



Chapter 5: Natural Environment

Open Space and Biological Resources Program Implementation Matrix (Part 2 of 2)

| No. | Name | City of Azusa | | | | | | | | | | City of Azusa | | | | Schedule * as funding permits | |
|---------|--|---|---|------------------------------------|---------|---------|---|--------------------------------|---|-------------------------------------|------------------------------|---------------------|--------------|--------------------|-------|-------------------------------------|---------|
| | | Administration (Admin., Info. Tech., and/or Transportation) | Community Development (Planning, Business Licenses, Code Enforcement, Building) | Economic Development/Redevelopment | Finance | Library | Light & Water (Electricity, Solid Waste, & Water) | Parks Planning and Development | Public Safety (Police & Emer. Services) | Public Works (Engineering & Maint.) | Recreation & Family Services | Planning Commission | City Council | Los Angeles County | Other | | |
| Program | | Responsible Agency | | | | | | | | | | Funding Source | | | | Schedule * as funding permits | |
| OS14 | Transfer of Development Credits | ● | | | | | ● | | | | | ● | ● | | | ● | 2009 |
| OS15 | Street Tree and Public Space Landscaping Palette | ● | | | | | | | | | | ● | ● | | | ● | 2005 |
| OS16 | Natural Areas Within Public Open Space | ● | | | | | ● | | | | | ● | ● | | | ● | Ongoing |
| OS17 | Native Plant Public Education | ● | | | | | ● | | | | | ● | ● | | | ● | Ongoing |
| OS18 | Vacant Land Native Habitat | ● | | | | | | | | | | ● | ● | | | ● | Ongoing |
| OS19 | Riparian/Stream Habitat Development Standards | ● | | | | | | | | | | ● | | | | | Ongoing |
| OS20 | Improve Biological Resource Value and Integrity | ● | | | | | | | | | | ● | | | | | Ongoing |
| OS21 | SGLARMC Strategic Plan | ● | | | | | | | | | | ● | | | | | Ongoing |
| OS22 | Native Habitat Buffer Zone | ● | | | | | | | | | | ● | ● | | | | Ongoing |
| OS23 | Reintroducing Declining or Extinct Species | ● | | | | | | | | | | ● | | | | ● | 2009 |
| OS24 | Exotic Pest Plant Control | ● | | | | | ● | | | | | ● | ● | | | ● | 2009 |
| OS25 | Habitat Studies on Quarry Sites | ● | | | | | | ● | | | | ● | ● | | | ● | Ongoing |
| OS26 | Restoration Funding | | | | | | | ● | | | | ● | | | | | Ongoing |
| OS27 | Oak tree preservation ordinance | | ● | | | | | | | | ● | ● | | | | | 2005 |

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Geology Hazards

Statutory Requirements

Government Code Section 65302 (g) states the following:

"The General Plan shall include a safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope stability leading to mudslides and landslides; subsidence and other geological hazards known to the legislative body; flooding and wild land and urban fires."

Geology Hazards Big Ideas

The Big Ideas for the Geologic Hazards Element are:

- update and redefine liquefaction hazard areas;
- post hazard maps on the City web site;
- prepare natural resources curriculum for schools;
- natural hazards preparedness to neighborhood watch;
- establish periodic tours of aggregate mines; and
- conduct natural disaster preparedness public education programs.

Geology Hazards Existing Conditions

Geology conditions in and around Azusa are reflected in the nature of the steep mountains, low foothills, and relatively flat valleys that make up the city area. There are some geologic conditions that benefit the community and some that can cause problems if proper precautions are not taken (Figure Geo-1).

In the northwest and north mountainous areas of the City, the land is generally too steep and bedrock

is too unstable for most construction. Construction is possible in selected areas of the mountains, but many precautions must be taken to avoid land sliding, severe erosion, and earthquake shaking hazards. Azusa's foothills just northeast and east of the central City are less steep and more stable than the mountains. While there is, therefore, more potential for safe development, some slope stability, erosion and mudflow potential remains in certain areas. Potential movement on some earthquake faults will provide challenges for certain types of construction (e.g., such faults as were discovered in the Monrovia Nursery area).

Flatter valley areas make up most of the City. Sand and gravel mining at two locations have provided mineral resources for the Valley area. Expansion of mining activities is technically possible if done in a way to minimize slope stability hazards to surrounding properties and important facilities such as roads and utilities. Potential earthquake fault hazards also exist for the valley area and must be considered carefully for safe future growth of educational, health care, commercial, industrial, and residential development.

The valley also has a relatively shallow groundwater table that is pumped for public use. The hazard of liquefaction, where a buried saturated sand layer liquefies during an earthquake, is present over nearly all of the City's valley due to the shallow water and strong earthquake shaking potential. Further study may reduce the current liquefaction hazard area.

The water supply in the City is safe, but some of the groundwater lying in aquifers under the City has been contaminated. These areas of contamination are known and programs are in place to clean the water.

Flooding potential exists in the City areas near the San Gabriel River for extraordinary storm rainfall and runoff. By regulation, development must re-



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ADD FIGURE GEO-1



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main out of the 100-year flood plain boundaries. This hazard can be controlled by existing or new-engineered barriers that contain the water in the channel. Also it is considered a fairly low potential for a severe earthquake to cause flooding due to the failure of Morris, San Gabriel, and/or Cogswell Dams.

Geologic Hazard Planning Issues are:

- All in all geology, soils, earthquake, and water conditions are well understood, which will allow City planners to make sound decisions regarding the path for future growth in the City.
- If the latest Uniform Building Code practices and State/County hazards maps are considered, redevelopment and new development can be accomplished safely.
- The greatest constraints on new development will be in the mountainous areas and the least will be in the valley area away from active earthquake faults.
- The foothill areas and valley areas near active faults will require special precautions; the City has considered these previously.
- Ongoing and future programs will assure the safety of groundwater and clean up of existing water contamination.
- Flood risks are primarily associated with areas very near the San Gabriel River, but can be a concern in small foothills canyons, and near drainage structures (e.g., culvert, inlet and outlet features).
- There are opportunities to further develop sand and gravel resources in a manner compatible with City goals.

