriptor shall be utilized.

The existing noise environment was determined through the employment of a noise measurement survey at George AFB of ambient noise sources and a computer noise model for traffic. The annual vehicle traffic and field were incorporated into the computer model through which average noise levels in the City were determined. The noise environment is commonly depicted in terms of lines of equal noise levels or noise contours.

### Aircraft Noise

Commercial jet aircraft activity from an airport at the now closed George Air Force Base is the major source of potentially harmful noise within the City. Development activity within close proximity to the Base has been restricted for 40 years due to such noise constraints. Although the Air Force left George AFB in November, 1992, reuse plans developed by both Adelanto and VVEDA have been identified that will continue aircraft operations for civilian uses. The City of Adelanto has proposed an International Airport and the VVEDA has proposed a Commercial Airport that may be called an International Airport. The scale of operations of this civilian facility will determine the extent of noise impacts, however, noise levels will be reduced significantly from the past military jet aircraft conditions, as civilian aircraft are much quieter.

### Industrial Noise

Industrial park areas within the City create potentially significant noise levels. Currently there are no major land use conflicts between industrial uses and sensitive uses. However, whenever development of sensitive land use occurs adjacent to industrial parks, measures must be incorporated to minimize noise impacts.

### Motor Vehicle Noise

Current motor vehicle noise is generated primarily from State Highway 395, which bisects the City of Adelanto. State Highway 395 and Highway 18 carry substantial volumes of both truck and commuter traffic. The exterior noise environment of land uses adjacent to these roadways are affected by motor vehicle noise. At this time, no noise calculations are available for Highway 395 through Adelanto. However, Caltrans is currently studying the realignment of 395 and the existing corridor. When this study is complete and a preferred alternative is approved, more current noise data will be produced and implemented into this plan relating to motor vehicle noise generation data.

### Significant Noise Sources

Two types of noise sources should be considered in determining significance: stationary and mobile noise sources. Stationary or fixed sources of noise in Adelanto include air conditioning/refrigeration units high level radio, stereo or television usage, power tools, lawn mowers, appliances used in the home and barking dogs. Mobile noise sources are typically transportation-related and include: airplanes, helicopters, automobiles, trucks, buses and motorcycles. Although construction activities associated with public works projects or private development occur throughout the City they are localized and temporary.

Motor vehicles in the City are a major source of continuous noise. Highway 395 through the center of the City and Palmdale Road and El Mirage Road carry appreciable volumes of both truck and commuter traffic. The noise levels of land uses adjacent to these elements of the circulation system are some of the highest experienced in the City.

#### 3.5.2 Impacts

Two significant ambient noise generation sources will affect the City of Adelanto during the planning period and through build out. Historically, the primary source of ambient noise was generated by aircraft from George Air Force Base. High levels of noise significantly impact sensitive land uses such as schools and residential development. In large sections of the City ambient noise generated by aircraft exceeded 65 CNEL noise levels which adversely affected such land uses. Although the City intends to reuse the facility at George Air Force Base as a major civilian airport, noise exposure levels are expected to decrease, due to the more quiet commercial airliners, which have strict noise guidelines imposed by the FAA. Figure VIII-1 of the General Plan Update shows the AICUZ (Air Installations Compatibility Use Zone) model established by the Air Force for operational levels of the Base. The descriptor used in this study was the CNEL/DNL model. Figure VIII-2 of the General Plan Update shows the maximum conceptual noise contours (CNEL) for a proposed major airport with an operational level of 25 million annual passengers (MAP).

The California Department of Health, Office of Noise Control, has established land use compatibility guidelines giving 60 to 70 dB as the maximum normally acceptable level and 70 as the conditionally acceptable level for noise sensitive receptors such as residences, transient lodging, churches, and schools. The San Bernardino County Noise Element also provides land use guidelines giving 60 dB as the acceptable external noise level for residential uses and 65 dB if noise reduction is incorporated and the interior level is below 45 dB. Table VIII-1 of the General Plan Update provides the Federal Aviation Administration recommended CNEL ranges for various land use categories.

### Proposed Major Airport

The conceptual noise contours for a proposed major airport under the proposed land use alternative identify noise levels that will be incompatible with some surrounding land uses. This element contains programs and implementation strategies intended to eliminate all potential conflicts. Most notably is the inclusion of the Airport Development District (ADD), intended to accommodate those activities that are airport related, whether directly or indirectly. All uses contained within the ADD must be compatible with airport operations and must be integrally planned as part of the Specific Plan Area (SPA) and the ADD. Those uses that are incompatible with the operations of the airport must be relocated to other sites within the Planning Area.

The number of persons exposed to excessive noise under the airport scenario is basically the same as under the prior use of George AFB. However, according to policies of the General Plan, proposed land uses within the potential 65 CNEL of the airport have been designated as Airport Development District (ADD), Manufacturing/Industrial (MI), Commercial Restricted (CR), or Open Space (OS). It is the intent of the City to accommodate the airport facility within the framework of the General Plan and to either relocate conflicting land uses to new sites within the Planning Area or mitigate existing land uses to accommodate noise levels in accordance with Table VIII-2 of the General Plan Update. The area considered suitable for relocation and/or noise protection for an international airport is generally located between Crippen Avenue and Air Base Road west of Adelanto Road consisting of approximately one square mile at a 45 degree diagonal. Relocation would only take place if the City of Adelanto is assured that it has primary control over policy decisions of the airport, through the anticipated Airport Authority. Mitigation would only take place if adequate funding is made available by the Airport Authority. The City is expending substantial sums on legal proceedings to assure that it has control over noise and funding for relocation, but the outcome of the various lawsuits is speculative at this time. In the event that the City is unable to obtain control of the Base it will use the CEQA to the fullest extent possible, limited only by the availability of funds, to force other jurisdictions to mitigate the adverse impact of noise to acceptable levels. Relocation will be undertaken pursuant to State and Federal Relocation Laws.

### Proposed Circulation and Development Impacts

Noise levels as high as 86 dB CNEL may be experienced at approximately sixty feet from centerline of major roadways and freeways. Increased urban development will add to noise levels of all improved and unimproved roadways in the Planning Area. Specific noise monitoring is currently being undertaken by CALTRANS for segments of Highway 395 through the Planning Area.

Proposed land use policies and associated circulation improvements to accommodate projected development are intended to minimize the impacts associated with increased traffic levels. Special design considerations for major roadways are incorporated into

the Development Standards, which will reduce the exposure of residents to harmful effects of noise. In addition, CALTRANS must incorporate noise reduction measures along the proposed Freeway 395 alignment.

### Industrial Noise

The industrial areas of the City are located away from the existing urban core area. Noise generated by manufacturing and industrial activities is considered minimal. However, an increase in industrial development could present increased noise impacts in some locations of the Planning Area, namely in residential and commercial districts.

### Construction Noise

There will be a significant increase in noise levels within the project area during construction, particularly in conjunction with grading and other site preparation activities. Typical noise levels produced by various types of construction equipment have been determined by the EPA and range generally from 70 to 95 dBA with pile drivers going as high as 105 dBA. Construction activities are anticipated to continue sporadically over the life of the General Plan as project implementation proceeds.

### 3.5.3 Mitigation Measures

The following are specific mitigation that are incorporated into the General Plan that will lessen the significance of airport noise impacts to residents and business within the Adelanto Planning Area.

Strategies which are controlled by the operational characteristics of the airport to lessen the severity of noise impacts include:

1. Operational measures: Change take-off, climb-out, or landing procedures; change flight tracks, limit or rotate primary runway usage, enforce prescribed flight track use and fan out departure flight tracks. Prohibit or limit Stage II aircraft operations.
2. Preventive measures: Acquire undeveloped land adjacent to the runways that are exposed to aircraft noise levels of 65 dB or greater. Restrict new residential and hospital development to areas outside the 65 CNEL noise contour.
3. Management measures: Develop a noise monitoring system, and establish a community relations office.
4. Remedial measures: Acquire mobile home sites and single family homes exposed to aircraft noise of 65 CNEL or greater. Redevelop such uses to other more compatible uses related to the operations of the airport.

Establish and conduct a sound attenuation program for single family residences, schools, hospitals, and churches in areas exposed to aircraft noise of 65 dB or greater.

Other mitigation measures to reduce noise within Adelanto include the following:

1. Set maximum allowable noise specifications for new City owned or operated vehicles.
2. Set noise emission and construction time limits on public work projects.
3. Limit siren usage, to the extent feasible, within populated areas by police, fire and ambulance vehicles.
4. Continue to require subdivision perimeter walls to be constructed as solid block walls, continue to require dual pane glass windows as part of energy conservation measures, and continue to install air conditioners in all homes as ways to reduce environmental noise and to meet State noise requirements.
5. Provide noise reduction retrofit equipment where effective and economically feasible.
6. Enforce State vehicle noise regulations (Sections 23130, 23130.5, 27150, 27151 and 38275 of the California Vehicle Code) to curtail the use of vehicles equipped with illegal or faulty exhaust systems and "hot rods" exhibiting tire squeal or excessive exhaust noise.
7. Require landscaped berm and barrier combinations where feasible.
8. Require all proposed barriers be not only dense enough to be effective but also properly designed and aesthetically compatible with the surrounding community.
9. Enforce the California Noise Insulation Standards (Title 25 California Administrative Code) for multi-family dwellings to ensure an acceptable maximum interior noise level of 45 CNEL in habitable rooms and maintain adequate noise insulation.
10. Incorporate measures into future residential projects which attenuate exterior noise levels in outdoor activity areas to a maximum of 65 CNEL.
11. Future projects approved within the City shall reflect adopted policies regarding the reduction of unnecessary noise near sensitive receptors such as parks, hospitals, libraries, schools and convalescent homes.

12. The City shall periodically review County and regional plans for land use, transportation, airport operation, etc. to identify any potential noise impacts and develop strategies for the control of major noise sources on a county wide and regional basis.
13. Minimize noise emissions from all local government controlled or sanctioned activities via enforcement of the City Noise Ordinance.
14. Ensure that public buildings (schools libraries etc.) are sufficiently noise insulated to permit their intended function to be uninterrupted by exterior noise events.
15. Exercise discretion when requiring noise barriers to ensure that: (a) other methods of noise attenuation have been explored (b) landscaped berm and barrier combinations are proposed where feasible and (c) the proposed barrier is not only dense enough to be effective (a minimum mass of 4.5 lbs./sq. foot) but also properly designed and aesthetically compatible with the surrounding community.
16. Assist in the formation of special assessment districts or other funding opportunities as necessary, to install noise barriers or berm and barrier combinations in areas where existing residences back up to major thoroughfares.
17. Ensure that the design and improvement of future master planned roadway links in the City are accomplished in a manner which minimizes noise impacts on adjacent educational facilities and adjoining neighborhoods.
18. Ensure through the General Plan process that objectives and policies provide for compatible noise environments for all existing and future land uses within the City.
19. Consider the following uses noise sensitive and discourage them in areas where exterior noise levels exceed 65 CNEL unless measures are implemented which reduce the noise exposure below this level:
  - (a) single and multiple family residential uses
  - (b) group homes
  - (c) hospitals
  - (d) schools and other learning institutions and

- (e) parks and open space areas where quiet is a basis for use.
20. Incorporate measures into future residential projects which attenuate exterior noise levels in outdoor activity areas to a maximum of 65 CNEL.
  21. Encourage the Adelanto School District to design and locate schools so that exterior noise exposures do not exceed 65 CNEL and interior peak noise levels do not exceed 60 dBA as a result of exterior noise sources.
  22. Ensure through the plan approval process that any branch library facilities are designed and located so that interior noise levels do not exceed 60 CNEL and average interior noise levels during business hours do not exceed 50 dBA.
  23. Ensure through the plan approval process that interior noise levels for hospital and convalescent homes do not exceed 55 CNEL in interior living areas and 45 CNEL in interior sleeping areas.
  24. Ensure through the plan approval process that recreational areas intended for quiet or passive activities are designed and located so that noise levels do not exceed 70 CNEL.
  25. Ensure through the plan approval process that recreational areas intended for noisy or active uses are buffered from passive use areas and from surrounding noise sensitive land uses.
  26. Ensure through the plan approval process that business and professional offices where effective communication is essential mitigate interior noise to 55 CNEL.
  27. Ensure through the plan approval process that exterior noise levels at commercial and industrial areas do not exceed 75 dBA.
  28. Ensure through the plan approval process that noise tolerant land uses are located in areas irrevocably committed to noise producing land uses such as transportation corridors or railroads.
  29. Future projects approved within the City shall reflect adopted policies regarding the reduction of unnecessary noise near sensitive receptors such as parks, hospitals, libraries, schools and convalescent homes.
  30. The City shall periodically review County and regional plans for land use transportation airport operation etc. to identify any potential noise impacts

and develop strategies for the control of major noise sources on a County-wide and regional basis.

31. Noise sensitive land uses including residences, hospitals and long-term medical care facilities, educational facilities, libraries, churches and places of public assembly shall not be allowed near major stationary noise sources.
32. The application of noise insulation and other noise control techniques in new schools, hospitals and convalescent homes shall be consistent with State and Federal regulations.
33. Consideration shall be given to the effects of truck mix, speed limits and ultimate motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned.
34. Enforce State vehicle noise regulations (Section 23130, 23130.5, 27150, 27151 and 38275 of the California Vehicle Code) to curtail the use of vehicles equipped with illegal or faulty exhaust systems and hot rods exhibiting tire squeal or excessive exhaust noise.
35. Specify that in Conditionally Acceptable areas applicants must submit an acoustical analysis of proposed residential developments prepared under the supervision of a person experienced in the field of acoustical engineering which evaluates existing and projected noise levels as well as the application of noise attenuation measures.
36. Enforce the California Noise Insulation Standards (Title 24 California Code of Regulations) for multi-family dwellings to ensure an acceptable maximum interior noise level of 45 CNEL in habitable rooms and maintain adequate noise insulation.
37. Acoustical privacy consistent with the California Noise Insulation Standards and all existing and future requirements outlined in the State Housing Code shall be strictly enforced for both single and multiple family residential construction.
38. Grading and construction activities will be limited in project Conditions of Approval by the City to week days between 7:00 a.m. and 6:00 p.m. This requirement will be enforced especially when the construction site is adjacent to existing residential uses.

39. Require the preparation of a Master Development Specific Plan for the long range operational requirements of the airport facility and the surrounding Airport Development District.
40. Require that all proposed development within the Airport Development District be in conformance with the Master Development Plan/Specific Plan.
41. Require all new development to conform to policies and regulations established for uses occurring within the 65 CNEL noise contour and the overflight areas of the proposed airport facility.

#### **3.5.4 Unavoidable Adverse Impacts**

The General Plan Update has the potential to generate significant adverse noise impacts, however, the mitigation measures proposed are expected to reduce impacts to less than significant levels (i.e. land uses are expected to meet State noise standards). Therefore, implementation of the General Plan Update will not result in unavoidable adverse impacts to the noise environment.

### **3.6 Light and Glare**

#### **3.6.1 Setting**

Light and glare within the Project Area comes from public and private lighting used generally in commercial districts, the street lighting in residential districts and glare from vehicular headlights. Light and glare is a problem principally when exterior lighting shines on adjacent properties. Due to the undeveloped nature of much of the Project Area, this problem is limited to only a few locations. For the most part, the light levels in the undeveloped areas are considered to be less than significant.

#### **3.6.2 Impacts**

Of primary concern is the effect of the Project Area's long-term land use and infrastructure development patterns will have on adjacent residential properties. Three potential impacts could include, (1) the effect of street lights on nearby residential properties, (2) glare from reflective building materials frequently used on mid-rise office buildings, and (3) the effect of headlights from vehicles using the Project Area roadways.

#### **3.6.3 Mitigation Measures**

Mitigation measures included as part of Project approval include the following:

1. Industrial and commercial uses adjacent to residential units will be required to direct outdoor lighting away from existing and planned residential units.
2. Development projects will be required to use, as appropriate, (a) low pressure sodium lights where security needs permit, to minimize the impacts of glare, (b) limitations on height of lighting fixtures to reduce unwanted illumination, (c) directing light and shielding to minimize off-site illumination, (d) point by point lighting plans, as necessary, for commercial and industrial developments in the immediate vicinity of residential areas, and (e) regulation of land use compatibility for highly illuminated land uses, such as ballfields, tennis courts and outdoor stadiums through the City development review process.

#### **3.6.4 Unavoidable Adverse Impacts**

Incorporation of the proposed mitigation measures into the Proposed Project will reduce impacts to a level of insignificance and there are no remaining unavoidable adverse impacts.

### **3.7 Land Use**

#### **3.7.1 Setting**

The Land Use Element is intended to outline the basic goals of the City, to provide a balance of land uses, and to describe the character of each land use category. This is a policy level recommendation of the City and is an indication of how public and private property should be utilized.

The existing land uses as established in the 1985 General Plan have served as the major guide to development during the past 9 years. The goals, policies, and programs were set forth to provide the basis for the land use decisions during that time period.

The policies from the 1985 General Plan that are incorporated into the General Plan Update are listed in the Land Use Element, Section 1,B.

#### **3.7.2 Impacts**

Land use impacts become significant when the proposed project conflicts with existing plans.

The Land Use Element serves as a guide for both public officials and private citizens for decisions regarding the use of land within the City. To the private citizen, it defines expectations to the type of neighborhood, the location and type of shopping and service facilities, the time and distance to work and to other necessary activities. To the public official, it is the framework for providing public facilities and services and for directing new development. It is the basis for long-range and short-range capital improvement programs.

Land within the City is used for activities which are classified as residential, commercial, manufacturing/industrial, airport park, airport development district, public/semi-public open space, and specific plan area. Many factors influence the decisions for the location of each type of land use and these factors are grouped into elements which are discussed in this chapter.

The goals and policies established by the General Plan are intended to focus on allowing the community to grow at a reasonable rate and also assure a healthy mix of land uses. They are also set forth to assure a high quality setting for new and current residents and businesses located within Adelanto.

The proposed land use plan as shown in Exhibit A of the Land Use Element has incorporated opportunities/constraints, policy decisions, and development trends to assemble an appropriate mix of uses within the City of Adelanto. There are many new land use categories that exist on the plan which have been derived through policy

decisions made by the Planning Commission and City Council. The plan provides the basis for decision makers, as well as development community. Additionally, it encompasses a larger area than that currently contained within the City's existing boundaries.

The General Plan Planning Area comprises over 81,000 acres. Of this 32,196 acres are within existing City boundaries and an additional 17,196 acres are within the existing Sphere of Influence. The Land Use Plan also includes the 25,600 acres between the northern Sphere of Influence boundary and Shadow Mountain Road and 5,719 acres of George Air Force Base.

The land use categories and acreage for the General Plan Update currently within the City and within the existing Sphere of Influence for buildout of the land use plan is as follows:

#### GENERAL PLAN LAND USE

ZONE	LAND USE	CITY	ACRES SPHERE	TOTAL
CR	COMMERCIAL RESTRICTED	345	0	345
C	GENERAL COMMERCIAL	2,495	180	2,675
ADD	AIRPORT DEVELOPMENT DISTRICT	2,483	6,344	8,827
CR-2	CARD ROOM	30	0	30
M/I	MANUFACTURING/INDUSTRIAL	9,579	240	9,819
L/M	LIGHT MANUFACTURING	607	0	607
AP	AIRPORT PARK	326	0	326
R-1	SINGLE FAMILY RESIDENTIAL	6,513	2,625	9,138
R-1(.5)	SINGLE FAMILY RESIDENTIAL (1/2 ACRE)	3,869	335	4,204
R3-8	MULTIPLE FAMILY RESIDENTIAL	1,940	0	1,940
DL-2.5	DESERT LIVING (2.5 ACRE)(1)	743	667	1,410
DL-5	DESERT LIVING (5 ACRE)(1)	1,868	3,615	5,483
DL-9	DESERT LIVING (9 ACRE)	0	0	0
MHS	MOBILEHOME SUBDIVISION	96	0	96
OS	OPEN SPACE/PUBLIC LAND/SCHOOLS	871	3,155	4,026
PF	PUBLIC SPACE/PUBLIC UTILITY	35	35	70
CF	COMMUNITY FACILITY	396	0	396
SPA	SPECIFIC PLAN AREA(2)	0	5,719	5,719
<b>TOTAL ACREAGE</b>		<b>32,196</b>	<b>22,915</b>	<b>55,111</b>

(1) GROSS ACRES

(2) NOT IN CITY SPHERE

## **BUILDING INTENSITIES**

In accordance with Government Code Section 65302(a) and recent court decisions (Camp, Twain Harte) the General Plan includes quantifiable standards of building intensity.

Section 17.10.020 of the Zoning Code specifies standards for Residential and Open Spaces Districts. Table III-4 of the Land Use Element lists Site Standards established in each Residential district. For MHP, refer to Chapter 17.18 of the Zoning Code.

## **LAND USES**

The following descriptions will outline the general nature of each land use category, define the basic goals and objectives to be achieved within the category, and describe specific mechanisms to be achieved within that land use category. This will help guide the development community in designing projects which encapsulate the intent of the City's goals, policies, and strategies for implementing the Land Use Element of the General Plan.

### **Residential Land Uses (R1, R1(.5), R3-8, DL-2.5, DL-5, and MHS)**

The residential land use designations are intended to provide a quality mix of development types and price ranges. The State of California requires that each City in the State provide affordable housing types within their jurisdiction. The proposed Land Use Plan has been designed to allow for various residential densities, and for a variety of housing types. Each category of residential land use will describe the intensity, community character, and development standards which must be incorporated into Tract Maps, Precise Plans, Development Plans, and Specific Plans.

#### **Single Family Residential (R1)**

This category of residential use is primarily intended to permit development of custom homes and single family detached production housing. The Single Family Residential density allows an overall density of up to four (4) dwelling units per gross acre. The minimum lot size allowed in this category is 7,200 square feet.

#### **Single Family Residential, .5 acre net (R1-.5)**

This category of residential use is primarily intended to provide for the development of large lots and custom homes in Adelanto. The R1-.5 category allows for an overall density of up to one unit per 1/2 acre (net). All other regulations and restrictions established for the R1 district shall apply to the R1-.5 category.

**Medium Density Residential (R3-8)**

This category of residential use is intended to permit the development of a range of product types, including single family detached homes, zero-lot line homes, single family attached homes (patio homes/townhouses), and multi-family dwellings. The Medium Density Residential category allows for a density range up to eight (8) units per gross acre.

**Mobile Home Park (MHP)**

This density category of residential use is intended to permit development of mobile home parks. The Mobile Home Park category allows an overall density range up to 6 dwelling units per gross acre or in compliance with the State Mobile Home Act, whichever is greater.

**Low Density Residential (DL-1)**

This category of residential use is primarily intended to permit development of large lot residential homesites. The Low Density Residential density allows an overall density of up to one (1) dwelling unit per gross acre. The minimum lot size allowed in this category is 20,000 square feet in order to provide flexibility in site design. In other words, density transfer is allowed to promote preservation of significant community features or amenities. Minimum lot size for parcels under five (5) acres is one (1) gross acre. Low Density Residential dwellings may be served by individual septic systems, pending City approval. If sewers are available within 250 feet of a property, that property must be sewerred.

**Low Density Residential (DL-2.5)**

This category of residential use is primarily intended to permit development of large lot residential homesites. The Low Density Residential density allows one single family unit for each acre, but no more than 2 units (one per acre). The minimum lot size allowed in this category is 40,000 square feet in order to provide flexibility in site design. In other words, density transfer is allowed to promote preservation of significant community features or amenities. Low Density Residential dwellings may be served by individual septic systems, pending City approval. If sewers are available within 250 feet of a property, that property must be sewerred.

**Rural Residential (DL-9)**

This category of residential use is intended to permit development of rural residential homesites. The DL-9 category allows for single family dwellings not to exceed one per acre with no more than three dwellings on each parcel of land. The rural residential dwellings may be served by individual septic systems, pending City approval.

## Commercial Land Uses

The primary purpose and application of the Commercial land use designation is to guide the planning, design, development and operation of the City of Adelanto's commercial areas. At the General Plan level, three Commercial land use designations are employed; "C, CR, and CR-2." "Commercial" (C) includes all general and neighborhood commercial uses. Certain commercial land use areas are subject to special use restrictions because they are affected by airport noise and/or safety impacts. The most significant restriction is the exclusion of uses involving overnight occupancy such as residential uses or hotels. These areas are identified by the "Commercial Restricted" (CR) zone. The CR-2 designation is for a card room.

### Commercial (C, CR, CR-2)

The purpose of this designation is to provide for a development of commercial facilities throughout the City that are adequate to satisfy business and service needs and to focus social interaction and community identity at a sub-regional, community or neighborhood level. While commercial land use areas are specifically identified in the General Plan, commercial uses may be allowed within any land use designation with a Conditional Use Permit based on demonstration of compatibility with the surrounding area through the submittal of a Specific Plan (development proposals over 80 acres) or a Development Plan (development proposals under 80 acres).

### Airport Development District (ADD)

The primary purpose of the Airport Development District land use designation is to guide the planning, design, development and operation of a major airport, and the complimentary surrounding uses contained therein. Within the ADD, the primary uses will be specifically oriented around airport operation, services, industries and businesses. The ADD will be restrictive of uses that are incompatible with aircraft noise and aviation-related activity.

The Airport Development District land use designation identifies uses which are compatible with the operation of a major civilian aviation facility. Projects or development that occurs within the ADD must be in coordination with approved zoning regulations for the ADD and the aviation operations portion of the airport specific plan area.

### Airport Park (AP)

The Airport Park designation (AP) is intended to continue the current use of the existing Adelanto airfield while encouraging the future development of new residential projects. In addition, it is important that the operation of the AP does not conflict with the operations of the proposed major airport project at George A.F.B.

The AP allows for a variety of aviation, residential, business park, and agricultural uses. The current designation allows for the development of 1 acre residential parcels in the district. The following goals and policies have been established for the AP district.

#### **Light Manufacturing and Manufacturing/Industrial (LM and MI)**

The MI land use designation refers to areas that will contain the majority of general industrial and manufacturing activity in the City of Adelanto. The LM classification is for the three light small manufacturing areas; one is located at Adelanto Road between Air Base Road and Bartlett Avenue, the second between De Soto Avenue and El Mirage Road west of Highway 395 and the third along the south side of Air Base Road between Lessing Avenue and Bellflower Street. The MI district is immense, containing over 9,400 acres of prime developable land that has excellent access to rail, air, and the interstate freeway network. The M/I area is located south of Air Base Road and north of Mojave Drive. Currently there are three City sponsored industrial park developments that are in the construction phase. These industrial parks have been very successful and will generate the momentum for continued industrial park development. This development is the primary economic asset for the City, creating much needed jobs for the residents of Adelanto and the High Desert.

#### **Open Space/Public Land/School, Public Facility, Community Facility (OS,PF,CF)**

These designations refer to all areas that are set aside for various public and semi-public uses, including corridors that provide for drainage throughout the City. These uses have been established to provide for the public health, safety, and welfare in addition to the provision of essential public services such as parks, public safety facilities, and City-owned facilities (i.e. Mavericks Stadium). This designation also provides for other public and semi-public facilities including schools, prisons and recreational facilities such as auto racing, moto-cross, etc. Utility rights-of-way are also designated as open space, assuring that adequate land is maintained for major utility structures.

#### **Specific Plan Area (SPA)**

The designation Specific Plan Area (SPA) refers to George Air Force Base directly adjacent to the City of Adelanto. This designation is designed to defer to a later date the specific land uses for the Base area. The City of Adelanto envisions the preparation of a Specific Plan pursuant to the requirements of State Law either by Adelanto, Adelanto and another jurisdiction or another jurisdiction. The George Air Force Base facility has the opportunity to become a major economic and employment center for the entire High Desert area. The City of Adelanto, however, is very concerned about the impact and control of flights over their community and desires to assure equitable compliance with regulations and appropriate mitigation measures.

This area is located in a potential overflight area for the proposed Airport and should remain as a non-residential use to mitigate any potential land use conflicts.

Since the threshold for significant impact is conformance to existing plans, there will be no significant impact on land uses when the General Plan Update is adopted by the Adelanto City Council.

### **3.7.3 Mitigation Measures**

Although no mitigation measures are required pursuant to the CEQA the following mitigation measures are recommended to insure that land use does not impact other topical areas.

Policies of the Land Use Element designed to reduce impact on the land use pattern of the City include the following:

1. The City will require "low flow" plumbing fixtures and other water conserving techniques to reduce overall per capita water consumption.
2. Require the preservation and relocation of endangered plants and animals which may be in jeopardy due to increased development activity.
3. Require that the Mojave River Corridor remain as an open space area, to be used for wildlife habitat and passive recreational activities.
4. Require the use of drought tolerant plant materials for all types of development, including the use of native California species.
5. Require new development to accommodate design criteria established in the Community Design Element.
6. Require that infrastructure be in place prior to the occupancy of new development.
7. Require that short term development demands are in balance with long range goals established by the General Plan.
8. Require that all developments within the City are designed to accommodate the "Buildout" road dedications at the time of approval.
9. Prepare a wastewater reclamation program for the use of treated water in appropriate land uses.
10. Provide residents with water conservation tips and education.

11. To manage growth according to the General Plan for land use, assuring that community services are adequate to meet existing and proposed community needs.
12. Encourage growth to occur according to the most efficient sequence from existing development to planned project areas.
13. Pursue annexations which serve to promote the balance of the community, the quality of development, improvement of the economic base, and foster the long range plans of Adelanto.
14. Allow for a range of street standards appropriate for the type and density of development, as well as the projected level of service of each roadway at buildout of the General Plan.
15. To provide a balanced mix of land uses and development patterns which provide the maximum flexibility to the development community.
16. Encourage the development of a variety of projects and project types that enhance the community image.
17. Offer a wide range of development opportunities for investors, developers, residents and businesses. The City encourages the development of mixed use projects, providing a balance of homes, jobs, and services.
18. Discourage the proliferation of "urban sprawl" by utilizing the general plan framework to foster a sense of community identity.
19. Require the implementation of varied setback lines and the use of appropriate buffers between incompatible or conflicting land uses.
20. Require the preparation of development plans that incorporate the design components contained in the Community Design Element.
21. Request all developers to plan projects according to the specified land uses contained in the General Plan. Otherwise, the City will request the preparation of development plans or a special plan in order to be considered.
22. To promote the transformation of George Air Force Base into a major airport.

23. Encourage the interests of domestic and international companies to locate in Adelanto's Airport Development District and promote the concept of an enterprise or foreign trade zone to stimulate business.
24. Coordinate all planning and design of Airport with the FAA, assuring that all Federal, State and local requirements are met.
25. Work to ensure that George Air Force Base property, after transfer from the Federal Government, will remain an aviation facility focused on serving the future air transportation needs of the region and/or Southern California.
26. Require the preparation of a Master Development Plan for the long range operation of the airport facility and the surrounding Airport Development District.
27. Require that all proposed development within the Airport Development District Zone be in conformance with the Master Development Plan for the Airport.
28. Require all land uses around the airport be in conformance with the plans, rules and regulations contained in a master Development Plan for the Airport.
29. Require all new and existing development to conform to policies and regulations established for uses occurring within the 65 CNEL and overflight areas of the proposed airport facility.
30. To promote industrial, business and commercial development that provides for increased jobs and strengthens the local economy.
31. Encourage the development of business parks, offices and R&D centers in appropriate zones located throughout Adelanto.
32. Encourage the appropriate development of commercial activity in areas designated "commercial" or in areas that have unique qualities indicating the need for a commercial land use.
33. Encourage "cluster" commercial development rather than "strip" or linear commercial development to minimize curb cuts and to foster individual identify of each commercial node.
34. Promote the revitalization of existing commercial areas located outside of the Airport Development District.

35. Continue an aggressive industrial development program, maximizing the use of the large manufacturing/industrial district.
36. Require all development within the Airport overflight area be subject to approval by City Council and the designated Airport Authority to ensure compatibility with airport operations. No high occupancy overnight uses shall be permitted within these areas.
37. Allow neighborhood commercial centers at major intersections within residential districts and at section and 1/2 section intersections, pending a Conditional Use Permit.
38. Request aggregation of small parcels to minimize incongruous development.
39. To provide for a conversion of the current U.S. 395 Corridor into a super arterial roadway and focus on the implementation of Freeway 395.
40. Coordinate U.S. 395 realignment efforts with Caltrans to obtain necessary dedications and rights of way for the proposed Freeway 395.
41. Continue efforts with surrounding communities on the U.S. 395 realignment, design and construction process in order to assure the implementation of Freeway 395.
42. Assure that the current U.S. 395 facility will be re-utilized as a high access roadway (business route).
43. Require that a comprehensive U.S. 395 Corridor Study be prepared to evaluate the necessary improvements needed to transform the current limited access roadway into a major arterial (business route) through Adelanto.
44. Initiate a cooperative dialogue with Victor Valley communities and CalTrans to speed up the process for implementation of the Freeway 395.
45. Promote the inclusion of safe, attractive, well-served and affordable housing to complement the presence of the industrial district, the airport complex and the commercial centers in Adelanto.
46. Encourage residential developments to contain a variety of product types, designs and features.

47. All residential developments, as necessary, will include the dedication of parklands as required by the Quimby Act and/or provide fees in lieu to be allocated to the City for park acquisition.
48. Drainage channels as shown on the Master Drainage Plan shall be considered as unalterable. No channels may be rerouted around development without prior approval by the City Council.
49. The City will encourage reverse design residential districts; those which do not front major streets, arterials or collectors.
50. Require multi-family and mobile home subdivisions to adhere to the same overall design standards that apply to other residential districts. These uses are also appropriate for infill areas within the City.
51. Enforce the requirements set forth in the Development Regulations section of this document to assure quality development and upkeep.
52. Require the use of streetscapes and edge treatments to buffer all homes along major and minor streets utilizing xeriscape landscape to the greatest extent possible.
53. Allow the incorporation of residential units above or behind commercial uses pending a Conditional Use Permit.
54. Promote low per capita water use through the use of low water consumptive plant materials/desert plants (xeriscape).
55. Retain natural drainage channels and assure construction of facilities necessary to accommodate flows generated by proposed development. Retention areas and spreading grounds are to be incorporated where feasible.
56. Promote the addition of wastewater recycling facilities and the reuse of treated water for appropriate purposes.
57. Promote architectural designs that give Adelanto a unique, positive community image as it relates to the desert environment.
58. Protect environmentally unique and fragile areas such as bluffs, Joshua Tree woodland, the Mojave River Corridor and sensitive wildlife habitat areas.
59. Other mitigation measures are included in the Land Use Element under the Land Use Descriptions, Goals and Policies, Section IV.

### **3.7.4 Unavoidable Adverse Impacts**

Incorporation of the proposed mitigation measures into the Proposed Project reduce impacts to a level of insignificance and there are no unavoidable adverse impacts. Since the threshold of significance is conformance to existing plans, with adoption of this General Plan Update, the land uses proposed will conform, leaving no significant impact.

### **3.8 Natural Resources**

#### **3.8.1 Setting**

The General Plan Update discussion of natural resources includes: (1) Biological Resources , (2) Cultural Resources, (3) Air Quality, (4) Water Resources, (5) Open Space/Recreation, (6) Earth Resources, and (7) Mineral Resources. Each of these natural resources are discussed elsewhere in this Environmental Impact Report with the exception of mineral resources which is discussed below.

Portions of the Planning Area may be subject to mineral and resource extraction in the future. Much of the Planning Area has sand and gravel resources and may have other precious metals in small quantities. Mineral extraction will be one of the uses that is suitable for the Airport Development District. This use would be compatible with the fly- over areas of the new major airport. No portion of the Planning Area is well suited for agricultural resources.

#### **3.8.2 Impacts**

The construction of the urban landscape will result in the consumption of fossil fuel resources for electricity, heating and cooling , transportation and construction. Refer to Tables VII-2, VII-3 and VII-4 of the Conservation/Open Space Element. As development occurs in accordance with the Land Use Element of the General Plan non- renewable energy and mineral resources will be consumed. The reader should refer to the other sections of this Environmental Impact Report including (1) Biological Resources , (2) Cultural Resources, (3) Air Quality, (4) Water Resources, (5) Open Space/Recreation, (6) Earth Resources, and (7) Mineral Resources. that discusses these subjects.

Open space will be consumed as a result of implementing the Land Use Element. Over 73,000 currently vacant acres will be developed to urban uses, however, implementing the policies of the Conservation/Open Space Element will substantially improve the remaining open space for human use.

In a regional and Statewide context, the level of consumption is not considered significant. However, any increase in the level of non-renewable resources should be considered adverse.

#### **3.8.3 Mitigation Measures**

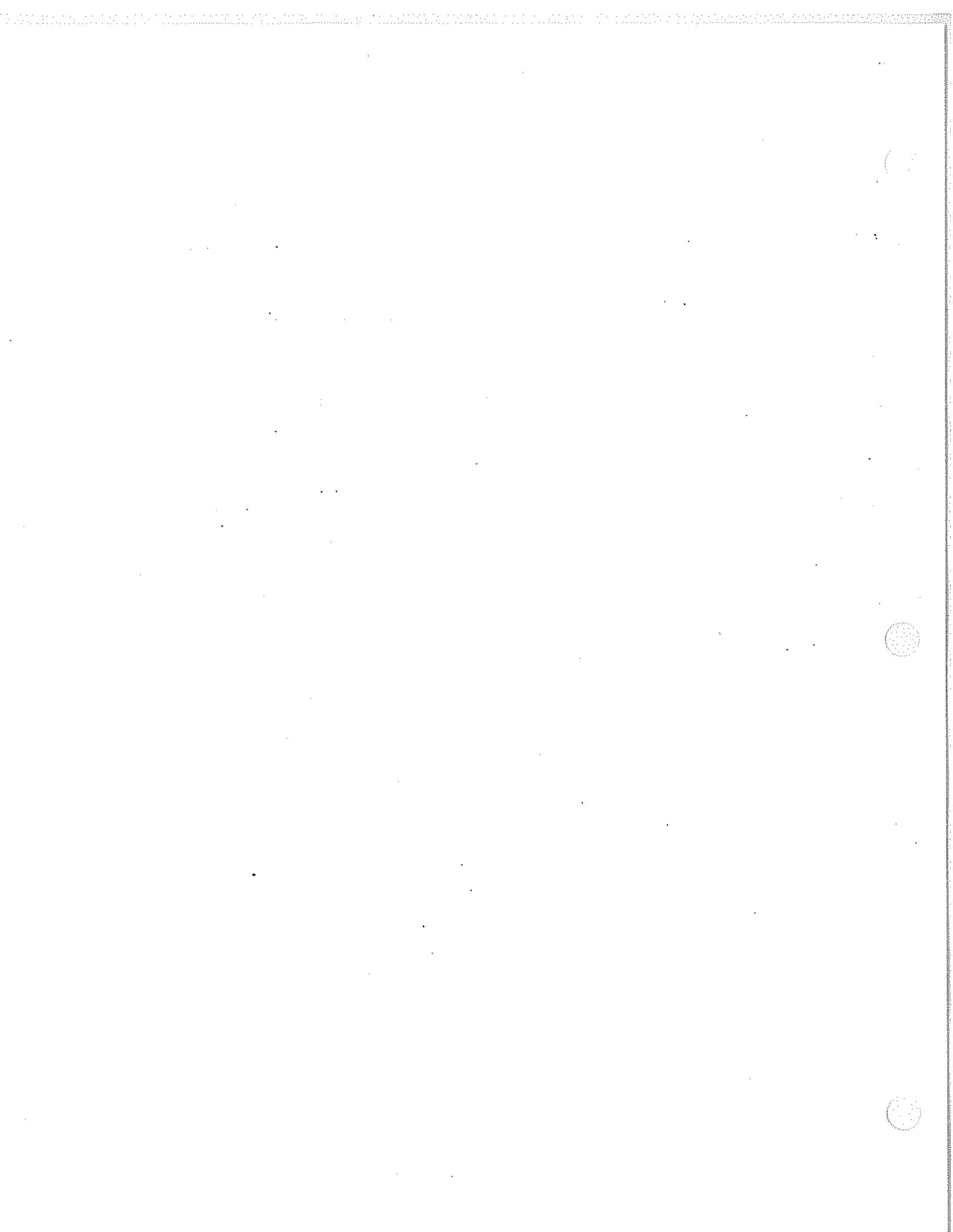
Policies of the Conservation/Open Space Element designed to reduce impact on natural resources within the City include the following:

1. The City will continue requiring the underground placement of existing and future utility lines to reduce visual impact as projects are approved.
2. All new developments will be required to implement energy conservation techniques into the development design.
3. The City will restrict development in those areas which are determined to have significant reserves of natural resources, including gas, oil, and aggregate materials.
4. Conservation techniques shall be required for proposed development (both domestic and industrial) to minimize consumption levels of renewable and non-renewable natural resources including water resources.
5. The City will seek to identify potential natural resources which may occur within the Planning Area and to conserve and protect those resources which may have substantial value to residents.
6. The City of Adelanto, in cooperation with Federal, State, and County government agencies, as well as surrounding jurisdictions and responsible agencies, will implement programs to assure maintenance and improvement of water quality from local groundwater sources and improve availability of water.
7. The City will cooperate with the County of San Bernardino to implement measures of the Congestion Management Plan in an aim to reduce the number of vehicles per capita on roadway systems within the Planning Area and the region, thus reducing the per capita consumption of fossils fuel.
8. The City will encourage residential, commercial, industrial users to conserve the use of water and other renewable and non-renewable natural resources by incorporating conservation measures.
9. The City shall promote the development and use of alternative energy sources, such as passive solar in industrial, commercial and residential developments.