Vision

Azusa residents, businesses, and property will be protected from naturally occurring hazards.

Geology Hazards Goals and Policies

GOAL

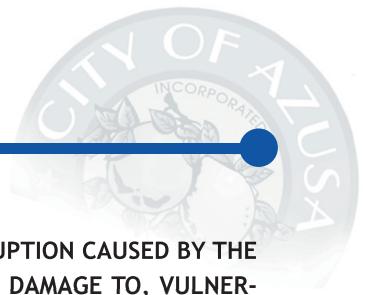
- 1 ENSURE THE CONTINUED FUNCTIONING OF ESSENTIAL (CRITICAL, SENSITIVE AND HIGH-OCCUPANCY) FACILITIES FOLLOWING A DISASTER; HELP PREVENT LOSS OF LIFE FROM THE FAILURE OF CRITICAL AND SENSITIVE FACILITIES IN AN EARTHQUAKE; AND HELP PREVENT MAJOR PROBLEMS FOR POST-DISASTER RESPONSE, SUCH AS DIFFICULT OR HAZARDOUS EVACUATIONS OR RESCUES, NUMEROUS INJURIES, AND MAJOR CLEANUP OR DECONTAMINATION OF HAZARDOUS MATERIALS.

POLICIES

- 1.1 Require that earthquake survival and efficient post-disaster functioning are primary concerns in the siting, design and construction standards of essential facilities. (Geo1, Geo4, Geo13, and Geo17)
- 1.2 Require that proposed essential facilities apply the most current professional standards for seismic design and be subject to seismic review, including detailed site investigations for faulting, liquefaction, ground motion characteristics, and slope stability. (Geo1, Geo2, Geo4, Geo5, Geo13, and Geo27)
- 1.3 Prohibit the location of Critical Facilities within an identified active fault zone or potentially active fault zone of concern (or future Alquist-Priolo Earthquake Fault Zone, Figure Geo- 2), unless it is determined by a qualified geologic engineer that a closer location will not result in undue risks based on detailed site investigations. (Geo1, Geo11, Geo14, and Geo27)
- 1.4 Prohibit the location of Sensitive and High-Occupancy facilities within 100 feet of the identified active fault zone or potentially active fault zone of concern, unless it

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INSERT FIGURE GEO-2



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is determined by a qualified geologic engineer that a closer location will not result in undue risks based on detailed site investigations. (Geo1, Geo2, Geo11, Geo14, and Geo27)

1.5 Attempt to locate Critical and Sensitive structures in areas with continuous road access where utility services can be maintained in the event of an earthquake. (Geo1, Geo10, and Geo27)

1.6 Encourage owners of existing Critical and Sensitive Facilities with significant seismic vulnerabilities to upgrade, relocate or phase out the facilities as appropriate. (Geo4 and Geo17)

1.7 Incorporate planning for potential seismic incidents affecting Critical, Sensitive and High-Occupancy Facilities into the City's contingency plans for disaster response and recovery. (Geo17, Geo24, Geo26, and Geo27)

1.8 Require that all existing essential facilities located in areas of potential geologic, seismic and soils hazards maintain emergency response plans, with contingencies for all appropriate hazards. (Geo6, Geo7, Geo8, Geo9, Geo11, Geo17, Geo26, Geo28, and Geo30)

Hazardous Structures

GOAL

2 MINIMIZE TO THE GREATEST EXTENT FEASIBLE THE LOSS OF LIFE, SERIOUS INJURIES, AND MAJOR SO-

CIAL AND ECONOMIC DISRUPTION CAUSED BY THE COLLAPSE OF, OR SEVERE DAMAGE TO, VULNERABLE STRUCTURES (E.G., BUILDINGS, BRIDGES, WATER STORAGE FACILITIES, KEY RAILROAD COMPONENTS) RESULTING FROM AN EARTHQUAKE.

POLICIES

2.1 Re-evaluate the seismic review procedures for tilt-up structures and other potentially hazardous buildings in the City at appropriate points in the structures' history to ensure their seismic integrity. (Geo4, Geo6, Geo7, Geo8, and Geo15)

2.2 Establish incentives for owners of potentially hazardous buildings² that would serve to encourage the seismic retrofitting of vulnerable structures. (Geo4)

Flooding and Drainage

GOAL

3 PROTECT LIVES AND PROPERTY AND ENSURE THAT STRUCTURES PROPOSED FOR SITES LOCATED ON FLOOD PLAINS SUBJECT TO THE 100-YEAR FLOOD ARE PROVIDED ADEQUATE PROTECTION FROM FLOODS WHILE PRESERVING AS OPEN SPACE IN THOSE AREAS THAT CANNOT BE MITIGATED FOR FLOOD HAZARD.

POLICIES

3.1 Support a multi-use concept of flood plains, flood-related facilities, and waterways, including, where appropriate, the following uses: flood control, groundwater recharge, open space, nature study, habitat preservation, pedestrian, eques-

² Examples of hazardous structures include: Non-ductile concrete frame buildings; inadequately designed pre-cast/tilt-up construction; multi-story buildings with soft structures; inadequately designed structures with geometric irregularities, mobile homes, residential buildings or other structures not properly secured to their foundations; dilapidated buildings; buildings with unusual interior and exterior nonstructural hazards; bridges, over passes, tunnels; dams and water tanks.

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trian, and bicycle circulation, and outdoor sports, and recreation. (Figure Geo-3) (Geo12 through Geo20)

- 3.2 Where feasible, given flood control requirements, maintain the natural condition of waterways and flood plains to ensure adequate groundwater recharge and water quality, preservation of habitat, and access to mineral resources. (Geo13 through Geo20)
- 3.3 Coordinate with the U.S. Army Corps of Engineers and Los Angeles County throughout construction, mitigation, and operation of the various components/projects that will directly affect the City and Sphere of Influence Area. (Geo13 through Geo20)
- 3.4 Support the intent of the County of Los Angeles' flood control policies as specified in the County General Plan. The County's detailed flood policies specify a range of protective measures, encourage coordination among jurisdictions, and acknowledge the need for a multi-use concept of streams and creeks. (Geo13 through Geo20)
- 3.5 Cooperate with all public and private agencies involved to ensure that flood control improvements do not disrupt environmentally sensitive areas beyond a level of basic necessary mitigation. (Geo13 through Geo20)

Emergency Preparedness and Education

GOAL

- 4 DURING A DISASTER, PROVIDE AN EFFECTIVE EMERGENCY RESPONSE THAT LIMITS THE LOSS OF LIFE AND CURTAILS PROPERTY DAMAGE AND SOCIAL DISLOCATION (I.E. HOMELESSNESS); EN-**

HANCES EMERGENCY PREPAREDNESS THROUGH COMMUNITY EDUCATION AND SELF-HELP PROGRAMS; AND MINIMIZE TO THE GREATEST EXTENT FEASIBLE SERIOUS DAMAGE AND INJURIES THROUGH EFFECTIVE HAZARD MITIGATION.

POLICIES

- 4.1 Ensure that emergency preparedness is the mutual responsibility of City agencies, residents, schools, and the business community. (Geo20, Geo23, Geo25, Geo26, Geo29, Geo30, and Geo31)
- 4.2 Incorporate three elements into the City's emergency preparedness program: hazard mitigation, disaster response, and resident, business and industry self-sufficiency/mutual support. (Geo19 through Geo25, and Geo30)
- 4.3 Periodically evaluate the appropriateness and effectiveness of the City's disaster response plans and update these as necessary. (Geo19, Geo23, Geo29, and Geo30)

Post-Disaster Reconstruction

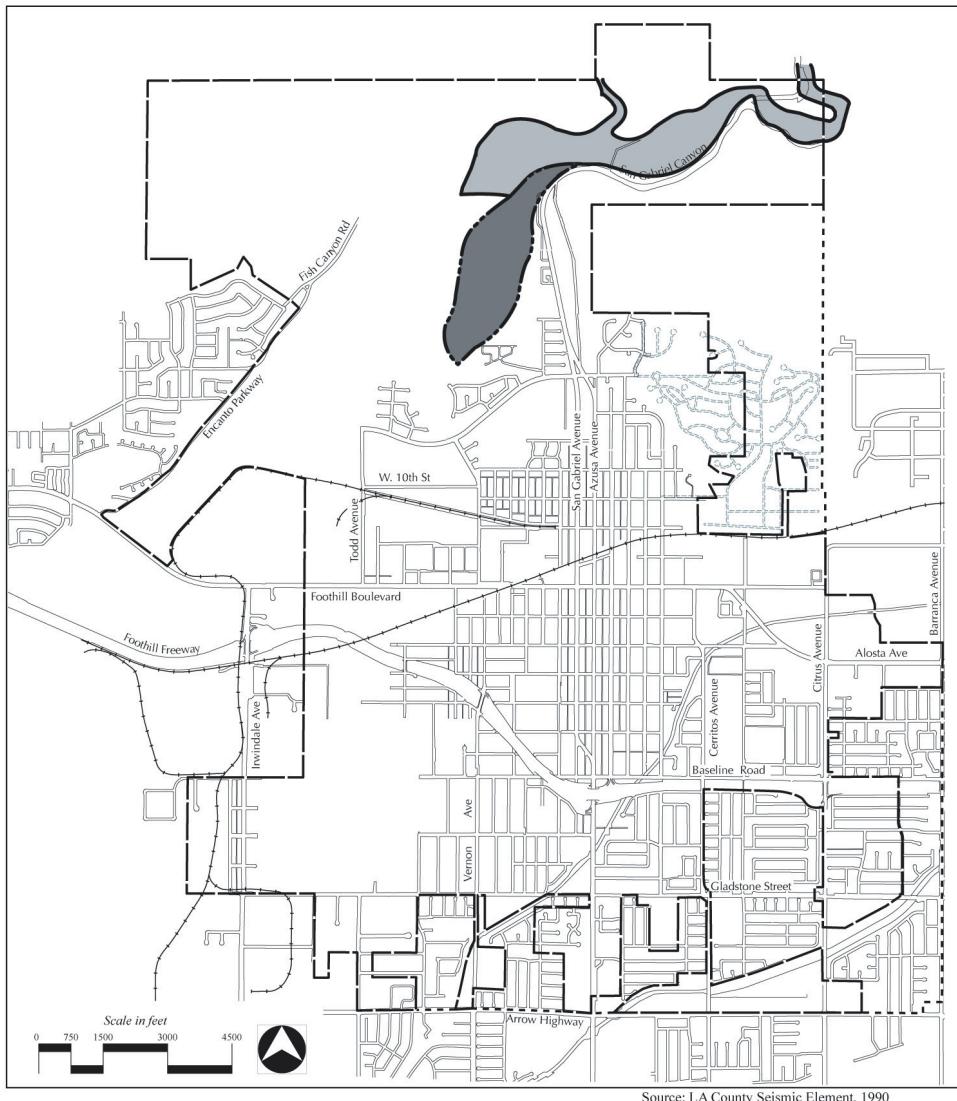
GOAL

- 5 ENCOURAGE THE PREPARATION OF A PLAN TO FACILITATE THE RAPID AND EFFECTIVE RECOVERY OF THE CITY FOLLOWING AN EARTHQUAKE. IDENTIFY ALTERNATIVE FINANCING SOURCES FOR THE REPAIR AND RECONSTRUCTION OF DISASTER RELATED DAMAGE.**

POLICIES

- 5.1 Participate in the development of programs and procedures that emphasize coordination between appropriate public agencies and private entities, promote the rapid reconstruction of the City following an earthquake, and facilitate an upgrading of the built environment, as opportunities allow. (Geo19, Geo23, Geo29, and Geo30)

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Source: LA County Seismic Element, 1990
FEMA, 1980

LEGEND:

— City of Azusa Boundary
- - - Sphere of Influence Boundary

[Grey Box] Areas of 100-year Flood; base flood elevations and flood hazard factors not determined.