No additional mitigation measures, other than those contained in the other parts of this Environmental Impact Report are proposed.

**3.8.4 Unavoidable Adverse Impacts**

The consumption of non-renewable fuels and the consumption of open space are unavoidable adverse impacts of the proposed project which can not be reduced to levels of insignificance by the mitigation measures proposed.



### **3.9 Risk of Upset**

#### **3.9.1 Setting**

The City of Adelanto is bisected by US Highway 395 which is a major truck route between Southern California and Canada. Many hazardous waste materials are transported on Highway 395 and could affect local residents and the environment if an accident should occur.

#### **3.9.2 Impacts**

In the event of a major catastrophe occurring within the Planning Area it will be necessary for the City to provide a plan of action to respond effectively to such disasters. An emergency response/preparedness plan should be developed to maximize the safety of residents in case of such an emergency.

#### **3.9.3 Mitigation Measures**

Policies of the Safety Element designed to reduce impact on potential hazards within the City include the following:

1. The City will ensure that all appropriate construction and safety standards are incorporated into all new development.
2. The City will review all development proposals to determine the possible impacts of each development on emergency services.
3. The City will enforce all Federal, State, County and local laws requiring all users, producers, and transporters of hazardous materials and waste to clearly identify any materials in the event of a violation.
4. The City will require all land uses involved in the production, storage, transportation, handling or disposal of hazardous materials be located at a safe distance from land uses that may be adversely impacted by these activities.

#### **3.9.4 Unavoidable Adverse Impacts**

Incorporation of the proposed mitigation measures into the Proposed Project reduce impacts to a level of insignificance and there are no unavoidable adverse impacts.

### **3.10 Population**

#### **3.10.1 Setting**

Adelanto's population grew at an enormous rate during the past decade, from 2,107 resident in 1980, to 8,712 residents in 1990, according to the U.S. Census. In percentage terms the population has increased by approximately 250% in the last decade, which is much higher than any other Victor Valley city's growth. Much of this growth occurred as the result of Adelanto's ability to provide affordable housing products within the City.

Adelanto's current population (1990) is over 8,700 residents, which is 190% over the City's 1985 population of 3,929. The City is expected to experience a high growth rate over the next several decades as Southern California, particularly San Bernardino and Riverside Counties, continues to attract people escaping the high cost of living in the more populated areas of Southern California. Many of the new residents of the state are locating outside the major population centers in order to obtain more affordable housing.

Recent growth projections by the Southern California Association of Governments (SCAG) and others estimate conservatively that the high desert region will grow from a current population of over 250,000 to at least 500,000 by 2010. If growth rates experienced over the past several years continue throughout the decade, the number could be much higher.

#### **3.10.2 Impacts**

Although the City of Adelanto is one of the smaller communities on the high desert, it is primed to receive a large percentage of the growth that is projected to occur in the region. There are several reasons for this, but the most important factor is the City Government itself. Adelanto has a very pro-active City government which is not only pro-growth, but has provided exceptional leadership in establishing a positive climate for attracting high quality investment. For example the City has implemented a remarkably successful industrial development program which has made it very attractive for businesses to locate in Adelanto.

Another important factor in Adelanto's growth potential is the enormous size of the Adelanto Planning Area. The Planning Area is comprised of approximately 81,000 acres, or approximately 20% of the land area of the Victor Valley.

Many of the other high desert communities are not accepting growth trends as enthusiastically as Adelanto. Some have adopted official policies to retain a more rural lifestyle. The other larger jurisdictions already have substantial population bases with built-in opposition to growth and change. This is not the case with Adelanto.

Development of Adelanto has been repressed for years by the negative impacts of George Air Force Base. Now that the base has closed (1992), citizens and land-owners of Adelanto are anxious to finally get their share of benefits from development pressures occurring in the region. City officials believe that with "good" planning, "quality" growth can occur, bringing both short-term economic benefits and a community of lasting values.

Given the lack of growth constraints and the assertive pro-growth policies and programs of Adelanto, it is realistic to expect that at least 20% of the high desert growth could occur within the Adelanto Planning Area. The proposed General Plan established land use policies that would accommodate a total population of over 156,000 residents at buildout. It is projected that approximately 33%, or nearly 52,000 residents will live in Adelanto by 2014. The reader is referred especially to the impacts in Climate and Air Quality, Water Resources, Biological Resources, Noise, Natural Resources, Traffic and Circulation, Housing, Public Services and Utilities sections of this Environmental Impact Report. It is the population that will impact the land, consume open space, increase noise levels and traffic congestion, degrade air quality, require new buildings, consume natural resources including fuel, wood, sand and gravel, use gas, electricity and services and consume water at home and at the job site.

### **3.10.3 Mitigation Measures**

No mitigation measures other than those discussed throughout this report are recommended. The reader is referred especially to the mitigation measures in Climate and Air Quality, Water Resources, Biological Resources, Noise, Natural Resources, Traffic and Circulation, Housing, Public Services and Utilities sections of this Environmental Impact Report. Mitigation measures discussed in these sections will reduce the impact on the land, consume less open space, reduce noise levels and traffic congestion, improve air quality, consume less natural resources including fuel, wood, sand and gravel, use less gas, electricity and services and consume less water at home and at the job site.

### **3.10.4 Unavoidable Adverse Impacts**

No unavoidable adverse impacts other than those discussed throughout this report will occur. The reader is referred especially to the unavoidable impacts in Climate and Air Quality, Biological Resources, Natural Resources, Traffic and Circulation, Public Services and Utilities sections of this Environmental Impact Report. Even with the mitigation measures discussed in these sections there will be unavoidable impacts to the land, open space, traffic congestion, air quality, natural resources including fuel, services and availability of water.

### **3.11 Housing**

#### **3.11.1 Setting**

Housing, particularly the development of single family homes, has and will continue to respond to the demand being experienced in the region. It is believed that with the development of the airport at George Air Force Base, as well as the continued development of the industrial districts, within Adelanto continued growth in both the creation of jobs and new houses will occur.

Approximately 3,000 housing units exist in Adelanto, with another 9,000 approved but not yet constructed. In 1980, there were 988 housing units. This represents a growth rate of 1,275% over the 10 year period. There are approximately 120,000 existing housing units in the high desert. Approximately 35% of the existing housing units are single family dwellings. Most of the development approved in the City over the past 5 years has been single-family units. This reflects the transition from a "Base" town to a normal suburban community.

#### **3.11.2 Impacts**

The General Plan Update will effect existing housing in both quality and quantity. The reader is also referred to the Housing Element and the Housing Programs in the Project Description of this Environmental Impact Report. The Low and Moderate Income Housing that is provided by the City is a major beneficial impact of the proposed project.

As indicated in the population growth discussion above, the City anticipates it will receive approximately 20% of the growth of the high desert. The proposed General Plan will accommodate over 59,000 housing units at buildout, of which, approximately 33% (19,400) are projected to be constructed by 2014. The vast majority of new housing will be medium to low density with medium high to high density comprising about 13% of the total, reflecting the market demand for single family homes and the availability of land.

Because of the availability and current surplus of generally affordable housing, the City does attract Low and Very Low Income persons from throughout the County, especially from the San Bernardino area. Approximately 25 percent or 725 households are on public assistance. According to the 1990 Census and the SCAG Draft Housing Element (1993) the total number of vacant units was 346 and the number of vacant rental units in Adelanto was 182 units. With the closure of George Air Force Base in December 1992 the number of renters has substantially decreased and the vacancy rate of units is estimated by the State Department of Finance to have increased from 11 percent in 1990 to 12.4 percent in 1993 with the total vacant units at 537. The availability of this rental housing with rents as low as \$250 per month more than meets

the existing and future needs of the City for housing. The affordable rental payments and housing cost ownership are calculated in Table IV-21 of the Housing Element. Owners overpaying for housing (more than 30 percent of monthly income) according to SCAG was 49 Very Low Income owners (\$16,650 per year in 1989) and 47 Low Income owners (\$26,600 per year in 1989). Renters are almost ten times the number of owners with 815 Very Low Income renters overpaying for housing and 163 Low Income renters. The 1990 Census indicates that 873 households are overpaying (more than 30 percent) of which 668 households are paying more than 35 percent.

As previously stated, it is projected that approximately 52,000 residents will live in Adelanto by 2014 in 19,400 units with 59,000 units at buildout. For the impacts of this housing the reader is referred especially to the impacts in Climate and Air Quality, Water Resources, Biological Resources, Noise, Natural Resources, Traffic and Circulation, Housing, Public Services and Utilities sections of this Environmental Impact Report. It is the population that will live in these houses that will impact the land, consume open space, increase noise levels and traffic congestion, degrade air quality, consume natural resources including fuel, wood, sand and gravel, use gas, electricity and services and consume water at home and at the job site.

### **3.11.3 Mitigation Measures**

The City of Adelanto will sponsor, encourage, and permit the development of housing to meet all the housing needs of the residents located in the City. No additional mitigation measures other than those discussed throughout this report are recommended. The reader is referred especially to the mitigation measures in Climate and Air Quality, Water Resources, Biological Resources, Noise, Natural Resources, Traffic and Circulation, Population, Public Services and Utilities sections of this Environmental Impact Report. Mitigation measures discussed in these sections will reduce the impact of housing and its related population on the land, consume less open space, reduce noise levels and traffic congestion, improve air quality, consume less natural resources including fuel, wood, sand and gravel, use less gas, electricity and services and consume less water.

### **3.11.4 Unavoidable Adverse Impacts**

No unavoidable adverse impacts other than those discussed throughout this report will occur. The reader is referred especially to the unavoidable impacts in Climate and Air Quality, Biological Resources, Natural Resources, Traffic and Circulation, Population, Public Services and Utilities sections of this Environmental Impact Report. Even with the mitigation measures discussed in these sections there will be unavoidable impacts to the land, open space, traffic congestion, air quality, natural resources including fuel, services and availability of water.

### **3.12 Cultural Resources**

#### **3.12.1 Setting**

An archaeological records search was conducted to determine the existence of prehistoric and historic resources in the City. This record search was conducted by the San Bernardino County Museum, Archaeological Information Center. The document search included a review of all recorded historic and prehistoric archaeological sites in the vicinity as well as a review of all known cultural resource survey and excavation reports. In addition historic maps regarding the region were also reviewed.

The results of the document search revealed that 29 prehistoric archaeological sites have been identified within the area. The review of historic resources indicated that 26 historic archaeological sites have been identified within the area. Maps of these sites are not published to protect the integrity of the individual sites from vandals and others who would remove valuable artifacts.

Materials of historic and prehistoric nature have been located within the Planning Area, particularly in the vicinity of the Mojave River. The preservation of these resources is important to understanding the history of Native Americans, as well as mankind in North America. These resources must be preserved to the greatest extent possible while allowing reasonable development to occur within the Planning Area.

#### **3.12.2 Impacts**

According to the Archaeological Information Center the Planning Area has a high sensitivity assessment. No cultural, ethnic or heritage resources are identified. The Center made six recommendations for the survey and inventory of resources within the Planning Area which are included in Appendix C.

#### **3.12.3 Mitigation Measures**

The past discovery of Indian artifacts and the potential presence in the Planning Area of unknown artifacts and buildings which may have historical importance contribute to the City's recognition of the importance of preserving cultural and historical resources as reflected in the policies and programs contained in the General Plan.

1. The City will require that all archeological resources, historic or prehistoric be evaluated in accordance with CEQA regulations and appropriate California guidelines prior to the adoption of mitigation

measures and the acceptance of conditions of approval and required permit approvals.

2. The City will place developers responsible for the destruction of historic and archaeologically significant resources on file with the County of San Bernardino and the State of California, Office of Historic Preservation.
3. As part of the City's land development review process and project environmental assessment, City staff will review proposed developments for sites that may have potential archaeological significance. If determined necessary by the City, an archeological survey will be performed by a licensed archaeologist and appropriate site specific mitigation measures shall be implemented, including possible extraction and cataloging of significant resources.
4. To preserve any known or undiscovered archaeological sites and/or artifacts which may be present within the Planning Area.
5. To assure that proposed development policies will not eliminate any significant archaeological or historic resources.
6. To provide a mechanism for the identification and preservation of archaeological or historic resources within the Planning Area.
7. To provide to the extent feasible cultural facilities (libraries, museums, historic sites, etc.) within the Planning Area to meet the needs of new and current residents of Adelanto.
8. The City will encourage the addition of new cultural facilities i.e., theaters etc., to meet the needs of ever growing community.
9. The City, will encourage new development to provide cultural amenities that will satisfy the demand for new residents.
10. The City will coordinate efforts with the Adelanto School District and the San Bernardino County Public Library in providing new library facilities within the Planning Area.

#### **3.12.4 Unavoidable Adverse Impacts**

With the implementation of the proposed mitigation measures no unavoidable adverse impacts will result from the proposed project.

### **3.13 Traffic and Circulation**

#### **3.13.1 Setting**

The Adelanto Planning Area is served by an outdated highway network in the vicinity of the City. U.S. Highway 395 currently bisects Adelanto and is considered the primary access into the City. However, since U.S. 395 is controlled by the State of California Transportation Department (CalTrans), Adelanto has not been able to maximize the potential of its presence. Restricted access from the highway to adjacent properties has been a severe economic constraint for development and creates a tremendous burden at current intersection locations.

Although the current transportation system is outdated, the City is located amid a vast regional/national highway network. Interstate 15 is located five miles east of the City's southeastern edge. Highway 18 (Palmdale Road) forms Adelanto's southern boundary. Highway 58 traverses just north of the City's General Plan Planning Area, linking Interstate 40 and Interstate 15. Access to the L.A. Basin freeway system is also a significant attribute for business and industry, including trucking and freight companies, to locate in the Adelanto area. The City of Adelanto is situated in a prime location for the benefits of this substantial highway network. It is imperative, however, that this network be upgraded in order to keep pace with the Victor Valley's tremendous growth rate.

Alternative transportation modes which exist within the City are limited due to the low population level. The City sponsors a local bus service catering to Adelanto residents who utilize commercial services, but do not have private vehicles. Another program aided by the City is the Rideshare program in which residents may congregate at the City Hall parking lot and share transportation to jobs elsewhere in the Victor Valley or "down the hill" in the L.A. Basin.

#### **EXISTING STREET SYSTEM**

##### **Highway 395:**

This two lane State Highway is a major regional north/south route for eastern California. As such, it carries a significant volume of traffic through Adelanto. There is periodic congestion on this road at the two intersections, Air Base Road controlled by a four-way stop and by the new signal and road widening at Palmdale Road.

##### **El Mirage Road:**

El Mirage Road provides access to the sparsely populated high desert area west of Adelanto.

**Air Base Road:**

This two lane road connects Adelanto and George Air Force Base and extends easterly to Victorville.

**Rancho Road:**

This four lane divided street provides access to the developing industrial land uses west of Highway 395.

**Palmdale Road:**

This east-west road is the primary connection between the cities of Palmdale and Victorville. It is one of two routes providing access to Adelanto from the west and from the east.

Figure V-1 of the Circulation Element identifies the existing roadway conditions for streets in Adelanto in 1990. The number of though lanes and the existing intersection controls are also shown.

**3.13.2 Impacts**

Roadway capacity is generally defined as the number of vehicles that can be reasonably expected to pass over a given section of road in a given time period. Congestion, high accident rates, the quality of traffic flow (Level of Service), and environmental acceptability all come into play in designing a particular roadway's effective capacity. It is possible to identify maximum desirable volumes for typical roadway types based on the number of roadway travel lanes. These daily volumes reflect estimates of the amount of daily traffic that will result in peak hour traffic equal to the maximum desirable capacity of each roadway type. Two lane undivided roadways are estimated to have a maximum capacity of 14,000 vehicles per day. Street segments that exceed Level of Service D are considered to have a significant impact on the environment.

By dividing existing daily traffic volumes by the daily roadway capacity existing daily volume to capacity ratios were calculated. The ratios show that segments of Highway 395 and Air Base Road are operating at Levels of Service D and E. Refer to Table V-2 in the Circulation Element for Level of Service definition.

The technique used to assess intersection operation is Intersection Capacity Utilization (ICU). To calculate and ICU the volume of traffic using the intersection is compared with the capacity of the intersection. ICU is usually expressed as a percent which represents that portion of the hour required to provide sufficient capacity to accommodate intersection traffic if all approaches operate at capacity. The ICU's for

existing intersections are based upon manual peak hour turning movement counts made by Kunzman Associates in 1990. Intersections are operating at Level of Service B or better during the peak hours.

Comparison of daily volume to capacity ratios and corresponding Level of Service, and peak hour Intersection Capacity Utilization and corresponding Level of Service reveals significant differences. The differences between daily link volume to capacity ratios and peak hour Intersection Capacity Utilization is particularly pronounced when cross traffic is light. Daily volume to capacity ratios assume that all cross streets require 50 percent of the time to satisfy their demand, and assume that the subject street has 50 percent of the time available to it. The daily segment volume to capacity ratios are a generalized indicator while peak hour Intersection Capacity Utilization actually represents what can be expected in the peak hour at intersections. Of the two indicators, the peak hour Intersection

The General Plan includes the following land uses:

- Desert Living Residential
- Single Family Residential
- Medium Density Residential
- Commercial
- Manufacturing/Industrial
- Airport Development District
- Airport Park
- Open Space/Public Facilities
- Specific Plan Area

These land uses are further described in the Circulation Element.

Figure V-4 of the Circulation Element shows the proposed circulation system that was used in this analysis and identifies the location and right-of-way width for the major roadways.

The Adelanto Planning Area has been divided into 12 Zones to facilitate analysis. It is anticipated that the General Plan land uses will be completed (i.e. buildout) well beyond the year 2014. Table V-3 of the Circulation Element outlines the projected year 2014 land use characteristics, buildout projections for each traffic analysis zone, as well as traffic generation rates and daily trips. The traffic analysis zones are shown on Figure V-2 of the Circulation Element.

#### Year 2014 General Plan Land Use Traffic Projections

To estimate future traffic volumes at various points on the street network, a three step process is utilized. First, the traffic that will be generated by the proposed land uses is determined. Second, the traffic volumes are geographically distributed to major

attractions of trips, such as employment centers, commercial centers, recreational areas or residential areas. Finally, the trips are assigned to specific roadways and the future traffic volumes are determined on a route-by-route basis.

The traffic generated in each zone is determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates for this study are expressed in terms of trip ends per acre, trip ends per dwelling, or trip ends per flight. For instance, if a particular land use generates six outbound trips per acre in the morning peak hour, then six vehicles are expected to leave the site in the morning peak hour for each acre of development.

Table V-3 of the Circulation Element exhibits the traffic generation rates used in this study. The rates for residential and airport are from the Fifth Edition of "Trip Generation", published by ITE in January, 1991. The rates for the other land uses are generalized trip generation rates reflective of an expected mix of development sized within each land use.

#### Year 2014 General Plan Land Use Traffic Volumes

Table V-4 of the Circulation Element presents a summary of the year 2014 daily trips by land use type. The volume of daily traffic generated by the airport was estimated using the following rationale:

1. The airport was assumed to primarily serve inter-regional/international flights. Due to the longer length of flight and larger size of aircraft, international flights have a higher average number of passengers/flight than those generated by airports such as John Wayne and Ontario which serve commuter and short haul trips. The annual passenger volume (MAP) was divided by 200 passengers/flight to produce the estimated number of flights/year.
2. The flights/year were divided by 300 to estimate the typical number of flights on a weekday. This factor is used to convert daily traffic data to annualized data and accounts for fluctuations in traffic during the week and on weekends (Note: A review of the international flight schedule at LAX shows significant fluctuations in the number of daily flights throughout the week).
3. The daily flights were then multiplied by the trip generation rate on Table V-3 (Circulation Element) to produce the daily volume.
4. It has been assumed that a high speed rail system between the Los Angeles Basin and the airport would carry a significant amount of airport users. Therefore the daily volume was reduced by 35 percent to reflect this modal split.

## Traffic Distribution and Assignment

Traffic distribution is the determination of the directional orientation of traffic. It is based on the geographical location of employment centers, commercial centers, recreational areas, or residential area concentrations. The distribution of trips for residential uses by purpose of trip is listed in Table V-5 of the Circulation Element.

Traffic assignment is the determination of which specific route development traffic will use once the generalized traffic distribution is determined. The basic factors affecting route selection are minimum time path and minimum distance path.

General Plan Planning Area generated traffic destined for points external to the area was distributed in the following directions based on existing travel patterns and anticipated future development in the vicinity of Adelanto.

North	10 Percent
East	30 Percent
South	35 Percent
West	25 Percent

## Projected Year 2014 Traffic Conditions

This section presents daily traffic volume projections for the Year 2014. These volumes include trips generated by the General Plan land uses and through traffic. The ability of the Circulation Element street system shown in Figure V-4 to accommodate the Year 2014 volumes and any additional street segments which will be needed are also discussed.

### Through Traffic

A review of the traffic counts on Highway 395 and on Palmdale Road (SR18) in the Adelanto area for the period 1979 to 1989 indicates annual growth rates in the 4 to 6 percent range for most segments. To be consistent with this historical growth, the existing through traffic volumes estimated in this element were increased at an annual rate of 5 percent through the Year 2014 to reflect future growth.

### Year 2014 Daily Traffic Volumes

Figure V-3 of the Circulation Element shows the projected daily traffic volumes on the proposed circulation system in the Year 2014. The volumes include traffic generated by the General Plan Land Uses and through traffic. The total ADT is over 725,000.

### Year 2014 Daily Volume to Capacity Ratios

Daily volume to capacity ratios have been calculated. The ratios were based on the maximum daily capacities and the following street designations:

1. The proposed US 395 freeway would be a 6 lane facility.
2. Super arterials would be 6 lane divided arterials.
3. Major arterials would be 4 lane divided streets.
4. Major collectors would be 4 lane undivided streets.

With the exception of the Mitigation Measures discussed below the impact of the General Plan Update does not exceed Level of Service D and will not have a significant impact on the local environment.

Regional transportation facilities will be necessary to reduce the impact of traffic to a level of insignificance. These facilities are dependent on the actions of the California Department of Transportation, surrounding cities and others and may include, but are not limited to, improvements to Highway 395, Interstate 15 and other regional connectors.

The 1994 General Plan is a tremendous change from the 1985 Plan in that the City is planning to be able to accommodate a "buildout" population level of over 156,000 residents. The City desires that the circulation system and public transportation requirements be laid out according to the anticipated changes. In other words, the road system, including projected rights of way will be designed to accommodate the overall growth of Adelanto in the long term. The "buildout" of the City will most likely occur beyond the 20 year planning horizon, but this plan will reflect a much more futuristic planning effort to accommodate anticipated long range growth. The circulation system is shown in Figure V-4, with the typical roadway sections shown in Figure V-5 of the Circulation Element.

### **Multi-Modal Transportation System**

As part of Adelanto's long range plans, a major new airport and a high speed rail link to other regions in Southern California will be used as the backbone for a multi-modal transportation system. The airport complex will serve as the hub of the High Desert's transportation network, with light rail, conventional rail, high speed rail, bus service, and regional highways emanating from it. This facility would serve not only High Desert residents, but would serve travelers from all over Southern California. It will also cater to the growing international market of travelers, especially those of the Pacific Rim countries.

### **U.S. 395 Expansion/Relocation**

The City of Adelanto is currently working with CalTrans and Victor Valley communities on the realignment of U.S. 395 to the west of the existing alignment. It is anticipated that the proposed freeway will be comprised of 6 or 8 lanes to accommodate the current and future traffic volume. The existing 395 alignment will be expanded to four or six lanes to help alleviate the immediate traffic concerns of the City and the State. The Circulation Plan portrays the freeway realignment in a conceptual nature in order to approximate the proposed location. Existing 395 is shown as a super arterial roadway with a 124' R.O.W. The Land Use Plan shows the new freeway alignment in greater detail.

#### **Additional East/West Super Arterial**

An additional east/west roadway should be located in the southern portion of Adelanto, connecting Interstate 15 and west Adelanto. The route that has been proposed in this Circulation Element is Mojave Drive. From the eastern edge of the City it will travel through Victorville (according to their proposed alignment of Mojave Drive) and meet Interstate 15.

#### **El Mirage Expressway**

El Mirage Road plays a significant role in the development of the airport in terms of vehicular access. It has been classified as a Super Arterial on the Circulation Plan and will serve as the primary link between Freeway 395 and the proposed Airport Development District. In addition, it will serve as a primary access route for communities west of Adelanto, including El Mirage. The expressway will have limited access and will be considered as the a future entry into the new airport. The roadway frontage will be characteristically designed and landscaped to provide a quality image for the City and the airport complex.

#### **Pedestrian Circulation**

It is the goal of the City to incorporate into the design of the roadway system a complete and effective pedestrian element. All major roadways shall contain adequate rights-of-way to allow for the implementation of sidewalks and bike lanes. It is also the goal of the City to establish a trails network within open space areas that are part of the land use design of the General Plan. These open spaces are intended to link to the major regional parks that have been established in the General Plan Planning Area.

#### **Public Transportation**

The City supports the upgrade of the existing public transit system and will begin expanding the service area once there is a significant need for such a system. The long term goals of the City are to upgrade the existing transit system, provide a new system when the population level increases substantially, and to begin looking into the establishment of a region-wide public transit system. This system could be in the form

of a monorail, light rail, or bus system geared to reduce the dependency on personal vehicles to transport citizens and visitors around the Victor Valley as well as to the airport complex.

### Future Transportation Considerations

Due to the limited population base currently established in Adelanto, many public transportation programs are not feasible. However, the City has positioned itself to provide for the future by establishing "buildout" rights-of-way for both vehicular and public transportation facilities, including mass transit corridors (light rail, monorail etc.). Utilization of current and proposed easements, drainage/open space corridors, and public roadway rights of way are all potential candidate sites for these corridors. When the population base warrants, programs for such mass transit systems will be pursued to the utmost. In the meantime, it is essential that the City prepare in advance to secure all necessary rights of way to achieve this goal.

#### 3.13.3 Mitigation Measures

The volume to capacity ratios analysis indicated the need to upgrade several street segments and provide additional streets in order to accommodate the projected Year 2014 traffic volumes. A facility was considered for mitigations when the volume to capacity ratio exceeded 0.90 or Level of Service D.

1. The airport and Airport Development District are estimated to generate approximately 106,000 trips/day, in 2014. To improve access to this area it will be necessary to provide additional streets and/or upgrade the El Mirage Expressway east of the 395 Freeway.
2. Existing Highway 395 shows the need for improvements between El Mirage Expressway and Air Base Road. This condition could be mitigated by improved access from this area to the proposed 395 Freeway.
3. Two segments of Air Base Road may need modifications. The section west of the 395 Freeway should be upgraded to a super arterial. The volumes on Air Base Road east of the 395 Freeway will require a four lane expressway.
4. The volumes on Mojave at the 395 Freeway suggest that this facility be upgraded to a six lane expressway with an on/off ramp at the new Freeway 395.
5. Establish all major rights of way according to the requirements of the buildout projections of the General Plan.

6. Develop a consistent design of roadways and landscape treatments that allow for improved visual quality.
7. Utilize high quality construction standards for all roadways, sidewalks and paved areas to increase the longevity of the system.
8. Allow the existing U.S. 395 roadway to become Adelanto's business route once the Freeway 395 plans are set forward.
9. Coordinate efforts with local agencies, CalTrans, the County Road Dept., and the Federal Transportation Department in the planning of a regional transportation system.
10. Investigate all options for the implementation of a high speed rail system from the Orange, Riverside and San Bernardino County areas to a new major airport.
11. Begin investigating the applicability of a local/subregional transit system and necessary rights of way needed in Adelanto and the surrounding area.
12. Prior to adoption of the General Plan Update, the City of Adelanto will prepare, if required by law and if the Victor Valley Transportation Model is available, a CMP Traffic Impact Analysis Report in accordance with City Resolution No. 93-45.

Regional transportation facilities will be necessary to reduce the impact of traffic to a level of insignificance. These facilities are dependent on the actions of the California Department of Transportation, surrounding cities and others and may include, but are not limited to, improvements to Highway 395, Interstate 15 and other regional connectors.

#### Financing Public Improvements

The following is a summary of the possible Financing/Funding sources of the traffic, public services and/or utilities future public works improvements identified in the General Plan Update. Financing of the improvements will be identified prior to the design and construction of the respective Capital Improvement Project. Developers will provide all internal and adjacent improvements for specific projects. Regional improvements, however, may require public financing. The City of Adelanto has the following funding sources and mechanisms available;

1. Require developers of a new project to pay a pro rata share ("pay as you go") of new water, sewer/wastewater, storm drainage system improvements necessitated by that development.

2. Establish "Developer Fees" for specific identified public improvements. Not limited to; traffic impact fees, drainage fees, and water and sewer connection fees. The purpose of the fee must be identified as part of the approval of the fees.
3. Direct benefit "Assessment Districts", in which those who benefit from infrastructure improvements pay a pro rata share of the costs through assessment liens. The assessment liens are financed through the issuance of bonds payable over a period of years, providing the advantage to the property owners of a loan or a deferred funding for the improvements. Two different procedures, the "1911 Act" and "1913 Act" are available.
4. The "Mello Roos Community Facilities Act of 1982" is a newer financing method which provides a method for a broad range of capital facilities.
5. The City of Adelanto has already created "Redevelopment Project Areas" within the City. A Redevelopment Agency can issue tax exempt redevelopment bonds for the construction of public works improvements within Redevelopment Project Areas.
6. "Government Obligation Bonds" could be raised for capital improvements, however, public debt requires two-thirds voter approval of the general populous within the City.
7. Other financing methods are "Certificates of Participation" and "Lease Revenue Bonds". These can be used to acquire and construct public land or buildings which can be subject to a lease.

With the implementation of the proposed mitigation measures no unavoidable adverse impacts will result from the proposed project at the local level.

#### **3.13.4 Unavailable Adverse Impacts**

Impacts at the regional level will be significant and unavoidable if regional transportation facilities and mitigation measures are not developed.

### **3.14 Public Services**

#### **3.14.1 Setting**

##### **Fire Protection**

Fire and emergency medical services within the Planning Area are provided by the City of Adelanto Fire Department. Fire protection requirements for the City of Adelanto are dominated by two major types of fire hazards, including (1) desert wildfire and (2) urban structural fires. Desert wildfires may be started by natural means such as lightning strikes or by careless use of flammable materials. These fires may sweep large areas and destroy thousands of acres before they are contained and extinguished. Urban structural fires can result from these wildfires and may incur costly property damage and loss of life.

Currently the Adelanto Fire Department has two stations. Station #1 is located at 11711 Hardy Street, in the urban core of Adelanto. Station #2 is located at 10370 Rancho Road, within the Industrial Park District of the City. There are 9 full time firefighters and 23 paid-call firefighters. Equipment consists of one brush unit, one 750 gallon pumper, one 3,500 gallon water tender unit, two 1,500 gallon per minute pumpers, one reserve unit, and the fire chief's four wheel drive unit.

##### **Police Protection**

Police Services for the residents of the City of Adelanto and the Planning Area are and will be provided by the City of Adelanto Police Department. The current police force of the City is comprised of 12 full time officers, 4 dispatchers, 1 control unit/officer, 1 records supervisor, 1 full time secretary, 1 part time secretary, 10 reserve officers (volunteer), and 2 canines. The department currently has 12 emergency vehicles (7 marked units, 2 unmarked units, 1 four-wheel drive vehicle, 1 animal control unit, and the Police Chief's car).

Response time within the Adelanto area is excellent, with dispatch to scene response times of less than 5 minutes. Since the police station is centrally located within the urban area of Adelanto (11613 Bartlett Avenue), officers are able to get to emergency situations very quickly.

##### **Schools**

The Adelanto School District, founded originally as the Sunrise School District in 1913, provides educational opportunities for elementary age students from kindergarten through the sixth grades. The areas served by the Adelanto School District include; the entire City of Adelanto, George Air Force Base area, portions of the City of Victorville, as well as, portions of the communities of El Mirage and Phelan. Junior High School

and High School students attend the Intermediate and Victor Valley High Schools under the direction of the Victor Valley Joint Union High School District. The High School is located six miles southeast of the Adelanto Planning Area.

The Adelanto School District operates 5 elementary schools, K-6, with a total enrollment of 2,649 students as of February, 1994.

### Government

The Governmental Center of the City of Adelanto is located at 11600 Air Base Road, Adelanto, CA 92301, (619) 246-2300. Planning Commission hearings are held at 7 p.m. on the 1st and 3rd Tuesday of the month. City Council hearings are held at 7 p.m. on the 2nd and 4th Tuesday of the month. Both meetings are held in the Council Chambers in the Adelanto City Hall.

The Adelanto Branch of the San Bernardino County Library provides limited resources for books, periodicals, and newspapers. The library is opened limited hours and located at 11744 Bartlett Ave., Adelanto, CA 92301, (619) 246-5661. Additional library resources are located at the San Bernardino County Library in Victorville. This library is much more extensive than the Adelanto Public Library, providing a broad spectrum of reading and research materials. This library is located at the County Governmental Center on Civic Drive in Victorville.

### Solid Waste

The City of Adelanto has adopted the San Bernardino County Solid Waste Management Plan. This is in accordance with Section 65302 of the California Government Code that requires solid waste management to be addressed in a City's adopted General Plan, also that it must be consistent with the adopted San Bernardino County Solid Waste Management Plan as a plan of that agency's plan. This element has been structured to accomplish these goals.

The City currently deposits its non-hazardous wastes into the County landfill site. In 1990 this was approximately 4,780 tons. This is a County owned and operated facility. The County charges a standard use fee to all municipalities which utilize its landfill facilities. Questions concerning solid waste should be referred to the San Bernardino County Solid Waste Management Plan, with the exception of the following policies herein, already implemented by the City of Adelanto as a part of their Solid Waste Management Plan.

#### 3.14.2 Impacts

Implementation of the Land Use Plan will have significant implication for public safety needs. Over seventy thousand acres are designated for some level of urban use which result in as many acres of some level of soil disturbance over the next few decades. As

the population grows from some ten thousand to tens of thousands, the City will be challenged to keep up with the demand for police and fire safety services and facilities. The City must find ways to minimize flood, seismic, erosion and waste hazards to its citizens, to the maximum extent possible. The City will need to assure adequate health facilities exist for its citizens.

### Fire Protection

Implementation of land use policies will result in an increase in urban development, which will extend farther from the urban core of the City. As the number of urban structures increases, so does the potential for structural fires. Increased urban development will result in a loss of open rangeland which may be subject to wildfires. However, this will also reduce the possible buffer area between potential wildfires and urban uses, while increasing the total urban perimeter that must be protected from fires.

By 2014 there will be a need for 50-55 fulltime firefighters and 4-6 new fire stations. At buildout 10-12 fire stations will be required and 160-170 full time fire fighters will be required.

Assistance is available from other fire protection agencies in the area, including George Air Force Base (staffed by March AFB), Victorville, and San Bernardino County. As development extends from the urban core, some uses may be located outside acceptable response times from the existing two stations, resulting in potentially significant impacts. As industry development continues to expand, special fire protection impacts may result from the use and storage of hazardous materials and wastes as new industries. Such incidents require special handling and may pose severe threats to the general public.

Fires present a unique threat in the City of Adelanto, particularly during summer months when temperatures exceed 100 degrees Fahrenheit and precipitation is almost non-existent. The abundance of brush and poor access contribute significantly to wildfires and may present significant danger to residents and structures.

Figure IX-4 of the Safety Element, Emergency Services Locations Map, and Figure IX-5, Emergency Evacuation Routes Plan, will assist residents and public safety agencies in case of natural disasters or fires.

### Police Protection

As implementation of land use polices takes place increased demand for police services will be required. The domestic requests for emergency assistance will increase proportionately with the increase in development. The current trend of new construction is occurring in the southern portion of the Planning Area, which is several miles from the urban core of Adelanto. This distance will begin to place added stress to

the police staff who must provide protection for the area. It is imperative that upgraded police services be provided for the newly developing areas of the City.

As the City of Adelanto grows, it will be exposed to increasing levels of crime. In order to assure that a safe living and working environment is sustained, adequate police services must be incorporated into the City structure. By 2014, 65-70 full time officers with support staff and facilities will be required.

### **Schools**

The School District intends to reopen Sheppard School under another name and then relocate those students to the now being developed Desert Trails Elementary School located at Bellflower and Seneca.

There are no immediate plans for other additional schools, although the City of Adelanto will work closely with the School District on any future school sitings or developments. By 2014 there will be a need for facilities to accommodate approximately 16,000 students. At 30 students per classroom this would total 533 classrooms.

Fiscal constraints on school facility acquisition, development and operation are extremely difficult. The Adelanto School District currently depends on the Leroy Green State Funding Process for funds and has no bonding capability. Limited funds are available for school facility maintenance. Enrollment has increased at a rate of approximately 7% per year, over the past 5 years. Affordable housing costs are expected to support opportunities in Adelanto for continued growth. The majority of new housing is expected to have relatively high student generation rates.

### **Government**

As population increases the need for government services will also increase. As implementation of land use polices takes place increased demand for government services will be required. Requests for assistance will increase proportionately with the increase in development.

### **Solid Waste**

According to City records the City of Adelanto disposed of approximately 4,780 tons of solid waste in the year 1990. This figure will increase along with the increase in population.

The area within the Adelanto city boundary is presently served by one refuse hauler. Estimates of trash collected are listed in the Safety Element based upon approximate figures from AVCO Disposal

Landfill sites have limited capacities. Resource recovery as an alternative to landfill disposal will increase the life expectancy of any site. Other benefits such as waste to energy, and conversion of waste materials into new products are results of resource recovery which the City intends to promote.

The per capita generation rate represents the amount of solid waste generated by each person each day. According to City records Adelanto had a per capita generation rate of 3.075 pounds per capita-day in 1990. This rate, times the 1990 population of 8,517 results 4,780 tons of refuse generated every year in Adelanto. Based upon the maximum 2014 population forecast of 60,000, an estimated 33,700 tons of reprocessible waste will be produced by Adelanto per year. The potential quantities of solid wastes warrant the investigation of resource recovery systems. The City intends to study and consider the economic feasibility of implementing resource recovery projects. The resource recovery section of this plan contains the policies adopted by the City of Adelanto.

The City of Adelanto has adopted its Source Reduction and Recycling Element (SRRE) and Household Hazardous Waste Element (HHWE). The SRRE will reduce solid waste by 34.5 percent by 1995 and by 52.3 percent by 2000.

Many cities and counties are now expressing concern over the toxic waste problem. The City of Adelanto has the jurisdiction within the City limits to adopt and enforce hazardous waste regulations. The City has adopted policies toward maintaining a safe environment for its citizens.

There are no Class 1 (hazardous waste) disposal sites in San Bernardino County. Legal disposal of most hazardous waste must be accomplished by exporting the wastes to a Class 1 site outside of the County. Some hazardous material is removed from the waste stream by reclamation and recycling, while a few industries treat their own wastes on site. Even though hazardous waste sites do not exist in the County several thousands of gallons of hazardous household wastes are deposited into non-hazardous landfill sites each year.

The date no generators of hazardous wastes in Adelanto have filed for permits with San Bernardino County. According to the County's Hazardous Waste/Toxic Control Section, the annual amount of hazardous wastes from any generators is unknown at this time. The total quantities of hazardous wastes from the 1990 County Solid Waste Management Master Plan may more accurately reflect the hazardous wastes being generated in Adelanto. That projection shows an increase of about 40% in hazardous wastes generated during the decade 1980-1990. These wastes include cleaning agents, poisons, insecticides, etc.

Currently Adelanto's non-hazardous wastes are deposited in the County landfill site located outside of the City. This Class II landfill comprises 80 acres and has a total landfill capacity of 2.6 million cubic yards. Approximately 1 million cubic yards capacity

remain with an estimated use expectancy until 1995. Additional capacity or new landfills will be required during the planning period. Septic tank pumpings are placed in well isolated areas which have not been utilized in the landfill operation. Hazardous household wastes are deposited into this landfill as well. This practice will probably continue until these items are separated out at the resident waste source.

### **3.14.3 Mitigation Measures**

#### **Fire Protection**

Mitigation measures for fire protection include the following:

1. The City shall evaluate and update annually its emergency preparedness plan to ensure that emergency shelters and evacuation routes are accessible to the residents of the city.
2. The City will assist in the provision of the police protection, requiring on-site security and defensible space, and other measures to be incorporated into new development.
3. The City will monitor, review and improve as needed, the City's, emergency response capabilities.
4. The City will require new development to incorporate sprinkler systems and smoke detectors, as appropriate and required by applicable codes.
5. The City will encourage improved fire insurance programs.