[Black Box] 500-year Flood Areas- Boundary revised locally to encompass Zone B of FIRM Map

[Dark Grey Box] 100-year Flood Areas- Boundary revised locally to correspond to Zone A of FIRM Map



Flood Plain Boundary Map

GENERAL PLAN UPDATE

FIGURE GEO-3

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- 5.2 Establish the mitigation of earthquake hazards as a high priority for City programs, both before and after an earthquake. (Geo1, Geo3, Geo19 through Geo22, and Geo30)
- 5.3 Ensure the development of plans and procedures that allow the City to declare itself a disaster area and receive its fair share of federal and state emergency funds in the event of a serious earthquake. (Geo19 and Geo30)

Geology Hazards Implementation Programs

GEO1 DEVELOPMENT, BUILDING, AND GRADING CODES AND ORDINANCES

- The building, development, and grading codes shall be amended, where appropriate, to:
 - reflect standards modified by the policies herein. Specifically, they shall incorporate standards for a) the siting, seismic design, and review of Critical, Sensitive and High-Occupancy Facilities; and b) the review of slope stability and soil hazards for new developments prior to discretionary review; and
 - prohibit construction on slopes exceeding 50 percent and mass grading on slopes exceeding 25 percent. The codes shall also require the clustering of units and the reduction of density for proposed developments sited on a 15–25 percent grade.
- Development and building codes shall be amended for the dam failure inundation area to encourage discretionary approval of the Planning Commission and applicable review criteria for:
 - The limited expansion of Critical Facilities. New construction of Critical

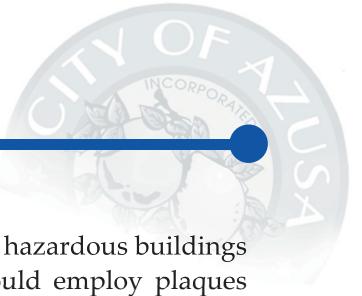
Facilities in a potential dam failure inundation area shall be prohibited;

- Sensitive Facilities including: nursing homes, senior citizen housing and other low-mobility uses, where rapid evacuation capabilities may be inhibited; and commercial and industrial facilities housing hazardous materials, or potentially hazardous operations requiring safe shutdown procedures; and
- High-occupancy Facilities and all assembly occupancies of 100 or more occupants.

- Amend the building and development codes to ensure that proposed developments incorporate drainage systems and appropriate landscape materials designed to prevent geologic and soils instability, including bedrock and soil slippage.
- Development regulations shall be amended to prevent Critical Facilities from being located within 150 feet of an identified active fault or potentially active fault of concern found in the City's database or from field investigation. This distance may be modified if it is determined by a qualified geologic consultant that no adverse risk would occur based on field surveys, borings, and other relevant data and analysis. Any building intended for human occupancy shall be constructed at least fifty feet from either side of an active or potentially active fault.

GEO2 SENSITIVE AND HIGH-OCCUPANCY FACILITIES SITING NEAR FAULTS

Sensitive and High-Occupancy Facilities shall require the discretionary approval of the Planning Commission if they are to be sited within 150 feet of an identified active fault or potentially active fault of concern. In any case Sensi-



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tive and High Occupancy Facilities shall not be allowed within 100 feet of either side of an active or potentially active fault. This distance may be modified if it is determined by a qualified geologic consultant that no adverse risk would occur based on field surveys, borings, and other relevant data and analysis.

GEO3 MANUFACTURED SLOPES PREVENTATIVE MAINTENANCE PROGRAM

Developers shall be responsible for supplying a preventative maintenance program for all manufactured (cut and fill) slopes. Additionally, the City shall consider the creation of slope maintenance districts as well as the implementation of a developer-sponsored 10-year slope failure warranty requirement. Inspection and maintenance of slopes during this period, including grading, planting and irrigation, will be provided for by association fees and CC&Rs.

GEO4 SEISMIC UPGRADE ORDINANCE

- Consider adopting an ordinance, which includes: 1) incentives for the upgrading of seismically hazardous structures that would include priorities for the sequence of enforcement; 2) structural standards for seismic upgrading; 3) options or requirements for early anchoring of buildings to provide an initial level of reinforcement at an early stage of seismic retrofit; 4) incorporating concepts and provisions of the State Code for historic buildings to provide additional flexibility for preservation of historic buildings while protecting them from significant earthquake damage; 5) time schedule for enforcement; and 6) procedures for the posting and maintenance of warning signs on hazardous structures.
- Consider establishing a special incentive and recognition program for buildings

reinforced under the hazardous buildings ordinance, which could employ plaques or certificates that can be displayed on or in a reinforced building.

- Maintain an awareness of other types of structures that may, over time, be considered by engineers, and through the use of state-of-the-art techniques, to be seismically hazardous. Develop programs for the reduction of these seismic hazards. For example, the City may consider the modification of the current ordinance to require concrete tilt-up and concrete frame buildings built before enactment of the current seismic codes to meet basic seismic standards before a change in use or occupancy level is approved, or when significant alteration or repair is proposed.

GEO5 LIQUEFACTION REPORT

Require development applicants to prepare a liquefaction report for proposed projects located in liquefaction susceptibility zones (Figure Geo-4). Liquefaction reports shall be prepared prior to the preparation of development plans or tentative tract maps. These reports will be used to help assure that adequate liquefaction mitigation is possible, and that the proposed mitigation is built into the initial project layout and design.

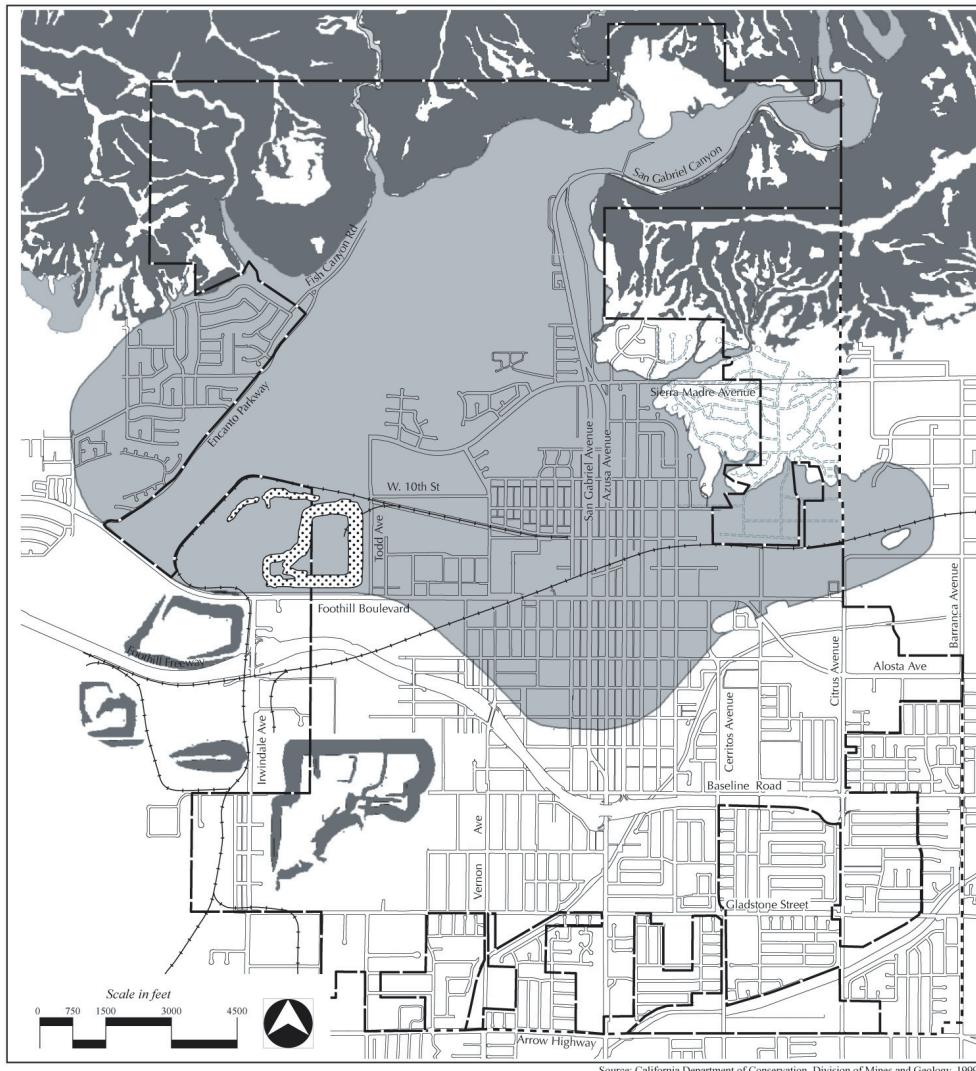
GEO6 UPDATE STATE UNIFORM BUILDING CODE

Seismic revisions to the State Uniform Building Code shall be reviewed and implemented in the City's Building Code.

GEO7 BUILDING AND GRADE CODE UPDATES

The City's building and grading codes shall be modified to reflect investigation requirements for designated potential liquefaction zones. A liquefaction susceptibility investigation shall be required for Critical Facilities, Sensitive Fa-

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Source: California Department of Conservation, Division of Mines and Geology, 1999

LEGEND:

— City of Azusa Boundary

- - - Sphere of Influence Boundary

■ Liquefaction

Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation would be required.



Earthquake-Induced Landslides

Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation would be required.



Overlapping Liquefaction and Earthquake-Induced Landslides

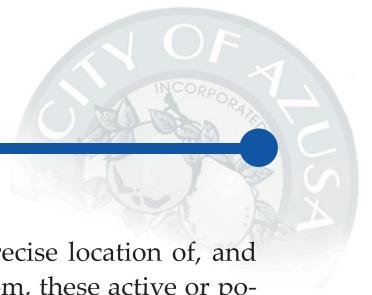
Areas that lie within zones of required investigation for both liquefaction and earthquake-induced landslides.



Liquefaction Potential

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FIGURE GEO-4



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cilities, High-Occupancy Facilities, and other select structures that have more than three stories and are of a size that shall be determined by City staff using criteria established by the City Engineer. Studies for all other human occupancy buildings should be at the discretion of the City Engineer and the City's Engineering Geology Consultant.

GEO8 BUILDING CODE ENFORCEMENT

Review the current building code enforcement procedures for concrete tilt-up and composite pre-stressed concrete construction for consistency with effective principles of seismic design, and revise as appropriate to maintain the seismic integrity of new construction.

GEO9 UTILITIES REPORT

Require public service agencies to prepare a Utilities Report for proposed projects located in liquefaction susceptibility zones. Utilities Reports will be used to help ensure that natural gas, electric, water, sewer and communication systems are designed to mitigate potential hazards arising from their location in liquefaction zones.

GEO10 DEVELOPMENT AND BUILDING CODE UPDATES

Amend the development and building codes to require the preparation of a landslide report by a qualified geologist or civil engineer for any proposed development located in a landslide hazard area. These landslide reports shall be written prior to the preparation of development plans or tentative tract maps.

GEO11 SITE SPECIFIC GEOLOGICAL REPORT

Require the preparation of a site-specific geological report for all proposed development within an identified active fault or potentially active fault of concern (also an Alquist-Priolo Earthquake Fault Zone, if identified in the fu-

ture) to ascertain the precise location of, and appropriate setbacks from, these active or potentially active faults.

GEO12 MASTER DRAINAGE PLAN

Prepare a Master Drainage Plan based on buildout of the General Plan to allow compilation of information from the San Gabriel River Master Plan, consultant flood and drainage studies, and projects associated with the San Gabriel River into an integrated whole.