#### **Police Protection**

1. The City will require improved lighting in existing and potential crime problem areas.
2. The City will assist in the organization of Neighborhood Watch Programs in conjunction with improvement associations and encourage the cooperation between citizens and police.
3. The City will cooperate with police and probation departments in rehabilitation of Adelanto residents involved in crimes through employment assistance, counseling, and related programs.
4. The City will initiate programs to get youths involved in neighborhood improvement programs, sports, and leisure activities in order to become a vital part of the community.

## Schools

Mitigation measures for schools include the following:

1. Continue to utilize joint use of school buildings and playgrounds for recreational uses on a non-interfering basis.
2. Achieve, by whatever cooperative means possible, quality maintenance of school facilities for joint use purposes.
3. School facilities such as auditoriums and gymnasiums should be located within centrally located schools where facilities could be made available to the community.

School siting requires a combination of various factors including but not limited to access, surrounding land uses and joint uses. The following factors should be used to locate future school facilities in concert with the Adelanto School District.

1. Joint use of school facilities should be evaluated.
2. Park sites and elementary schools facilities should share play areas to the greatest extent feasible.
3. School facilities should be located within residential areas.
4. Elementary and Junior High School facilities should be located on local or collection level roadways and should not be located on arterials.
5. Provide assistance in facility maintenance to ensure joint use of school facilities.
6. Work closely with the school district in anticipating school impacts of new housing and urban development.
7. Develop a School Facilities Master Plan based on projected land use and population projections established in the General Plan update.

## Government

No mitigation measures are proposed for government facilities.

## Solid Waste

The overall objective of this Solid Waste Management Plan is to provide a cost effective solid waste management system that integrates source reduction, storage,

collection, transportation and transfer, recycling, and transformation or disposal in a manner which will:

1. The City will communicate and coordinate with trucking companies to ensure that transport of hazardous materials does not threaten the life or property of residents of the City of Adelanto.
2. The City of Adelanto will coordinate between the Fire Department and the San Bernardino County Environmental Health Department to assure swift and capable response to handling hazardous materials accidents.
3. The City will implement its A.B. 939 comprehensive resource recovery program designed to minimize the impact on existing and future disposal sites and to foster conservation of natural resources.
4. The City will support the location of hazardous waste sites only in areas without the potential for groundwater or other contamination, and which are away from urban area.
5. The City will develop a hazardous waste recovery program and encourage private industry participation. In October, 1993 the City joined the County Program for collection of Household Hazardous Wastes.
6. The City will develop and adopt local regulations dealing with the storage, transport, and disposal of hazardous wastes.
7. The increase in hazardous wastes generated requires active mitigation measures to be employed. The City has adopted the San Bernardino County Solid Waste Management Plan in order to mitigate problems associated with hazardous waste materials.
8. The City will encourage industry to recycle and recover hazardous wastes. The City will also develop an information base regarding hazardous wastes. This information base will serve industry, public agencies, institutions, and the general public concerning health hazards, handling techniques, and current technologies for waste disposal and recovery.
9. The City will encourage industry to recycle and recover hazardous wastes. The City will also develop an information base regarding hazardous wastes. This information base will serve industry, public agencies, institutions, and the general public concerning health hazards, handling techniques, and current technologies for waste disposal and recovery.

Litter and unlawfully dumped materials pose several safety related problems. When these materials are left to accumulate they may cause health or fire hazards. Recognizing the importance of litter control, the City has adopted the following policies:

1. Continue to maintain and enforce the City's uniform Anti-Litter Ordinance and implement the Source reduction and Recycling Element..
2. Control litter at any refuse disposal site which may come under City jurisdiction.
3. Provide periodic free disposal at a City landfill site to City residents to encourage cleanup, if such a landfill is established.
4. Develop and maintain a system which facilitates information dissemination about the solid waste collection system.

A summary of the possible Financing/Funding sources of the traffic, public services and/or utilities future public works improvements are identified in the Traffic and Circulation section of this Environmental Impact Report. Financing of the improvements will be identified prior to the design and construction of the respective Capital Improvement Project. Developers will provide all internal and adjacent improvements for specific projects. Regional improvements, however, may require public financing. The cost of other services will come from property tax, sales tax State funds, Federal funds, and all the other sources of funds that are received by cities, schools and other agencies. The General Plan Update includes over 10,000 acres for industrial development which will substantially offset the costs of the proposed residential developments.

With the implementation of the proposed mitigation measures no unavoidable adverse impacts will result from the proposed project to City fire, police and government facilities.

#### **3.14.4 Unavoidable Adverse Impacts**

Funding and facilities will be necessary to reduce the impact to schools and solid waste facilities to a level of insignificance. These services and facilities are dependent on the actions of the County of San Bernardino and the School Districts, and may include, but are not limited to, new elementary, junior high and high schools and new landfills and/or landfill capacity. Without sufficient funding, schools will be significantly impacted. Without additional landfill capacity or new landfills, solid waste will be significantly impacted.

### **3.15 Utilities**

#### **3.15.1 Setting**

##### **Water**

##### **Existing Rights**

Total legal water rights exercised by the City of Adelanto amount to 5,510 acre feet of water annually (Hampson). The City of Adelanto is successor to water rights to Mojave River underflow in the amount of 4.5 cubic feet per second (cfs). State water resources Control Board License 6506 entitles the City to 2.5 cfs, and a judicial decree entitles the City to a further 2.0 cfs. The total quantity permitted underflow is 4.5 cfs, which amounts to 3,260 acre feet per year, which does not include groundwaters. These rights were upheld by the Armed Services Board of Contract Appeals in 1958.

The City can also pump groundwater, which is not limited or regulated by the State at this time. The current underground waters pumped amount to 1,320 acre-feet of water annually. An adjudication undertaken by the Mojave Water Agency could have a major impact on future groundwater use by the City of Adelanto. It seeks to limit groundwater production, subject to replenishment with State Project Water. As the outcome of the adjudication is unknown at this time, its impact on groundwater production is not clear.

Additionally, the State Water Resources Control Board mandated that the George Air Force Base tie into the Victor Valley Water Reclamation Authority (VWRA) regional water reclamation plan when it became available. This eliminated the availability of sewage effluent produced at George Air Force Base being utilized on their golf course. This increased pumping is offset by the reclaimed water derived from the VWRA water reclamation plant and returned to the Mojave River System. This offset amounts to 300 acre-feet per year of additional rights owned by the City of Adelanto.

Finally, the City of Adelanto sent 630 acre-feet of water to the VWRA plant in 1993. This water was returned to the Mojave River Underflow through percolation beds in the river. Hence, the City has an additional right to 25 percent of its total groundwater and underflow pumpage. Since the percentage of water treated as a percentage of the water pumped will likely increase over the next few years, so will the corresponding right to underflow returned to the Mojave River.

As stated previously, the total rights owned by the City of Adelanto are 3,260 acre-feet from the 4.5 cfs rights to underflow, 1,320 acre-feet from pumped groundwater, approximately 300 acre-feet from George Air Force Base water used on the golf course instead of the effluent, and 630 acre feet of water returned to the Mojave River Underflow, for a total of 5,510 acre -feet. (These rights are subject to litigation).

## System Description

The City owns and operates its water supply and distribution system, No. 36-001 with the California State Office of Drinking Water, under permit No. 03-93-037. In addition to owning and operating six wells for City purposes, the City also owns eight wells on land leased to George Air Force Base. The City also owns, operates, and maintains a distribution network serving 3,551 active service connections in three different pressure zones with total reservoir storage of 16.75 million gallons as of November 1993. (See Figure X-1 of the General Plan). Eighty-six percent of the active service connections were sewered, while fourteen percent were not. The total capacity of city-operated wells is 2,190 gallons per minute (gpm), which is equivalent to 3,500 acre-feet if operated continuously for a year. The total capacity of George Air Force Base operated wells is 6,500 gpm, or 10,500 acre-feet if operated continuously (Note: Capacity is not legal rights).

## Existing System Capacity

In 1992 the City had approximately 12,000 residents and a water demand of 2,100 acre-feet for domestic, commercial, and industrial purposes. All of this water was pumped, with approximately 37%, or 780 acre-feet, coming from Mojave River Underflow and 63%, or 1320 acre-feet, coming from groundwater aquifers. The City has also historically supplied water to George Air Force Base from wells adjacent to the Mojave River at an average rate of 3,100 acre-feet per year until the base closed in 1992.

The ability of Adelanto to provide water is contingent upon a number of factors: legal rights, pumping capacities, and the ability to use water from the wells at George Air Force Base. The City currently has enough water supplies under current legal rights and current legal groundwater supplies to supply approximately 5,500 acre-feet a year and serve a population of approximately 24,000 people, or almost double the current population. (This 24,000 can only be served with substantial conservation/mitigation measures which are discussed in the mitigation measures below).

Water availability is based on the following sources:

1. The City can currently pump approximately 820 gallons per minute (gpm) from its existing Well No. 2. This water is permitted under the City's 4.5 cfs (3,260 acre-feet per year) of right. The sustainable population based solely on the current underflow pumped is approximately 4,000 people.
2. The City can currently pump approximately 1370 gpm of groundwaters from City wells. These waters do not require a license by the State of California. The sustainable population based solely on the underflow and groundwater currently pumped is approximately 11,000 people.

3. The City can currently pump 1,000 gpm from George Air Force Base (GAFB) operated wells. The limiting factor here is the booster station connecting the City to the GAFB system, which can currently pump approximately 1,000 gallons per minute. This water is under the City's 4.5 cfs right (for a total of 3,260 acre-feet per year.) The sustainable population considering underflow, groundwater, and GAFB intertie water is approximately 16,000 people.
4. The City can trade high-fluoride waters from Wells Nos. 4 and 5 for the better quality GAFB water currently used to irrigate the golf course, pursuant to Section 13550 of the Water Code. Section 13550 of the Water Code prohibits the use of potable water for irrigation when reclaimed water is available. The capacity of these two wells is approximately 1,700 gallons per minute. To employ this water, a distribution system must be constructed to transfer the high-fluoride waters to the base irrigation system, and the capacity of the existing 1,000 gallon per minute Booster Station Number 1 must be upgraded to at least 3,000 gallons per minute.

Alternately, a treatment facility could be constructed to remove the fluoride, in which case the water could be used directly in the Adelanto municipal water system. Any water in excess of Base needs could be treated.

The sustainable population with underflow currently pumped by the City, groundwater currently pumped by the City, GAFB intertie water from the City's GAFB wells, and by trading high-fluoride water with that of the GAFB wells is approximately 24,000 people, or double the current population (with mitigations).

5. The City has an additional 200 gpm available under the 4.5 cfs rights. This right may be maintained for future use under Section 106 of the Water Code. This amount of water could sustain an additional 1,000 people bring the total to 25,000 (with mitigation). This is the total extent of legal water supplies owned by the City.
6. The City could obtain up to an additional 3,800 gpm, or 6,140 acre-feet per year by pumping water from its wells currently leased to the former GAFB. This amount will be limited by down-time, recovery periods, interference and other inefficiencies. This water is in addition to both the current 1,000 gpm connection capability, and the 1,700 gpm available from trading high-fluoride water. This would require upgrading the booster station capacity from its current 1,000 gpm level to at least 6,500 gpm. It would also require additional rights to underflow in the amount of 6,140 acre-feet by the State, as all GAFB operated wells produce river

underflow. The population that could be sustained if all City-owned GAFB wells were pumped at full capacity, in addition to the options listed previously, is approximately 50,000 people, or four times the current population. (Note: This is the capacity of the system which is different than the legal rights to water discussed above and is based on the mitigation measures described below).

The City of Adelanto currently obtains its water supply from water wells owned and maintained by the City. The water it obtains is from existing underground aquifers. The aquifers that the water is obtained from are identified as the Upper Basin of the Mojave River Basin which is an extensive underground aquifer system that has its head waters in the San Bernardino Mountains, and ends at Soda Dry Lake outside Baker. This system has been studied by the Mojave River Agency which is in the process of finalizing a Water Delivery Master Plan and Water Resources Study. The Water Resources Study is to determine the amount of water in storage within the basin. Studies that have been completed for the basin have identified that the existing basin is in an overdraft situation, in which the quantity of water removed through pumping is greater than that quantity returning to the aquifer through natural or recharged sources.

In 1951 the State of California developed the State Water Project. This project included construction of the California Aqueduct. This aqueduct was constructed to convey water from Northern California at the Sacramento/San Joaquin Delta to Southern California at Perris Lake.

The Mojave Water Agency (MWA) was established in the 1960's by State Legislation to be the local Water Contractor for the State Water Project. Figure X-5 of the General Plan, Public Facilities Element illustrates the MWA service boundaries. The East Branch of the California Aqueduct remains the source of the water. This aqueduct traversed east-west approximately 4 miles south of Adelanto's southern City Limit. The MWA is entitled to purchase 50,800 acre-feet of water from the State. Unfortunately, due to economic constraints the MWA has not consistently purchased any water from the system. The State Water Project has the potential to supplement the City's and the Victor Valley's current and future water supplies.

## Sewer

The Table below shows the unmitigated sewage generation by the year 2014 and at buildout. Figure X-7 of the Public Facilities Element illustrates the proposed sewer distribution network for proposed General Plan update. The proposed sewer lines illustrated are major trunk lines and are shown in their general proposed location. As explained earlier the surface water of the City drains to the north. The existing trunk line to the VVWRA treatment plant can be used to sewer the proposed airport and eastern portion of the City. The VVWRA updates their feasibility and planning efforts based on sewer demands. Currently the existing plant has a design capacity of 9.5 MGD.

The existing treatment plant site has the capacity to expand to a 20 MGD plant. VVWRA designs plant expansion and future facilities in coordination with its member agencies. The existing treatment plant will not have the capacity to serve the buildout of the plan. A proposed treatment plant is illustrated which is intended to service the City. It is located along the Fremont Wash, which has the lowest elevation in the study area. This treatment plant can be constructed so as to provide reclaimed water for non-potable uses, as well as typical treatment operations.

### Drainage

Except for the Shadow Mountains rising approximately 300 feet above the general terrain in the northwest portion of the study area, the topography of the Planning Area is relatively gentle with uniform slopes. The elevation of the southwest portion of the study area is approximately 2,670 feet, or a difference of 605 feet over an approximate 11-mile distance. Thus, the average slope is 1.04 percent. The southwesterly area is approximately 2.0 percent and becoming relatively flat with percentages less than 1 percent in the central to north portion of the community. The majority of the storm runoff within the City drains to the Fremont Wash, which in turn drains into the Mojave River.

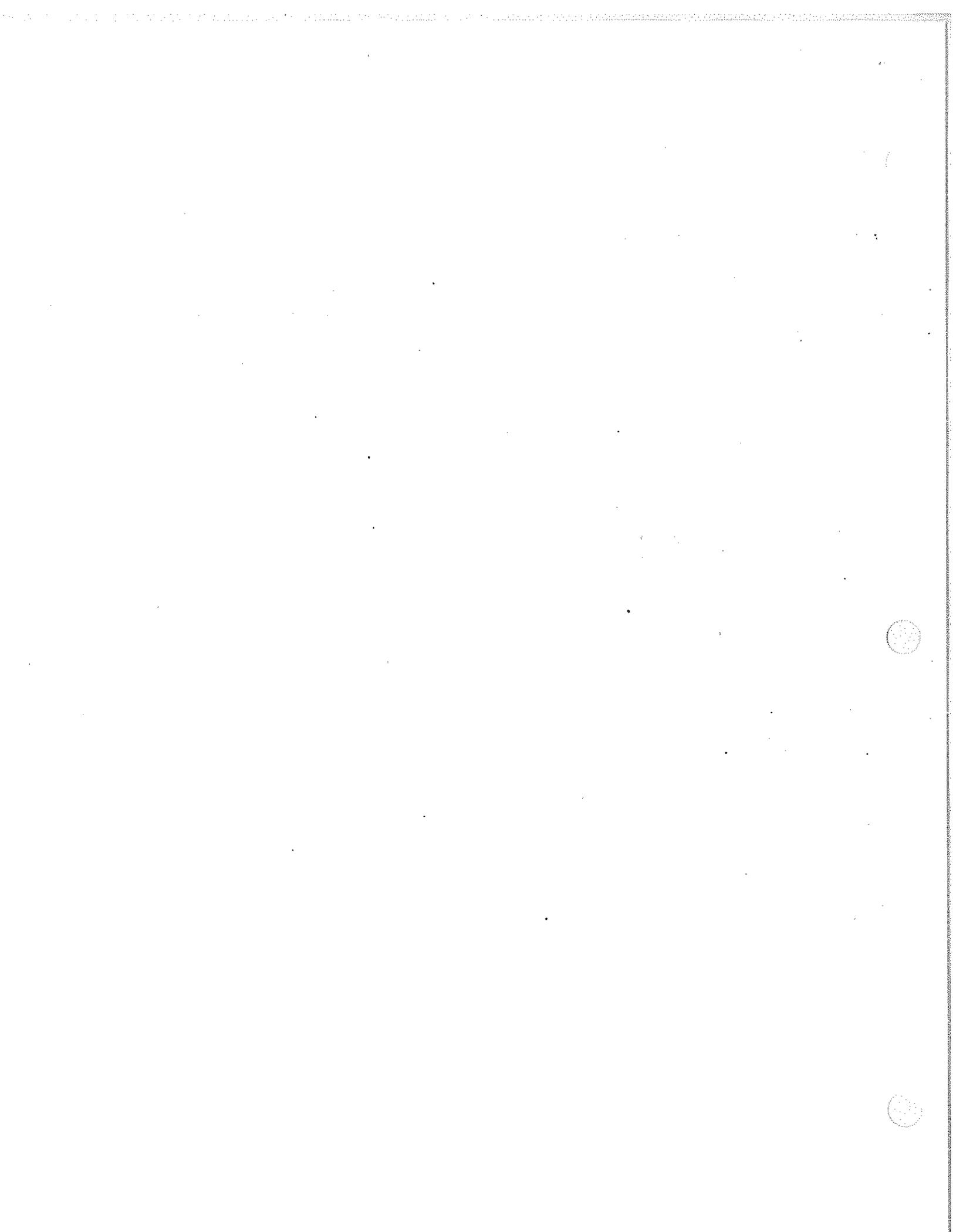
As is typical with desert areas, the sloping gradient acts as an alluvial fan and creates numerous drainage courses with sheet overflow occurring over the entire area during thunderstorms. The contributory drainage area comes from the San Gabriel Mountains to the southwest and comprises 175 square miles.

In 1985 the City of Adelanto authorized the preparation of a Master Plan of Regional Storm Drain Channels. The study was conducted to establish a flood control master plan for the City to mitigate flooding caused by major storms. The study focused on the regional channel requirements within the City limits. However, it was coordinated with the Baldy Mesa study area in order to be compatible with the channel alignments.

### Gas and Electricity

Electricity is provided to the Planning Area by the High Desert District of Southern California Edison. In 1990 the District consisted of 101,000 metered customers. The region is currently using alternate electrical generation techniques, including the Solar One project in Daggett. Intermountain Power has a major converter station within the City of Adelanto.

The Southwest Gas Company supplies natural gas to the Planning Area through a fixed transmission and distribution system. Several major natural gas mains pass through the region. Available natural gas supplies are sufficient to meet the existing needs of the City residents. However, the availability of natural gas supplies can be affected by external influences and may not always be accessible.



**3.15.2 Impacts****Water**

To determine the water demands for the Adelanto General Plan Update, the demands of water use on a per unit and per acre basis were determined. Numerous sources were compiled to establish the demands. The land use, dwelling units/acres, rates, gallons per day and acre feet per year for 2014 and General Plan buildout are presented in the following tables. It is estimated that unmitigated residential uses consume approximately 396 gallons per day of water. Commercial, Industrial and Airport Land Uses are estimated to consume 1,500 gallons per day per acre unmitigated.

**SUMMARY OF LAND USES AND WATER USE - 2014**

LAND USE	DU/AC	RATE	GAL./DAY	AF/YEAR
Desert/Single Family	15,648 DU	396	6,196,715	6,939
Med. Density Residential	3,718 DU	396	1,472,502	1,649
Manufacturing/Industrial	4,080 AC	1,500	6,120,675	6,854
Commercial	882 AC	1,500	1,323,135	1,482
Airport	273 AC	1,500	408,870	458
Airport Development District	1,650 AC	1,500	2,475,000	2,772
<b>TOTAL</b>			<b>17,996,897</b>	<b>20,153</b>

**SUMMARY OF LAND USES AND WATER USE - BUILDOUT**

LAND USE	DU/AC	RATE	GAL./DAY	AF/YEAR
Desert/Single Family	46,945 DU	396	18,590,145	20,818
Med. Density Residential	11,155 DU	396	4,417,507	4,947
Manufacturing/Industrial	12,241 AC	1,500	18,362,025	20,562
Commercial	2,646 AC	1,500	3,969,405	4,445
Airport	818 AC	1,500	1,226,610	1,374
Airport Development District	4,950 AC	1,500	7,425,000	8,315
<b>Total</b>			<b>53,990,691</b>	<b>60,460</b>

Utilizing the unmitigated established rates the water demands for the year 2014 would be 20,153 acre feet per year. The City would require a total of 60,460 acre-feet of

water under the buildout conditions without mitigation. As discussed, the City of Adelanto currently obtains its water supply from its existing wells. These wells are sufficient for existing conditions. Additional water supplies will be needed to service the City into the year 2014. The primary source of this additional supply is the MWA. Currently the MWA is entitled to 50,800 acre-feet through the State Water Project.

With an increase in water supply from the discussed potential programs, the Department of Water Resources could reallocate water to the MWA to meet the expected demands by the year 2014. The MWA has established a Master Plan for delivery of this water. Water treatment plants have been identified along the aqueduct. The MWA Master Plan identifies a Regional Treatment Plant along the aqueduct at Highway 395. The master plan identifies this treatment plant as a 50 MGD (Million Gallons per Day) plant with a capacity of 56,000 acre-feet per year. The master plan also identifies other treatment plants with a total capacity of 95,502 acre-feet per year. This amount of water would be the total necessary purchase from the State Water Project. This supply would be the major source of water supply for the City of Adelanto. To receive treated water from the treatment plant at Highway 395 and the aqueduct, a major transmission pipeline would need to be constructed. This transmission pipeline, traversing northward parallel to Highway 395, would tie into the City water system. Due to the elevation of the City relative to the aqueduct, gravity flow would be utilized, transmitting water through the system, starting from the south, without the need of major pumping facilities. As an alternative untreated water could be used as groundwater recharge using the proposed Flood Control Facilities as spreading basins.

The major hurdles in obtaining state project water are two-fold. First, the existing entitlement for the MWA is 50,800 acre-feet. The demand for this water exceeds the availability. Thus, if the entitlement cannot be increased, the allocation of the existing water entitlement among the water districts within the MWA boundaries becomes a major factor. The second hurdle is financing. Several financing sources for funding of treatment plants and transmission pipelines are available. General obligation bonds, assessment districts, or developer fees are several that could be utilized. General obligation bonds, though the most equitable because the costs are spread among the entire MWA boundaries to existing and future users, is the most difficult because its approval would be based on a two-thirds majority in an election. Assessment districts and/or developer fees would be the most attractive financing mechanism. However, the treatment plant could be limited in design size by the direct users of the water, new development. Assessment districts are a good financing source for newly developing cities such as Adelanto.

Other sources of water for the City include the use of reclaimed water. This is water that could be reclaimed from the sewage treatment process for non-potable uses. Further discussion of the proposed sewage treatment process and facility will be covered in the Sewer Infrastructure portion of this report. It is estimated that 14,600 acre-feet of water per year could be reclaimed and utilized. This water would be non-potable, but satisfactory for irrigation and other non-domestic uses. However,

reclaimed water requires an extensive treatment process in order to be used for irrigation purposes. The cost of this water, including necessary pumping, will be nearly twice that of State Water Project water. This water would off-set the total water demand, however, and would decrease the need to find other sources of water.

Figure X-6 of the Public Facilities Element illustrates the proposed water distribution network for the proposed General Plan. It is estimated that the water system by the year 2014 would require approximately 27 million gallons of storage. The water lines illustrated are major transmission lines (12" or greater) and are shown in their general proposed location. As illustrated, the existing system would be utilized as a starting point for the new system and would be used as the backbone system.

Other potential actions to address the water issue may include: limiting or conditioning wasteful large volume consumers, utilizing conservation measures, including drought tolerant landscaping, requiring water flow restrictors, increasing drainage and flood recharge of basins and protecting water from contamination from sewage systems. General policies developed for this issue require coordination among regional water agencies and those within the MWA boundaries.

The General Plan Update without mitigation anticipates needing 20,153 acre-feet by the year 2014 and 60,460 acre-feet at "buildout". Either additional water will be secured or the implementation of the proposed General Plan Update will be severely curtailed.

### Sewer

It is estimated that the City of Adelanto will generate 13.1 MGD (Million Gallons per Day) of sewage at the year 2014 under the proposed General Plan without any mitigation. From the treated wastewater, 13.1 MGD (14,600 AF/YR) can be reclaimed for non-domestic uses. The proposed treatment plant at the north portion of the City could be designed to provide the treatment process necessary for reclaimed water purposes. This water could be handled by a separate water system. However, the reclaimed water would be required to be pumped back to the southern portion of the City, thus adding to the cost of the water. With an extensive cross-connection control program, the reclaimed water could be used for:

- Industrial uses;
- Recreational uses;
- Landscape Irrigation
- Groundwater recharge; and
- Fire protection systems.

**SUMMARY OF LAND USES AND SEWER NEEDS - 2014**

LAND USE	DU/ACE	RATE	GAL/DAY	MGD
Desert/Single Family	15,648 DU	245	3,833,826	3.83
Med. Density Residential	3,718 DU	245	911,018	0.91
Manufacturing/Industrial	4,080 AC	1,200	4,896,540	4.90
Commercial	882AC	1,200	1,058,508	1.06
Airport	273 AC	1,200	327,096	0.33
Airport Development Dist.	1,650 AC	1,200	1,980,000	1.98
<b>TOTAL</b>			<b>3,006,988</b>	<b>13.01</b>

**SUMMARY OF LAND USES AND SEWER NEEDS - BUILDOUT**

LAND USE	DU/AC	RATE	GAL./DAY	MGD
Desert/Single Family	46,945 DU	245	11,501,478	11.50
Med. Density Residential	11,155 DU	245	2,733,053	2.73
Manufacturing/Industrial	12,241 AC	1,200	14,689,620	14.69
Commercial	2,646 AC	1,200	3,175,524	3.18
Airport	818 AC	1,200	981,288	0.98
Airport Development District	4,950 AC	1,200	5,940,000	5.94
<b>Total</b>			<b>39,020,964</b>	<b>39.02</b>

The use of reclaimed water would reduce the total water demand by the City. This is a very important aspect of the proposed plan. As identified in the preceding discussion on water, the existing MWA allocation within the MWA boundaries is 50,800 acre-feet. To meet the demands of the Victor Valley through the year 2010, additional water sources must be developed. The City of Adelanto has the unique opportunity to be a model City for the Victor Valley. Reclaimed water has a great potential to reduce overall water demand.

The City of Adelanto owns and maintains its own sewer lines. (See Figure X-2 of the Public Facilities Element). Sewage treatment is provided by the Victor Valley Wastewater Reclamation Authority (VWVRA). The City is a member agency of the VWVRA and is currently connected to the VWVRA treatment plant which is located along the Mojave River northwest of George AFB. This plant has capacity for processing immediate and future sewage needs of the community.

Currently the County of San Bernardino Flood Control District, in cooperation with the City of Adelanto, is updating the existing drainage study. The new study will take into account the existing and proposed land use designations in the Baldy Mesa/Phelan area, upstream of the City, and those land uses under consideration within the City of Adelanto. The results of this study will allow the City of Adelanto to make decisions or any revisions that may be necessary to the Drainage Master Plan.

### **Gas and Electricity**

The proposed General Plan Update impacts on electricity and natural gas use are indicated in Tables VII-2 and VII-3 of the Conservation/Open Space Element. In 2014 the Planning Area will consume 3 million KWH per day and 12 million cubic feet of gas per day.

The Southwest Gas Company and Southern California Edison have indicated that gas and electricity can be provided to the land uses proposed for the region without a significant impact on the environment. Easements will be required for all future mains not installed within public right of ways. As part of the General Plan Update the following energy programs will be implemented to reduce the impacts to energy resources from the proposed project.

### **3.15.3 Mitigation Measures**

#### **Water**

Since State, regional and local water authorities are jointly responsible for developing basin-wide water management plans for provision of potable water supplies, the following mitigation measures are required.

1. Coordination with all local agencies providing water service and protection to achieve effective local and regional planning.
2. Promote cooperation and sharing of information.
3. Provide mutual assistance in regional projects.
4. Assist in the development and implementation of regional water resource management plans and the incorporation of individual district plans.
5. Identify specific needs for recharge of overdraft groundwater basins and proceed with plans for development and management of such activities.
6. Prioritize and document critical areas of basins in overdraft, sole source basins, or quality degradation problems.

7. Provide programs that will maintain or enhance natural water recharge characteristics.
8. Continue a working relationship with MWA in the purchase and distribution of State Water Project water.
9. Provide and share information on supply and demand for water and projected service levels and capacities that can be utilized in infrastructure assessment models.
10. Since an adequate and reliable supply of water must be ensured to provide adequate fire flow, the City shall develop an Emergency Preparedness Plan to be enacted during water shortages due to mechanical or conveyance system breakdown or failure, insufficient water supply, or unacceptable water quality, which will:

Develop temporary interconnections between retail water systems where appropriate.

Prohibit nonessential water uses during declared emergencies in the directly affected water supply area, with coordination between County Department of Environmental Health Services and responsible authorities.

11. Because the development approval process may be dependent upon the location and size of water distribution facilities and the timing of their use, the City shall:

Study the effect of development proposals and whether or not they should include the phased construction of water production and distribution systems; hydrologic studies may be required as appropriate.

Develop a systematic, ongoing assessment of regional and local water supply needs and capabilities to serve planned land uses as defined in the General Plan.

12. Because water resources are limited, and the use of reclaimed wastewater and other non-potable water will play an important part in conserving water supplies, the City shall:

Study water reclamation systems and the use of reclaimed wastewater and other non-potable water to the maximum extent feasible for:

Industrial uses;  
Recreational uses;  
Landscape irrigation; and  
Groundwater recharge.

Apply water conservation and water reuse (reclamation) measures which are consistent with policies/regulations on wastewater.

13. Water conservation measures are an important element in water management practices necessary to meet present and future needs, and the following shall be implemented by the City:

Develop a water conservation and reclamation program to reduce water consumption and prevent loss or waste of water.

Provide a public education program to increase consumer awareness about the need and benefit of water conservation.

Develop lists of drought-resistant water conserving plants and encourage their use in new landscaping within the City.

Require low-volume flush toilets and low-flow plumbing fixtures as conditions of approval for all new development pursuant to the Uniform Plumbing Code and State requirements.

Develop and require landscape and irrigation plans which use water conserving irrigation systems and landscape design utilizing the following features:

Minimize the use of water through the use of automatic rain sensors, giving attention to weather conditions (wind) and other water-use minimizing techniques.

Incorporate low-output sprinkler heads and drip irrigation systems.

Minimize runoff and evaporation.

Maximize the use of drought-tolerant or low-water-use plants.

Use mulch and topsoil to improve the water holding capacity of the soil.

14. Certain types of major industrial or commercial development have the potential to consume vast quantities of water. A program shall be

developed within the City to require such uses to recycle and/or provide offsets for water consumed.

15. Fire Flow requirements are a very important aspect for the protection of life and property within the City. The city shall coordinate its water improvements and developments with the Fire Department to assure that the Fire Department's minimum standards are met.

#### Mitigation Measures Added By Lead Agency

To further mitigate the impact on water resources the City acting as Lead Agency will adopt a Water Conservation Ordinance during this Fiscal Year that will require water-efficient plumbing fixtures in structures as follows:

1. Health and Safety Code Section 17921.3 requires low-flush toilets and urinals in virtually all buildings as follows:  
  
"After January 1, 1983, all new buildings constructed in this state shall use water closets and associated flushometer valves, if any, which are water-conservation water closets as defined by American National Standards Institute Standard A112.19.2. and urinals and associated flushometer valves, if any, that use less than an average of 1-1/2 gallons per flush. Blowout water closets and associated flushometer valves are exempt from the requirements of this section."
2. Title 20 of the California Administrative Code Section 1604(f) (Appliance Efficiency Standards) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, and sink faucets, as specified in the standard approved by the American National Standards Institute on November 16, 1979. and known as ANSI A112.18,1M-1979.
3. Title 20 of the California Administrative Code Section 1606(b) (Appliance Efficiency Standards) prohibits the sale of fixtures that do not comply with regulations. No new appliance may be sold or offered for sale in California that is not certified by its manufacturer to be in compliance with the provisions of the regulations establishing applicable efficiency standards.
4. Title 24 of the California Administrative Code Section 2-5307(b) (California Energy Conservation Standards for New Buildings) prohibits the installation of fixtures unless the manufacturer has certified to the CEC compliance with the flow rate standards.
5. Title 24 of the California Administrative Code Sections 2-5352(i) and (i) address pipe insulation requirements, which can reduce water used

before hot water reaches equipment or fixtures. These requirements apply to steam and steam-condensate return piping and recirculating hot water piping in attics, garages, crawl spaces, or unheated spaces other than between floors or in interior walls. Insulation of water-heating systems is also required.

6. Health and Safety Code Section 4047 prohibits installation of residential water softening or conditioning appliances unless certain conditions are satisfied. Included is the requirement that, in most instances, the installation of the appliance must be accompanied by water conservation devices on fixtures using softened or conditioned water.
7. Government Code Section 7800 specifies that lavatories in all public facilities constructed after January 1, 1985, be equipped with self-closing faucets that limit flow of hot water.

Interior requirements to be included in the Ordinance are as follows:

1. Supply line pressure: Water pressure greater than 60 pounds per square inch (psi) be reduced to 60 psi or less by means of a pressure-reducing valve.
2. Drinking fountains: Drinking fountains be equipped with self-closing valves.
3. Hotel rooms: Conservation reminders be posted in rooms and restrooms. Thermostatically controlled mixing valve be installed for bath/shower.
4. Laundry facilities: Water-conserving models of washers be used.
5. Restaurants: water-conserving models of dishwashers be used or spray emitters that have been retrofitted for reduced flow. Drinking water be served upon request only.
6. Ultra-low-flush toilets: 1-1/2-gallon per flush toilets be installed in all new construction.

Exterior requirements in the Ordinance will include:

1. Landscape with low water-using plants wherever feasible.
2. Minimize use of lawn by limiting it to lawn-dependent uses, such as playing fields. When lawn is used, require warm season grasses. Limit lawn area to 60 percent of landscaped area.

3. Group plants of similar water use to reduce overirrigation of low-water-using plants.
4. Provide information to occupants regarding benefits of low-water-using landscaping and sources of additional assistance.
5. Use mulch extensively in all landscaped areas. Mulch applied on top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction.
6. Preserve and protect existing trees and shrubs. Established plants are often adapted to low-water-using conditions and their use saves water needed to establish replacement vegetation.
7. Install efficient irrigation systems that minimize runoff and evaporation and maximize the water that will reach the plant roots. Drip irrigation, soil moisture sensors, and automatic irrigation systems are a few methods of increasing irrigation efficiency.
8. Use pervious paving material whenever feasible to reduce surface water runoff and to aid in ground water recharge.
9. Grade slopes so that runoff of surface water is minimized.
10. Investigate the feasibility of using reclaimed waste water, stored rainwater, or grey water for irrigation,
11. Encourage cluster development, which can reduce the amount of land being converted to urban use. This will reduce the amount of impervious paving created and thereby aid in ground water recharge.
12. Preserve existing natural drainage areas and encourage the incorporation of natural drainage systems in new developments. This aids ground water recharge.
13. To aid in ground water recharge, preserve flood plains and aquifer recharge areas as open space.

Mitigated water demands for the Adelanto General Plan Update, the demands of water use on a per unit and per acre basis were determined. Rates used to establish the mitigated demands were from the City of Adelanto, Water Supply Report prepared by Roy C. Hampson in March 1994. The land use, dwelling units/acres, rates, gallons per day and acre feet per year for 2014 and General Plan buildout are presented in the following tables. It is estimated that residential uses after all mitigation will consume

approximately 240 gallons per day of water with water conservation. Commercial, Industrial and Airport Land Uses are estimated to consume 900 gallons per day per acre with all mitigation measures.

#### SUMMARY OF MITIGATED WATER USE - 2014

LAND USE	DU/AC	RATE	GAL./DAY	AF/YEAR
DESERT/SINGLE FAMILY	15,648 DU	240	3,755,585	4,206
MED. DENSITY RESIDENTIAL	3,718 DU	240	892,426	999
MANUFACTURING/INDUSTRIAL	4,080 AC	900	3,672,405	4,112
COMMERCIAL	882 AC	900	793,881	889
AIRPORT	273 AC	900	245,322	275
AIRPORT DEVELOPMENT DISTRICT	1,650 AC	900	1,485,000	1,663
<b>TOTAL</b>			<b>10,844,618</b>	<b>12,144</b>

#### SUMMARY OF MITIGATED WATER USE - BUILDOUT

LAND USE	DU/AC	RATE	GAL./DAY	AF/YEAR
DESERT/SINGLE FAMILY	46,945 DU	240	11,266,754	12,617
MED. DENSITY RESIDENTIAL	11,155 DU	240	2,677,277	2,998
MANUFACTURING/INDUSTRIAL	12,241 AC	900	11,017,215	12,337
COMMERCIAL	2,646 AC	900	2,381,643	2,667
AIRPORT	818 AC	900	735,966	824
AIRPORT DEVELOPMENT DISTRICT	4,950 AC	900	4,455,000	4,989
<b>TOTAL</b>			<b>32,533,855</b>	<b>36,432</b>

Utilizing the mitigated rates the water demands for the year 2014 would be 12,144 acre feet per year. The City would require a total of 36,432 acre-feet of water under the "buildout" conditions. As discussed in impacts above, the City of Adelanto currently obtains its water supply from its existing wells. These wells are sufficient for existing conditions. Additional water supplies will be needed to service the City into the year 2014 and beyond. The primary source of this additional supply is the MWA. Currently the MWA is entitled to 50,800 acre-feet through the State Water Project. Other sources include in-basin transfers, acquisition of out of basin rights, and reclaimed water.

If the MWA is unable to obtain this water either because of a lack of financial resources or because of a lack of available water the General Plan Update as proposed will have to be limited and/or modified

### Sewer

Since sewerage systems are the preferred method of wastewater collection, and whenever mandated by the Regional Water Quality Control Board or County Department of Environmental Health Services, dry sewers (standard sewer lines to be used for future connection to the sewer system) or appropriate financial arrangements shall be provided per the requirements of the City when the following conditions exist:

1. The proposed project lies within 600 feet of a sewer line to be constructed within 10 (ten) years per the City's approved Master Plan.
2. The RWQCB requires dry sewers as a condition of the waste discharge permit.
3. Require an updated sewerage system as development occurs within the City.

Since sewer systems are the preferred method of wastewater collection, connection to the sewer system shall be required for any proposed development or subdivision of land that exceeds the minimum requirements of the RWQCB. Exceptions may be approved subject to review by the Regional Water Quality Control Board for Package Wastewater Treatment Plants, individual onsite and multiple owner septic systems, holding tanks, and experimental systems.

Since there is a need to regularly inform and educate the public on the need, methods, and timing of septic tank system maintenance, the City shall cooperate with the County Department of Environmental Health Services (DEHS) to:

1. Publish educational materials on proper septic tank maintenance and distribute them to septic tank owners when requested.
2. Utilize septic tank maintenance districts where feasible to ensure an adequate level of maintenance.

Since the development approval process may be dependent upon the location and size of sewer facilities and the timing of their use, the City shall:

1. Actively work with the VVWRA to ensure planned capacity increases in locations where sewage facilities are approaching capacity.

2. Monitor and provide information to the VVWRA on a continual basis, compile an annual report on the capacity and condition of wastewater collection and treatment systems, and develop contingency plans for sewage management.
3. Actively work with VVWRA to monitor future development to ensure that development will proceed only when sufficient capacity or approved alternative wastewater treatment systems can be provided.

Since water resources are limited, and the use of reclaimed wastewater and other non-potable water will play an important part in conserving water supplies, the City shall encourage the local wastewater/sewering authority to:

1. Require water reclamation systems and the use of reclaimed wastewater and other non-potable water to maximum extent feasible for:
  - Industrial uses;
  - Recreational uses;
  - Landscape irrigation; and
  - Groundwater recharge projects.
2. Apply water conservation and water reuse (reclamation) measures which are consistent with policies and regulations on water quality.