GEO13 DEVELOPMENT REVIEW

- Prior to project approval in the vicinity of a waterway or drainage course, consult Flood Insurance Rate Maps on file with the Community Development Department to identify areas that have not been subject to detailed study; if the project falls within an area that has not been studied, require studies and, if necessary, require mitigation or restrictions on development.
- Consider all proposed development within the 100-year flood plain of the San Gabriel River drainage system, on a case-by-case basis, to determine whether flood-related mitigation is to be required.
- Identify any critical facilities in flood hazard areas, and improve their level of protection, if necessary. Critical facilities include fire and emergency service facilities, utility lifeline facilities such as water, electricity, and gas supply, sewage disposal, communications, and transportation facilities.

GEO14 DETENTION BASIN CONSTRUCTION

Work with the Los Angeles County Flood Control District to construct detention basins in the areas where inadequate 100-year flood protection along the San Gabriel Mountains exists to reduce or eliminate downstream flooding.

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GEO15 STORMWATER IMPROVEMENT PROGRAM

Implement stormwater facilities for improvement in priority areas as funding allows to accommodate the significant increase in stormwater flows expected as a result of development in the City's current underdeveloped areas.

GEO16 SURFACE WATER RUNOFF REDUCTION

Reduce the effects of surface runoff in developing areas by the use of extensive landscaping with an emphasis on native and drought-resistant species, minimizing impervious surfaces, and providing for recharge.

GEO17 FEMA MAP CHANGES

Encourage timely FEMA map changes and annually incorporate mapped revisions to the 100-year flood zone into City hazards maps.

GEO18 INTERAGENCY COORDINATION

To reduce the possibility of significant changes in climate and regional hydrology that could lead to local flooding, support national and international efforts to protect the Earth's ozone layer, including policy to minimize or prevent the release of greenhouse gases.

GEO 19 EARTHQUAKE AWARENESS/PREPAREDNESS

Develop a City-based public awareness/earthquake preparedness program, to educate the public about seismic hazards, and what to do in the event of an earthquake. Seismic hazard education could take the form of distributing an information pamphlet through libraries, schools, or utility bills, and community-wide simulations.

GEO 20 SPECIAL STUDIES FOR CRITICAL, SENSITIVE AND HIGH-OCCUPANCY FACILITIES

- Detailed site specific studies for ground shaking characteristics, liquefaction po-

tential, and fault rupture potential shall be required prior to discretionary review as background to the development/approval process for Critical, Sensitive and High-Occupancy Facilities.

- Existing City-owned, City-leased or City-rented Critical, Sensitive and High-Occupancy facilities, including the City Hall, Light and Water, and the Police Department, shall be reviewed for any significant siting, design, or construction problems that would make them vulnerable in an earthquake. The findings shall be incorporated into emergency operations plans as well as addressed in longer-term programs of facilities upgrading or relocation.

GEO 21 FAULT ACTIVITY INVESTIGATION REPORTS

Fault activity investigation reports shall have a standard format developed through consultation among the California Division of Mines and Geology, the City's Engineering Geology Consultant and relevant City Departments (e.g., Planning, Public Works). An agreed upon design shall be formulated by this group for the Sierra Madre, Upper Duarte, and Duarte faults, and unnamed Faults "C" and "D", and used in the reports to determine ground shaking potential. The City's Engineering geology consultant shall review reports for adequacy. At such time that the City's Sphere of Influence or other lands within the Planning Area are annexed, the City (Community Development Department) shall require that areas planned for development within 500 feet of the these faults be studied to document age of last movement.

GEO 22 CONSTRUCTION EXCAVATIONS AND TRENCHES REQUIREMENTS

All construction excavations and trenches of five feet or deeper, created in conjunction



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with human occupancy structures and public works infrastructure, shall be inspected by the City's Engineering geology consultant for any evidence of faulting if the subject property is identified as lying within 500 feet of an identified active fault or potentially active fault of concern in pervious soils, or geologic reports conducted for subject site.

GEO 23 BUILDING TYPE DATABASE

At the earliest opportunity, a database shall be compiled of all structural building types in the City that may be considered potential seismic hazards, including tilt-up structures and non-ductile concrete frame buildings.

GEO 24 GROUNDWATER LEVEL STUDY

Request the California Division of Mines and Geology or the U.S. Geological Survey to perform an initial study to re-define the groundwater levels in areas where liquefaction potential is estimated to be high. For areas of very high groundwater (within 30 feet of the ground surface), the City shall consider the appropriateness of requiring potential developers in these areas to investigate means of lowering the groundwater level, and consider appropriate programs to that end.

GEO 25 GROUNDWATER LEVEL AND RESOURCE ANALYSIS

Ensure the community has an adequate information base on the level and extent of the City's water table. Require project proponents to conduct water resource analysis should data prove to be insufficient.

GEO 26 GEOLOGIC HAZARDS RESOURCE INFORMATION UPDATES

Liquefaction susceptibility and fault zone designations and related land use and construction policies shall be reviewed and updated periodically to reflect current information and technology.

GEO 27 DESIGN REVIEW

Seismic design for proposed Critical, Sensitive and High Occupancy Facilities and other select structures that have more than four stories and are of a size determined by City staff using criteria established by the City Engineer shall be handled by City retained structural engineers. Alternatively, seismic design may be conducted through a third-party review process, whereby qualified engineers report to the City Engineer and are paid directly by the developer.

GEO 28 GEOLOGIC AND SOILS REPORTS AND REPORT REPOSITORY

- All geologic and soils reports submitted to the City shall be reviewed for their adequacy and completeness by a qualified, Certified Engineering Geologist and/or Registered Soils Engineer.
- A central repository shall be established in the Engineering Division, for the collection and compilation of geologic and soils engineering information related to identified active fault or potentially active fault of concern and fault zone studies, groundwater levels, soils characteristics, susceptibility to landslides and liquefaction, and other data as appropriate. This information shall be used to increase the knowledge and insights of City reviewers and applicants alike, in support of hazard mitigation. To the extent possible this information should be in a GIS-database and available in summary form on the City website.

GEO 29 STRUCTURAL REVIEWS

Special structural reviews shall be conducted on any multi-story or concrete buildings receiving significant damage in an earthquake, prior to their re-occupancy, repair or demolition. Review shall be conducted in accordance

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with Applied Technology council publications ATC-20, 1989, Procedures for Post Earthquake Safety Evaluation of Buildings and ATC-20-2, 1995, Addendum to the ATC-20 Post Earthquake Building Safety Evaluation Procedures. Such information as type of construction and occupancy, and damage evidence such as collapse or partial collapse, leaning walls, cracked or displaced foundations, distressed columns and beams, soil movement/slippage, etc. Structural review would be the responsibility of the owner.

GEO 30 EMERGENCY PREPAREDNESS AND DISASTER RESPONSE PLANS

- Appropriate disaster response and emergency response plans shall be maintained and updated. Disaster response plans shall include adequate capabilities for heavy search and rescue, major medical response, interim morgue, emergency shelter, traffic and utility impacts, debris removal and disposal, as well as hazardous materials response for any chemicals stored or used in or adjacent to the hazardous buildings. Disaster response plans shall also include procedures for access, traffic control, emergency evacuations, and security of damaged areas.
- Criteria for efficient and orderly evacuation capabilities shall be incorporated into development, street planning, and other land use procedures for the potential inundation area below the dam or reservoir.
- The City in cooperation with other agencies shall conduct emergency response exercises. Exercises shall be designed to test and upgrade various disaster response plans.
- Public participation shall be sought in the development of hazard mitigation and disaster recovery programs.
- A public education and preparedness program shall be a continuing component of the emergency preparedness program. It should include, at a minimum:
 - the existence and approximate locations of major regional and local identified active faults or potentially active faults of concern, landslide and liquefaction susceptibility areas;
 - the potential for strong ground shaking in the area, and means of strengthening buildings and protecting furnishings, equipment and other building contents from damage;
 - the need for businesses and residents to be self-sufficient for several days following an earthquake, including food, water, medical assistance, and limited firefighting; and
 - specific information describing what an individual should do during and immediately following an earthquake, whether at home, in a car, at work, or in an unfamiliar building.
- Solicit the cooperation of the business community for public education and mutual assistance. Businesses shall be encouraged to develop their own disaster response plans and have provisions for food, water, first aid and shelter of employees who may not be able to return home for several days following a major earthquake.
- Guidelines shall be developed by the City that provide a clear direction for the exercise of authorities following an earthquake related disaster for such purposes as:
 - rapid designation of redevelopment areas;
 - revising land use, circulation and parking requirements, and institution of other programs for improving the community environment;



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- adapting and instituting of special programs for disaster recovery;
 - funding of disaster recovery measures;
 - moratoria on reconstruction in any high-hazard areas where damage could be repeated in after shocks or in future earthquakes;
 - upgrading of the building code if deficiencies are believed to exist;
 - establishing Geologic Hazard Abatement Districts, as appropriate;
 - designating of sites for temporary housing (e.g., travel trailers and prefabricated construction) of households made homeless in the disaster, in cooperation with the Disaster Housing Program of the Federal Emergency Management Agency; and
 - using of schools, government, armory, or other interim sites for emergency housing and postdisaster care.
-
- In order to prepare for post earthquake recovery, the City shall establish procedures for declaring itself a disaster area and for receiving Federal Emergency Management Agency (FEMA) and comparable state disaster relief funds.

Projects that could realistically be completed in the next five years:

1. Amend building and development codes, as appropriate.
2. Identify buildings in flood hazard, earthquake hazard, and fire hazard areas that may require modifications to improve the level of protection.
3. Reduce surface runoff.
4. Develop public awareness and earthquake preparedness programs.

GEO 31 MUTUAL AID AGREEMENTS

Maintain effective mutual aid agreements with other agencies and/or municipalities works, building inspection, mass care, and heavy rescue.

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Geological Hazards Program Implementation Matrix (Part 1 of 3)

| No. | Name | City of Azusa | | | | | | | | | | City of Azusa | | | | | | | | | | | | |
|---------|---|---|---|------------------------------------|---------|---------|---|--------------------------------|---|--------------------------------------|------------------------------|---------------------|--------------|--------------------|-------|---------------|----------------------------------|--------|---------------|------------------|------------|-------------|---------------|---------|
| | | Administration (Admn., Info. Tech., Transportation and/or City Clerk) | Community Development (Planning, Business Licenses, Code Enforcement, Building) | Economic Development/Redevelopment | Finance | Library | Light & Water (Electricity, Solid Waste, & Water) | Parks Planning and Development | Public Safety (Police & Emerg.Services) | Public Works (Engineering & Maint.) | Recreation & Family Services | Planning Commission | City Council | Los Angeles County | Other | General Funds | Assessment or other Districts | Grants | Redevelopment | Development Fees | Other Fees | State Funds | Federal Funds | Other |
| Program | | Responsible Agency | | | | | | | | | | Funding Source | | | | | Schedule * as funding permits | | | | | | | |
| GEO1 | Development, Building, and Grading Codes and Ordinances | ● | | | | | | | | | | ● | | | | | | | | | | | | 2004 |
| GEO2 | Sensitive and High-Occupancy Facilities Sitting Near Faults | ● | | | | | | | | | | ● | | | | | | | | | | | | Ongoing |
| GEO3 | Manufactured Slopes Preventative Maintenance Program | ● | | | | | | | | | | ● | | | | | | | ● | | | | | Ongoing |
| GEO4 | Seismic Upgrade Ordinance | ● | | | | | | | | | | ● | | | | | | | | | | | | 2006 |
| GEO5 | Liquefaction Report | ● | | | | | | ● | | | | ● | | | | | | | | | | | | Ongoing |
| GEO6 | Update State Uniform Building Code | ● | | | | | | | | | | ● | | | | | | | | | | | | 2006 |
| GEO7 | Building and Grade Code Updates | ● | | | | | | ● | | | | ● | | | | | | | | | | | | 2006 |
| GEO8 | Building Code Enforcement | ● | | | | | | ● | | | | ● | | | | | | | | | | | | 2004 |
| GEO9 | Utilities Report | | | | ● | | | | | | | ● | ● | | | | | | | ● | | | | Ongoing |
| GEO10 | Development and Building Code Updates | ● | | | | | | | ● | | | ● | ● | | | | | | | | | | | 2006 |
| GEO11 | Site Specific Geological Report | ● | | | | | | | ● | | | ● | ● | | | | | | | ● | | | | Ongoing |
| GEO12 | Master Drainage Plan | | | | | | | | ● | | | ● | ● | | | | | | | | | | | 2009 |
| GEO13 | Development Review | | | | | | | | ● | | | ● | ● | | | | | ● | | | | | | Ongoing |
| GEO14 | Detention Basin Construction | | | | | | | | ● | | | ● | ● | | | | | | | ● | | | | Ongoing |