**SUMMARY OF MITIGATED SEWER NEEDS - 2014**

LAND USE	DU/AC	RATE	GAL/DAY	MGD
Desert/Single Family	15,648 DU	175	2,738,447	2.74
Med. Density Residential	3,718 DU	175	650,727	0.65
Manufacturing/Industrial	4,080 AC	850	3,468,383	3.47
Commercial	882 AC	850	749,777	0.75
Airport	273 AC	850	231,693	0.23
Airport Development District	1,650 AC	850	1,402,500	1.40
<b>TOTAL</b>			<b>9,241,526</b>	<b>9.24</b>

**SUMMARY OF MITIGATED SEWER NEEDS - BUILDOUT**

LAND USE	DU/AC	RATE	GAL./DAY	MGD
Desert/Single Family	46,945 DU	175	8,215,342	8.22
Med. Density Residential	11,155 DU	175	1,952,181	1.95
Manufacturing/Industrial	12,241 AC	850	10,405,148	10.41
Commercial	2,646 AC	850	2,249,330	2.45

Airport	818 AC	850	695,079	0.70
Airport Development District	4,950 AC	850	4,207,500	4.21
<b>Total</b>			<b>27,724,579</b>	<b>27.72</b>

It is estimated that the City of Adelanto will generate 9.24 MGD (Million Gallons per Day) of sewage at the year 2014 under the proposed General Plan with mitigation and 27.72 MGD at "buildout".

### Drainage

Since individual developments may be subject to spot flooding from small streams or unmapped areas adjacent to mapped flood areas, the City shall require specific hydrology and hydraulic studies to be prepared at the time the developments are proposed. These studies shall:

1. Identify existing buildout drainage conditions of the General Plan update and measures which must be taken within the development project or downstream from the project to preclude impacts on the proposed development or increase impacts to downstream development. This includes the identification of primary (Master Plan) and secondary drainage facilities. These studies should be submitted and reviewed by the City Engineer and the City Manager.
2. Fully account for all planned flood-control facilities within or adjacent to the project site. When sections of flood-control facilities cannot be constructed, provision should be made for their ultimate construction, that is rights-of-ways reserved and construction funds secured. Additionally, interim facilities must be provided which will be able to handle the additional runoff from the proposed development until the planned flood control facilities are constructed.
3. Develop the drainage system in a natural state where possible.

Since the FEMA mapping and studies do not yet identify all flood hazard areas in the entire City, the following mitigation measures will be required:

1. Programs for the continuous evaluation and designation of floodway, floodplain and drainage areas shall be identified and financed.

Since drainage from adjacent development contributes to flood hazards, the following shall be required:

1. Surface run-off from new development shall be controlled by on-site measures including but not limited to:

Structural controls and restrictions regarding changes in topography, removal of vegetation, creation of impervious surfaces, and periods of construction, such that the need for off-site flood and drainage control improvements is minimized and such that run-off from the development will not result in downstream flood hazards.

Flood control and drainage measures are part of the overall community improvement program and should advance the goals of recreation, resource conservation, preservation of natural riparian vegetation and habitat, and the preservation of the scenic values of the City's streams and creeks. The City shall:

1. Consider ecological significance and aesthetic quality of natural drainage channels in the design of all drainage projects.
2. Preserve designated drainage channels and water courses such as creeks and river beds as resource management areas or linear parks and recreation trails, when possible.

Since the funding of necessary flood control and drainage facilities is a major concern, the City shall continue to develop local area drainage plans and establish appropriate funding mechanisms.

As public education plays a vital role in minimizing flood hazard, the City shall:

1. Establish a public information system through the Fire and Police Departments outlining emergency operations plans and measures to reduce losses in the event of a flood disaster.
2. Enact an ordinance that would require flood hazard information be recorded for each affected property so that all prospective buyers may be informed.
3. Require the storm waters be used for groundwater recharge when possible.

Since flood protection is both local and regional in nature, the City shall:

1. Continue the development of intergovernmental coordination with adjacent cities, County Flood Control District, the Army Corps of Engineers, and other agencies which have an interest in flood control projects that cross jurisdictional boundaries.

2. Coordinate land use and flood control planning through continued improvement of staff contacts between the County Flood Control District, and cities within the areas, and through annual review of the Capital Improvements Program.

### Gas and Electricity

Mitigation measures for gas and electricity include the following:

1. The City will incorporate, as necessary, requirements into the Zoning Ordinance for the evaluation of new uses which consume very high levels of energy. The purpose of the evaluation will be to identify the means by which energy use can be reduced and if this is not possible to review the appropriateness of the land use in terms of its high energy use versus its benefit to the City
2. The City will cooperate with Southern California Edison Company and the Gas Company to initiate and facilitate programs for energy audits of existing structures. The audits will define the current levels of use compare these to current standards for similar types of structures and Prescribe corrective methods to improve conservation. The City will initiate programs which facilitate the retrofitting of existing buildings and required improvements. These may include technical assistance and low-interest loans to property owners. The City will also conduct energy audits on all City buildings and incorporate measures to increase their energy efficiency.
3. The City will incorporate at a minimum the following requirements in the City Building Code:  
  
State requirements for the use of energy-efficient fixtures and energy saving design elements in new construction (Government Code Section 66473.1)  
  
Inclusion of windows that can be opened in all new construction unless sealing is required for safety or other purposes considered acceptable by the City  
  
Installation of specified energy conservation elements on transfer of ownership of an existing building.
4. The City will conduct a study to determine the appropriateness and feasibility of incorporating within the Zoning Ordinance or as a separate ordinance standards to ensure solar access for existing and future uses in the City. The study will consider the definition of possible solar envelopes

as a function of building height bulk and siting/orientation. The City will incorporate code guidelines and standards for new development into the Zoning Ordinance which minimize the impact of shade and shadows on neighboring properties.

5. The City will allow for the use of alternative energy systems provided that they meet all public safety health and welfare requirements and are proven to be reliable. If necessary back-up systems will also be required.
6. The City will provide information to all residents and businesses on the conservation programs offered by the Gas Company and Southern California Edison Company.

#### **3.15.4 Unavoidable Adverse Impacts**

Without additional water resources the City will only be able to implement the equivalent population of approximately 25,000 persons. The waterbasin is already in a state of overdraft and any additional pumping from the groundwater basin will cause significant unavoidable adverse impacts which can not be reduced to a level of insignificance by the mitigation measures proposed.

5. The City will allow for the use of alternative energy systems provided that they meet all public safety health and welfare requirements and are proven to be reliable. If necessary back-up systems will also be required.
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#### **3.15.4 Unavoidable Adverse Impacts**

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## **4.0 LONG TERM IMPACTS**

### **4.1 Short-Term Uses Versus Long-Term Productivity**

The proposed project will result in impacts on the local environment that will affect both short-term uses and the maintenance and enhancement of long-term productivity. The Project will commit the City to the land uses presented in the proposed General Plan, thereby precluding development of interim uses that may be inappropriate and/or incompatible with the proposed General Plan. The proposed General Plan Update will result in changes in land use and an increased intensity of land utilization in the project area. Moreover, the project will provide expanded employment opportunities for local residents and increased municipal revenues, while not significantly affecting the use of natural resources or posing any significant long-term risks to health or safety. Therefore, the project is expected to enhance the long-term productivity of the area.

Implementation of the project will involve short-term construction activities interspersed over a long period of time. These activities will create localized impacts, e.g., rerouting of traffic, construction noise, etc., which will likely have an adverse effect upon nearby business activity and surrounding residential properties during the construction phase of project implementation. These impacts will be experienced by the businesses and residents within and immediately adjoining those portions of the project area undergoing construction. The adverse impacts associated with project-related construction will cease with the completion of this activity and as such will not have an adverse impact on the maintenance and enhancement of long-term productivity.

### **4.2 Growth-Inducing Impacts**

The implementation of the proposed General Plan will result in both direct and indirect growth-inducing impacts. The primary direct impact will be the more intensive utilization of the land. Vacant and desert properties will be utilized for productive development. This will result in an increase in the assessed value of land and improvements within the project area, which, in turn, will ultimately increase revenues for the City of Adelanto, and other affected taxing agencies. Off-setting this increase in public revenues will be an increase in costs to meet the increased demand for public services and facilities.

#### **4.2.1 Direct Growth-Inducing Impacts**

The continued growth and economic development of the City of Adelanto is a key goal of the General Plan Update. The need to expand and diversify the economy is at the heart of the project. This thrust involves not only the active recruiting of new commercial and industrial development, but making sure that sufficient land, utilities, governmental services and housing are also available to meet the needs of businesses which may locate in the City. The project will have the effect of increasing both

temporary and permanent employment opportunities in the project area. Construction activities will generate a relatively short-term demand for workers in the construction trades. Permanent jobs for local and area-wide residents will be created by the establishment of new commercial and industrial enterprises in the project area.

#### **4.2.2. Indirect Growth-Inducing Impacts**

Indirect growth-inducing impacts anticipated from implementation of the proposed General Plan will include an increased demand for housing and land within the region. The project will indirectly generate additional jobs and sales tax dollars. When properly planned, the proposed uses will build interdependence and self-sufficiency for the City. The project's land use and development activities will also stimulate the private development and upgrading of adjacent and nearby areas.

#### **4.3 Cumulative Impacts**

A number of impacts discussed in more depth in the environmental analysis section (3.0) are considered to be cumulative. Mitigation measures addressing the project-related impacts are covered in the Environmental Analysis Section.

The cumulative impacts to earth resources, plant and animal resources, light and glare, land use, natural resources and public services are not deemed to be significant impacts on a wide scale outside of the immediate community. The increase in land use intensification which could take place will be in conformance with the zoning designations, as amended for the project area.

The General Plans of the four major cities in the region are the basis for the cumulative impacts discussed in this section. The Town of Apple Valley expects to develop 43,000 acres with development including 37,481 residential units with a population of 100,000 (Land Use Element September 1991). The City of Hesperia expects to develop 56,000 acres with 103,058 residential units (Land Use Public Facilities, May 1991). At 2.64 persons per unit Hesperia will generate 272,000 persons. The City of Victorville expects to develop 33,300 acres with 111,936 residential units (Community Development Element, October 1988). At 2.64 persons per unit Victorville will generate 295,000 persons.

Other projects known to Adelanto that may be more intense than the averages normally included in the General Plans include the Golden Triangle, the Mojave River Pipeline, the Second Adelanto Transmission Line, and the Adelanto Raceway. These projects have been or will be subject to CEQA analysis.

The Mojave River Pipeline is a 72 mile pipeline to distribute State Project Water to Adelanto, Hodge, Lenwood, Daggett, Mineola and Newbury Springs. The project will have temporary construction impacts to the region on noise, air quality use of natural materials etc. but will have beneficial impacts on the availability of water to the region

and recharge of the groundwater basin. Based on limited information available at this time, this project is not expected to result in long term adverse impacts to the region.

The Second Adelanto Transmission Line will parallel the existing Adelanto Transmission Line. This project will also have temporary construction impacts to the region on noise, air quality use of natural materials etc. but will have beneficial impacts on the availability of electrical energy to the region. Based on limited information available at this time, this project is not expected to result in long term adverse impacts to the region.

The Adelanto Raceway is a project that has been proposed and which will be subject to a separate Environmental Impact Report. The Proposed Project consists of the development of an Indy 500 type facility with a 80,000 seat grandstand with related parking and support facilities. The Project also includes a Drag Strip, Midget Racing, Rodeo Facilities, and a 200 Room Hotel. This project will probably have 25,000 vehicles at major weekend events. While there is not sufficient information at this time to estimate actual impacts in relation to the region this facility could compare to the impact of 3,000 dwelling units as follows : 80,000 persons divided by 2.64 persons per unit times ten percent of the time.

The Golden Triangle project consists of the development of approximately 10,000 residential units. These units are already included in the units of the Hesperia General Plan (Section 1 of that Plan) and no additional impacts are expected

The additional long term impact from the Adelanto Raceway is the equivalent of 3,000 dwelling units. This amounts to one percent (.962) of the total 311,638 units contemplated in the Cities General Plans. This one percent impact will be added to the cumulative impacts .

#### **4.3.1 Air Quality**

The proposed project is located in the Southeast Desert Air Basin (SEDAB) and is under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD) and the California Air Resources Board (ARB). The MDAQMD sets and enforces regulations for stationary sources in the basin, while the ARB regulates emissions generated by mobile sources. The ARB also ensures that the California Clean Air Act (CCAA) is enforced.

The region is in nonattainment for ozone and PM 10 for both the CCAA and the Federal CAA. To bring the region into attainment for ozone, the MDAQMD (formerly the San Bernardino County Air Pollution Control District) prepared the "1991 Air Quality Attainment Plan" (AQAP, SBCAPCD, 1991) and the "Supplemental Report, 1991 Air Quality Attainment Plan For Ozone, Indirect, Transportation, and Area Source Control Measures"(MDAQMD, 1993). As with Federal projects under the National Environmental Policy Act (NEPA), certain projects under CEQA, including the Adelanto

General Plan, must demonstrate conformity with the AQAP (SBCAPCD, 1991). The AQAP, in turn, must comply with the CCAA requirements. The MDAQMD AQAP contains measures that will be implemented over a four year period to reduce emissions in order to meet both state criteria pollutant standards by 1997.

Control strategies included in the AQAP are slated for implementation during the current planning cycle from 1991 to 1997. The AQAP has provisions for addressing existing and new sources as required by the CCAA. The following summarizes some of the more important measures in the AQAP:

1. A permitting program designed to achieve no net increase in emissions of nonattainment pollutants or their precursors from new or modified stationary sources which emit 25 tons per year or more of nonattainment pollutants or their precursors.
2. The AQAP also requires Best Available Control Technology (BACT) control measures on all new or modified emissions sources triggering the 25 tons per year threshold.
3. Reasonable available control technology (RACT) for all existing sources.
4. Reasonable available transportation control measures.
5. Provisions to develop area source and indirect source control programs. These programs in the AQAP help to reduce the impact of mobile sources by reducing the use of motor vehicles.
6. Provisions to develop and maintain an emissions inventory system to enable analysis and progress reporting and a commitment to develop other analytical techniques to carry out its responsibilities pursuant to subdivision (b) of the H&S Section 40924.
7. Provisions for public education programs to promote actions to reduce emissions from transportation and areawide sources.

Where pertinent, the proposed project must demonstrate conformity with these and other measures contained in the AQAP.

Toxic air contaminants (TACs) are airborne substances that are capable of causing short-term or long-term adverse human health effects. TACs include both organic and inorganic chemical substances. TACs may be emitted from a variety of common sources, including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. Research and teaching facilities where a variety of chemicals are used for various experiments may also be a source of TACs. The 1990 Federal CAA Amendments expanded the regulation of hazardous air pollutants (HAPs; the

Federal government terminology for TACs), establishing a list of 172 individual compounds and 17 compound categories to be regulated as HAPs. The Federal CAA required the EPA to establish a stringent, technology-based emissions standard for stationary sources of emissions of these listed substances. The Act also required the EPA to list "major" and "area" source categories that the EPA finds sufficiently threatening to human health or the environment by November 1993, to establish emissions standards for at least 40 stationary source categories by November 1994, and to establish standards for all regulated sources by November 2002. "Major sources" are defined as any stationary source that emits at least ten tons per year of any HAP or 25 tons per year of any combination of HAPs. "Area sources" are stationary sources encompassing small diverse facilities that routinely release small amounts of HAPs. By November 1997, the EPA must list sufficient categories and subcategories of area sources to ensure that 90 percent of the emissions of the 30 HAPs presenting the greatest threat to the public health in the largest number of urban areas are subject to regulation.

In the State of California, the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB2588) requires specified facilities to submit to the local air pollution control agency, in this case, the MDAQMD, a comprehensive plan to inventory air toxics emissions for all substances listed pursuant to the Act. After the inventory preparation plan is approved, the facility must implement the plan and submit the resulting air toxics emission inventory to the District. After the District receives the completed emission inventories subject to the Act, it is then required to identify high priority facilities for which health risk assessments must be prepared to estimate the potential health risk associated with TAC emissions.

Assembly Bill 1807 (Tanner Bill) set up a statewide process to determine the need for methods to set standards for toxic air contaminants. The process includes identification of toxic air contaminants, determination of emissions and ambient levels of the identified compounds, preparation of regulatory needs documents, and establishment of minimum statewide emission control standards by the ARB. The ARB has identified several chemicals as TACs under the Tanner Bill, including asbestos, benzene, cadmium, carbon tetrachloride, chlorinated dioxins and dibenzofurans (15 species), chromium (VI), ethylene dibromide, ethylene dichloride, ethylene oxide and methylene chloride as toxic air contaminants. The ARB has not developed statewide standards for any of these chemicals.

Air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin and, as is the case in the SEDAB, transport from adjacent basins. The existing emissions inventory indicate that mobile sources are the major source of regional emissions. Motor vehicles account for 38 percent of the ROG emissions, and 29.1 percent of the NO emissions, 67 percent of the CO emissions, and 4 percent of the PM10 emissions.

Existing air quality at the Victorville air quality monitoring station, during the period 1987 to 1990, indicates that the National Ambient Air Quality Standards (NAAQS) for ozone were exceeded less than four percent of the time, while the more stringent California Ambient Air Quality Standards (CAAQS) for ozone were exceeded up to 16 percent of the time. Annual and 24-hour State standards for PM10 were exceeded in each of the years from 1987 to 1990. No violations of the Federal PM10 standard occurred in Victorville and the only violation of the national PM10 standard in the area occurred in Hesperia in 1989. The air basin is in attainment for all of the other criteria pollutants. The 1993 air quality concentrations have been released by the MDAQMD and show that air quality at the Victorville monitoring station improved during 1993 relative to the period from 1987-1990.

The Federal ozone nonattainment status in the SEDAB is "severe." The ARB nonattainment designation is "moderate". The ozone exceedances of the State standard measured at the Victor Valley monitoring site from 1985 through 1990 shows that 105 days were exceeded in 1985 that 87 days were exceeded in 1989 and that 56 days were exceeded in 1990. The control measures to be implemented within the next three years are designed to bring the basin into attainment by the year 1997. The plan focuses on a process of seeking reductions of ozone-precursors; i.e., ROG and NOx pollutants. The MDAQMD must reduce the ROG and NOx levels by at least five percent per year or 15 percent or more in a three-year period (1994-1997) to comply with the CCAA. The Federal requirement mandates a 15 percent or more reduction in a six year period (1994-1999).

Air quality data indicate that ozone is the air pollutant of primary concern in the regional area. Ozone is a secondary pollutant. Ozone is the result of the chemical reactions of other pollutants, most importantly hydrocarbons (i.e., ROG and VOCs are components of hydrocarbons) and NO<sub>2</sub>, in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the regional area. The data indicate that ozone levels exceeded state standards less than or equal to 24 percent of the time for each year. The South Coast Air Basin and the San Joaquin Valley Air Basin contribute heavily to the ozone levels experienced in the Region.

The PM-10 nonattainment designation is moderate. The moderate nonattainment region is required to meet the Federal attainment deadline of December 31, 1994. The Federal CAA requires moderate nonattainment areas to develop a SIP that discusses the methods by which attainment would occur.

Particulate levels in the area are due to natural sources, grading operations, motor vehicles, and transported pollution from adjacent air basins. Data indicate that particulates exceed the State standard between 40 percent and 76 percent per year.

Pollutant levels of SO<sub>2</sub> have not exceeded the Federal standard at any time. The State standard was not exceeded until 1990. During 1990, the SO<sub>2</sub> concentration exceeded

the State standard once in the SEDAB. Although data is not available for sulfate and lead for the most recent years, it is unlikely that exceedances of the State standards have occurred in San Bernardino County

The impacts to air quality associated with the proposed project (Adelanto General Plan Update) and as a result of projects in the surrounding communities (i.e. the projects contemplated in the General Plans for the cities of Victorville, Hesperia and Apple Valley, as well as the "Other Projects" discussed above) will incrementally contribute to the degradation of air quality conditions in the Mojave Desert Air Basin. Mitigation measures addressing the impacts to Air Quality are discussed in detail in section 3.2.

The estimated cumulative impacts to air quality in 2014 includes 336 tons of pollution from all sources per day including 54.8 million locally generated vehicle miles total per day.

#### CUMULATIVE AIR QUALITY IMPACT - 2014

<u>AREA</u>	<u>PERCENT POP.</u>	<u>TPD</u>	<u>MVMTD</u>
Adelanto	19	68	10.3
Victorville	36	118	19.5
Apple Valley	12	39	6.5
Hesperia	33	108	18.0
Other Projects		3	.5
<b>Total</b>	<b>100</b>	<b>336</b>	<b>54.8</b>

Source: Pro-rata of Adelanto from EIR Impacts.

The estimated cumulative impacts to air quality at buildout include 998 tons of pollution from all sources per day including 165 million locally generated vehicle miles total per day.

#### CUMULATIVE AIR QUALITY IMPACT - BUILDOUT

<u>AREA</u>	<u>PERCENT POP.</u>	<u>MPD</u>	<u>MVMTD</u>
Adelanto	19	188	31.00
Victorville	36	356	58.65
Apple Valley	12	118	19.64
Hesperia	33	326	54.00
Other Projects		10	1.63
<b>Total</b>	<b>100</b>	<b>998</b>	<b>164.92</b>

Source: Pro-rata of Adelanto from EIR Impacts.

These estimates are based on the relatively high existing trip lengths of 10 and 20 miles contained in Table VII-4 of the Conservation Element. As urbanization continues these trip lengths will substantially shorten thereby lessening the projected impact to VMT and air quality. Other reports (Mestre Greve Associates, 1992) estimated the total tons per day at 673.5 in 2010 for the Victor Valley

Implementation of the mitigation measures in this EIR for all the jurisdictions would reduce particulates to a level of insignificance. The Mojave Desert Air Quality Districts has not yet determined if the local area can meet State and Federal standards for ozone even if the mitigation measures for all jurisdictions were implemented. It is forecast that cumulative impacts to air quality will be adverse and significant.

#### **4.3.2 Water Resources**

There is a substantial difference of expert opinion on the use and availability of water in the regional area. At the regional level, according to the Mojave Water Agency, the continuation of overdraft of water resources in the Mojave River Basin creates a background significant water resource condition that is unavoidable. In forecasting future cumulative impacts on the Mojave River Basin groundwater resources, the MWA developed a population growth forecast within the Basin through the year 2015. Estimates of future population were projected using growth rates consistent with the Southern California Association of Government's (SCAG) Growth Management Plan. Although not representing total build-out of the region, this period was selected by MWA as a reasonable forecast period without having to resort to speculation on future growth or availability of imported water resources. The population growth figures to 2015 for the Mojave River Area are estimated at a low of 332,200 to a high of 538,700, with medium at 460,800. Including the Morongo Basin and Johnson Valley the total projected population is 543,500. The estimated cumulative demand for water resources within the Mojave River Basin by the year 2015 is as follows:

1. Total consumptive use by the year 2013 is estimated to be 160,500 af/yr. Of this volume of water, total urban consumptive use in the Alto area, which primarily consists of the Victor Valley, is forecast to be about 62,500 af/yr.
2. The project overdraft by the year 2013 could be as high as 88,800 af/yr in the Mojave River Basin. The overdraft in the Alto (primarily Victor Valley) portion of the Basin is forecast to be 45,400, or about 51% of total overdraft in 2015.
3. If no actions are taken to reduce overdraft, the groundwater basins in the Mojave River Basin will be depleted by an estimated 1,860,000 acre feet by the year 2015, leaving 1,140,000 acre-feet of water in storage that can be used for domestic water supply. Assuming no increase in water

supplies, the available adequate quality groundwater in storage would last only about 13 additional years (to the year 2028) before being depleted.

Mitigation is available for cumulative water impacts, but at the regional scale it is not clear that adequate imported water supplies and shifts of water resources from agriculture to municipal uses can fully offset continued overdraft. For the past three years those parties relying on groundwater resources in the Mojave River Basin have been involved in an adjudication of water rights before the Superior Court of the State of California in the County of Riverside. An Interlocutory Judgment was reached in this water rights case in September 1993. The purpose of the stipulated judgment has been summarized as follows: "(1) create incentives to conserve local water, (2) guarantee that downstream producers will not be adversely affected by upstream production, and (3) assess producers to obtain funds to purchase imported water. The judgment does not place any pumping restrictions on the producers. Instead it relies upon conservation of local water, purchase of imported water and transfers among producers to, in time, eliminate the groundwater overdraft."

The MWA's RWMP (pages 2 through 6) identifies specific actions that can be implemented by the MWA and water users within the Mojave River Basin to fully correct overdraft in accordance with the stipulated judgment. The Plan contains cost estimates for correcting the overdraft, including purchase of imported water, is estimated to be \$26.8 million in 2015. Full correction of overdraft could be accomplished by the year 2000 for an estimated cost of \$21.7 million. Based on this data, the cumulative adverse water resource impacts can be reduced below a significant level by implementing the "Regional Water Management Plan."

This measure is beyond the ability of the Adelanto to implement and it is not within Adelanto's jurisdiction to ensure that all the measures outlined in MWA's Management Plan can be funded at this stage of its review and implementation. Therefore, Adelanto concludes that a cumulative significant water resource impact may occur if the proposed Adelanto General Plan and cumulative development occurs as forecast in this document with full implementation of the above mitigation measures.

The City of Adelanto estimates that the total demand within the Victor Valley by the year 2010 is 154,135 acre-feet. As illustrated in the Table below, 35 percent of the total demand in the Victor Valley area is a result of agricultural users. The reduction of agricultural uses would allow more water for domestic uses. The demand within the MWA boundaries is approximately 320,000 acre feet. Comparatively the demand within the Metropolitan Water District (MWD) boundaries, which serve the Metropolitan Los Angeles, Orange, Riverside, San Bernardino, and San Diego areas, is over 3.8 million acre-feet. The demand within the Mojave Water Agency boundary is approximately 8-percent of the total MWD demand. This would indicate that with adjustments in the allocation of this water, the needs of the Victor Valley through the year 2014 can be met.

**VICTOR VALLEY WATER DEMAND PROJECTIONS - 2014**

UPPER BASIN	AG. DEMAND	DOMESTIC DEMAND
Adelanto Area		20,153
Victorville Area		18,093
Apple Valley Area		33,087
Hesperia Area		16,571
Phelan/Baldy Mesa Area		12,131
Subtotal	54,100	100,035
<b>TOTAL DEMAND (AF/YR)</b>		<b>154,135</b>

Source: Adelanto demand from General Plan and Master Plan for Delivery of Imported Water, Pirmie, November, 1989.

Additional sources for the entire Southern California region, of which Adelanto and the Victor Valley are a part, consist of: reallocating State Water Project water, construction of additional storage capacity along the State Water Project, desalination plants along the coast, extensive emphasis on water conservation (both domestic and major agricultural users) and expanded systems for the use of treated wastewater. All of these issues are regional in nature. Alternative or additional sources of water must be developed to ensure the future economic vitality of the entire Southern California area.

If State Project water is not introduced to the water system on an annual basis, and if urbanization continues with its related use of water and drawdown of the groundwater basin, there will be a significant impact on the rare and endangered species of the Mojave River system. Without the addition of State Project water, the local ability to approve development projects may be withdrawn under the requirements of CEQA and the Federal Endangered Species Act.

The cumulative impact on water is significant. The total population of the proposed project together with the population projections of the General Plans of Victorville, Hesperia and Apple Valley is approximately 825,000 persons. Based on available local sources and existing allocated State Project water the basin has adequate water for only about 455,000 persons. With the implementation of conservation/mitigation measures this may increase to 550,000 persons. For Adelanto and the surrounding cities to implement their respective general plans the State Project water allocation will have to be doubled. For Adelanto to fully implement the proposed General Plan project additional sources of water will have to be secured. Implementation of the area General Plans without additional State Project Water would be a adverse and significant impact on water resources.

**4.3.3 Noise**

Other than George AFB there are no other major airports that will contribute to community noise impacts. The City of Adelanto is considering the development of an auto raceway, however this facility would have only local impact in the central western area of the City. The long-term cumulative noise impacts from traffic will be significant on certain roadways within the region (such as Bear Valley Road). This is an unavoidable significant impact of building out the Victor Valley through infill of existing underdeveloped areas. While Adelanto believes that its proposed land use pattern and noise mitigation measures will reduce noise to levels of insignificance, mitigation in other communities may not reduce noise in certain instances and may not totally eliminate exposure to significant noise in the future.

If George Air Force Base is developed by the VVEDA the noise impacts to the City of Adelanto may not be adequately controlled or mitigated to levels of insignificance.

**4.3.4 Population**

The number of units as designated in each of the General Plans for the region and the respective population projections at 2.639 persons per unit is as follows:

**CUMULATIVE POPULATION IMPACT**

<u>AREA</u>	<u>TOTAL UNITS</u>	<u>POPULATION</u>
Adelanto	59,163	156,188
Victorville	111,936	295,508
Apple Valley	37,481	98,949
Hesperia	103,058	272,070
Other Projects	3,000	7,920
<b>Total</b>	<b>314,638</b>	<b>830,637</b>

Source: Total Units from General Plans

The region has more than enough land to support this number of persons.

The short-term impact of the closure of the Base on the Victor Valley area has been a loss of population to the area of approximately 14,600 military and civilian personnel associated with the Base (U.S. Air Force, 1991c). In the long-term, implementation of the General Plans of the region will stimulate population growth. Estimates made by the U.S. Air Force in evaluating the environmental impact of the proposed reuse as a regional/commercial airport indicate that approximately 30,000 people will be added to the Victor Valley population by the year 2013 under the commercial growth alternative. Growth in population based on change of existing land uses in conformance with the

General Plans of the local land use jurisdictions and assuming General Plan build-out could increase as much as 157,123.

The short-term employment impact on Victor Valley caused by Base closure could result in the loss, either directly or indirectly, of approximately 8,500 jobs. Reuse of the Air Base as a commercial airport would stimulate the entire Victor Valley economy. In addition to the jobs generated directly through construction and operation of the new airport, the GAFB Final EIS estimates that some 26,000 additional jobs would be added to the two-county region of impact (San Bernardino and Los Angeles Counties) as a result of regional spending for goods and services by both the direct on-site workers and by the various companies and agencies operating from the airport site. Approximately 15,000 of these secondary jobs would be located in the Victor Valley and are anticipated to be concentrated in the services and retail trade sectors of the local economy (U.S. Air Force, 1991c). Employment generated as a result of General Plans build-out, could produce an increase of approximately 214,000 jobs. However, this projection is based on an assumption of General Plans build-out within the greater Victor Valley and it is difficult at this time to predict when, or if, that might occur because of the uncertainty of the exact nature, timing, and extent of activity within the Region.

Consultations with economists and review of current commercial and industrial absorption rates indicate General Plan buildout may not be achieved for 70-80 years, if then. Nevertheless, growth in the number of jobs in the Victor Valley is considered a beneficial impact in view of the existing low jobs-to-housing ratio and the impending loss of jobs due to the closure of the Base.

#### 4.3.5 Housing

The number of units as designated in each of the General Plans for the region is as follows:

<b>CUMULATIVE HOUSING IMPACT</b>	
<u>AREA</u>	<u>TOTAL UNITS</u>
Adelanto	59,163
Victorville	111,936
Apple Valley	37,481
Hesperia	103,058
Other Projects	3,000
<b>Total</b>	<b>314,638</b>

Source: From General Plans

The region has more than enough land to support this number of housing units.

Long-term demand for housing as a direct result of the reuse of the Base is projected to reach 10,500 additional units by 2013 (U.S. Air Force, 1991c). Averaged over 20 years this is an average annual demand of approximately 525 housing units per year. Given the availability of some 6,647 vacant units in 1990, an average vacancy rate of approximately 10 percent and a high projected annual building rate, no significant impact is foreseen. No mitigation is required or proposed.

**4.3.6 Cultural Resources**

The City of Adelanto, as well as other Agencies in the area, have evaluated the cultural resources in the Victor Valley with reference to build-out effects. Although the region has significant cultural values, the regional cumulative impact evaluation concluded that adequate controls on development exist within the current general plans of the various jurisdictions and adequate mitigation is available to mitigate cumulative cultural resource impacts to a nonsignificant level as growth occurs. No significant cultural resource impact is forecast to occur with the implementation of the mitigation measures described in General Plans and in previous EIRs.

**4.3.7 Traffic and Circulation**

The traffic/circulation impacts of the proposed project on the City and surrounding communities may create serious traffic problems for the project area and surrounding sub-region. Much of this problem is due to existing conditions that will be further impacted. The estimated cumulative impact from traffic in 2014 for the region totals 55 Million Average Daily Trips as follows:

<b>CUMULATIVE TRAFFIC IMPACT</b>		
<b>AREA</b>	<b>PERCENT POP.</b>	<b>MADI</b>
Adelanto	19	10.35
Victorville	36	19.61
Apple Valley	12	6.53
Hesperia	33	17.97
Other Projects		.54
<b>Total</b>	<b>100</b>	<b>55.00</b>

Source: Pro-rata of Adelanto from EIR Impacts.

These estimates are based on the relatively high existing trip lengths of 10 and 20 miles contained in Table VII-4 of the Conservation Element. As urbanization continues these trip lengths will substantially shorten thereby lessening the projected impact to

VMT. Other reports (Dwight French & Associates,1992) estimate buildout average daily VMT at 21.150 million.

The local and regional transportation facilities will require substantial improvement over the lives of the General Plans for the region. Implementation of the mitigation measures contained in this EIR for the City of Adelanto would mitigate local traffic levels to a level of insignificance. Regional traffic may be significant if additional freeways are not constructed to serve the High Desert area.

At the regional level, the cumulative impact forecast for build-out conditions described in indicates that the regional circulation system will likely incur cumulative significant adverse traffic impacts that will be unavoidable. The air quality impact analysis forecast 54 million total miles (other studies forecast 21 million) will be traveled each day in the Victor Valley which cannot be handled on the existing or proposed circulation system in the various general plans for the Victor Valley. Thus, a cumulative significant regional traffic impact is forecast to occur and based on data available at this time, the other area communities do not have the resources to reduce this cumulative significant traffic impact below a below a significant level.

**4.3.8 Utilities**

Cumulative impacts for the regional area for sewers, natural gas, electricity and solid waste are discussed below.

The cumulative impact for sewer capacity is 206 million gallons per day as follows:

**CUMULATIVE SEWER IMPACT - BUILDOUT**

<u>AREA</u>	<u>PERCENT POP.</u>	<u>MGD</u>
Adelanto	19	39.02
Victorville	36	73.83
Apple Valley	12	24.72
Hesperia	33	67.97
Other Projects		2.04
<b>Total</b>	<b>100</b>	<b>206.56</b>

Source: Pro-rata of Adelanto from EIR Impacts.

To accommodate the cumulative sewer needs the regional capacity will have to be expanded by 10 times, from the planned 20 MGD to 205 MGD over the life of the proposed General Plans for the region. If the treatment plant is not expanded, or new facilities constructed, development will cease.

The cumulative impact on natural gas supplies is 191 million cubic feet per day as follows:

#### CUMULATIVE GAS IMPACT - BUILDOUT

<u>AREA</u>	<u>PERCENT POP.</u>	<u>MCFD</u>
Adelanto	19	36.00
Victorville	36	68.11
Apple Valley	12	22.81
Hesperia	33	62.71
Other Projects		1.89
<b>Total</b>	<b>100</b>	<b>191.52</b>

Source: Pro-rata of Adelanto from EIR Impacts.

The mitigation measures contained in this Environmental Impact Report if implemented by the regional jurisdictions would mitigate the use of natural gas to the extent feasible. The gas company will be required to install significant facilities over the next 30-40 years. This will greatly improve their business opportunities.

Natural gas service to the area is provided by Southwest Gas Company. The City of Adelanto, as well as other Agencies in the area, has evaluated the adequacy of energy resources for build-out of the Victor Valley and concluded that adequate energy resources could be made available. The distribution systems will have to be expanded (not the transmission systems) but this is normally done when individual development projects are constructed. It is anticipated that development will fund most distribution system improvements as part of growth and other mitigation mechanisms as required.

The cumulative impact of electrical usage for all of the local jurisdictions is 47.8 million kilowatt hours per day as follows:

#### CUMULATIVE ELECTRICITY IMPACT - BUILDOUT

<u>AREA</u>	<u>PERCENT POP.</u>	<u>MKWHD</u>
Adelanto	19	9.00
Victorville	36	17.03
Apple Valley	12	5.70
Hesperia	33	15.68
Other Projects		.47
<b>Total</b>	<b>100</b>	<b>47.88</b>

Source: Pro-rata of Adelanto from EIR Impacts.

The mitigation measures contained in this Environmental Impact Report if implemented by the regional jurisdictions would mitigate the use of electricity to the extent feasible. The electric company will be required to install significant facilities over the next 30-40 years. This will greatly improve their business opportunities.

Electricity is provided to the Victor Valley area by the High Desert District of Southern California Edison (SCE). The District consisted of 101,000 metered customers in 1990. The region is currently utilizing alternative electrical generating techniques including the solar thermal projects at Daggett, Harper Dry Lake and Kramer Junction.

The cumulative impact of solid waste generation for the region is 466,712 tons per year as follows:

#### CUMULATIVE SOLID WASTE IMPACT - BUILDOUT

AREA	PERCENT POP.	TPY
Adelanto	19	87,726
Victorville	36	165,977
Apple Valley	12	55,576
Hesperia	33	152,812
Other Projects		4,620
<b>Total</b>	<b>100</b>	<b>466,712</b>

Source: Pro-rata of Adelanto from EIR Impacts.

The total tons per year of solid waste will be approximately 50 percent of this total due to the effects of AB 939, (50 percent by 2000 recycling law).

Existing landfill capacity will have to be substantially increased or new landfill sites established to accommodate this cumulative impact. If capacity is not increased, cumulative impact will be adverse and significant.

This section also discusses the potential impacts of existing contaminated sites on GAFB, and the potential for environmental impacts caused by hazardous materials/waste management practices associated with reuse. Hazardous materials/wastes, IRP sites, storage tanks, asbestos, pesticides and herbicides, PCB's, radon, and medical/biohazardous wastes are covered by this discussion.

The U.S. Air Force is committed to the remediation of all contamination at George AFB due to past Air Force activities. The DMT will remain after base closure to coordinate cleanup activities. Delays or restrictions in reuse or disposal of property may occur due to the extent of contamination and the results of both the risk assessment and remedial

designs determined for contaminated sites. Examples of possible land use restrictions would be the capping of landfills and the constraints from methane generation and cap integrity; as well as the location of long-term monitoring wells. These restrictions would have to be considered in the layout of future development. Options to developers include creation of parks, greenbelts or open spaces over and around such areas. Regulatory standards and guidelines will be applied in determining the impacts caused by hazardous materials/waste. The following criteria were used to identify potential impacts:

Accidental release of friable asbestos during the demolition or modification of a structure.

Generation of 100 kilograms (or more) of hazardous waste or 1 kilogram (or more) of an acutely (California Health and Safety Code Chapter 6.95, Section 25532) hazardous waste in a calendar month, resulting in increased regulatory requirements.

New operational requirements or service for all UST and tank systems.

Any spill or release of a reportable quantity of a hazardous material.

Manufacturing of any compound that requires notifying the pertinent regulatory agency

Exposure of the environment or public to any hazardous material through release or disposal practices.

The U.S. Air Force is committed to continue IRP activities under DERP, CERCLA and the FFA between the U.S. Air Force, U.S. EPA, California DHS, and the California water quality control board. IRP activities will be coordinated by the DMT and the aforementioned agencies.

The extent of contamination is being delineated and both the risk assessment and remedial designs will be a result of this work. Proposed disposal and reuse of some George AFB properties may be delayed or limited due to the extent of contamination as well as ongoing and future IRP activities. This process will also identify current and future monitoring of well locations and consider land use limitations as a result of their presence.

Ultimate decisions on what type of future land use will be implemented at areas overlying or adjacent to an IRP site will greatly depend on the overall characterization of risk to human health posed by the IRP site. This risk assessment is an integral part of the remedial investigation to be conducted at IRP sites. Part of the risk assessment involves estimates of exposure to contaminants under future land use conditions at the site. This assessment provides an understanding of the potential exposures to

contaminants in the future and may reveal that the site will not support some potential future land uses.

**4.3.9 Risk of Upset**

The City of Adelanto, as well as other Agencies in the area, has evaluated the hazardous material issues in the Victor Valley with reference to build-out effects. Although the region will utilize substantial quantities of hazardous materials and generate substantial quantities of hazardous wastes in the future, the regional cumulative impact evaluation concluded that adequate controls on development exist within the current hazardous material/waste regulatory framework and the current general plans of the various jurisdictions. Implementing these measures, many of them mandatory so they require no mitigation requirement, are adequate to mitigate cumulative hazardous material impacts to a nonsignificant level as growth occurs. The Adelanto General Plan Update contributes to cumulative impacts to the region's hazardous material requirements, but mitigation will be implemented by Adelanto, as outlined in the impact section above, to control the potential impacts to a level of nonsignificance

**4.3.10 Open Space**

The cumulative impact of the build-out of the Victor Valley will substantially disturb or eliminate an additional 205,000 acres of native habitat, primarily creosote bush scrub. The cumulative impact of developing the remainder of the Victor Valley is considered a significant adverse impact. Mitigation can be implemented on a case-by-case basis for certain species, but the large amount of acreage lost and the reduction in wildlife supported by this habitat results in a significant, unavoidable adverse biological resource impact. Open space lost to urban uses is as follows:

**CUMULATIVE LOST OPEN SPACE IMPACT**

<u>AREA</u>	<u>ESTIMATED ACRES</u>
Adelanto	73,000
Victorville	33,300
Apple Valley	43,000
Hesperia	56,000
Other Projects	0
<b>Total</b>	<b>205,300</b>

Source: General Plans.

#### **4.4 Irreversible Environmental Changes**

The implementation of the proposed General Plan will result in the alteration of existing development patterns and land use. The commitment of land for this purpose, including existing vacant properties, would be essentially irreversible and would preclude its use for alternative purposes for the foreseeable future. The rehabilitation and/or construction of buildings, infrastructure and other ancillary facilities would result in irreversible environmental changes.

Incremental increases in the demand for utilities (energy, water, sewage and solid waste), and other public services and facilities are implied in the approval and implementation of the proposed project and any projects in conformance with this General Plan Update. Utilization of nonrenewable energy sources in construction and operations, including water, natural gas, and fuels used for electricity generation, will also result.

The implementation of the proposed project will also cause subtle but definite reductions in the ambient air quality in the project area. These long-term impacts associated with the proposed project, which for all practical purposes are considered irreversible, have been discussed in greater detail in the impact section of this report.

## **5.0 ALTERNATIVES**

### **5.1 No Protect**

In considering the range of possible alternatives to a given action, one alternative that is both obvious and mandated by applicable guidelines is the "No Project" alternative. Selection of this alternative would require that the actions initiated under the General Plan Update would cease and the proposed Planning Area would continue under the existing 1985 General Plan and any General Plan Amendments that have been approved. The proposed land use changes are intended to: improve the land use pattern in the City, meet the goals of the General Plan Update, and reduce potential significant impacts.

Under the "No Project Alternative," impacts to the City would be development within the project area of only those land used contained in the 1985 General Plan and any subsequent amendments. This Alternative would not allow the development of a major airport, which is a major planning premise for the proposed General Plan Update.

The proposed General Plan Update also includes the development of two suburban areas within the City of Adelanto: (1) is an extension of the existing urbanized area to the north and west, and (2) is the development of single family housing with supporting services in the southern portion of the City. The airport results in a large industrial area beginning generally at the end of the existing runways and heading west.

The "No Project Alternative" would promote a continuation of policies that are not considered beneficial to the future growth and development of the community.

### **5.2 Alternative General Plan Concepts**

As part of the 1994 General Plan Update process, the City of Adelanto developed two land use alternatives that reflected the potential development patterns that would result based on the type of reuse of the George Air Force Base facility. The reuse of this facility has the most significant impact on the City of Aelanto and its land use patterns.

Each of the alternatives were evaluated in terms of feasibility and environmental/socio-economic impacts. Data was assembled from various agencies, such as Contel and SCAG, indicating the future growth patterns of the High Desert and the rest of the Southern California area.

In each alternative land use pattern the land uses west of Highway 395 remained essentially the same as in the proposed project. The land uses east of Highway 395 varied dramatically depending on the type of airport evaluated including the development of no airport.

#### **5.2.1 Alternative No. 1 - Local/Regional Airport**

Land Use Alternative No. 1 of the 1994 Adelanto General Plan is the development of a local/regional airport facility that can be accommodated within the existing boundaries of the Base, except for the possible acquisition of 274 acres within the City of Adelanto south of Air Base Road. Adelanto has considered this alternative in this General Plan. Important features as outlined in this plan are:

- 1) The retention of the existing airfield configuration, which is capable of accommodating 215,000 takeoffs and landings per year.
- 2) A passenger terminal area located adjacent to the large parking ramp southeast of Worley Boulevard. This area can be expanded to include the area between Sabre Boulevard and Starfighter Street. (This terminal is proposed to accommodate up to 15 MAP.)
- 3) An aviation industrial area located to the southwest and west of the airfield which utilizes the existing hangars, shops and offices.
- 4) Facilities for other airport uses such as general aviation, airline training and maintenance, Air National Guard or Reserve unit, law enforcement, and other aviation activities.

The land uses surrounding the 15 MAP airport under this alternative would be significantly more residentially oriented, as the smaller airport will not require as much industrial and aviation land. Current demand is greatest for industrial, residential, and commercial development. This alternative has been rejected by Adelanto because no property has been "land banked" to assure that Southern California's long term aviation needs will be met. There is clearly no way the existing 5,300 acre George AFB site could attract Southern California's regional and international markets unless the necessary land is preserved at this time for future development.

Under this Alternative approximately 4,800 additional acres of Single Family Residential development (19,200 Units) and approximately 4,000 acres of Multiple Family Residential development (24,000 Units) would be developed in place of the Airport Development District. These total 43,200 units would produce an additional population of 115,000 persons. This population increase would represent an increase of 70 percent over the proposed project and a commensurate increase in impacts to air and traffic circulation and 230 percent increase in water use over the proposed Airport Development District (10,000,000 gallons per day vs. 4,400,000 gallons per day).

### **5.2.2 Alternative No. 2 - No Airport at George AFB**

This land use alternative has been designed without an airport facility developed on the George Air Force Base property. It is intended to reflect the current market trends that are already established in the City and in the entire High Desert region. This

alternative is even more residentially oriented than Alternative No. 1, reflecting the reduced demand for industrial land that will result without an aviation facility. The City already contains adequate acreage of industrially zoned land suitable for future needs.

This alternative emphasizes Adelanto as a residential/industrial City with a substantial amount of land devoted to affordable housing for employees in the area. It represents a continuation of successful development trends that are already underway in Adelanto. This alternative could be acceptable to the City of Adelanto, as it will continue to thrive as an industrial center with or without an airport. The land area of the existing Base will contain land uses including Manufacturing/Industrial, Medium Density Residential, Medium High Density Residential, and High Density Residential, as well as a large amount of open space/recreation in the Mojave River Basin. It is assumed that the Base and its facilities will be retained as much as possible in their existing state. However, airport activity will be eliminated and the runways will need to be removed to allow for new development. The existing dwelling units are targeted as moderate to low income housing and are to be maintained or rehabilitated as such.

Under this Alternative approximately 10,000 additional acres of Single Family Residential development (30,000 Units) and approximately 4,000 acres of Industrial development would be developed in place of the Airport Development District and George AFB. These total 30,000 units would produce an additional population of 80,000 persons. This population increase would represent an increase of 50 percent over the proposed project and a commensurate increase in impacts to air and traffic circulation and 240 percent increase in water use over the proposed Airport Development District and Base (10,700,000 gallons per day vs. 4,400,000 gallons per day).

Public infrastructure on the Base is in fair condition and will require only minor improvement to accommodate civilian reuse of the facilities and services at this scale, including police and fire protection. However, prior to development of new areas on the Base, complete environmental clean-up will be required to make the land suitable for habitability. The Department of Defense requires the Air Force to address and, as necessary, remediate environmental concerns created by past military practices.

### **5.2.3 Alternative No. 3 - Medium/Long Haul/International Airport (Preferred)**

This alternative establishes George AFB and the lands around it as an international airport and superhub complex. Adelanto has outlined a 20,000 acre area that will be needed to accommodate the facility. Of the existing Base land, approximately 3,300 acres will be contained within the ADD, with the balance to be transformed into a future Business Park and Hotel/Park land use designations.

The reason that 20,000 acres has been allocated for the airport and airport-related uses is based on development of similar airports. For instance, the average acreage for Dulles, Dallas/Ft. Worth, and the new Denver Airport is approximately 22,000 acres.

Dallas/Fort Worth is currently seeking to acquire additional expansion area. Therefore, it is obvious that acreage of this magnitude is warranted. It is also an enticing factor when trying to market an airport facility to companies looking for new facilities. It is much easier to market an abundant supply of land for prospective tenants as opposed to having a limited amount of lease space. If the 5,300 acre Base is converted to a smaller sub-regional civilian use, at least 3,300 acres will be needed for actual airport operation, leaving the remaining 1,800 acres, much of which is contained close to the Mojave Corridor, available for potential lease space and business development. This amount of space is totally inadequate for international companies to locate to such a facility, where a portion must be demolished in order to reuse. Companies prefer to locate in undeveloped areas that are already improved with infrastructure capable of handling their requirements. Adelanto offers the only answer with nearly 10,000 acres of undeveloped land with direct adjacency to airport operations. Most of this land is already serviced with utilities and infrastructure and can be easily adapted and extended to new service areas.

Under the international airport alternative, a large portion of existing residential and business areas of Adelanto will have to be relocated to conform with California's Community Noise Equivalent Level, or CNEL guidelines describing airport noise exposure. Under the City of Adelanto's Redevelopment Program funding for relocation of residential areas and businesses could be accomplished in accordance with a final airport reuse plan. The bulk of this reuse is likely to occur before the year 2000 and will be phased according to actual airport development. The areas most affected by the new airport development lie between U.S. Highway 395 and George Air Force Base, north of Air Base Road and south of De Soto Avenue. These areas lie directly within the Airport Development District and need to be relocated to eliminate all potential land use conflicts. Also, uses in other parts of the City within the 65 CNEL will require relocation to other areas of the City, or facilitate enhanced design construction to comply with all California Noise Standards.

Uses deemed incompatible with the proposed international airport will also require relocation or demolition and include:

- 1) Single-family dwellings
- 2) Multiple-family dwellings
- 3) Trailer parks
- 4) Schools and educational facilities
- 5) Hospitals

These uses must be located outside the 65 CNEL and should be prohibited within the 60 CNEL contour for comfort levels. Also land use restrictions shall be required in overflight areas extending 10,000 feet from the ends of each runway. Density and occupancy levels are the primary constraint within this 1,000 x 10,000 ft. area. An Airport Land Use Plan which contains restrictions on land uses surrounding the airport

as a result of noise, air safety, and height limitations must be developed by the San Bernardino County Airport Land Use Commission as required by State Law.

Alternative No 3 of the 1990 General Plan has been adopted by the City as their interim General Plan for land use and is included in the Proposed Project. It includes the 20,000 acre Airport Development District which allows for development of the international airport facility. The plan shows that overflight areas, and the projected 65 CNEL contours are established over the Manufacturing/Industrial, and Specific Plan Areas. All of these uses will be least impacted by the presence of aircraft noise and safety requirements

### **5.2.3 Alternative No. 4 - Population Intensities**

Under this alternative the City considered several population levels as follows:

1. In 1992 the City considered a land use pattern that would result in the development of 95,475 residential units and include a buildout population of 248,233. This alternative was later rejected because it resulted in land use densities that were not keeping with the existing low rise development that was currently taking place and did not reflect to any measure the desert lifestyle.
2. This scenario assumed that a moderate growth rate (6%) will occur within the Planning Area due to these factors: George A.F.B. used as a general aviation facility/no passenger service during the planning horizon, limited infrastructure resources, immigration rate decreases, economic climate remains uncertain, etc. This alternative was rejected by the City because it would limit economic development in the High Desert area.
3. This scenario assumes that a relatively slow growth rate (4 %) will occur in the Planning Area due to several factors: lingering recession, lack of available water, no airport at George A.F.B., anti-growth policies, etc. This alternative was rejected by the City as even a further restriction on economic development within the High Desert region.

### **5.2.4 Alternative No. 5 - Environmental Limitations (Superior)**

Based on existing water supplies the City of Adelanto could develop a land use pattern that reflects a "buildout" population of 25,000 persons. This alternative would reduce the residential land use pattern from approximately 22,500 acres (35 square miles) to approximately 3,600 acres (5.6 square miles). The land development pattern would be a small residential area in the vicinity of Palmdale Road and Highway 395 and a minor expansion of the existing built up area in the central portion of the community. This alternative would be the environmentally superior alternative because it reflects current limitations of the amounts of water in the region. This alternative has been rejected by

Adelanto in favor of the proposed project because of the political consequences of having only a limited number of voters. The cities with substantial population in the Victor Valley wield superior power in the region and are able to dominate the dispersion of resources, decision making, spheres of influence, annexations, services etc. If Adelanto is ever able to compete in this very important arena it must have a population exceeding 150,000 persons with the commensurate voting power. If the City were limited to 25,000 persons it would not be able to compete politically in the Victor Valley and may not even be able to survive as a viable City. The proposed project has been selected because it provides a balanced community at an efficient size that will be able to successfully compete in the region.

## 6.0 REFERENCES

### 6.1 Referenced Documents

1. *General Plan Update, City of Adelanto, May 1994.*
2. *City of Adelanto, Water Supply Report, Roy C. Hampson & Associates, March 2, 1994.*
3. *General Plan, City of Hesperia, May 16, 1991.*
4. *General Plan, Town of Apple Valley, September 10, 1991.*
5. *General Plan, City of Victorville, October 1988.*
6. *General Plan, City of Adelanto, 1985.*
7. *Final Environmental Impact Statement, Disposal and Reuse of George Air Force Base, California, March 1992.*
8. *High Desert International Airport, Reuse Plan for George Air Force Base, City of Adelanto, November 1990.*
9. *Draft Regional Mobility Element, SCAG, December 1993.*
10. *Draft Environmental Impact Report for the George Air Force Base, interim Airport Operating Plan, Tom Dotson & Associates, June 1994.*
11. *Final Environmental Impact Report, Victor Valley Redevelopment Project, Victor Valley Economic Development Authority, 1992*

### 6.2 Individuals and Entities Consulted

The Notice of Preparation was sent to the entities on the list attached hereto as Appendix A.

### 6.3 Preparers of the EIR

This Draft EIR was prepared by Michael J. Wagner & Associates, Inc., Fullerton, CA. with generous assistance from the City Manager, the City Engineer and the Engineering Department.

### 6.4 Notice of Preparation and Responses

The Notice of Preparation and Responses are Attached as Appendix B.

**APPENDIX A**

**MAILING LIST FOR NOTICE OF PREPARATION,  
INITIAL STUDY, DRAFT GENERAL PLAN  
AND RESPONSES**

**MAILING LIST**

**GENERAL PLAN, NOTICE OF PREPARATION, INITIAL STUDY**

**CERTIFIED, RETURN RECEIPT REQUESTED**

Board of Supervisors  
County of San Bernardino  
385 North Arrowhead Avenue  
San Bernardino, CA 92414-0110

Operations Location Site Manager OL-C  
Air Force Base Conversion Agency  
Building 321 George Air Force Base, CA 92394

Victor Valley College District  
18422 Bear Valley Road  
Victorville, CA 92392

Steve Johnson, Chief  
Project Management Staff  
Bureau of Land Management  
6221 Box Springs Boulevard  
Riverside, CA 90630

James Roddy  
LAFCO  
175 West Fifth Street  
2nd Floor  
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Town of Apple Valley  
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Apple Valley, CA 92307

City of Hesperia  
P.O. Box 2966  
Hesperia, CA 92345

City of Victorville  
14343 Civic Drive  
Victorville CA 92392

Sabo & Greene  
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6320 Canoga Avenue  
Woodland Hills, CA 91367

California Regional Quality Control Board  
Suite 100  
15428 Civic Drive  
Victorville, CA 92392

Victor Valley Union  
High School District  
16350 Mojave Drive  
Victorville, CA 92392

U.S. Fish & Wildlife Services  
Suite 100  
2140 Eastman Avenue  
Ventura CA 93003

Environmental Health Services  
15505 Civic Drive  
Victorville, CA 92392

Chief, Department of Transportation  
District 8 Office  
P.O. Box 231  
San Bernardino, CA 92402

Southwest Gas Company  
13471 Mariposa Road  
Victorville, CA 92392

San Bernardino  
Associated Government  
472 North Arrowhead Avenue  
San Bernardino, CA 92401

Southern California Gas Company  
ATTN: Michael Hoyt  
17071 Gasline Road  
Victorville, CA 92392

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Administration Office  
11824 Air Base Road  
Adelanto, CA 92301

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Victorville, CA 92392

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13615-A John Glenn Road  
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San Bernardino County Planner  
15505 Civic Drive  
Victorville, CA 92392

Mojave Desert Air Quality Management District  
15428 Civic Drive Suite 100  
Victorville, CA 92392

Adelanto Chamber of Commerce  
c/o Frank Pacheco  
P.O. Box 700  
Adelanto, CA 92301

Southern California Edison  
RM 515 Land Rights Section  
P.O. Box 410  
100 North Long Beach Boulevard  
Long Beach, CA 90801

Planning/Recycling Division  
Solid Waste Management Department  
2nd Floor  
222 West Hospitality Lane  
San Bernardino, CA 92415-0017

State Department of Fish & Game Region 5  
Wildlife Protection Suite 50  
330 Golden Shore  
Long Beach, CA 90802

Chuck Wigley, General Manager  
Victor Valley Wastewater Reclamation Authority  
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Office of Planning & Research  
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Ernie Scott  
Councilor

Judith A. Crommie  
Mayor

Harold Smith  
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Thomas Thornburg  
Councilor

Samuel K. Dwyer  
Planning Commission Chairman

Lawrence A. Mac Murray, Sr.  
Planning Commissioner

Patsy Durocher  
Planning Commission Vice Chairman

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Adelanto Police Department

Building Official

Water Superintendent

City Engineer

County Library  
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**MAILING LIST**

**NOTIFICATION OF AVAILABILITY OF GENERAL PLAN**

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South Pasadena, CA 91030



**RECEIVED**  
JUN 22 1994  
CITY OF ADELANTO

Ms. Patricia Chamberlaine  
City of Adelanto Planning Department  
11600 Air Base Road  
PO Box 10  
Adelanto, California 93201

June 21, 1994

**RE: Notice of Preparation of a Draft Program Environmental Impact Report  
City of Adelanto General Plan Update**

Dear Ms. Chamberlaine:

Thank you for the opportunity to comment on the referenced Notice of Preparation, which was received by our office on May 24, 1994. Your transmittal requests comment on the Notice of Preparation of an Environmental Impact Report, and it is therefore anticipated that the General Plan Update and Draft EIR will both be circulated for review and comment at a latter date. The Agency requests the opportunity to provide additional comment regarding the General Plan and the DEIR at that time.

Page 23 (section 2.3.12) of the Initial Study incorporated with the Notice of Preparation discusses "Subsequent Projects". This section states "Projects that conform to the goals, policies and programs of this General Plan Update and also conform to the requirements of the Adelanto Zoning Code and the Standard Conditions of the City including residential projects, subdivisions, commercial projects, industrial projects and capital improvement projects are intended to be included in this Program Environmental Impact Report." The intent of this section is not clear, but it could be interpreted to mean that all of the referenced projects (essentially all development and capital improvement projects in the City), would receive environmental review by the General Plan Program EIR sufficient to allow construction to proceed without additional environmental analysis (or circulation for review and comment). This would not be permissible under the Public Resources Code, which defines the content and function of a program EIR.

---

72450 Headquarters • P.O. Box 1089 • Apple Valley, CA 92307 • (619) 240-9201 • FAX (619) 240-2642

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Division #1

Carl N. Dalton  
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John H. Russell  
Division #7

Larry W. Rowe, P.E.  
General Manager / Chief Engineer

# **Mojave Water Agency**

Ms. Patricia Chamberlaine  
NOP for GP Update  
06/21/94  
Page 2

A program EIR is prepared for an agency program or a series of actions (such as a General Plan) that are closely related, including phased projects, agency plans, policies and regulatory programs. When subsequent activities are proposed, an Initial Study must be used to determine whether an additional CEQA document must be prepared because of significant effects not examined in the program EIR. The purposes of a program EIR are to provide a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action; to ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis; to avoid duplicative reconsideration of basic policy considerations; and, to allow the lead agency to consider broad policy alternatives and program-wide mitigation measures at an early stage of the process when the City would have greater flexibility to deal with basic problems or cumulative impacts. These are the objectives which the draft EIR should achieve in the analysis of the proposed General Plan Update. The current NOP, and the General Plan Update upon which it relies, do not contain the substance necessary to address the issues of significance to the Mojave Water Agency.

The issues of most significant concern to the Mojave Water Agency are the potential for the proposed General Plan Update to impact water supply and water quality within the local area and the region. Section 3.11 on page 38 of the Initial Study states that the population within the planning area is projected to increase to 52,000 by the Year 2014. Objective 3 on page 8-9 indicates that "...median islands should be planted and border area planting areas should be increased." The passage also indicates that drought-tolerant landscape materials are to be emphasized, but unless these planned additions are limited to native plants, then additional water demands will result for landscape irrigation, particularly considering the need to add additional recreation facilities. Pages 1-4 of Section 10 within the General Plan Update document provided states that the "...City currently has enough water supplies under current legal rights and current legal groundwater supplies to supply approximately 5,500 acre-feet a year and serve a population of approximately 24,000 people, or almost double the current population." Even if those statements were correct, it is apparent that the claimed 5,500 acre-feet of "legal" right is insufficient to meet the projected population of 52,000 and any new demand from increased landscaping and recreation area irrigation.

Neither the Initial Study nor the General Plan update passage referenced above acknowledge that the "right" claimed is the subject of active litigation, which includes a potential finding that the City may have in fact over-produced what right it may have acquired from the State Water Resources Control Board. The referenced litigation includes not only the pending water rights trial in Riverside County Superior Court

# **ojave Water Agency**

Ms. Patricia Chamberlaine  
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Case 208568 (City of Barstow et al. v. the City of Adelanto et al.), but also litigation between the City of Adelanto and the Federal Government over water rights and water facilities located at George Air Force Base. The referenced facilities at George Air Force Base are the same as those that the General Plan Update allege are the source of available water supply for the City of Adelanto.

Additionally, the Notice of Preparation and the General Plan Update do not reference that the City of Adelanto has submitted an application for additional water supply appropriation from the Mojave River, which has not been acted upon by the State Water Resources Control Board because the Mojave River has been previously declared fully appropriated. The documents provided therefore overstate the availability of water supply in light of the existing and future overdraft which would be induced by the proposed General Plan, and the unsubstantiated claims to water rights made by the City. The NOP and the General Plan Update also do not acknowledge the City of Adelanto's active opposition to the Mojave Basin Area Adjudication Stipulated Judgment, which provides mechanisms for assessment for supplemental water, reduction of groundwater overdraft, transfers from agriculture to municipalities, and mitigation for riparian habitat. Instead, the NOP and General Plan Update rely on a supposition that the State will somehow increase the MWA entitlement of State Project Water.

Section 3.3 on page 34 acknowledges that the proposed General Plan Update will result in an increase to water consumption and that additional overdraft "may" result. It does not, however, indicate specific steps to be taken by the City in lieu of stipulating to the referenced Judgment to address the overdraft (which would be tremendously increased by the high degree of growth proposed by the General Plan). The document only suggests that policies to aid programs to increase imported water supplies for the area from the State Water Project and the Colorado Aqueduct (to which the area does not have direct access), and through water transfers, will provide the needed water supply. It is worthwhile to note that these methods of securing additional water for the region have been described by the City as implausible in recent communications to the MWA regarding the Agency's Regional Water Management Plan.

The Initial Study document states on page 9 (Objective 8) that the City will "Work with San Bernardino County to resolve regional problems such as...water supply...and other issues." The Mojave Water Agency would be the appropriate Agency to address regional water supply problems. In fact, Government Code Sections 65302(d) and 65352 et seq. requires that the City cooperate with the MWA in preparation of the

# **Mojave Water Agency**

Ms. Patricia Chamberlaine

NOP for GP Update

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General Plan Update regarding water resources issues. The City has not accomplished this. The City also has not identified the impacts that would result from the significant increase to groundwater pumping proposed, which would be manifested in changes to surface and groundwater quantity, changes to water quality from decreased groundwater in storage and increased imported water supply needed, changes to rate and direction of groundwater movement, and substantial reduction of water supplies (both native and imported) that would otherwise be available for public use. The Program EIR should carefully address these issues, and should include evidence to support your findings.

The large amount of development proposed, development of linear park facilities along natural and developed storm channels, and proximity to the Mojave River and its tributaries could also result in significant water quality impacts. These impacts could be in the form of contamination from sedimentation and toxic fertilizers and pesticides, runoff from surface streets and parking lots, and industrial land use activities. The Program EIR should assess the potential impacts to water quality from these and other sources, and develop appropriate mitigation measures. The general availability of adequate quality water for drinking water supplies should also be assessed.

The land use map in the General Plan document indicates potential future development in close proximity to areas along the Mojave River which contain significant stands of riparian vegetation/habitat. Prior discussions with the Department of Fish and Game has indicated a keen interest on their part regarding impacts to these areas. The Agency recommends that the City consult with the Department of Fish and Game regarding development and potential impact to these areas due to toxic materials and sedimentation, or due to reduced groundwater levels induced by the City in order to supply the projected development. The Initial Study indicates on page 41 (section 3.19, Recreation) that recreation opportunities are and will be partially met through access to open space along the Mojave River. The increased use of the referenced riparian areas by people for recreation should also be assessed by the Program EIR and reviewed with the Department of Fish and Game.

The General Plan Update describes several capital improvement programs that are stated as necessary in order for the large amount of development desired. The referenced capital facilities include new water supply systems, flood control facilities, waste water treatment, and reclamation facilities. The Program EIR should assess the cumulative effects of these facilities and increased ground water pumping on the local and regional hydrologic systems. The General Plan program should also indicate how

# **Mojave Water Agency**

Ms. Patricia Chamberlaine  
NOP for GP Update  
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Page 5

the City will finance needed capital improvements and the acquisition of imported water that would be needed.

Cumulative impacts in general should be assessed for the project relative to other projects planned within the area, and associated impacts on natural resources, particularly water supply. The cumulative analysis of water supply impacts should assess the impacts to "downstream" water users, and water users in the area in close proximity to where the City would locate new wells or other water facilities to supply the new growth in the City. Attention should also be given to the water supply factors that caused downstream entities (City of Barstow and the Southern California Water Company) to file the initial lawsuit claiming injury to their water supply due to growth and groundwater production by water producers in the areas upstream. The information in the General Plan Update currently only provides a cursory discussion of Victor Valley water supply issues.

As noted, the documents provided estimate the City population to increase to 52,000 by 2014. The Program EIR should consider the cumulative and growth inducing impacts associated with such a significant rate of growth in the context of other known projects in the region, growth projections for the area by the Southern California Association of Governments, and other regional programs (air quality, waste management, transportation planning, etc.). The Draft EIR should also assess the potential for construction activities, cumulative effects and growth inducement to impact water resources (quantity and quality), vegetation and wildlife resources, transportation and circulation, noise, air quality, population and housing, human health, and changes to land use patterns.

Page 27 of the Initial Study (checklist item 5.b) states that the General Plan will not result in reduction of the numbers of any unique, rare or endangered species of animals. This is inconsistent with potential for development to displace or "take" desert tortoise. Page 35 of the same document states that over 8,000 acres of sensitive habitat area will be significantly altered by the General Plan, including tortoise habitat which will require "relocation". These processes will require a take permit from the Fish and Wildlife service, and would likely result in the reduction of the number of tortoises.

Page 41 of the Initial Study (3.20, Cultural Resources) indicates that no significant cultural resources exist in the area, other than at George Air Force Base. The checklist items 20 a.-d. indicate the same conclusion. The environmental impact analysis

## **Mojave Water Agency**

Ms. Patricia Chamberlaine  
NOP for GP Update  
06/21/94  
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conducted for the MWA Regional Water Management Plan found the Mojave River corridor to be the most sensitive area for potential cultural resources within the RWMP boundaries. A records search conducted for that area at the San Bernardino County Museum Archaeological Information Center and the BLM indicated that only a small portion of the area has been adequately surveyed, but that areas north of Victorville along the River corridor have significant potential for historic and cultural resources. In fact, this conclusion and the potential for impacts to the riparian vegetation and habitat areas discussed above, caused the Agency to reconsider potential alignments for the proposed Mojave River Pipeline. The General Plan Update Program EIR should address the potential to impact cultural and/or historic resources within potentially sensitive areas.

Again, thank you for the opportunity to comment. Please call me at 240-9201 if you have any questions.

Sincerely,



Norman T. Caouette  
Director of Planning and  
Resource Development

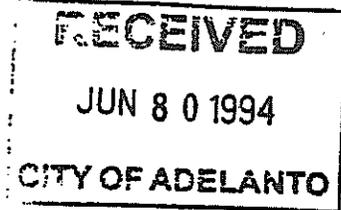
c. Planning/Res. Dev. Comm

# SOLID WASTE MANAGEMENT DEPARTMENT



COUNTY OF SAN BERNARDINO  
PUBLIC WORKS GROUP

22 Hospitality Lane, Second Floor • San Bernardino, CA 92415-0017  
(909) 386-8700 • Fax (909) 386-8707



June 6, 1994

Patricia A. Chamberlaine, Director of Planning  
City of Adelanto  
PO Box 10  
Adelanto CA 92301

**RE: NOTICE OF PREPARATION OF ADELANTO GENERAL PLAN UPDATE DRAFT PROGRAM EIR**

Dear Ms. Chamberlaine:

The County of San Bernardino Solid Waste Management Department (SWMD) appreciates the opportunity to review the Draft Program Environmental Impact Report (EIR) for the proposed City of Adelanto General Plan Update Project and offer the following comments.

## PROJECT DESCRIPTION

General Plan Update for the City of Adelanto affecting an area of 32,196 acres incorporated within the City limits, and an additional 49,365 acres which are in the City's sphere of influence. The General Plan Update would address projected growth, and would serve as a guidance document in the approval process for all new development projects.

## SWMD COMMENTS

California State Assembly Bill 2583 states that a Public Agency shall only make substantive comments on a project which are within the area of the agency's expertise or which relate to activities which that agency must carry out or approve. In consideration of the California Environmental Quality Act (CEQA) Section 15205(c), SWMD staff will focus comments on specific issues involving County Solid Waste Management operations or policies.

Chapter 9 SAFETY ELEMENT - On Page IX-14, it is stated that the City has adopted the County Solid Waste Management Plan. The County of San Bernardino is currently preparing a Countywide Integrated Waste Management Plan (CIWMP) which will replace the Solid Waste Management Plan. The CIWMP is expected to be completed by November 1996.

The landfill which currently serves the Adelanto area is the County-operated Victorville landfill site, which is projected to close in the year 1998. SWMD is currently working with the Bureau of Land Management to acquire additional land adjacent to the Victorville landfill to ensure adequate future capacity.

PATRICIA CHAMBERLAINE

June 6, 1994

Page 2 of 2

On Page IX-19, it is stated that "several thousand gallons of hazardous household wastes are deposited into non-hazardous landfill sites each year." The County-operated Victorville landfill site is classified as a Class III facility permitted to accept non-hazardous solid waste, including dewatered sludge. A Class II liquid impoundment for non-hazardous and undewatered sludge is also maintained at the site. Non-hazardous waste is defined as "all putrescible and non-putrescible solid, semi-solid and liquid wastes, ... provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of waters of the state" [CCR Title 23 Article 2, §2523].

On Page IX-20, it is stated that the Landers disposal site accepts limited quantities of crankcase oil and pumpings from service stations and garage oil traps. The SWMD currently operates Class II liquid impoundments at the Barstow, Landers, Twentynine Palms and Victorville landfill sites. The Class II facilities are permitted to accept septage sludges, and chemical toilet pumpage. They are not permitted to accept crankcase oil and pumpings from service stations and garage oil traps.

Thank you for the opportunity to review and comment on the subject Draft EIR. If you have any questions regarding the above comments, please contact me at (909) 386-8722.

Sincerely,



CRAIG M. CONGDON, Planner III  
Planning Section

cc: Joe Bellandi, Supervising Planner - Planning Section  
Ken Kaz, Environmental Specialist IV  
Jim Trujillo, DEHS/LEA  
Director's Read File



June 16, 1994

RECEIVED

JUN 16 1994

CITY OF VICTORVILLE  
PLANNING

Ms. Patricia Chamberlaine, Director of Planning  
City of Adelanto  
P.O. Box 10  
Adelanto, CA 92301

Dear Ms. Chamberlaine:

On May 19, 1994, this department received the Notice of Preparation for a draft program environmental impact report (EIR) for the City of Adelanto General Plan Update Project. This letter will serve as the Planning Department's response to that Notice of Preparation and will detail areas of environmental analysis which we believe need to be included within the above referenced document.

Please be advised that the draft EIR should be submitted to Mr. John R. Hnatek, Director of Planning and Development, P.O. Box 5001, Victorville, CA 92393-5001.

The draft EIR identified as a program document should comply with the Public Resources Code as to the content of an EIR. From reviewing the document submitted to this department, we would expect that an analysis of the environmental impacts associated with this project would cover all of the checklist items contained within the initial study with appropriate mitigation measures. Specifically, we would request the analyses of these areas contain the following:

1. Earth - Specific mitigation measures should be included in the environmental document which will conclusively reduce any significant impacts rather than relying on "(p)olicies and implementation strategies contained in the General Plan" which "are intended to mitigate these impacts to a level of insignificance." (emphasis added)
2. Air - A thorough analysis of impacts related to deterioration of air quality with specific mitigation measures should be included within the draft document. The analysis should contain the affect that this analysis will have on the existing Mojave Desert Air Quality Management District's Air Quality Attainment Plan.

Further, on page 34 of the initial study it states, "All development proposals which are deemed to disproportionately impact the air shed must provide means of mitigating such impacts." Clarification is needed with regard to development proposals "disproportionately" impacting air quality, and the analysis must be based

June 16, 1994

Page 2

Re: Notice of Preparation of a Draft Program Environmental Impact Report for the City of Adelanto General Plan Update Project

upon all development allowed by the general plan when assessing impacts to deteriorating air quality.

3. Water - The draft document should analyze the impacts of the project as it relates to increases in the rate and amount of surface runoff and its potential impact on George Air Force Base. On page 34 the statements with regard to surface runoff rates are conclusory and a thorough analysis of the impacts associated with surface runoff rates is anticipated in the draft document, especially as it affects George Air Force Base and areas outside the planning area.

On page 26 of the checklist, subsection "h" which deals with "a substantial reduction in the amount of water otherwise available for public water supplies," should be answered "yes." An analysis in the draft EIR should relate the amount of growth and development allowed by the project to limited water resources (i.e., overdraft) and the ability of Adelanto to secure separate water resources. The analysis should not be based on any misrepresentation or claims as to existing water resources available to the city, since to do so would create an analysis and mitigation measures based on speculation resulting in an understatement of the impact.

Further, an analysis of Adelanto's existing water supplies in terms of water quality should be contained within the document to determine what affect water quality will have on the implementation of the proposed general plan.

4. Plant Life - On page 35, under the heading "Impact Analysis," it states, "The General Plan identifies programs and actions which will be implemented in order to mitigate impacts to plant life in the Planning Area due to increased development." Again, in the draft EIR specific implementable mitigation measures should be identified which will reduce any impacts to a level of nonsignificance rather than relying on future "programs and actions" in the general plan that may or may not be implemented.
5. Animal Life - On page 27, under section "b," the answer to "Reduction of the numbers of any unique, rare or endangered species of animals?" is "no." Yet, discussion on page 35 states, "Endangered species such as the Desert Tortoise (*Gopherus agassizii*) (sic) may be negatively impacted and potentially habitat lost due to implementation of proposed land uses." This inconsistency between the checklist and discussion should be corrected in the draft EIR.

Again, specific mitigation measures that are implementable should be included. Reliance on policies and actions contained within the general plan document is inappropriate since most of the policies and actions contained in that document do not conclusively guarantee implementation.

June 16, 1994

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Re: Notice of Preparation of a Draft Program Environmental Impact Report for the City of Adelanto General Plan Update Project

6. Noise - Again, there is reliance on "policies" in the draft general plan "that will help mitigate such impacts to an acceptable level." Comments made previously to the general plans policies, programs, actions and strategies apply here as well.

Noise impacts from George Air Force Base should be representative of a closed facility and future noise should be based upon the Victor Valley Economic Development Authority's proposed civilian air facility, since that facility has been found to conform with all regional plans. In the appropriate section of the draft EIR Adelanto's proposed air facility should be analyzed in relation to its inconsistency with regional plans. This discussion should occur under the air quality and transportation sections.

7. Light and Glare - Specific mitigation measures should be included after a thorough analysis of the impacts of light and glare rather than reliance on any "development standards" contained within the general plan, which may not be implemented.
8. Land Use - The continual suggestion that mitigation measures have already been incorporated into the project is again totally inappropriate. Reliance on the policies, programs, and implementation strategies as presently contained in the general plan does not meet the requirements for mitigation measures which will conclusively reduce the environmental impact to a level of nonsignificance.
9. Natural Resources - On page 37, under "Assessment," the draft EIR should provide a well-reasoned and documented analysis of the Adelanto General Plan's impact on natural resources. Statements in the initial study, such as "(r)esources such as petroleum products, natural gas, as well as sand and gravel may be slightly depleted due to development," are conclusory and should not be placed in the draft EIR. The statement, "Few mitigations will be needed to preserve such natural resources, except for programs which can be utilized to conserve and recycle resources such as petroleum products, metals, plastics, paper, and glass," is speculative and further analysis will be required in the draft EIR.
10. Risk of Upset - The draft EIR should not rely on the draft general plan document with regard to mitigation measures for the reasons previously indicated. The draft document should be based on an objective analysis and not rely on conclusory statement contained within the "Assessment" and "Impact Analysis" sections of this document.
11. Population - In this section it is indicated that Adelanto's population by the year 2014 will be 52,000. The draft EIR should analyze impacts based on the general plan "build-out" population. Again, reliance on general plan policies with regard to infrastructure to mitigate impacts is inappropriate.

June 16, 1994

Page 4

Re: Notice of Preparation of a Draft Program Environmental Impact Report for the City of Adelanto General Plan Update Project

12. Housing - As indicated on page 38, the project is to provide a "build-out scenario" and the complete environmental analysis should be based upon that scenario.
13. Transportation/Circulation - A traffic model clearly identifying the impacts of the project on transportation and circulation should be made part of the draft EIR. This traffic model should be compatible with regional traffic models so that cumulative impacts associated with transportation and circulation can be effectively evaluated in the draft EIR.
14. Public Services - Again, reliance on general plan policies is inappropriate to serve as mitigation measures for public services. Methods ensuring that public facilities will not be adversely affected with the adoption of this project should be analyzed and reviewed in the draft EIR.
15. Energy - Referring to "policies" contained within the general plan does not substitute for mitigation measures within the draft EIR.
16. Utilities - On page 30, in answer to questions "d," "e," and "f," is "maybe." The adoption of the general plan will result in development which will have an impact on existing utilities. The capacity of the existing utilities, as well as facilities needed to serve the build-out population, should be analyzed in the draft EIR.
17. Human Health - The environmental baseline for assessment of impacts associated with George Air Force Base is a non-operational facility. As such any impacts associated with George Air Force Base should be evaluated on this basis.

There exists an inconsistency between the environmental checklist and the environmental analysis. In the former no impacts to human health are indicated, yet in the analysis it is suggested that "appropriate mitigation techniques" could be implemented. Again, reliance on the general plan goals and policies as mitigation measures is inappropriate.

18. Aesthetics - Reliance on a community design element of the general plan for mitigating the "very low" aesthetic value of significant portions of the city and planning area is inappropriate.
19. Recreation - The environmental checklist, on page 31, identifies answers of "maybe" to impacts on recreational facilities. Those answers should be "yes" since Adelanto's proposal identified in the general plan does not have recreational facilities to adequately serve its existing population. Reliance on the Quimby Act or development impact fees will not cure the existing deficit problem in the city. The draft EIR should fully identify future recreational facility requirements and propose

June 16, 1994

Page 5

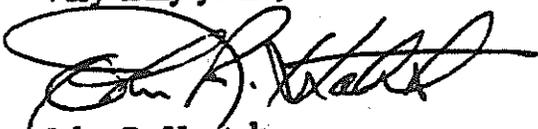
Re: Notice of Preparation of a Draft Program Environmental Impact Report for the City of Adelanto General Plan Update Project

implementable mitigation measures with adequate provision for impacts to recreational facilities in Victorville and San Bernardino County.

20. Cultural Resources - Both the draft general plan and initial study are devoid of any discussion of paleontological resources. Existing evidence suggests a series of seven prehistoric lake beds extending into the City of Adelanto, and, therefore, the potential for impact to paleontological resources is significant. Consultation with the San Bernardino County Museum or the Office of Planning and Research should occur regarding the need to include impacts to paleontological resources within any environmental documents.
21. Mandatory Findings of Significance - Under this section, again, conclusory statements are made both in the "Assessment" and "Impact Analysis" sections. It is requested that the draft EIR contain an extensive project alternatives analysis section as well as a cumulative impacts section. The growth provided for in the Adelanto General Plan will have a substantial impact on the region, and an adequate cumulative impacts section is imperative. In the "Impact Analysis" section it states, "Mitigations and overriding considerations are incorporated into the General Plan that assist reviewing agencies to evaluate the proposed plan in regard not only to local impacts, but in relation to the overall benefits to region, residents, businesses, and visitors." This statement is inappropriate in an initial study and the use of a draft general plan document should not substitute for meeting the requirements of the Public Resources Code.

If you have any questions or need clarification regarding this matter, please do not hesitate to contact me at (619) 955-5135.

Very truly yours,



John R. Hnatek  
Director of Planning and Development

JRH:gb

cc: James L. Cox, City Manager  
Chris Garrett, Latham & Watkins



## LOCAL AGENCY FORMATION COMMISSION

175 West Fifth Street, Second Floor  
San Bernardino, CA 92415-0490 • (909) 387-5866 • FAX (909) 387-5871

*Established by the State of California to serve the Citizens, Cities, Special Districts  
and the County of San Bernardino*

June 22, 1994

### COMMISSIONERS

HUMBERTO (BERT) LUGO, Chair  
Special Districts

ELMER J. DIGNEO, Vice Chair  
City Member

JON MIKELS  
Board of Supervisors

OLIVER P. ROEMER  
Special Districts

ERNA I. SCHUJLING  
Public Member

LARRY WALKER  
Board of Supervisors

JIM WARREN  
City Member

Pat Chamberlaine  
Director of Planning  
City of Adelanto  
Post Office Box 10  
Adelanto, CA 92301

Dear Pat:

**RE: Notice of Preparation of a Draft Program  
Environmental Impact Report for the City of  
Adelanto General Plan Update Project**

### ALTERNATES

JERRY EAVES  
Board of Supervisors

WILLIAM KATONA  
Public Member

DONNA KELSEY  
Special Districts

DIANE WILLIAMS  
City Member

We have no specific comments related to the Notice of Preparation; however, we note that the City of Adelanto has taken the unusual action of including lands within the current sphere and corporate boundaries of Victorville within the Adelanto General Plan. Please maintain the Local Agency Formation Commission on your mailing list for continued notification of the Draft Program EIR and City's General Plan update.

### STAFF

JAMES M. RODDY  
Executive Officer

KATHLEEN ROLLINGS-McDONALD  
LAFCO Analyst

CECILIA LOPEZ-HENDERSON  
LAFCO Analyst

DEBBY MABERY  
Clerk to the Commission

DOROTHY A. MOSSO  
LAFCO Secretary

The City's current sphere of influence, and sphere of interest extending to Shadow Mountain Road is included within the Notice of Preparation for the planning area boundary of the General Plan update. As a function of the rezoning process conducted by cities for proposed annexations within their current spheres of influence, we request that LAFCO be placed on the mailing list for review and comment of the initial studies. In these cases where the City is the lead agency, the Commission will be acting as a responsible agency and should comment at the earliest possible time.

Thank you for the opportunity to respond. I apologize that these comments have been submitted after the deadline date. Should you have any

### LEGAL COUNSEL

CLARK H. ALSOP

Pat Chamberlaine  
June 22, 1994

questions concerning these comments, please do not  
hesitate to contact our office.

Sincerely,

  
CECILIA LOPEZ-HENDERSON  
LAFCO Analyst

CLH:

(x:\clh\chamber.pat)

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 8, P.O. BOX 231  
SAN BERNARDINO, CALIFORNIA 92402  
TDD (909) 383-5959

**RECEIVED**

JUN 22 1994

**CITY OF ADELANTO**

June 16, 1994

08-SBd-395-Var.  
08-SBd-18-Var.

Ms. Patricia Chamberlaine  
Director of Planning  
City of Adelanto  
11600 Air Base Road  
Adelanto, CA 92301

Dear Ms. Chamberlaine:

**Notice of Preparation of a Draft Environmental  
Impact Report for the Proposed  
City of Adelanto General Plan Update**

We have reviewed the above-referenced document and request consideration of the following comments:

- A traffic study is needed for the Draft Environmental Impact Report and should include the following from a worst case scenario viewpoint: existing and future average daily traffic (ADT) volumes, traffic generation (including peak hour), traffic distribution, analysis of peak hour demand and capacity using delay methodology for intersections along with current and projected capacities of local roads, state highways and freeways that might be impacted. Special attention should be given to state Route 395 (SR 395), State Route 18 (SR 18) and all utilized intersections.
- Figure V-3, page V-16, shows an underestimated projection of the year 2014 average daily traffic volume on the segment just north of SR 18; and an overestimated traffic volume just north of Caluse Road. According to Caltrans, these volumes should be 50,000 ADT at the first mentioned segment compared to the report's 28,000 ADT, and 30,000 ADT at the second segment compared to the report's 60,000 ADT.

Ms. Patricia Chamberlaine  
June 16, 1994  
Page 2

- The proposed 395 freeway may not be constructed by the year 2014. Until a final alignment for the freeway is approved and the freeway construction project is programmed, the following should be maintained:
  - Preservation of the needed right-of-way for future improvement of the existing facility as needed to accommodate future growth in the area. A six lane facility will require a minimum right-of-way of 134 feet.
  - Access to the State highway should be limited to road connections at one-half mile spacing. Driveways and other road type connections will be limited to right turn-in/right turn-out only.
  - The freeway location as shown in the circulation map should only be considered as approximate location.
  - Improving access to the freeway cannot be considered a mitigation measure for impact on the existing facility.
- Concerning drainage, care should be taken when developing this plan to preserve and perpetuate the existing drainage pattern of the state highway. Particular consideration must be given to cumulative increased storm runoff to insure that a highway drainage problem is not created.
- It is recognized that there is considerable public concern about noise levels adjacent to heavily traveled highways. Certain types of land use may not be appropriate near a major highway and/or may require special noise attenuation measures. Development of this property should include any necessary attenuation measures as mitigation for noise impacts.
- Should any work be required within State highway right of way, Caltrans would be the responsible agency, and may require that certain measures be provided as a condition of permit issuance.

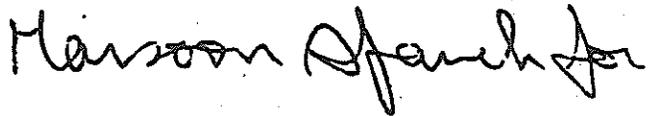
Ms. Patricia Chamberlaine  
June 16, 1994  
Page 3

When available, please send the DEIR to:

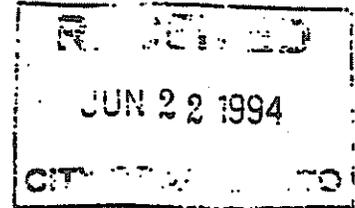
Maisoon Afaneh  
Transportation Planning, CEQA/IGR  
California Department of Transportation  
P.O. Box 231  
San Bernardino, CA 92402

If you have any questions, please contact Maisoon Afaneh at  
(909) 383-5928 or FAX (909) 383-7934.

Sincerely,



HARVEY J. SAWYER, Chief  
Transportation Planning  
San Bernardino County  
Coordination Branch



**Southern California Edison Company**

12353 HESPERIA ROAD  
VICTORVILLE, CALIFORNIA 92392

TELEPHONE  
(619) 851-3237  
FAX (619) 851-3128

**USAN K. PETERSON**  
AREA MANAGER  
NORTHERN REGION

June 20, 1994

Ms. Patricia A. Chamberlaine  
City Manager  
City of Adelanto  
P. O. Box 10  
Adelanto, CA 92301

Dear Ms. Chamberlaine:

**SUBJECT: City of Adelanto -  
General Plan and Environmental Impact Report:  
Land Use Element  
Housing Element  
Circulation Element  
Parks and Recreation Element  
Conservation/Open Space Element  
Noise Element  
Safety Element  
Public Facilities Element  
Community Design Element**

Thank you for including the Southern California Edison Company in the review process for the above referenced document.

This is to advise you that the City of Adelanto is located within the service territory of the Southern California Edison Company and that the electric loads of the project are within the parameters of the overall projected load growth which we are planning to meet in this area.

Unless the demand for electrical generating capacity exceeds our estimates, and provided that there are no unexpected outages to major sources of electrical supply, we expect to meet our electrical requirements for the next several years.

In addition, the relocation, reconstruction, extension, or undergrounding of Edison's electrical distribution system which may be necessitated by activities within the proposed project area, will be performed by Edison in accordance with Edison's effective Tariff Schedules approved by and filed with the California Public Utilities Commission.

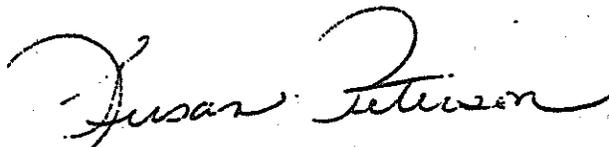
Page - 2 -  
City of Adelanto

General comments to the Conservation/Open Space Element (pages VII-4 and VII-24):

The primary purpose of Edison's rights-of-way is designated for utility purposes and that while on the surface appears to be undeveloped, the rights-of-way are in fact developed. Any secondary use of these rights-of-way would be reviewed on a parcel by parcel basis for the riding and hiking trail system. We would welcome the city's input as to desired Edison rights-of-way and to what the right-of-way would be used for.

Edison would enjoy working with the city and developers in achieving the city's goals. Thank you for the opportunity to review and comment on the city's General Plan. If you have any questions regarding this response, please call me.

Sincerely,

A handwritten signature in cursive script that reads "Susan Peterson". The signature is written in dark ink and is positioned above the printed name.

Susan K. Peterson



DEPARTMENT OF THE AIR FORCE  
AIR FORCE BASE CONVERSION AGENCY

13 June 1994

Dept of the Air Force  
AFBCA/OL-C, Bldg 321  
George AFB CA 92394

Ms Pat Chamberlaine  
City Manager  
City of Adelanto  
P.O. Box 10  
Adelanto CA 92301

**SUBJECT: City of Adelanto General Plan Update Comments**

Dear Ms Chamberlaine

We have reviewed the Notice of Preparation of a Draft Program Environmental Impact Report for the City of Adelanto General Plan Update Project and the City of Adelanto General Plan Update and have the following general comments

1. Part of the planning area identified in the General Plan Update (noted as Specific Planning Area on City of Adelanto General Plan Land Use/Zoning Map) consists of the Federal Property known as George Air Force Base. This property has been annexed by the City of Victorville with the outcome of this annexation pending litigation between Victorville and Adelanto. The Air Force believes that the General Plan Update seriously conflicts with existing agreements and development plans.

2. The Air Force has leased approximately 2300 acres (Parcels A and C) of the air field portion of the installation to the Victor Valley Economic Development Authority (VVEDA) for a period of twenty-five years. This lease was signed on 29 April 1994. VVEDA plans to develop this property into an airport using the existing runways, structures, and support facilities. Adelanto's General Plan Update also includes plans for an airport which conflicts with VVEDA's airport plan.

3. Adelanto and VVEDA are in the throes of a legal conflict with several lawsuits awaiting litigation. Any long-term planning effort by the City of Adelanto which affects property on George AFB should be put on hold pending the outcome of all litigation.

Sincerely

*William A. Collins*  
WILLIAM A. COLLINS  
Installation Management Officer

cc: John Smith  
Darence Fivehouse  
Denise Caron

Zakaria A. Shams  
P. O. Box 217  
So. Pasadena, Ca. 91030  
June 22, 1994

Patricia A. Chamberlaine,  
City Manager.  
City of Adelanto,  
Adelanto, California

Dear Ms. Chamberlaine:

How are you? I hope you are fine, and that everything is going well for you & for the city of Adelanto.

I stopped by today to look at the preliminary map of the General Plan of Adelanto, & I noticed that the location of the property I bought for a high price as commercial zone will be changed to M-1 zone. My property is located south of Air Base fronting on Bellflower just between Joshua & Yucca.

I am writing to ask you to <sup>please</sup> keep the present commercial zoning of this property similar to what you are proposing in section 4 fronting on Jonathan St. which is a half-section road while Bellflower is a section road. I really bought this commercial property with the intention of developing as a small shopping center.

Thank you! Sincerely,  
Zakaria A. Shams

S. The legal of these 7 small lots is Parcels 1, 2, 3 & 4 of parcel Map 9743 in Book III of parcel maps, pages 50 & 51 in the Recorder's office  
APN # 459-351-69; APN # 459-351-70; & APN # 459-351-71

FILE *hymn GP*

RECEIVED  
JUN 20 1994  
CITY OF ADELANTO

June 12, 1994

City Hall  
Planning Department  
11600 Air Base Road  
Adelanto, California 92301

Re: Re-zoning of Parcel #3128-201-01

Dear Sir or Madam:

My wife and I are the owners of Parcel #3128-201-01 (4.77 acres at the corner of Pansy & Bellflower) in Adelanto. We have heard that there is consideration underway that this parcel be re-zoned from the current DL2 designation to Manufacturing. We heartily agree with this proposed change.

We are requesting that the zoning of our parcel be changed from DL2 to either a Manufacturing or Industrial Park designation, whichever better best suits the area. We have been told that the final decision will be made by the end of July and we hope that you will inform us of the outcome as soon as possible.

Please let us know if you need our signatures or any information and we will comply immediately.

Sincerely,

*Robert L. Mann*  
Robert L. Mann

*Keiko M. Mann*  
Keiko M. Mann

Mailing address: 384 SW Kestor Drive  
Port St. Lucie, FL 34953-5515

*STEVE,*  
*CK and see if*  
*it is going to be*  
*MI please*

*6/12/94*



# San Bernardino Associated Governments

*San Bernardino County Transportation Commission  
San Bernardino County Transportation Authority  
San Bernardino County Congestion Management Agency  
Service Authority for Freeway Emergencies*

472 North Arrowhead Avenue, San Bernardino, California 92401-1421  
(909) 884-8276 FAX: (909) 885-4407

June 14, 1994

Ms. Patricia A. Chamberlaine  
Director of Planning  
City of Adelanto  
11600 Air Base Road  
Adelanto, California 92301

Re.: **General Plan Update - Circulation Element**  
**SANBAG IGR No. I9400027**

Dear Ms. Chamberlaine:

We appreciate the opportunity to review the proposed General Plan update and to comment on the Circulation Element.

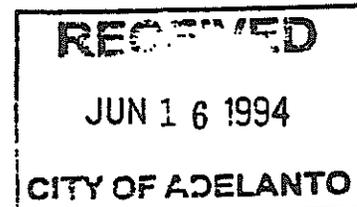
Our analysis indicates that the proposed General Plan requires a Traffic Impact Analysis following the procedures of the land use/transportation analysis program of the Congestion Management Program (CMP) for San Bernardino County, and as adopted in Resolution No. 93-45 by the City Council of the City of Adelanto. The traffic study in the General Plan uses procedures found in capacity manuals and circulars that are not approved for San Bernardino County and do not meet the requirements of the CMP. (Please refer to Section 4-12 of the 1993 CMP update.) The adopted guidelines may be found in Appendix C of the CMP.

We wish to point out that the new Victor Valley Transportation Model providing future network traffic forecasts will be available for use on June 20, 1994 through the SCAG Inland Empire office in Riverside. Also, the predominate methodologies to determine LOS for arterial streets and freeways in urbanized areas are found in the 1985 Federal TRB (Transportation Research Board) Highway Capacity Manual - Special Report 209, Chapters 3 and 9.

Should you desire further information concerning the above comments, please contact Deborah Barmack, Ty Schuiling, or myself at your convenience.

Sincerely,

Robert W. Wirts  
Traffic Engineer



M:\PC940614.BW

CC.: Caltrans - Harvey Sawyer

Cities of: Adelanto, Barstow, Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Hesperia, Highland, Loma Linda, Montclair, Needles, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Twentynine Palms, Upland, Victorville, Yucaipa

**APPENDIX B**

**NOTICE OF PREPARATION AND INITIAL STUDY**



**City of Adelanto**  
**CALIFORNIA**

May 13, 1994

**TO:** Responsible Agencies  
Interested Citizens and Groups

**SUBJECT: NOTICE OF PREPARATION OF A DRAFT PROGRAM  
ENVIRONMENTAL IMPACT REPORT FOR THE CITY OF  
ADELANTO GENERAL PLAN UPDATE PROJECT**

The City of Adelanto will be the Lead Agency and will prepare a Draft Program Environmental Impact Report (EIR) for the City of Adelanto General Plan Update Project. The City is soliciting the views of your agency as to the scope and content of the environmental information which is relevant to your agency's statutory responsibilities in connection with the proposed project.

The project description, location, the potential environmental effects and initial environmental assessment are attached for your determination.

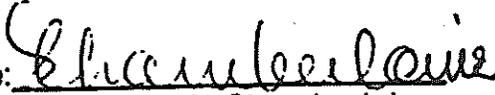
Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than 30 days after receipt of this notice.

Please send the notices and/or comments to Patricia A. Chamberlaine, Director of Planning, 11600 Air Base Road, Adelanto, CA 92301. We will need the name and telephone number of a contact person in your agency:

**PROJECT TITLE: PROPOSED CITY OF ADELANTO GENERAL PLAN  
UPDATE**

**PROJECT APPLICANT: CITY OF ADELANTO**

**RESPONSES DUE: WITHIN 30 DAYS OF RECEIPT**

Signature:   
Patricia A. Chamberlaine  
Director of Planning  
Telephone: (619) 246-8606

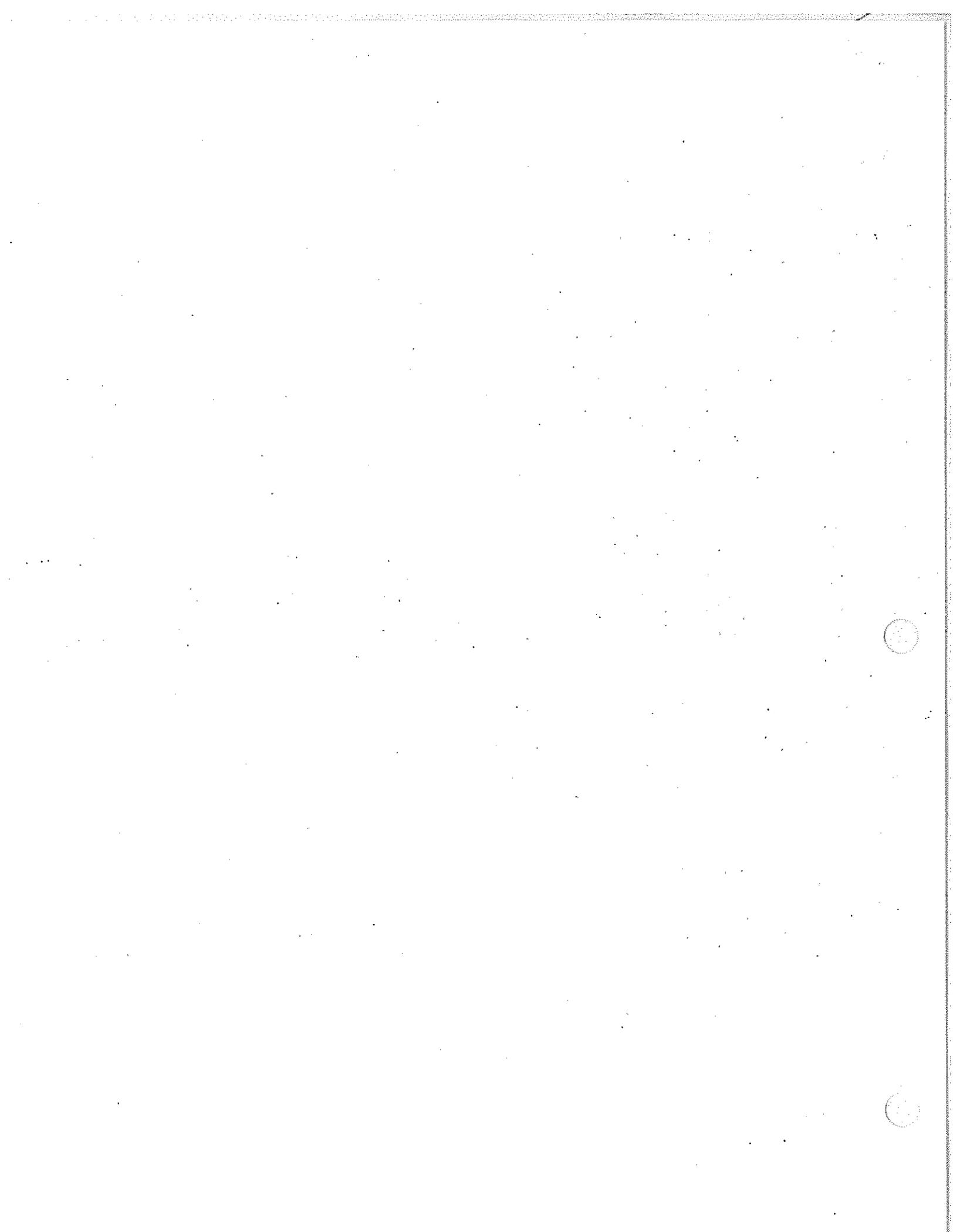
Reference: California Administrative Code, Title 14 Sections 15082(a), 15103, 15375

# **INITIAL STUDY**

**City of Adelanto  
General Plan Update EIR**

**City of Adelanto  
11600 Air Base Road  
Adelanto, California 92301**

**MaY 13, 1994**



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City of Adelanto  
CALIFORNIA

## NOTICE OF PREPARATION

**TO:** Responsible Agencies  
Interested Citizens  
and Groups

**FROM:** City of Adelanto  
PO Pox 10  
Adelanto, CA 92301

**SUBJECT:** Notice of Preparation of a Draft Environmental Impact Report

The City of Adelanto will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location and the probable environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State law your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Ms. Patricia A. Chamberlaine, Director of Planning at the address shown above. We will need the name for a contact person in your agency.

**Project Title:** City of Adelanto General Plan Update

**Project Applicant:** City of Adelanto

**Date:** May 13, 1994

**Signature:**

*Patricia A. Chamberlaine*  
**Title:** Director of Planning  
**Telephone:** 619-246-8606

**Reference:** California Administrative Code Title 14 Sections 15082(a) 15103. 15375

## **2.0 INTRODUCTION**

The City of Adelanto is hereby commencing a program to revise its General Plan to reflect the objectives of the Adelanto City Council, Planning Commission and the general public. The General Plan, while considering several alternatives for development, reflects a land use pattern that preserves the future option of developing a major airport at the George Air Force Base facility.

## **2.1 PROJECT LOCATION**

The City of Adelanto is located adjacent to Highway 395 in the High Desert region of San Bernardino County. (Figure 1). The eastern boundary of the General Plan Planning Area is the Mojave River; the southern boundary is Palmdale Road (State Route 18); the western boundary is Lessing Avenue; and the northern boundary is Shadow Mountain Road. (Figure 2). Adelanto is located in an area which is termed the "Victor Valley" which includes the cities of Victorville, Apple Valley and Hesperia all of which are located generally to the southeast of the Planning Area. The current City Limits encompass 32,196 acres (50.3 square miles) and the entire General Plan Planning Area comprises at 81,511 acres (127 square miles). Of this 49,365 acres (77.1 square miles) of the Planning Area are part of Adelanto's Sphere of Influence. The balance is considered as Adelanto's Sphere of Interest. George Air Force Base and the land between Oleander Street and Shadow Mountain Road are part of the Sphere of Interest and the General Plan Planning Area.

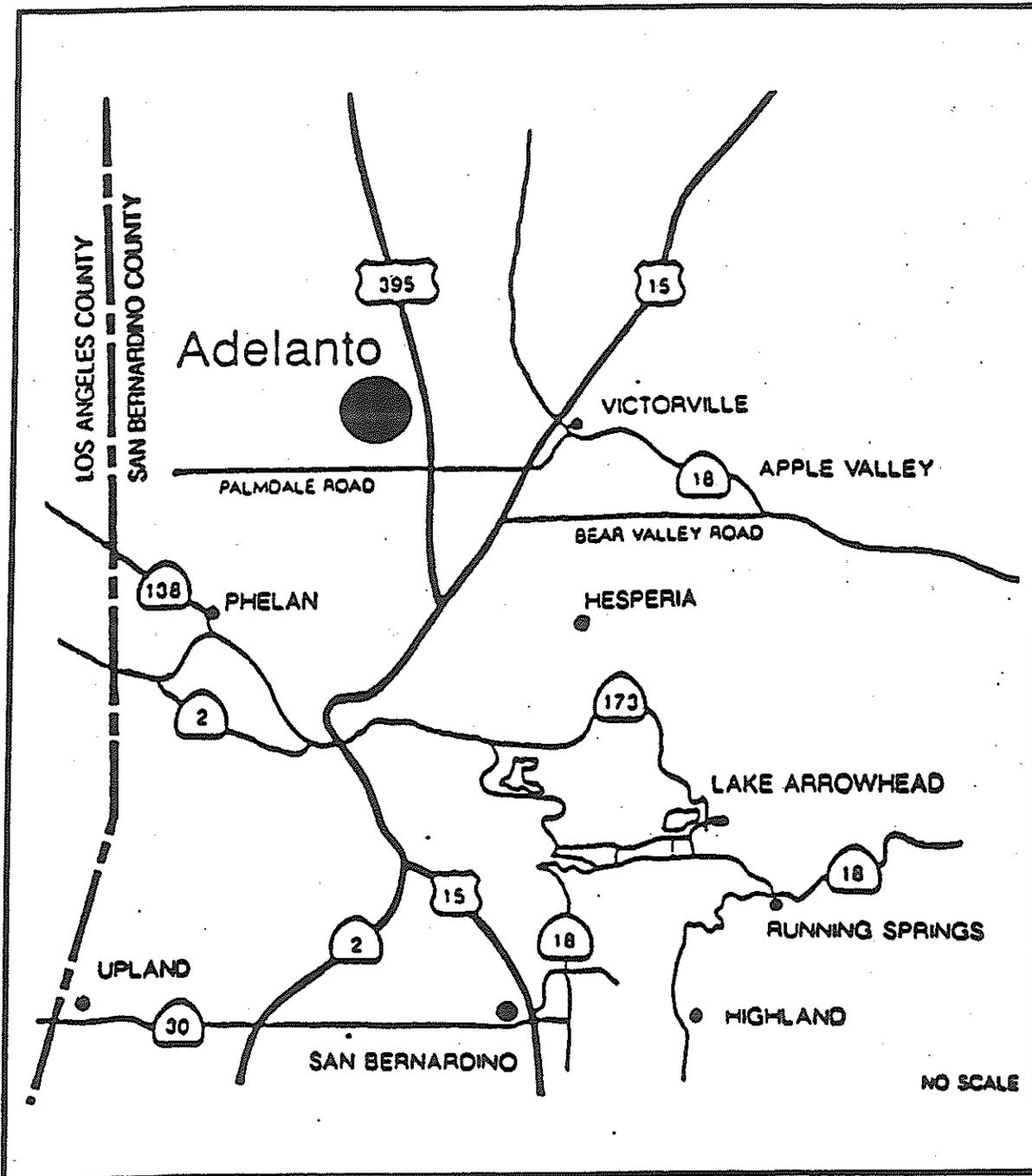
## **2.2 ENVIRONMENTAL SETTING**

The City of Adelanto is situated on gently sloping desert terrain west of the Mojave River. The drainage flows in a northerly direction via a system of natural channels that drain into the Fremont Wash which then enters the Mojave River in the extreme northeast portion of the Planning Area. Based on the 1990 Census the population of the City of Adelanto is 8,517 residents. The population is expected to grow exponentially over the next two decades as a result of development pressure generated by Southern California's regional demand for affordable housing. The anticipated conversion of the adjacent George Air Force Base to a major aviation facility will also contribute to the long term growth of Adelanto and the High Desert.

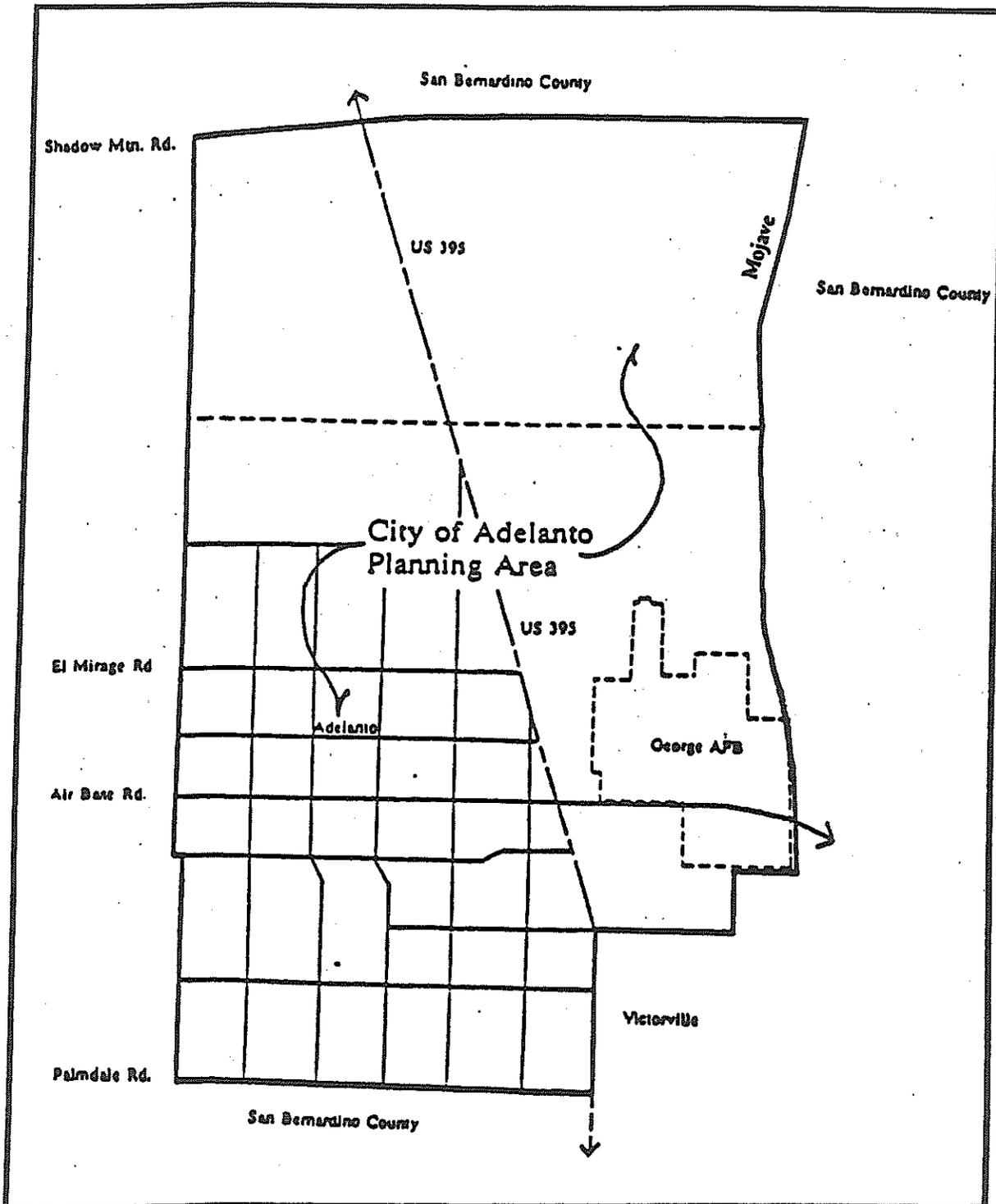
## **2.3 PROJECT DESCRIPTION**

This General Plan Update seeks to address the projected growth and to plan all pertinent aspects of the City to accommodate this growth in an orderly and positive manner. Further, the City intends to use this General Plan as a working tool to guide the development community, as well as, the City staff in the approval process for all new development projects.

Figure 1 REGIONAL LOCATION MAP



**Figure 2** PLANNING AREA BOUNDARIES OF THE GENERAL PLAN UPDATE



**2.3.1 Project History and Objectives**

The City of Adelanto first established a General Plan in 1973 which was prepared in accordance with the State of California's "General Plan Guidelines" which were in effect at that time. Since 1973 the State Guidelines have been revised, in 1980, and again in 1990. These revisions have addressed new state legislation which has altered the scope and content of local general plans.

The General Plan has been prepared in accordance with the requirements established under the Government Code of the State of California as presented in the State of California General Plan Guidelines, as amended by Chapter 1009, Statute of 1984, the Government Code requires that seven mandatory elements be included in a City or County General Plan. These elements are as follows:

- |            |              |             |
|------------|--------------|-------------|
| Land Use   | Conservation | Circulation |
| Noise      | Housing      | Safety      |
| Open Space |              |             |

Since the proposed General Plan for the City of Adelanto is such a wide departure from the current General Plan, it shall include subjects which, in the opinion of the City, relate to the physical development of Adelanto. These subjects will relate to recreation, public services and facilities, historic preservation, and other development-related activity. Development standards for each land use district are incorporated herein. These standards are intended to act as a guide until the Zoning Code can be revised and adopted by the City Council.

The General Plan is visionary in its approach to land use policy and direction, relying on decisions that will be made by the City of Adelanto and others in regard to George Air Force Base, availability of water, etc. A 20 year planning horizon has been incorporated into this document in terms of population, employment, housing, circulation, and other issues.

The City of Adelanto has experienced a tremendous increase in economic growth. In the recent past the City has initiated numerous industrial park developments which have created a growing job base. This job base and the availability of inexpensive land has stimulated the development of "affordable" single family homes and other residential product types. This is presently occurring in many areas of the City and is anticipated to continue during the 20 year planning period.

In accordance with the State of California General Plan Guidelines and Government Code Section 65302 (c), the City has prepared a Housing Element.

In September of 1993, this document was submitted to the State of California Office of Department of Housing and Community Development for review. The Element was adopted December 14, 1993 and did incorporate the recommendations from HCD. The Element is included as an integrated part of this General Plan.

Recent changes in State law, have established new requirements to be met in the General Plan, such as the need to specify standards for population density, building intensity, and a number of items to be included in the Housing Element, such as the need to provide affordable housing and allocation of facilities for the homeless.

This General Plan document shall be utilized as a working development guideline for all projects which will occur within the General Plan Planning Area. The Development Standards will be considered as a guidelines for revision to the Zoning Code.

The General Plan will serve as a base document for implementation programs including zoning ordinances, specific plans, development plans, area plans, and other permit processes. In addition, the General Plan provides guidelines for the preservation and conservation of open space and natural resources, biotic habitats, as well as protection of life and property from natural and man-made hazards. It is a document which will lead the City of Adelanto into the 21st Century with a firm grasp of the needs of the residents, the Planning Commission, and the City Council, as well as the development community.

With such a dynamic climate in the high desert and the City of Adelanto, it is anticipated that the City will grow, building on past success and the vision of the future.

### **2.3.2 Project Characteristics**

The goals of the City of Adelanto are statements of the commitment of the Planning Commission, City Council, and Staff to establish the City as a leader of the high desert in regard to public policy and development planning. This General Plan is intended to act as a guide to future development and will incorporate a broad range of technical information that can be used by the development community, as well as, the citizens of Adelanto. This document consolidates the General Plan policies and requirements in order to create the framework and guidelines that will turn the goals into reality.

### **City Goals**

Many public forums, presentations, hearings, and discussions have taken place throughout this planning effort. The ordinary form of urban development applies

to a certain extent, but Adelanto is on the verge of setting new standards. The opportunity of the George AFB closure has generated tremendous momentum for the General Plan and the City is committed to the incorporation of the airport into the General Planning process. This commitment is part of the following basic goals, which are followed by specific objectives that suggest approaches toward achieving these goals.

- Goal 1:** Take advantage of the opportunity of the closure of George AFB and to maximize its potential by converting it into an aviation facility capable of accommodating Southern California's long term aviation needs. This concept is a primary means of creating much needed jobs for the residents of Adelanto and the Victor Valley.
- Goal 2:** Develop a General Plan and Development Standards that efficiently facilitates changes in land use policies. The Development Standards will form the basis of a revised Zoning Code, which will be formulated subsequent to the adoption of the General Plan. The General Plan document will be used as a "Development Manual" that can be used to assist developers and the planning staff of the City in the development approval process, including development standards and design guidelines for implementation of commercial, residential, business, industrial, and public works projects. This manual will function hand in hand with the new land use map which is included as part of the General Plan document.
- Goal 3:** Create a balanced relationship between the number of jobs that occur within the City and the number of workers that reside in the nearby vicinity of those jobs. This balanced growth is of utmost concern to planning agencies in Southern California and is intended to lessen the environmental impacts created by long distance commuter travel via the automobile.
- Goal 4:** Promote the continuation of the City-sponsored Industrial Park developments that have created a strong economic base for Adelanto. Additional industrial park locations will be the focus of the City during the next several years and will continue to generate jobs for the residents of the City and the High Desert.
- Goal 5:** Take advantage of the availability of vacant land to incorporate a parks and open space system throughout the City. This system should link all of the current and proposed parks locations together via an open space/trails network. This network will be designed in conjunction with the master planned drainage channels that flow through Adelanto.

- Goal 6:** Continue the implementation of redevelopment projects under the Adelanto Redevelopment Agency or a similar entity.
- Goal 7:** Formulate a cohesive plan on the future relocation of incompatible land uses within the Airport Development District Area to other areas of the City. This plan will assist the City, as well as residents and businesses to relocate in the most cost effective and least painful manner. The program should incorporate alternative solutions to the implementation of the relocation process as well as community workshops designed to gather public input for how this process will be achieved.

### **Objectives**

Special objectives of immediate concern to the City that must be implemented to accomplish the desired goals include:

1. Adopt the new General Plan and certify the associated Program Environmental Impact Report which the development community and residents can use to understand the policy directions of the City. The General Plan Update will provide the guiding criteria for Precise Plans, Development Plans, Specific Plans, and Area Plans that can be created easily and efficiently with regard to design standards and site requirements.
2. Determine the "buildout" requirements for the roadway system in order to design and regulate community circulation routes and incorporate regional transportation facilities to assure a balance with land use intensity patterns. Emphasis will be placed on "through" vehicular traffic to the freeways and expressways, reserving surface streets for local traffic. Regional facilities adjacent to the freeways and "expressways will be designed with good access, appropriate "stacking distance", and adequate visibility for both visitors and local citizens. Alternate forms of transportation will be encouraged to reduce the importance on the automobile for local and regional travel. Pedestrian, equestrian, and bicycle parkways will be incorporated to link the City's existing and future activity centers.
3. Designate open space areas, as rapidly as possible, to assure that adequate linkage can be maintained between the City's activity centers, parks, and schools, creating an open space beltway throughout the City. The entrances to the City, streetscapes, parks, and public facilities such as the civic center

and school sites should set the standards for quality development and maintenance throughout Adelanto. To the extent feasible median islands should be planted and border area planting areas should be increased. Use of xeriphytic (drought tolerant) landscape materials are to be emphasized. School children, public officials, and community organizations should be involved in the planting and care of trees at schools and playgrounds and families should be involved in neighborhood and park development programs.

4. Promote the City's Environmental Performance Standards to assure that the above efforts are meaningful and not defeated by conflicting actions and constraints. Business and industry must be regulated to contain and control pollutants generated by their operations. These industries shall be required to provide landscaping for areas which front public right-of-ways or dissimilar land uses. Environmental mitigation techniques are to be implemented for uses which may tend to stress the natural and built environment.
5. Increase usable open space by establishing a park land acquisition program/policies and optimizing streets and utility right-of-ways. Linkage of all planned activity centers is encouraged by the Land Use Plan and must be aggressively pursued by the City in order to protect the viability of this concept.
6. Prevent "strip" commercial development along arterial streets by creating activity centers which are conveniently located, provide a concentration of goods and services, and are designed to blend with and complement the neighborhoods they serve. Strict signage and lighting requirements are essential.
7. Maintain a realistic Capital Improvement Program. Seek grants and special funding to hasten the development of necessary public improvements. Continue to seek methods to assure high quality development and maintenance with equitable distribution of costs and responsibilities.
8. Work with neighboring communities to resolve local problems such as health, safety, education, circulation, local ecology, land use and zoning where the actions of one agency affect the adjoining jurisdiction. Work with San Bernardino County to resolve regional problems such as jobs/housing, air quality, noise, solid waste, mass transit, water supply/quality, and other issues. Work with Caltrans to develop quality design of the proposed

Freeway 395 including berms, walls, and landscaping to reduce the negative impacts imposed by such activity.

9. Work with the Airport Authority and the San Bernardino Airport Land Use Commission to help provide solutions that will mitigate the impact of the airport on the surrounding communities. The design of the ultimate facility must be state-of-the-art and should be reviewed by the City to assure that the correct image of Adelanto is achieved. Special attention should be placed on the entries to the airport and should characterize a quality image for the City and the setting.

The objectives and contents of the individual Elements of the General Plan Update are summarized below.

### **2.3.3 Land Use Element**

The Land Use Element is perhaps the single most important element of the General Plan, and the accompanying Land Use Map provides the framework around which the other elements are constructed. The Land Use Element indicates the location and extent of development in the City, and areas subject to development constraints. The element contains standards for population density and development intensity. The Land Use goals are intended to provide long-range guidelines toward which the City will proceed through the normal course of day-to-day planning, decision-making and administrative action. The supporting objectives will help to define the course of action the City will take in implementing these goals, and will provide a basis for policy decisions. The general goals set forth in the Land Use Element update include:

- RE 1: To encourage a range of residential product types and price ranges.
- RE 2: To establish healthy, livable neighborhoods with adequate support uses including parks, schools, and neighborhood commercial centers.
- RE 3: Assure adequate infrastructure, circulation, and public services adequate to serve the residential developments.
- RE 4: To maintain a positive, high quality community image within the residential districts.

- CLU 1:** Provide adequate commercial facilities to satisfy the business and service needs at the sub-regional, community and neighborhood levels.
- CLU 2:** Assure provision of infrastructure, circulation and public services adequate to serve commercial areas.
- CLU 3:** Minimum commercial intrusion on residential areas.
- CLU 4:** Assure that compatible commercial land uses are provided within the overflight areas surrounding the Airport.
- ADD 1:** Assure that the ADD is capable of containing and supporting the development of a major airport facility that will accommodate Southern California's current and future unmet air transportation demand.
- ADD 2:** Assure the development of functional and attractive design of all structures, facilities, and landscaping located within the ADD.
- ADD 3:** Assure that the ADD can function properly and effectively without creating severe adverse impacts on the surrounding community.
- AP 1:** Provide a continued use of the airfield for private aviation.
- AP 2:** Assure provision of infrastructure, circulation and public services adequate to serve new uses within the AP.
- AP 3:** Continue to permit residential development within AP Zone.
- MI 1:** Assure that the manufacturing/industrial development in the City continues to thrive.
- MI 2:** Assure the provision of infrastructure, circulation and public services adequate to serve the MI district.
- MI 3:** Minimize MI intrusion on surrounding residential neighborhoods.
- MI 3:** Minimize MI intrusion on surrounding residential neighborhoods.

- MI 4: Attempt to plan for the inclusion of mass transit systems linking residential areas to the Manufacturing/Industrial district.
- MI 5: Encourage the introduction of "clean industry" to the Manufacturing/Industrial district and Light Manufacturing district.
- OPC 1: Provide a comprehensive open space system throughout the City utilizing the drainage courses that are identified in the Master Drainage Plan for Adelanto.
- OPC 2: To provide the residents with quality public facilities that will keep pace with projected growth.
- OPC 3: Encourage the development of parks and open space facilities that are of high quality design and construction to promote the health, safety, and welfare of the citizens.
- OPC 4: Encourage development of public and semi-public facilities including prisons, auto racing, moto-cross, etc., in compliance with commonly accepted environmental standards.
- SPA 1: To provide for the incorporation of a future specific plan district within the Planning Area.

#### **2.3.4 Housing Element**

The purposes of the Housing Element are to identify local housing problems and the necessary mitigation measures to meet housing needs for all economic segments of the community. Provision of adequate housing is a goal of state housing policy with which local jurisdictions must comply. The Housing Element update builds upon the foundation provided by the existing Housing Element, including the following goals:

#### **CONSTRUCTION**

##### **Rental Ownership Scattered Site (5 Units)**

This program will encourage renters to purchase affordable housing scattered throughout the City. With interest rates at a 20 year low and housing prices as low as \$68,000 the City will encourage renters to purchase existing available new single family homes located in the City. As additional CDBG Funds become available, as a result of population growth, they may be used, if necessary to

supplement this program. Because the ownership limitation is \$35,000-\$40,000 for Very Low Incomes the program will probably encourage the purchase of existing mobile homes in the City. The City will also investigate the availability of Federal HOME funds through the County of San Bernardino.

Responsible Agency: City of Adelanto

City Role: Encourage Ownership, Investigate Supplemental Down Payment Assistance

Financing Source: Future CDBG, HOME

Time Frame: 1994-1996

#### Multi Family Units (10 Units)

This program will provide 10 units of multi family housing within the City. Two units will be Low Income and 8 units will be Very Low Income. Existing multi family land uses in the City are developed on approximately 125 acres. Vacant, water and sewer served (within 1/2 mile) properties outside the 65 CNEL Zoned for multi family development total over 1,000 acres. Very Low Income rentals for a two person family are \$360 per month or less and \$576 for Low Income households. At this level local developers can develop market rate rental housing to meet the needs of this program. Because of the existing high vacancy rate the market may not support this program at this time. To assist public assistance relievers the City will request additional Section 8 Certificates from the County of San Bernardino.

Responsible Agency: City of Adelanto

City Role: Encourage Developers, Continue Existing Zoning, Request Additional Section 8

Financing Source: Market Rate Financing, Section 8

Time Frame: 1994-1996

#### Density Bonus Program (30 Units)

This program will provide 30 units of rental housing within the City. Five units are expected to be Low Income and 25 units should be Very Low Income. This program will consist of allowing and encouraging developers to construct high density projects currently permitted by the Zoning Code. The current Zoning Code permits up to 22 units per net residential acre which is substantially higher than other areas in the region.

Responsible Agency: City of Adelanto

City Role: Inform Developers at Counter

Financing Source: Market Rate Financing

Time Frame: 1994-1996

### **First Time Homebuyers (30 Units)**

This program will assist 30 renters to become homeowners within the City. The City will work with relocates and developers to provide down payment assistance to five units of Low Income and 25 units of very Low Income. This program will consist of relocation of renters from within the 65 CNEL Noise Contour of the major airport that is to be developed adjacent to the City of Adelanto. State and Federal Relocation Guidelines will be followed.

**Responsible Agency:** Airport Authority (to be formed), City of Adelanto  
**City Role:** Negotiate Funding, Relocation Assistance Program  
**Financing Source:** FAA, Airport Authority, Landing Fees  
**Time Frame:** 1995-1996

### **Affordable Housing Market Rate (50 Units)**

This program will provide 50 units of ownership housing within the City. All fifty units will be Low Income. This program will consist of encouraging developers to construct affordable housing including single family homes, modular housing and trailer parks. Approximately 1,000 acres of appropriately zoned vacant land with available water and sewer service are available for multi family developments. Over 9,500 single family units have been tentatively approved of which 50 percent will be in the price range of Low Income households.

**Responsible Agency:** City of Adelanto  
**City Role:** Inform Developers at Counter of Demand  
**Financing Source:** Market Financing  
**Time Frame:** 1994-1996

## **REHABILITATION**

### **Loans, Grants, Community Cleanup**

This program will assist 115 units of rental and ownership housing within the City. Thirty five units will be Low Income and 80 units will be Very Low Income. This program will consist of City sponsored, with support from other community groups, for clean up and painting of units throughout the City. As the population of the City grows the CDBG entitlement will also grow and these funds will be used to supplement and support the program. Senior citizen and handicapped households will be given high priority. The City is also investigating the possibility of purchasing distressed apartments and rehabilitating them for Low and Very Low Income households. Redevelopment funds would be used for acquisition and rehabilitation. Other funds from the County Housing Authority and the availability of Mortgage Revenue Bonds will also be investigated.

Responsible Agency: City of Adelanto  
City Role: Organize Paint and Clean-up Day, Acquire Multi family Property  
Financing Source: Citizen Participation, CDBG, Redevelopment, County  
Housing, Mortgage Revenue Bonds  
Time Frame: 1994-1996

#### Code Enforcement (43 Units)

This program will rehabilitate 43 units of rental and ownership housing within the City. This continuing program is administered by the Assistant Redevelopment Director and consists of proceedings to enforce the Municipal Code of the City. This program usually involves absentee landowners who have neglected their properties.

Responsible Agency: City of Adelanto  
City Role: Notify Owners of Action  
Financing Source: General Fund for Administration, Owner Financing for  
Rehabilitation  
Time Frame: 1993-1996

#### CONSERVATION

##### Weatherization Program (30 Units)

The City will pursue the use of energy conservation measures in Very Low, Low and Moderate Income households through a "weatherization" program. The City will encourage the utility companies that provide these types of programs.

Responsible Agency: City of Adelanto, Utility Companies  
City Role: Encourage Utility Companies  
Financing Source: Special Utility Funding Programs, County Winterization  
Programs  
Time Frame: 1994-1996

#### EDUCATION

##### Public Information Program

The City will provide a public information program to residents of the housing programs described above through a variety of distribution methods including public discussion at City Council meetings, public hearings on the Housing Element and General Plan Update, press releases to the local newspapers and biannual inserts in the water billings informing owners and renters of the housing programs that are available. Information on the housing programs will also be

available to residents at the public counter at City Hall and from City Planning Staff.

Responsible Agency: City of Adelanto  
City Role: Meetings, Public Counter  
Financing Source: General Fund  
Time Frame: 1993-1996

### **Fair Housing Program**

The City will make available to the public at the Information Counter in City Hall copies of the Fair Housing (HUD 1260 - FHEO) flyers. Copies of this brochure will also be made available at the library, community center, police station and the fire stations. Once per year notice of the Fair Housing information will be included in the City water billings. Fair Housing Month is April.

Responsible Agency: City of Adelanto  
City Role: Distribute Fair Housing Brochures in Public Places, Water Bill Insert  
Financing Source: General Fund  
Time Frame: 1994-1996

### **ANNUAL REVIEW OF HOUSING ELEMENT**

The Planning Commission and the City Council will conduct an annual review of the Housing Element Programs. The review will include a review of the residential development permits and completion reports, an update or inventory on approved projects, the annual estimate of population from the State Department of Finance and a vacant land and Zoning Map survey.

The Housing Element has already received environmental clearance and has been adopted by the Adelanto City Council. It is included in this Program Environmental Impact Report to be made the General Plan Update comprehensive and to relate to any Subsequent Projects. In the event the prior adoption and environmental documentation is successfully challenged, this EIR includes the Housing Element and will be used in place of the prior environmental documentation.

#### **2.3.5 Circulation Element**

The Circulation Element has been designed to insure internal consistency with the proposed Land Use Element, and allows for the integration of traffic information into the formal General Plan Update and adoption process. In addition, it integrates regional policies required under the Congestion

Management Plan (CMP). The general goals of the Circulation Element include:

- CIR 1: Improved circulation system that accommodates the projected growth of the City/community.
- CIR 2: Enhanced quality of the visual corridor through Adelanto.
- CIR 3: Adequate capacity of roadways to handle buildout of the entire City.
- CIR 4: Safe, durable and aesthetic roadway construction design that will provide a long-lasting surface for vehicular transportation.
- CIR 5: Improved access/visibility to Adelanto's primary commercial, business and industrial sectors, including a new major airport.
- CIR 6: Integrated street and signage design criteria.
- CIR 7: Improved east/west and north/south circulation through Adelanto.
- CIR 8: Coordinated transportation master plan for Adelanto and surrounding communities.
- CIR 9: Long-range outlook for the incorporation of mass transit, conventional rail, high speed rail and air transportation needs of the High Desert and Southern California.

### **2.3.6 Parks and Recreation Element**

The Parks and Recreation Element identifies open space areas in the City, including existing parks, utility easements, and open space reserved for public recreation. This element also includes standards for existing and new parks and for landscaping and other improvements in new developments. The general goals of the Parks and Recreation Element include:

- REC 1: To provide a minimum of 3 acres of parkland and recreational facilities for every 1,000 residents in Adelanto. This parks system will include a combination of local parks, trails, school playgrounds and other public facilities which meet park of the need for local recreational facilities.
- REC 2: Continue to utilize a number of strategies in financing future park activities and development.

**REC 3:** To provide readily accessible recreational facilities to meet the needs of persons of all ages, physical conditions and socioeconomic situations.

**REC 4:** To provide adequate system of multi-use trails.

### **2.3.7 Conservation/Open Space Element**

The Conservation/Open Space Element addresses a wide-range of issues that relate to the conservation, preservation, or management of natural resources and open space areas in the City. The Conservation/Open Space Element identifies goals and policies that are consistent with regional programs dealing with air pollution and solid waste management, and open spaces including the following:

- BIO 1:** To protect and conserve its natural, cultural and historic resources to the greatest extent possible.
- BIO 2:** To assure adequate protection and conservation of all native vegetation and wildlife habitats within the Planning Area.
- BIO 3:** To plan for the most energy efficient use of natural resources for activities which take place within the Planning Area.
- BIO 4:** To provide recreational and open space facilities to meet the needs of all segments of the community for both active and passive recreational uses.
- BIO 5:** To provide pedestrian access to all parks and open space areas utilizing linear parkways and the natural and man made drainage corridors that traverse the City.
- CUL 1:** To preserve any known or undiscovered archaeological sites and/or artifacts which may be present within the Planning Area.
- CUL 2:** To assure that proposed development policies will not eliminate any significant archaeological or historic resources.
- CUL 3:** To provide a mechanism for the identification and preservation of archaeological or historic resources within the Planning Area.

- CUL 4:** To provide to the extent feasible cultural facilities (libraries, museums, historic sites, etc.) within the Planning Area to meet the needs of new and current residents of Adelanto.
- NR 1:** To preserve and protect the area's renewable and non-renewable resources to the maximum extent possible.
- NR 2:** To reduce the rate of consumption per capita of renewable and non-renewable natural resources which are located within and outside the Planning Area.
- AQ 1:** Support local and regional efforts to improve air quality throughout the region.
- AQ 2:** To assist in improving air quality in accord with the San Bernardino Air Quality Attainment Plan.
- AQ 3:** Implementation of control measures which apply to Adelanto as an employer and contractor.
- AQ.4:** To reduce air pollutant emissions to the greatest extent feasible by monitoring air quality mitigation measures developed for new development projects.
- WQ 1:** To provide, extend, maintain, and improve a safe and efficient wastewater collection system and treatment facilities that maximize water recharge and minimize the consumption needs and prevents groundwater contamination.
- WQ 2:** To assure that an adequate supply of water is made available to residents and businesses without the depletion of local (Victor Valley) groundwater sources.
- WQ 3:** To assure that storm runoff in industrial sectors of the Planning Area does not contaminate the groundwater resources of the Planning Area.
- OS 1:** To provide a comprehensive open space system throughout the City utilizing existing natural and man made drainage courses.
- OS 2:** To preserve the natural open space areas in their existing state, while providing public access and recreational needs.

### **2.3.8 Noise Element**

The Noise Element describes the existing and future noise environments, based on existing and projected traffic and land use patterns, and establishes policies and standards aimed at reducing noise levels and/or mitigating the effects of noise. The goals of the City of Adelanto, in relation to noise, are:

- NS 1: To reduce the number of persons and land uses exposed to excessive noise levels within the Planning Area.
- NS 2: To provide a safe and comfortable living environment for new residential, business, and commercial developments in Adelanto which are minimally affected by noise.

### **2.3.9 Safety Element**

The Safety Element addresses local safety and health issues, including the identification of those areas within the City that will be subject to seismic hazards, fire, flooding and other potential risks and hazards. The Safety Element focuses on policies that will be effective in reducing the damaging effects of those hazards that cannot be controlled, and policies to mitigate the occurrence of hazards, where this is possible. Finally, the Safety Element establishes goals, policies, implementation programs, and standards that will be effective in reducing the potential loss of life, injury, and property damage in the event of a major disaster, including the following:

- S 1: To preserve and protect the overall health, safety, and well being of the community's residents, businesses, and visitors.
- S 2: To minimize potential hazards to public health, safety and the well being of the community resulting from natural and man-made hazards.
- S 3: To provide assurance to the community that all solid waste and hazardous materials are disposed of according to all applicable local, state and federal standards.

### **2.3.10 Public Facilities Element**

An inventory and analysis of existing infrastructure and constraints to development was conducted, including but not limited to sewer, water,

drainage, schools and public facilities. Long- and short-range Capital Improvement programs are recommended that will be necessary to serve development within the area. The potential sources of funding, both private and public, is also included in this Element. The general goals of this Element include:

- PF 1:** The City shall encourage and participate with the local water authorities to:
- a. Achieve a balanced hydrological system in terms of withdrawal and replenishment of water from groundwater basins.
  - b. Continue and expand the importation of water to sustain the existing population and projected growth; actively support the completion of the State Water Project improvements in the Sacramento/San Joaquin Delta and to the Colorado River Aqueduct System, and the use of water transfers and water marketing techniques.
  - c. Achieve a reduction in the existing consumption of water by implementing conservation measures prior to approving new development in areas experiencing water supply shortages.
  - d. Plan and construct new water distribution and treatment systems on the basis of the City's adopted growth forecast.
  - e. Maximize the use of existing water resources through conservation programs and efficient ground and surface water management programs.
  - f. Improve and rehabilitate water distribution systems to prevent losses from leakages and to maximize efficient water use.
  - g. Achieve conservation, reclamation, reuse, and other refinements in water management practices as an essential part of all water supply programs, whether in urban, rural, or agricultural sectors.
  - h. Protect and maintain high quality water with the objective being the protection of surface and groundwater from degradation, with drinking water being the highest and most beneficial use.

- i. Achieve the approval of new development conditioned on the availability of adequate and reliable water supplies and conveyance systems.
- PF 2: The City shall encourage and participate with VVWRA and other local responsible agencies to:
- a. Require wastewater collection and treatment systems which are consistent with the protection of public health and water quality.
  - b. Promote activities/measures that facilitate the reclamation and reuse of wastewater.
  - c. Plan and construct new wastewater treatment and collection facilities on the basis of the City's adopted growth forecast and in conjunction with new development.
- PF 3: The City shall encourage the development and construction of a local flood control system to:
- a. Protect life and property from flood hazards.
  - b. Allow for joint use facilities for wildlife migration and recreational corridors.
  - c. Protect the quality of storm waters from urban runoff.
- PF 4: Work with the School District to
- a. To provide quality education to all students.
  - b. To achieve unification in order to maximize bonding capabilities.
  - c. To expand service to K - 12 to provide a full range of educational opportunities within the Adelanto School District.
  - d. To achieve the cooperation between the School District and all affected communities to best meet the needs of all agencies within the School District boundaries.

### **2.3.11 Community Design Element**

The goal of the Community Design Element of the General Plan is to establish a set of policies as to the appearance of the City of Adelanto

both now and in the future. These policies are intended to relate the physical elements of the community in a way that produces an overall environment that is visually pleasing, as well as efficient and functional.

### **2.3.12 Subsequent Projects**

Projects that conform to the goals, policies and programs of this General Plan Update and also conform to the requirements of the Adelanto Zoning Code and the Standard Conditions of the City including residential projects, subdivisions, commercial projects, industrial projects and capital improvement projects are intended to be included in this Program Environmental Impact Report.

## **2.4 PROGRAM EIR**

During the preliminary review of the General Plan Update the Lead Agency has determined that a Program Environmental impact Report will be required. Implementation of the General Plan policies and strategies may have significant environmental impacts on the following issues and will be analyzed in the Environmental Impact Report.

- a. Earth Resources
- b. Water Resources
- c. Biological Resources
- d. Climate and Air Quality
- e. Traffic and Circulation
- f. Land Use
- g. Cultural Resources
- h. Noise
- i. Public Services
- j. Utilities
- k. Long Term Impacts
- l. Cumulative Impacts
- m. Growth Inducing Impacts
- n. Alternatives

## **2.5 EXISTING GENERAL PLAN AND ZONING**

While the 1985 General Plan, as amended, is a legally valid document, the City's current General Plan and Zoning Ordinance do not reflect the current growth climate within the Adelanto Planning Area and the High Desert. Outdated San Bernardino County zoning categories have been utilized for both the General Plan and Zoning documents. This system can not adequately fulfill the future planning needs of the City.



The following Environmental Information and Checklist Form has been completed by the project applicant (City of Adelanto) and is included as part of this Initial Study.

3.0 ENVIRONMENTAL CHECKLIST

Yes Maybe No

1. Earth. Will the proposal result in:

- a. Unstable earth conditions or in changes in geologic substructures?                         X
- b. Disruptions, displacements compaction or overcoming of the soil?   X
- c. Change in topography or ground surface relief features?   X
- d. The destruction, covering or modification of any unique geologic or physical features?                         X
- e. Any increase in wind or water erosion of soils, either on or off the site?   X
- f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?              X
- g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mud slides, ground failure, or similar hazards?                         X

2. Air. Will the proposal result in:

- a. Substantial air emissions or deterioration of ambient air quality?              X
- b. The creation of objectionable odors?              X

Yes Maybe No

- c. Alteration of air movement moisture, or temperature, or any change in climate, either locally or regionally?

\_\_\_ X \_\_\_

**3. Water. Will the proposal result in:**

- a. Changes in currents, or the course of direction of water movements, in either marine or fresh waters?

\_\_\_ \_\_\_ X \_\_\_

- b. Changes in absorption rates, drainage patterns, or the rate and amount of surface- runoff?

X \_\_\_ \_\_\_

- c. Alterations to the course or low of flood waters?

\_\_\_ X \_\_\_

- d. Change in the amount of surface water in any water body?

\_\_\_ \_\_\_ X \_\_\_

- e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?

\_\_\_ X \_\_\_

- f. Alteration of the direction or rate of flow of groundwaters?

\_\_\_ X \_\_\_

- g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?

X \_\_\_ \_\_\_

- h. Substantial reduction in the amount of water otherwise available for public water supplies?

\_\_\_ X \_\_\_

Yes Maybe No

- i. Exposure of people or property to water related hazards such as flooding or tidal waves?

\_\_\_\_\_X\_\_\_\_\_

4. Plant Life. Will the proposal result in:

- a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?

\_\_\_\_\_X\_\_\_\_\_

- b. Reduction of the numbers of any unique, rare or endangered species of plants?

\_\_\_\_\_X\_\_\_\_\_

- c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?

X\_\_\_\_\_

- d. Reduction in acreage of any agricultural crop?

\_\_\_\_\_X\_\_\_\_\_

5. Animal Life. Will the proposal result in:

- a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects)?

\_\_\_\_\_X\_\_\_\_\_

- b. Reduction of the numbers of any unique, rare or endangered species of animals?

\_\_\_\_\_X\_\_\_\_\_

- c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?

\_\_\_\_\_X\_\_\_\_\_

- d. Deterioration to existing fish or wildlife habitat?

\_\_\_\_\_X\_\_\_\_\_

Yes Maybe No

6. **Noise.** Will the proposal result in:

a. Increases in existing noise levels?

\_\_\_ X \_\_\_

b. Exposure of people to severe noise levels?

\_\_\_ X \_\_\_

7. **Light and Glare.** Will the proposal produce new light or glare?

\_\_\_ X \_\_\_

8. **Land Use.** Will the proposal result in a substantial alteration of the present or planned land use of an area?

X \_\_\_

9. **Natural Resources.** Will the proposal result in:

a. Increase in the rate of use of any natural resources?

\_\_\_ X \_\_\_

b. Substantial depletion of any non-renewable natural resources?

\_\_\_ \_\_\_ X

10. **Risk of Upset.** Will the proposal involve:

a. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?

\_\_\_ X \_\_\_

b. Possible interference with an emergency response plan or an emergency evacuation plan?

\_\_\_ \_\_\_ X

11. **Population.** Will the proposal alter the location, distribution, density, or growth rate of the human population of an area?

X \_\_\_

Yes Maybe No

12. **Housing.** Will the proposal affect existing housing, or create a demand for additional housing?

  X                

13. **Transportation/Circulation.** Will the proposal result in:

a. Generation of substantial additional vehicular movement?

  X                

b. Effects on existing parking facilities, or demand for new parking?

  X                

c. Substantial impact upon existing transportation systems?

  X                

d. Alterations to present patterns of circulation or movement of people and/or goods?

  X                

e. Alterations to water borne, rail or air traffic?

  X                

f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?

         X         

14. **Public Services.** Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:

a. Fire protection?

  X                

b. Police protection?

  X                

c. Schools?

  X                

d. Parks or other recreational facilities?

  X                

e. Maintenance of public facilities, including roads?

  X

Yes Maybe No

f. Other governmental services?

X \_\_\_\_\_

15. Energy. Will the proposal result in:

a. Use of substantial amounts of fuel or energy?

X \_\_\_\_\_

b. Substantial increase in demand upon existing sources or energy, or require the development of new sources of energy?

\_\_\_\_\_ X \_\_\_\_\_

16. Utilities. Will the proposal result in a need for new systems, or substantial alterations to any utilities:

a. Power or natural gas?

\_\_\_\_\_ X \_\_\_\_\_

b. Communication systems?

\_\_\_\_\_ X \_\_\_\_\_

c. Water?

X \_\_\_\_\_

d. Sewer or septic tanks?

\_\_\_\_\_ X \_\_\_\_\_

e. Storm water drainage?

\_\_\_\_\_ X \_\_\_\_\_

f. Solid waste and disposal?

\_\_\_\_\_ X \_\_\_\_\_

17. Human Health. Will the proposal result in:

a. Creation of any health hazard or potential health hazard (excluding mental health)?

\_\_\_\_\_ \_\_\_\_\_ X

b. Exposure of people to potential health hazards?

\_\_\_\_\_ \_\_\_\_\_ X

Yes Maybe No

18. **Aesthetics.** Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of any aesthetically offensive site open to the public view?

\_\_\_\_\_ X \_\_\_\_\_

19. **Recreation.** Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?

\_\_\_\_\_ X \_\_\_\_\_

**20. Cultural Resources.**

a. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archaeological site?

\_\_\_\_\_ X \_\_\_\_\_

b. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?

\_\_\_\_\_ X \_\_\_\_\_

c. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?

\_\_\_\_\_ X \_\_\_\_\_

d. Will the proposal restrict existing religious or sacred uses within the potential impact area?

\_\_\_\_\_ X \_\_\_\_\_

**21. Mandatory Findings Of Significance.**

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community,

reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

\_\_\_ X \_\_\_

- b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.)

\_\_\_ X \_\_\_

- c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total impacts on the environment is significant.)

\_\_\_ X \_\_\_

- d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

\_\_\_ X \_\_\_

### Impact Analysis

The impacts associated with the development of land uses proposed in the General Plan may result in significant adverse environmental affects. All development proposals which are deemed to disproportionately impact the air shed must provide means of mitigating such impacts. The City will require that all development proposals to comply with the standards established by the Mojave Desert Air Quality Attainment Plan. Particular emphasis will be placed on developments proposed within the Manufacturing/Industrial and the Airport Development Districts.

## **3.3 WATER (Checklist items a through i)**

### Assessment

Implementation of proposed land uses will alter the surface runoff rates within the Planning Area impacting the drainage facilities downstream. Significant water volume increases will most likely be discharged into the Fremont Wash system and subsequently the Mojave River. No significant affects to these systems will result from the increase in flow, except possible siltation as discussed above. Water consumption will increase due to the addition of new residents and businesses into the Planning Area and may impact the existing water supply system. Additional depletion (overdraft) may result from such development and additional State Project water and additional allocations will be required before all planned development in the Victor Valley is implemented.

### Impact Analysis

Although implementation of proposed land uses will increase the volume of surface runoff, the primary drainage facilities will be able to accommodate the additional flow. New developments will be required to adequately plan for storm runoff and to provide whatever structures are necessary to protect the public safety. Additionally, increase in the population will place significant stress on the City water supply and distribution system. The General Plan contains policies and strategies which are intended to identify ways in which this regional dilemma can be mitigated in order to accommodate the tremendous growth that is anticipated.

## **3.4 PLANT LIFE (Checklist items a through d)**

### Assessment

Implementation of land use policy will have potential impacts on native plant life within the Planning Area. The Planning Area contains over 8,000 acres of Joshua Tree Woodland, of which the Joshua Tree (*Yucca brevifolia*) is a

protected species (California Desert Native Plant Act, 1986). Other species on this list are Agave, Mesquite and various cactus species.

#### Impact Analysis

Due to the extensive development proposed in the General Plan, many native and sensitive plant materials may need to be removed and relocated according to State and Federal guidelines. The most significantly impacted area within the Planning Area is located in the northeastern portion of the Planning Area and contains Joshua Tree Woodland. The General Plan identifies programs and actions which will be implemented in order to mitigate impacts to plant life in the Planning Area due to increased development.

### **3.5 ANIMAL LIFE (Checklist items a through d)**

#### Assessment

Increased development will also have a significant impact on the fauna that may exist within the General Plan Planning Area. Endangered species such as the Desert Tortoise (*Gopherus agassizii*) may be negatively impacted and potential habitat lost due to implementation of proposed land uses. State and Federal regulations will require the careful relocation/rehabilitation of such species that are found within the Planning Area.

#### Impact Analysis

Over 8,000 acres of sensitive habitat area will be significantly altered due to the implementation of the proposed land uses of the General Plan. The fauna, namely the Desert Tortoise must be relocated according to State and Federal statutes. The General Plan establishes policies and actions that are intended to comply with these requirements. In addition programs for the preservation of large portions of habitat areas are contained within the document.

### **3.6 Noise (Checklist items a and b)**

#### Assessment

The reuse of George Air Force Base will continue to impose significant noise impacts on the City of Adelanto. In addition, an increase in development may create a large increase in auto/truck and manufacturing noise sources. The revitalization and expansion of the rail spur into the airport complex and into Adelanto's Industrial Park No. 1 may also create additional noise impacts within the Planning Area. Proposed Freeway 395, identified as a six lane roadway located in a more western alignment, will generate significant noise impacts on adjacent properties.

### Impact Analysis

The impacts created by the implementation of land use policy contained in the General Plan may have significant effects on the resident population in terms of exposure to noise levels exceeding 65 dBA. The proposed airport, the proposed realignment of U.S. 395 and the general increase of development all will generate noise impacts. Policies have been incorporated into the General Plan that will help mitigate such impacts to an acceptable level. Such policies include implementation of compatible land use patterns surrounding potential noise sources, as well as, physical design criteria for the buffering of freeway, industrial and airport noise.

## **3.7 LIGHT AND GLARE**

### Assessment

Any increase in development will create an increase in the light and glare emanating from new projects, automobile traffic and increased street lighting. Such impacts may produce adverse conditions on certain properties throughout the Planning Area due to an increase in light and glare on existing conditions.

### Impact Analysis

Light and glare produced as a result of implementation of land use policy may have a negative impact on some properties. Such impacts are always a factor in an urbanizing community and are intended to be mitigated through the adherence to the Development Standards contained within the General Plan.

## **3.8 LAND USE**

### Assessment

The general policy of the City of Adelanto is to provide the development community with ample business opportunity and to encourage growth to occur in a logical and progressive manner. Incorporation of a major airport will have the greatest overall impact on the population and employment rates. The 9,600 acre Manufacturing/Industrial District is also the catalyst for the future growth of Adelanto. Transformation of very low density residential land uses into more affordable single family developments will also create additional demand on existing and planned public services and facilities. Land uses within the Planning Area have been situated as to allow for a non-conflicting relationship between the high impact airport/industrial land uses and the residential land uses.

### Impact Analysis

The addition of new land uses at increased densities will place significant demand on all public services and facilities. It will also generate significant stress on the existing natural environment and current population base. The General Plan incorporates policies that outline programs which must be established to accommodate the projected growth in an efficient, acceptable, manner. Mitigation measures have been incorporated to reduce the overact impact of new development.

## **3.9 NATURAL RESOURCES (Checklist items a and b)**

### Assessment

Natural resource depletion due to the implementation of the General Plan land uses may be significant. Resources such as petroleum products, natural gas, as well as, sand and gravel may be slightly depleted due to development. On a region-wide scale, this depletion is not significant.

### Impact Analysis

Natural resources that will be provided to residents within the Planning Area must be provided via outside sources. The only exception may be sand and gravel (concrete) production. New development will increase the need for raw materials, but in general, the impacts will be minimal. Few mitigations will be needed to preserve such natural resources, except for programs which can be utilized to conserve and recycle resources such as petroleum products, metals, plastics, paper, and glass.

## **3.10 RISK OF UPSET (Checklist items a and b)**

### Assessment

Activities that might occur within the Manufacturing/Industrial District of the Planning Area could introduce the possibility of hazardous materials or an increase in the likelihood of some type of explosion. Reuse of the Air Force Base as a commercial airport may also continue the possibility of an occurrence involving an aircraft crash. Other activities planned within the General Plan Planning Area will create little likelihood for an occurrence of this type.

### Impact Analysis

Land uses contained within the Planning Area have been organized to have the least possible impacts resulting from a major catastrophe. Additionally, the Development Standards require, as part of the development approval of any industrial project, a potential industrial user to prove that the activities of a proposed use will not pose a threat to the health, safety, and welfare of the

residents of the City and the operators of such project. Additional policies contained in the General Plan are intended to mitigate potential hazardous situations, including the development of an emergency preparedness plan.

### 3.11 POPULATION

#### Assessment

The City of Adelanto's population will continue to increase as development occurs within the Planning Area according to proposed land uses. Adelanto's population is growing at a rapid pace, reflecting the pro-growth attitude of the City and the current development pressure. The current population is 8,517 residents (1990 Census) and is projected to grow to 52,000 by the year 2014.

#### Impact Analysis

The increase in population will place added demand for public services and facilities within the Planning Area. Additional infrastructure will be required in order to serve this growing population. The General Plan Public Facilities Element identifies projected service facilities and locations that will be needed to accommodate such growth. In addition, the General Plan contains policies which establish a hierarchy of needs in terms of implementation of required infrastructure.

### 3.12 HOUSING

#### Assessment

Based on population projections stated above, a significant increase in the number of housing units is anticipated. Primarily all of the residential developments that exist or are planned within the City are considered as affordable housing. Although the current recession has slowed the economy, the demand for affordable housing, especially single family homes still exists. New development is occurring both in the southern and northern portion of the Planning Area.

#### Impact Analysis

A wide variety of residential development opportunities have been incorporated into the Land Use Element. Product types ranging from single family detached housing to higher density apartment complexes are allowed to develop within the Planning Area in a wide variety of locations. The impact of residential development will significantly affect the provision of public services, so mitigation measures have been incorporated into the policies of the General Plan. A "build-out" scenario has been utilized to identify the long term requirements for infrastructure and other public services.

### **3.13 TRANSPORTATION/CIRCULATION (Checklist items a through f)**

#### **Assessment**

The current circulation system within the Planning Area is in need of substantial upgrading to accommodate any increase in traffic volumes. U.S. Highway 395, Palmdale Road (Route 18), and other roadways are operating at D and F levels of service. As new development occurs within the Planning Area, even greater stress will be placed on all roadways in the City. Relocation/expansion efforts for Freeway 395 and the expansion of other roadways are essential measures in order to facilitate adequate ground access into the City's industrial, residential, and airport districts.

#### **Impact Analysis**

The General Plan for land use, as well as, the associated Circulation Element, identify an upgraded roadway network intended to accommodate the projected traffic volumes. The Circulation Element designates roadway widths and designs which will provide for the safe and effective movement of ground transportation systems. Included in the Element are programs that will guide the development of potential mass transit systems, including future high speed rail to Adelanto and the airport complex.

### **3.14 PUBLIC SERVICES (Checklist items a through f)**

#### **Assessment**

The demand for public services within the Planning Area are anticipated to increase significantly from current levels due to implementation of land uses proposed in the General Plan. New police, fire, school, park, and other public services will need to be substantially upgraded to adequately serve the increased demand.

#### **Impact Analysis**

As the population base grows within the Planning Area, additional public services will be required. The General Plan contains policies that specify the intent of the City to assure that these facilities are provided to serve the public and to promote their health, safety, and welfare.

### **3.15 ENERGY (Checklist items a and b)**

#### **Assessment**

The proposed General Plan policies and subsequent implementation may create a substantial increase in the use of fuel and energy, and the demand on existing sources within the region.

### Impact Analysis

Policies contained in the General Plan are intended to minimize the potential impacts regarding the increase in development activity and the population base. Although new supply facilities will be needed, new sources of energy are not anticipated to result as part of Adelanto's growth. Although a slight impact in the use of energy sources will be created, energy conservation measures will be utilized in the construction of all new development within the City, in accordance with the General Plan guidelines.

## **3.16 UTILITIES (Checklist items a through f)**

### Assessment

Implementation of land uses identified in the General Plan will have an impact on all utility systems within the Planning Area. Increased usage of power, communications, water, sewer systems, drainage facilities, and solid waste disposed will result from the proposed development within the Planning Area.

### Impact Analysis

The proposed policies in the General Plan will result in the need to add new systems, and substantially alter the existing system in order to accommodate new development. The General Plan does identify the basic needs of the build-out of the land uses, and identifies policies to assure that all utilities will be provided using several financing alternatives. As development occurs, new facilities will be implemented to accommodate the increase in service.

## **3.17 HUMAN HEALTH (Checklist items a and b)**

### Assessment

No significant health hazards are anticipated as a result of the implementation of the proposed land uses. Conversion of the Air Base into a commercial aviation facility will slightly reduce the risk to human health in the Planning Area, as more stringent regulations are placed on civilian aircraft and on commercial airliners than on military aircraft. Other land uses will not create substantial health risks.

### Impact Analysis

Goals and policies contained the General Plan are used to assure that any potential health hazards are identified and minimize through implementation of appropriate mitigation techniques and through the logical organization of land use patterns in the Planning Area.

### 3.18 AESTHETICS

#### Assessment

The existing aesthetic value of the majority of the City and the Planning Area is very low. New development in the Planning Area will actually improve the aesthetic character of the City. New development may have a negative visual impact in portions of the Planning Area that contain Joshua Tree Woodland, however, quality urbanized replacement may mitigate the loss of the aesthetic character.

#### Impact Analysis

Implementation of land uses within the Planning Area for the most part will enhance the aesthetic value of the City. The existing desert vegetation is of marginal scenic value, except in the outer reaches of the Planning Area. In addition, the Community Design Element of the General Plan outlines design characteristics that will help increase the visual appearance of new development. Development Standards are also included to assure that quality construction and appropriate uses are developed in the City.

### 3.19 RECREATION

#### Assessment

Recreational opportunities within the Planning Area are readily available to residents of Adelanto. Park facilities, open space along the Mojave River, the El Mirage Cooperative Management Area (BLM), and Maverick Stadium all provide residents within the community quality recreational opportunities. Additional development will necessitate the location of additional parklands within the Planning Area.

#### Impact Analysis

Many new recreational facilities will be needed to adequately serve the projected population levels. The Recreation Element of the General Plan identifies suggested park location criteria, as well as, a proposed open space and trails system, linking some of the major parks in the City. Allocation of parks should comply with the Quimby Act (3 acres per 1,000 population). These requirements have been incorporated into the Recreation Element.

### 3.20 CULTURAL RESOURCES (Checklist items a through d)

#### Assessment

No significant cultured resources, other than those identified on George Air Force Base, exist within the Planning Area boundaries. There are several

churches located in the urbanized part of the City which may be impacted by future land use decisions.

#### Impact Analysis

Implementation of the General Plan land uses, especially the proposed Airport Development District, may require the relocation of some of the previously mentioned church facilities. All attempts will be made to assure that adequate facilities are made available to assist in the transition to other parts of the Planning Area.

### **3.21 MANDATORY FINDINGS OF SIGNIFICANCE (Checklist items a through d)**

#### Assessment

The General Plan Update project and subsequent implementation of the goals and policies may have the potential to degrade the existing quality of the environment, substantially reduce existing wildlife habitat, and restrict the natural occurrence of native vegetation. No elimination of important examples of California's history and prehistory is anticipated. However, the General Plan project has the unrivaled opportunity to produce long term positive impacts for the area, the region, and the State. The incorporation of a major airport is a long term solution to many of Southern California's transportation needs. The socioeconomic benefits will certainly outweigh the negative environmental impacts, many of which will be mitigated via newer technology systems.

#### Impact Analysis

Although the positive regional socioeconomic benefits may appear to outweigh the local environmental impacts, it is important to clearly identify the measures that will be necessary to allow such development to occur. Mitigations and overriding considerations are incorporated into the General Plan that assist reviewing agencies to evaluate the proposed plan in regard not only to local impacts, but in relation to the overall benefits to region, residents, businesses, and visitors.

**4.0 LEAD AGENCY DETERMINATION**

On the basis of this initial evaluation:

I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A **NEGATIVE DECLARATION WILL BE PREPARED.**

I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

Date: May 13, 1994

Signature: *Patricia A. Chamberlaine*

Patricia A. Chamberlaine  
Director of Planning  
Telephone: (619) 246-8606

For the City of Adelanto

**APPENDIX C**  
**CALIFORNIA ARCHAEOLOGICAL INVENTORY**

CALIFORNIA  
ARCHAEOLOGICAL  
INVENTORY



ARCHAEOLOGICAL INFORMATION CENTER  
San Bernardino County Museum  
2024 Orange Tree Lane  
Redlands, California 92374  
(909) 792-1497  
(909) 798-8585 - FAX

May 19, 1994

Michael J. Wagner  
Michael J. Wagner & Associates, Inc.  
2111 Yucca Ave.  
Fullerton, CA 92635

**HISTORICAL RESOURCES RECORD SEARCH FOR: City of Adelanto General Plan**

In response to your request for information dated May 6, 1994, a record search has been conducted for the above project on the Adelanto, Helendale, Victorville and Victorville NW 7.5-minute quadrangles.

**HISTORICAL RESOURCES:**

Historical resources are reported to exist within the project area, including:

Prehistoric Archaeological Resources:

- 29 prehistoric sites
- 4 pending prehistoric sites
- 34 prehistoric isolates

Historic Archaeological Resources (sites older than 50 years in age):

- 26 historic archaeological sites
  - 6 pending historical archaeological sites
  - 21 historic isolates
- many possible historic archaeological site locations determined from historic maps (maps checked: USGS Barstow, surveyed 1920-32.)

Historic Resources (structures older than 50 years in age):

- 1 pending historic structure sites
- many possible historic structure locations determined from historic maps (see maps above)

Cultural Landscapes

- 0 cultural landscapes

Ethnic Resources

- 0 ethnic resources

Heritage Properties (designated by State and Federal commissions):

- 0 National Register Listed Properties
- 0 National Register Eligible Properties
- 0 California Historic Landmarks
- 0 California Points of Historical Interest

**PREVIOUS HISTORICAL RESOURCE INVESTIGATIONS:**

Historical resource reports for the project area include (see enclosed bibliography):

- 45 Area-specific survey reports
- 5 General area overviews

In addition to the Center's historical resources files, the following publications, manuscripts or correspondence also were consulted:

- American Association for State and Local History  
1989 National Register of Historic Places, 1966-1988. Nashville, TN.
- California Office of Historic Preservation  
1986 National Register of Historic Places -- Listed Properties, as of August 1986. Correspondence.
- 1986 Survey of Surveys: A Summary of California's Historical and Architectural Resource Surveys.
- 1987 Inventory of Historic Structures -- Records entered into the OHP computer file of historic resources as of February 1987.
- 1988 Five Views: An Ethnic Sites Survey for California.
- 1990 California Historical Landmarks.
- 1991 Directory of Determinations of Eligibility:  
- Volume I: Historic Properties Directory (November 29, 1990)  
- Volume II: Archeological Sites Listing (December 19, 1991)
- 1992 California Points of Historical Interest. (May 1, 1992)
- National Park Service  
1979- National Register of Historic Places; Annual Supplemental  
1988 Listing of Historic Properties -- Listed and Eligible Properties. Federal Register:  
February 6, 1979; Vol. 44(26):7433, 7635;  
March 18, 1980; Vol. 45(54):17449, 17493, 17516;  
February 3, 1981; Vol. 46(54):10625, 10670;  
February 2, 1982; Vol. 47(22):4933, 4956, 4957, 4959;  
March 1, 1983; Vol. 48(41):8629, 8673;  
February 7, 1984; Vol. 49(26):4612, 4676;  
March 5, 1985; Vol. 50(43):8853, 8903;  
February 25, 1986; Vol. 51(37):6630, 6675, 6683, 8912; and  
May 24, 1988; Vol. 53(100):18662, 18709, 18748, 18758.
- San Bernardino County Museum  
1980 Historical Landmarks of San Bernardino County. Quarterly of the San Bernardino County Museum Association 28(1-2).

## SENSITIVITY OF PROJECT AREA FOR HISTORICAL RESOURCES:

Based upon the above information, available historical records and comparisons with similar environmental localities, the sensitivity assessment for this project area is:

	Low	Moderate	High	Unknown
Prehistoric Archaeological Resources	---	---	X	---
Historic Archaeological Resources	---	---	X	---
Historic Resources	---	---	X	---
Cultural Landscapes	---	---	---	X
Ethnic Resources	---	---	---	X

Comments: None

## RECOMMENDATIONS:

1. Conduct a field survey for historical resources, especially prehistoric and historic archaeological resources and historic resources, within portions of the project area not surveyed previously for such resources. See enclosed Referral List of Historical Resource Consultants qualified to perform this survey.
2. Contact the San Bernardino County Archives for information on historical property records. Contact James Hofer, Archives, 777 E. Rialto Ave., San Bernardino, CA 92415-0795, call for appointment, (909) 387-2030.
3. Inventory all historical resources, including archaeological and historic resources older than 45 years, and resources that have achieved significance within the last 50 years, using appropriate State record forms, following guidelines in the California Office of Historic Preservation manuals for archaeological and historic resources. Submit two copies of the completed forms to the San Bernardino County Archaeological Information Center for assignment of State trinomials.
4. Evaluate the significance and integrity of all historical resources within the project area, using criteria established in Appendix K of the CEQA Guidelines for important archaeological resources and/or 36 CFR 60.4 for eligibility for listing on the National Register of Historic Places.
5. Propose mitigation measures, and recommend conditions of approval (if a local government action), to eliminate adverse project effects to significant, important and unique historical resources, following appropriate CEQA and/or National Historic Preservation Act - Section 106 guidelines.
6. Prepare a technical historical resources management report, documenting the inventory, evaluation and proposed mitigation of resources within the project area (following guidelines for Archaeological Resource Management Reports prepared by the California Office of Historic Preservation, Preservation Planning Bulletin 4(a), December 1989). Submit one copy of the completed report (with original illustrations) to the San Bernardino County Archaeological Information Center for permanent archiving.

A California Environmental Quality Act (CEQA) Initial Study determination of "MAYBE" for potential adverse environmental impact to historical resources is warranted, unless it can be documented by a qualified professional that no resources older than 45 years in age exist on the property. Implementation of the above recommendations will ensure that existing historical resources will be inventoried and evaluated, and that appropriate mitigation measures will be recommended to avoid adverse impacts.

If appropriate mitigation measures are not proposed for significant historical resources within the project area, then subsequent destruction of these resources may violate the California Environmental Quality Act, National Environmental Policy Act, National Historic Preservation Act, California codes or various local government ordinances.

If prehistorical or historical artifacts over 50 years in age are encountered during land modification, then activities in the immediate area of the finds should be halted. A call should be placed to the San Bernardino County Archaeological Information Center, (909) 792-1497, and arrangements should be made for an on-site inspection by a qualified archaeologist. This professional will be able to assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act (CEQA), California codes and National Environmental Policy Act (NEPA).

If human remains are encountered on any property within San Bernardino County, then the San Bernardino County Coroner's office must be contacted, and all work within the immediate vicinity of the find halted until a clearance is given by that office and any other involved agencies. Contact the county coroner at 825 East Third Street, San Bernardino, CA 92415-0876; (909) 387-2978.

The County of San Bernardino requests that historical resource data and artifacts collected within this project area be permanently curated at a repository within the county. Per a State Historical Resources Commission motion, dated February 7, 1992, the repository selected should consider 36 CFR 79, Curation of Federally-Owned and Administered Archeological Collections; Final Rule, as published in the Federal Register, September 12, 1990, or as later amended, for archival and collection standards. For names and addresses of repositories within the county, please contact the Center at the address and telephone number above.



Robin E. Laska  
Acting Center Coordinator

HISTORICAL RESOURCES BY USGS QUADRANGLE  
Adelanto 7.5-minute Quadrangle

Prehistoric Archaeological Resources

Prehistoric Archaeological Sites

CA-SBR-1465	lithic reduction site
CA-SBR-1478	lithic scatter
CA-SBR-7555	campsite
CA-SBR-7558	lithic scatter
CA-SBR-7560	lithic scatter
CA-SBR-7748	stone circle

Prehistoric Isolates

A1583-1	flaked lithics
A1583-2	ground stone
A1583-3	flaked lithics
A1583-4	flaked lithics
A1583-5	flaked lithics
A1583-6	flaked lithics
A1583-7	flaked tools
A1583-8	flaked tools
A1583-9	flaked lithics
A1583-10	flaked lithics
A1583-11	flaked lithics
A1583-12	flaked lithics
A1583-31	ground stone
A1583-32	flaked tool
A1583-35	flaked lithics

Historic Archaeological Resources

Historic Archaeological Sites

CA-SBR-4020H	refuse disposal site
CA-SBR-4021H	refuse disposal site
CA-SBR-4674H	refuse disposal site
CA-SBR-5268H	refuse disposal site
CA-SBR-5445H	refuse disposal site
CA-SBR_6532H	refuse disposal site
CA-SBR-7090H	refuse disposal site
CA-SBR-7556H	structural site
CA-SBR-7557H	refuse disposal site
CA-SBR-7559H	refuse disposal site
CA-SBR-7561H	refuse disposal site
CA-SBR-7562H	refuse disposal site
CA-SBR-7747H	homesteading site
CA-SBR-7749H	refuse disposal site

Pending Historic Site

P1583-1H	military site
P1583-2H	military site
P1583-3H	military site

Adelanto continued...

**Historic Isolates**

A1583-13H	refuse disposal site
A1583-17H	glass bottle
A1583-20H	tinned cans
A1583-21H	refuse disposal site
A1583-22H	refuse disposal site
A1583-23H	refuse disposal site
A1583-24H	tinned cans
A1583-25H	metal hardware
A1583-26H	tinned cans
A1583-27H	tinned cans and glass
A1583-28H	glass bottle
A1583-29H	glass bottle
A1583-30H	glass bottle
A1583-34H	tinned cans

**Historic Resources**

**Pending Historic Resources**

PSBR-39H	power transmission line
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HISTORICAL RESOURCES BY USGS QUADRANGLE  
Helendale 7.5-minute Quadrangle

Prehistoric Archaeological Resources

Prehistoric Archaeological Sites

CA-SBR-184	habitation site
CA-SBR-2074	lithic reduction site
CA-SBR-3005	campsite
CA-SBR-3618/H	food processing site

Historic Archaeological Resources

Historic Archaeological Sites

CA-SBR-3618/H	residential site
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HISTORICAL RESOURCES BY USGS QUADRANGLE  
Victorville NW 7.5-minute Quadrangle

Prehistoric Archaeological Resources

Prehistoric Archaeological Site

CA-SBR-5332/H	stone circle
CA-SBR-7085	lithic quarry
CA-SBR-7086	lithic reduction site
CA-SBR-7087	lithic scatter
CA-SBR-7088	lithic reduction site
CA-SBR-7089	lithic scatter
CA-SBR-7553	lithic reduction site
CA-SBR-7672	lithic quarry
CA-SBR-7673	lithic reduction site
CA-SBR-7674	lithic scatter
CA-SBR-7682	lithic scatter
CA-SBR-7683	lithic scatter
CA-SBR-7684/H	lithic reduction site
CA-SBR-7685	lithic reduction site

Pending Prehistoric Archaeological Sites  
P1582-2                      campsite

Prehistoric Isolates

A1582-1	flaked lithics
A1582-2	flaked lithics
A1582-9	flaked lithics
A1582-10	flaked lithics
A1582-11	flaked lithics
A1582-13	flaked lithics
A1582-15	flaked lithics

Historic Archaeological Resources

Historic Archaeological Sites

CA-SBR-1067H	refuse disposal site
CA-SBR-5332/H	structural site
CA-SBR-7015H	mining site
CA-SBR-7084H	refuse disposal site
CA-SBR-7213H	refuse disposal site
CA-SBR-7554H	refuse disposal site
CA-SBR-7684/H	refuse disposal site
CA-SBR-7687H	structural site

Pending Historic Archaeological Sites  
P1582-1H                    mining site

Victorville NW continued...

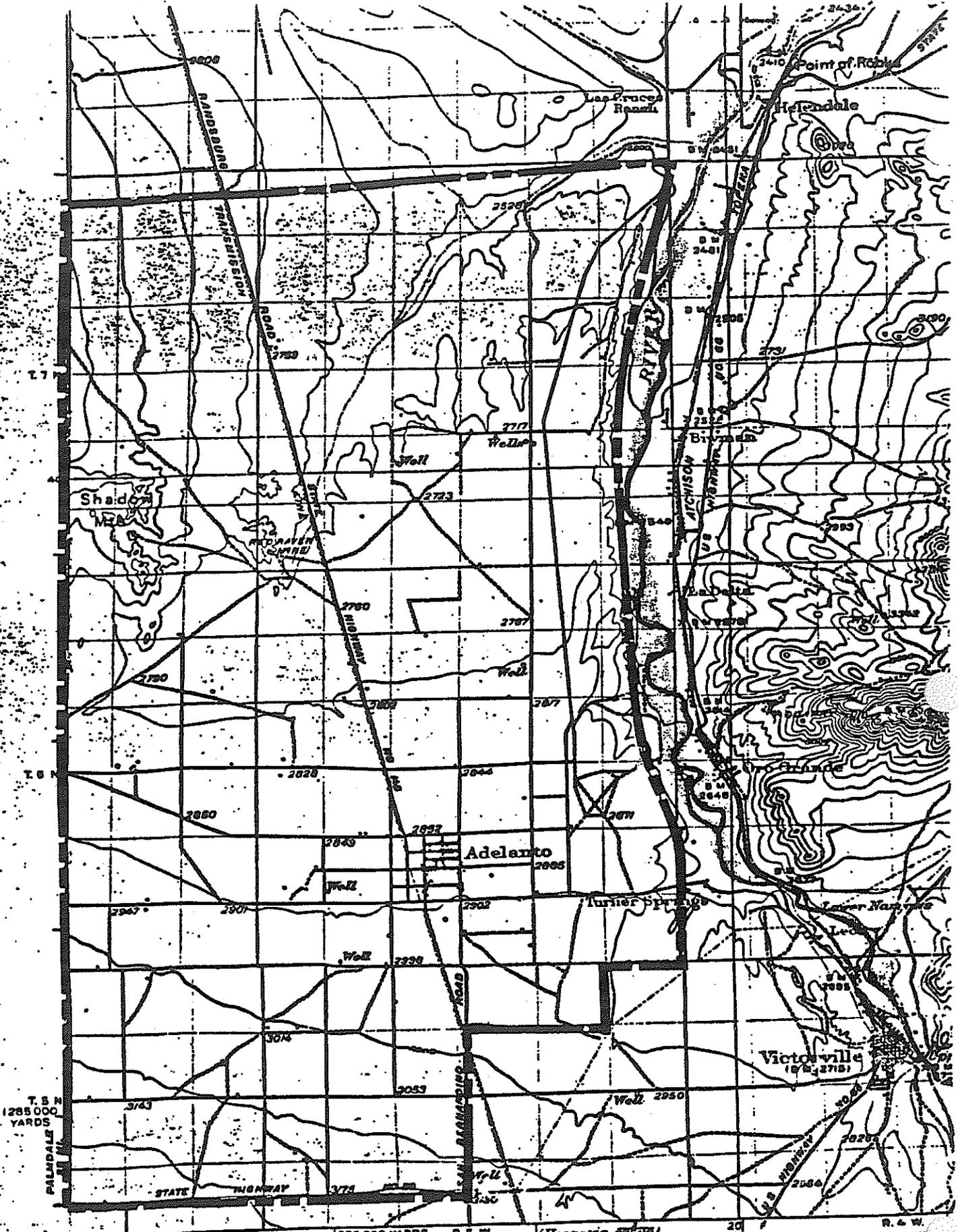
**Historic Isolates**

A1582-3H	tinned cans
A1582-4H	tinned cans
A1582-5H	tinned cans
A1582-6H	tinned cans
A1582-7H	tinned cans
A1582-8H	tinned cans
A1582-14H	tinned cans

**Historic Resources**

**Pending Historic Resources**

PSBR-39H	power transmission line
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Topography by W. G. Carson, W. R. Chenoweth, C. W. H. Nessler,  
 A. Fankhauser, R. C. Seitz, and City of Los Angeles  
 Control by U.S. Geological Survey,  
 U.S. Coast and Geodetic Survey, and City of Los Angeles  
 Surveyed in 1920 and 1932



AREA.REP  
05/19/94

City of Adelanto General Plan  
Area-Specific Reports

Document No.: 1060160 Unpublished Report  
BELL, STEPHEN  
1973 ENVIRONMENTAL IMPACT SURFACE SURVEY OF THE NW 1/4 OF THE NE 1/4 OF  
THE NE 1/4 OF SEC. 33, T7N R5W. SAN BERNARDINO COUNTY MUSEUM  
ASSOCIATION. SUBMITTED TO ALTON H. CLARKE. UNPUBLISHED REPORT ON FILE AT  
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Last Update: 11/14/88 Cataloged by: WRO-CA-03 on 11/14/88

Document No.: 1060166 Unpublished Report  
SAN BERNARDINO COUNTY MUSEUM ASSOCIATION  
1973 ARCHAEOLOGICAL SURVEY OF THE MOJAVE RIVER AQUEDUCT AND RECHARGE  
AREAS. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO NATIONAL  
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Last Update: 12/22/88 Cataloged by: WRO-CA-03 on 11/16/88

Document No.: 1060179 Unpublished Report  
SCHUILING, WALTER C.  
1973 ARCHEOLOGIC SURVEY, TRACT 8703. SAN BERNARDINO COUNTY MUSEUM  
ASSOCIATION. SUBMITTED TO JOHN SABOL. UNPUBLISHED REPORT ON FILE AT S.B.  
CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.  
Last Update: 11/16/88 Cataloged by: WRO-CA-03 on 11/16/88

Document No.: 1060257 Unpublished Report  
SAN BERNARDINO COUNTY MUSEUM ASSOCIATION  
1975 ARCHAEOLOGIC AND PALEONTOLOGIC ASSESSMENT: WASTEWATER FACILITIES  
FROM VICTORVILLE. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED  
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2024 ORANGE TREE LANE, REDLANDS, CA 92374.  
Last Update: 12/22/88 Cataloged by: WRO-CA-03 on 11/21/88

Document No.: 1060330 Unpublished Report  
HARRIS, RUTH D.  
1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT OF THE EAST 1/2 OF  
SECTION 12, T7N R5W, HELENDALE AREA, SAN BERNARDINO COUNTY. SAN  
BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO ROBERT OLDER.  
UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE,  
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Last Update: 04/05/89 Cataloged by: WRO-CA-03 on 11/30/88

Document No.: 1060354

Unpublished Report

HARRIS, RUTH D.

1976 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT FOR CITY OF ADELANTO STREET LIGHTING PROGRAM, SENIOR CENTER PROJECT, STREET CONSTRUCTION PROJECT. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO CITY OF ADELANTO. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/02/88

Cataloged by: WRO-CA-03 on 12/02/88

Document No.: 1060428

Unpublished Report

HEARN, JOSEPH E., RUTH D. SIMPSON, AND LARRY E. BURGESS

1976 ARCHAEOLOGICAL RESOURCES, MOJAVE WATER AGENCY, PROJECT NO. C-06-0822, VICTORVILLE AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO MOJAVE WATER AGENCY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/07/88

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Document No.: 1060528

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HEARN, JOSEPH E.

1977 ARCHAEOLOGICAL - HISTORICAL RESOURCES ASSESSMENT ZONE 6 - ADELANTO EAST CHANNEL, ADELANTO AREA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 12/15/88

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Document No.: 1060680

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SAN BERNARDINO COUNTY MUSEUM ASSOCIATION

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Last Update: 12/27/88

Cataloged by: WRO-CA-03 on 12/27/88

Document No.: 1060799

Unpublished Report

RECTOR, CAROL H., JAMES D. SWENSON, AND PHILIP J. WILKE

1979 ARCHAEOLOGICAL STUDIES AT ORO GRANDE MOJAVE DESERT, CALIFORNIA. ARCHAEOLOGICAL RESEARCH UNIT, UCR. SUBMITTED TO VICTOR VALLEY WASTEWATER RECLAMATION AUTHORITY. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 06/17/92

Cataloged by: WRO-CA-03 on 01/12/89

Document No.: 1060927

Unpublished Report

GARFINKEL, ALAN P.

1980 ARCHAEOLOGICAL SURVEY REPORT FOR A PROPOSED JET FUEL LINE FROM EDWARDS AIR FORCE BASE TO GEORGE AIR FORCE BASE, MOJAVE DESERT, SAN BERNARDINO AND LOS ANGELES COUNTIES, CALIFORNIA. FAR WESTERN ANTHROPOLOGICAL RESEARCH GROUP. SUBMITTED TO U.S. AIR FORCE. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.

Last Update: 01/18/89

Cataloged by: WRO-CA-03 on 01/18/89

Document No.: 1060969  
GARFINKEL, ALAN P.

Unpublished Report

1980 ADDENDUM REPORT TO AN ARCHAEOLOGICAL SURVEY REPORT FOR A PROPOSED  
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MOJAVE DESERT, KERN, SAN BERNARDINO AND LOS ANGELES COUNTIES,  
CALIFORNIA. FAR WESTERN ANTHROPOLOGICAL RESEARCH GROUP. SUBMITTED TO  
UNKNOWN. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE  
LANE, REDLANDS, CA 92374.

Last Update: 01/19/89

Cataloged by: WRO-CA-03 on 01/19/89

Document No.: 1061051

Unpublished Report

GEOSCIENTIFIC SYSTEMS AND CONSULTING

1980 FINAL REPORT: ARCHAEOLOGICAL/HISTORICAL ASSESSMENT OF GEORGE AIR  
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Last Update: 02/22/89

Cataloged by: WRO-CA-03 on 02/22/89

Document No.: 1061095

Unpublished Report

REYNOLDS, ROBERT E. AND JENNIFER REYNOLDS

1981 CULTURAL RESOURCES ASSESSMENT: PHELAN WATER LINES, COUNTY SERVICE  
AREA 70, IMPROVEMENT ZONE L, SAN BERNARDINO COUNTY, CALIFORNIA. SAN  
BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO SAN BERNARDINO COUNTY  
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Last Update: 04/05/89

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Document No.: 1061158

Unpublished Report

GREENWOOD, ROBERTA S. AND MICHAEL J. MCINTYRE

1981 CLASS III CULTURAL RESOURCE INVENTORY: ADELANTO-RINALDI 500 KV T/L  
CORRIDORS 1, 2, AND 3, LOS ANGELES DEPARTMENT OF WATER AND POWER.  
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Last Update: 04/05/89

Cataloged by: WRO-CA-03 on 03/13/89

Document No.: 1061159

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FOSTER, JOHN M. AND ROBERTA S. GREENWOOD

1984 ADDENDUM REPORT: INCREASED STUDY AREA, PROPOSED REALIGNMENT OF  
VICTORVILLE - RENALDI LINE 2. GREENWOOD AND ASSOCIATES. SUBMITTED TO  
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Last Update: 04/05/89

Cataloged by: WRO-CA-03 on 03/13/89

Document No.: 1061175

Unpublished Report

LERCH, MICHAEL K.

1981 CULTURAL RESOURCES ASSESSMENT OF PROPOSED IMPROVEMENT PROJECTS OF  
ADELANTO ROAD AND RANCHO ROAD, CITY OF ADELANTO, SAN BERNARDINO COUNTY,  
CALIFORNIA. SAN BERNARDINO COUNTY MUSEUM ASSOCIATION. SUBMITTED TO C M  
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Last Update: 04/05/89

Cataloged by: WRO-CA-03 on 03/20/89

Document No.: 1061280 Unpublished Report  
MACKO, MICHAEL E., EDWARD B. WEIL, JILL WEISBORD, AND JAMIE LYTTLE-WEBB  
1982 CLASS III CULTURAL RESOURCE SURVEY: INTERMOUNTAIN POWER PROJECT  
(IPP), INTERMOUNTAIN - ADELANTO BIPOLE I TRANSMISSION LINE,  
RIGHT-OF-WAY, CALIFORNIA SECTION. APPLIED CONSERVATION TECHNOLOGY.  
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Last Update: 04/10/89 Cataloged by: WRO-CA-03 on 04/10/89

Document No.: 1061320 Unpublished Report  
SUTTON, MARK  
1982 CULTURAL ASSESSMENT OF THE ROBERT "BIG BOB" T. OLDER ACCESS ROADS.  
MARK SUTTON. SUBMITTED TO BUREAU OF LAND MANAGEMENT - BARSTOW OFFICE.  
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Last Update: 04/17/89 Cataloged by: WRO-CA-03 on 04/17/89

Document No.: 1061336 Unpublished Report  
RECTOR, CAROL H., JAMES D. SWENSON, AND PHILIP J. WILKE  
1983 ARCHAEOLOGICAL STUDIES AT ORO GRANDE, MOJAVE DESERT, CALIFORNIA.  
CAROL H. RECTOR, JAMES D. SWENSON AND PHILIP J. WILKE. SUBMITTED TO  
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Last Update: 06/17/92 Cataloged by: WRO-CA-03 on 04/17/89

Document No.: 1061479 Unpublished Report  
DAMES & MOORE  
1985 MEAD/MCCULLOUGH-VICTORVILLE/ADELANTO TRANSMISSION PROJECT TECHNICAL  
REPORT: VOLUME IV, CULTURAL RESOURCES. DAMES & MOORE. SUBMITTED TO LOS  
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Last Update: 05/22/89 Cataloged by: WRO-CA-03 on 05/22/89

Document No.: 1061504 Unpublished Report  
GREENWOOD, ROBERTA S. AND JOHN M. FOSTER  
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AND POWER: VICTORVILLE-RINALDI 500 KV TRANSMISSION LINE 1: FINAL REPORT.  
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92374.  
Last Update: 06/02/89 Cataloged by: WRO-CA-03 on 06/02/89

Document No.: 1061646 Unpublished Report  
NORWOOD, RICHARD H.  
1987 A CULTURAL RESOURCE SURVEY FOR ADD/ALTER BOUNDARY FENCE, GEORGE AFB,  
CA. RICHARD H. NORWOOD. SUBMITTED TO GEORGE AIR FORCE BASE. UNPUBLISHED  
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Last Update: 06/23/89 Cataloged by: WRO-CA-03 on 06/23/89

Document No.: 1061734 Unpublished Report  
SHACKLEY, M. STEVEN, REBECCA MCCORKLE APPLE, JAN WOOLEY, AND ROBERT E.  
REYNOLDS

1987 CULTURAL AND PALEONTOLOGICAL RESOURCES SURVEY: US SPRINT FIBER OPTIC  
CABLE PROJECT, RIALTO, CALIFORNIA TO LAS VEGAS, NEVADA. DAMES & MOORE.  
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Last Update: 06/28/89 Cataloged by: WRO-CA-03 on 06/28/89

Document No.: 1061848 Unpublished Report  
PARR, ROBERT E.

1989 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF  
MINOR SUBDIVISION DN88-0223E LOCATED NEAR ADELANTO IN SAN BERNARDINO  
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Last Update: 06/30/89 Cataloged by: WRO-CA-03 on 06/30/89

Document No.: 1061851 Unpublished Report  
MURRY, JOHN

1989 ARCHEOLOGICAL RESOURCE ASSESSMENT COMPLETED FOR A 350+/- ACRE  
PROPOSED RUNWAY CONSTRUCTION PROJECT ON GEORGE AIR FORCE BASE,  
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ENGINEERS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE  
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Last Update: 07/03/89 Cataloged by: WRO-CA-03 on 07/03/89

Document No.: 1061907 Unpublished Report  
TAYLOR, THOMAS T.

1989 ARCHAEOLOGICAL SURVEY REPORT: INYOKERN-KRAMER 220KV TRANSMISSION  
LINE CONDUCTORING PROJECT: TOWER SITES, PULLING AREAS, SLEEVE AREAS AND  
WIRE SETUPS, KERN AND SAN BERNARDINO COUNTIES, CALIFORNIA. SOUTHERN  
CALIFORNIA EDISON. SUBMITTED TO UNKNOWN. UNPUBLISHED REPORT ON FILE AT  
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Last Update: 10/04/89 Cataloged by: WRO-CA-03 on 10/04/89

Document No.: 1061908 Unpublished Report  
TAYLOR, THOMAS T.

1989 ADDENDUM TO CULTURAL RESOURCE ASSESSMENT: KRAMER-VICTOR 115KV  
TRANSMISSION LINE PROJECT: HISTORIC DOCUMENTATION AND EVALUATION,  
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LINE, SAN BERNARDINO COUNTY, CALIFORNIA. SOUTHERN CALIFORNIA EDISON.  
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2024 ORANGE TREE LANE, REDLANDS, CA 92374.

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- Document No.: 1061909 Unpublished Report  
HAMPSON, R. PAUL  
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- Document No.: 1061915 Unpublished Report  
SMITH, GERALD A.  
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- Document No.: 1061927 Unpublished Report  
PADON, BETH, SCOTT CROWNOVER, JANE ROSENTHAL, AND REBECCA CONARD  
1989 CULTURAL RESOURCES ASSESSMENT: SOUTHERN CALIFORNIA GAS COMPANY PROPOSED LINE 335, LOS ANGELES AND SAN BERNARDINO COUNTIES. LSA ASSOCIATES, INC. SUBMITTED TO SOUTHERN CALIFORNIA GAS CO. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.  
Last Update: 10/05/89 Cataloged by: WRO-CA-03 on 10/05/89
- Document No.: 1062128 Unpublished Report  
PARR, ROBERT E., RICHARD OSBORNE, AND MARK G. SUTTON  
1990 ARCHAEOLOGICAL INVENTORY, TESTING AND EVALUATION FOR THE SOUTHERN CALIFORNIA EDISON KRAMER-VICTOR 220 KV TRANSMISSION LINE PROJECT. CSUB, CULTURAL RESOURCE FACILITY. SUBMITTED TO SOUTHERN CALIFORNIA EDISON. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.  
Last Update: 10/10/90 Cataloged by: WRO-CA-03 on 10/10/90
- Document No.: 1062257 Unpublished Report  
BUREAU OF LAND MANAGEMENT  
1978 ARCHAEOLOGICAL SITES OF THE CALIFORNIA DESERT AREA (CALICO, KRAMER, STODDARD, JOHNSON, MORONGO, TWENTYNINE PALMS) TRANSECT FORMS. UNKNOWN. SUBMITTED TO BUREAU OF LAND MANAGEMENT. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE TREE LANE, REDLANDS, CA 92374.  
Last Update: 11/02/91 Cataloged by: WRO-CA-03 on 10/23/91
- Document No.: 1062283 Journal Article  
KING, CHESTER  
1989 REVIEW OF SHELL BEAD AND ORNAMENT EXCHANGE BETWEEN CALIFORNIA AND THE WESTERN GREAT BASIN BY BENNYHOFF AND HUGHES. JOURNAL OF CALIFORNIA AND GREAT BASIN ANTHROPOLOGY, 11(2):268-270.  
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Document No.: 1062399 Unpublished Report  
MCGUIRE, KELLY R. AND LESLIE GLOVER  
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CORRIDOR FROM ADELANTO TO WARD VALLEY, SAN BERNARDINO COUNTY,  
CALIFORNIA. FAR WESTERN ANTHROPOLOGICAL RESEARCH GROUP. SUBMITTED TO  
SOUTHERN CALIFORNIA GAS CO. UNPUBLISHED REPORT ON FILE AT S.B. CO.  
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Document No.: 1062421 Unpublished Report  
DROVER, CHRISTOPHER E.  
1991 ENVIRONMENTAL IMPACT EVALUATION: AN ARCHAEOLOGICAL ASSESSMENT OF THE  
COMMUNITY FACILITIES DISTRICT 9D-1 NORTHERN SEWER TRUNK PROJECT,  
VICTORVILLE, CALIFORNIA. CHRISTOPHER DROVER. SUBMITTED TO CITY OF  
VICTORVILLE. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024 ORANGE  
TREE LANE, REDLANDS, CA 92374.  
Last Update: 05/20/92 Cataloged by: WRO-CA-03 on 05/20/92

Document No.: 1062440 Unpublished Report  
TAYLOR, THOMAS T.  
1991 ARCHAEOLOGICAL SURVEY REPORT: VICTOR-COOLGLEN-KRAMER 115 KV  
TRANSMISSION LINE RIGHT-OF-WAY, SAN BERNARDINO COUNTY, CALIFORNIA.  
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Document No.: 1062441 Unpublished Report  
YORK, ANDREW  
1991 ARCHAEOLOGICAL INVENTORY OF A PROPOSED FIBER OPTICS CABLE ROUTE  
BETWEEN RIDGECREST AND HELENDALE, CALIFORNIA. DAMES & MOORE. SUBMITTED  
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Last Update: 05/20/92 Cataloged by: WRO-CA-03 on 05/20/92

Document No.: 1062570 Unpublished Report  
SHEETS, ROBERT AND CRAIG WOODMAN  
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MARTIN MARIETTA SYSTEMS. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM,  
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Document No.: 1062651 Unpublished Report  
BLAIR, LYNDA A.  
1992 KERN RIVER GAS TRANSMISSION COMPANY, ADELANTO LATERAL ALTRNATE "A",  
SAN BERNARDINO COUNTY, CALIFORNIA. UNIVERSITY OF LAS VEGAS-DIVISION OF  
ENVIRONMENTAL ASSESSMENT. SUBMITTED TO BUREAU OF LAND  
MANAGEMENT-BARSTOW. UNPUBLISHED REPORT ON FILE AT S.B. CO. MUSEUM, 2024  
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Last Update: 01/06/93 Cataloged by: WRO-CA-03 on 01/06/93

Document No.: 1062731 Unpublished Report  
MACKO, MICHAEL E., JEANNE D. BINNING, DAVID D. EARLE, AND PAUL E.  
LANGENWALTER  
1993 NATIONAL REGISTER ELIGIBILITY DETERMINATIONS FOR HISTORIC RESOURCES  
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Last Update: 09/22/93 Cataloged by: WRO-CA-03 on 09/22/93

Document No.: 1062735 Unpublished Report  
YOHE, ROBERT M. II  
1993 ARCHAEOLOGICAL TEST EXCAVATIONS ALONG THE ORO GRANDE SEWER PIPELINE  
ALIGNMENT, VICTORVILLE, SAN BERNARDINO COUNTY, CA. CSUB. SUBMITTED TO  
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Document No.: 1062795 Unpublished Report  
HAMPSON, R. PAUL, JAMES J. SCHMIDT, AND JUNE A. SCHMIDT  
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Document No.: 1062796 Unpublished Report  
MCKENNA, JEANETTE A.  
1993 CULTURAL RESOURCES INVESTIGATIONS, SITE INVENTORY AND EVALUATIONS,  
THE CAJON PIPELINE CORRIDOR, LOS ANGELES AND SAN BERNARDINO COUNTIES.  
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Document No.: 1062854 Unpublished Report  
CUNKELMAN, SARAH C. AND JOHN R. MURRAY  
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OVER.REP  
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USGS Adelanto 7.5 Quad  
Overview Reports

Document No.: 1060891

Unpublished Report

STICKEL, E. GARY AND LOIS J. WEINMAN-ROBERTS

1980 AN OVERVIEW OF THE CULTURAL RESOURCES OF THE WESTERN MOJAVE DESERT.  
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Last Update: 01/17/89

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OVER.REP  
02/09/96

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Document No.: 1062044  
SCHNEIDER, JOAN S.

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PAPER PRESENTED AT THE KELSO CONFERENCE ON THE PREHISTORY OF THE MOJAVE  
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Document No.: 1062164  
BEAN, LOWELL JOHN, AND SYLVIA BRAKKE VANE (EDITORS)

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Document No.: 1060719 Unpublished Report  
COOMBS, GARY B., RICHARD MCCARTY, TARA SHEPPERSON, AND SHARON DEAN  
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TORRES, JOHN, DAVID EARLE, SEAN CONNELL, AND STEPHEN WELLS  
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SAN BERNARDINO COUNTY, CALIFORNIA. UNIV. OF CALIF. RIVERSIDE,  
ARCHAEOLOGICAL RESEARCH UNIT. SUBMITTED TO TIERRA MADRE CONSULTANTS.  
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02/09/96

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Overview Reports

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Last Update: 01/17/89

Cataloged by: WRO-CA-03 on 01/17/89

CALIFORNIA  
ARCHAEOLOGICAL  
INVENTORY



ARCHAEOLOGICAL INFORMATION CENTER  
San Bernardino County Museum  
2024 Orange Tree Lane  
Redlands, California 92374  
(909) 792-1497  
(909) 798-8585 - FAX

November 5, 1993

To: To All Users of the Archaeological Information Center  
From: Robin E. Laska, Acting Coordinator  
Subject: WHY CALIFORNIA ARCHAEOLOGICAL INFORMATION IS CONFIDENTIAL

Cultural resources are nonrenewable and easily damaged--their scientific and aesthetic values can be significantly impaired by disturbance. In order to prevent vandalism and artifact hunting, and to protect landowners from trespass, the locations of cultural resources are confidential. California Government Code Section 6254.10 exempts archaeological site information from the California Public Records Act which requires that public records be open to public inspection.

Access to site location information is usually limited to:

- 1) landowners;
- 2) cultural resource consultants;
- 3) scholarly researchers working under the supervision of a college professor or a professional archaeologist.

Those granted access to the archives of the Information Center sign an Agreement of Confidentiality whereby they agree to keep site location information confidential by not disclosing it to unauthorized individuals or including it in publicly-distributed documents.

## REFERRAL LIST OF HISTORICAL RESOURCE CONSULTANTS

This is a partial, alphabetically ordered, list of individuals, firms and institutions that are minimally qualified to conduct historical resource evaluations in compliance with federal and state environmental laws. It is composed of all parties who have requested listing by this Information Center and who have either been certified by the Society of Professional Archaeologists without subsequent sanctioning, or who have demonstrated abilities to identify, evaluate or restore historic buildings and historic engineering structures.

The Information Center provides a copy of this list without charge when field inspection is recommended, periodically as updated to all agencies with which we have regular professional or advisory contact, and upon request.

This list has been prepared, in part, in accordance with guidelines stipulated by the Office of Historic Preservation. Inclusion on this list does not constitute endorsement or recommendation by the California Office of Historic Preservation or this Information Center. Neither recommendation pertaining to individuals listed nor evaluations of their work are made by this Information Center.

Questions regarding this list may be directed to William Seidel, Coordinator of the California Archaeological Inventory, Office of Historic Preservation, at (916) 653-9125.

For Archaeological Field Research, recommended consultants include:

Archaeological Advisory Group  
Archaeological Associates  
Archaeological Consulting Services  
Archaeological Research Unit  
Biometrics Analysis  
Stephen Bosterman  
Chabbers Group  
CM TECH  
Christopher Brewer  
Beverly Research Institute  
Brian Billion  
EPC Environmental and Energy Services  
Greenwood and Associates  
Ipsana Archaeological Research Consultants  
R. Paul Hanson  
Heritage Environmental Archaeological Research Team (HEART)  
Heritage Resource Consultants  
Institute for Archaeological Research  
Keith Companies  
LSA Associates, Inc.  
Mack Archaeological Consulting  
McKenna et al.  
Peat, L. Associates  
Petra Resources, Inc.  
Paine Payton  
RECON

For Historic Archaeological Research, recommended consultants include:

Archaeological Consulting Services  
Chabbers Group  
Greenwood and Associates  
R. Paul Hanson  
Heritage Resource Consultants  
Keith Companies  
McKenna et al.  
Anne Ruffield Stoll

For Archaeological Resource Management, recommended consultants include:

Chabbers Group  
Greenwood and Associates  
R. Paul Hanson  
Keith Companies  
LSA Associates, Inc.  
Peat, L. Associates

For Historic Resource Surveys, recommended consultants include:

Archaeological Advisory Group  
Chabbers Group  
Keith Companies  
Paine Payton  
PMI Associates  
RECON

For Architectural Historical Research, recommended consultants include:

Archaeological Consulting Services  
Chabbers Group  
Keith Companies  
PMI Associates  
RECON  
Archaeological Advisory Group

For Historical Research, recommended consultants include:

Chabbers Group  
Keith Companies  
Paine Payton  
PMI Associates  
RECON

For Historical Architectural Evaluations, recommended consultants include:

RECON  
Robert David Sawyer

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- James Brock -- Archaeological Field Research (SDPA)  
Historical Archaeological Research (SDPA)
- John Elliott -- Historic Structures Survey  
Historical Research

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- David Van Horn -- Archaeological Field Research (SDPA)

Archaeological Consulting Services  
P.O. Box 39  
13826 Pollard Drive  
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- J. Stephen Alexandrowicz -- Archaeological Field Research (SDPA)  
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- Kim Tressline -- Archaeological Field Research (SDPA)

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- Archaeological Field Research (SOPA)
- Archaeological Field Research (SOPA)

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- Allan J. Schlitz  
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- Archaeological Field Research (SOPA)
- Historical Archaeological Research (SOPA)

- Roberto Greenwood

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Matheway and Associates  
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- Historic Structures Survey
- Architectural Historical Research
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- Roger Matheway

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La Mirada, CA 90638-1674  
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- Historical Archaeological Research (SOPA)

- Paul Langemalter II

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Calabasas, CA 91302  
(818) 880-0338

- Archaeological Field Research (SOPA)

- Robert Miodareki

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Iguana Archaeological Research Consultants  
P.O. Box 54134  
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- Barry Scott

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- Dr. L. Kyle Nepton

- Archaeological Field Research (SOPA)

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Santa Ana, CA 92799  
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- Dr. Paul Chace

- Archaeological Field Research (SOPA)
- Historical Archaeological Research (SOPA)
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- Bradley Stura

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Huntington Beach, CA 92646  
(714) 965-3294

- Michael Racho

- Archaeological Field Research (SOPA)

McKenna et al.  
4202 Friends Avenue  
Whittier, CA 90601  
(310) 696-3852

- Jeanette McKenna

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- Historical Archaeological Research (SOPA)

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Huntington Beach, CA 92603  
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-- Archaeological Field Research (SOFA)  
Archaeological Resource Management (SOFA)

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Ric Windmiller

- Nancy A. Whitney-Demutels -- Archaeological Field Research (SOFA)

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Southern California and Desert Research Office  
24307 Magic Mountain Parkway, Suite 861  
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-- Archaeological Field Research (SOFA)  
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Patricia Jerthberg  
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Shelley Bookspan and  
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- Ronald Bissell