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Geological Hazards Program Implementation Matrix (Part 2 of 3)

| No. | Name | City of Azusa | | | | | | | | | | City of Azusa | | | | | Schedule * as funding permits | | | | | | | |
|---------|---|--|---|------------------------------------|---------|---------|---|--------------------------------|---|-------------------------------------|------------------------------|---------------------|--------------|--------------------|-------|---------------|---|--------|---------------|------------------|------------|-------------|---------------|---------|
| | | Administration (Admin., Info. Tech., Transportation and/or City Clerk) | Community Development (Planning, Business Licenses, Code Enforcement, Building) | Economic Development/Redevelopment | Finance | Library | Light & Water (Electricity, Solid Waste, & Water) | Parks Planning and Development | Public Safety (Police & Emer. Services) | Public Works (Engineering & Maint.) | Recreation & Family Services | Planning Commission | City Council | Los Angeles County | Other | General Funds | Assessment or other Districts | Grants | Redevelopment | Development Fees | Other Fees | State Funds | Federal Funds | Other |
| Program | | Responsible Agency | | | | | | | | | | Funding Source | | | | | | | | | | | | |
| GEO15 | Stormwater Improvement Program | | | | | | | | ● | | | | | | ● | | | | | | | | | Ongoing |
| GEO16 | Surface Water Runoff Reduction | | ● | | | | | | | ● | | | | | ● | | | | | | | | | Ongoing |
| GEO17 | FEMA Map Changes | | | | | | | | ● | | | | | ● | | ● | | | | | | | | Ongoing |
| GEO18 | Interagency Coordination | | | | | | | | ● | | | | | ● | | ● | | | | | | | | Ongoing |
| GEO19 | Earthquake Awareness/Preparedness | | | | | | | ● | | | | | | ● | | ● | | | | | | | | 2006 |
| GEO20 | Special Studies for Critical, Sensitive and High-Occupancy Facilities | | | | | | | | ● | | | | | ● | | ● | | | | | | | | Ongoing |
| GEO21 | Fault Activity Investigation Reports | | | | | | | | ● | | | | | ● | | ● | | | | | | | | 2006 |
| GEO22 | Construction Excavations and Trenches Requirements | | | | | | | | ● | | | | | ● | | ● | | ● | | | | | | Ongoing |
| GEO23 | Building Type Database | ● | | | | | | | | ● | | | | | ● | | | | | | | | | Ongoing |
| GEO24 | Groundwater Level Study | | | | | | | | | | | | | | | | | | | | | | | 2006 |

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Geological Hazards Program Implementation Matrix (Part 3 of 3)

| No. | Name | City of Azusa | | | | | | | | | | City of Azusa | | | | | | | | | | Schedule * as funding permits | |
|---------|--|--|--|--|------------------------------------|---------|---------|---|--------------------------------|--|------------------------------|---------------------|--------------|--------------------|-------|---------------|-------------------------------|--------|---------------|------------------|------------|---|---------------|
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| Program | | Responsible Agency | | | | | | | | | | Funding Source | | | | | | | | | | | |
| GEO25 | Groundwater Level and Resource Analysis | | | | | | ● | | | | | | | ● | | | | | | | | ● | Ongoing |
| GEO26 | Geologic Hazards Resource Information Updates | | | | | | | | ● | | | | | ● | | | | | | | | | Ongoing |
| GEO27 | Design Review | | | | | | | | ● | | | | | | | | | ● | | | | ● | Ongoing |
| GEO28 | Geologic and Soils Reports and Report Repository | | | | | | | | ● | | | | | ● | | | | | | | | | Ongoing |
| GEO29 | Structural Reviews | | | | | | | | ● | | | | | ● | | | | | | | | | Ongoing |
| GEO30 | Emergency Preparedness and Disaster Response Plans | | | | | | ● | | ● | | | | | ● | | | | | | | | | Ongoing |
| GEO31 | Mutual Aid Agreements | | | | | | ● | ● | | | | | | ● | | | | | | | | | Ongoing |



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Mineral Resources

Statutory Requirements

State law, Government Code Section 65302(d), requires a discussion of mineral resources in the conservation element. The Azusa General Plan discusses mineral resources in its Mineral Resources Element.

Big Ideas

The Big Ideas for Mineral Resources are:

- Relocate, to the maximum extent feasible, mining operations to less visible and less environmentally sensitive areas.
- Each area of a mine will be reclaimed as the mining in that area is completed.
- Use state of the art mining and reclamation techniques to minimize environmental impacts including but not limited to habitat, visual, noise, and dust.

Mineral Resources Existing Conditions

The City of Azusa is situated on sand and gravel deposits formed at the base of the San Gabriel Mountains known as the San Gabriel Fan District. These aggregate deposits are designated by the Department of Conservation as mineral resources of regional importance. Aggregate from Azusa and surrounding areas is used for a variety of construction activities throughout the San Gabriel Valley and Los Angeles Basin, including production of concrete, road base, and related building materials (Figure MR-1).

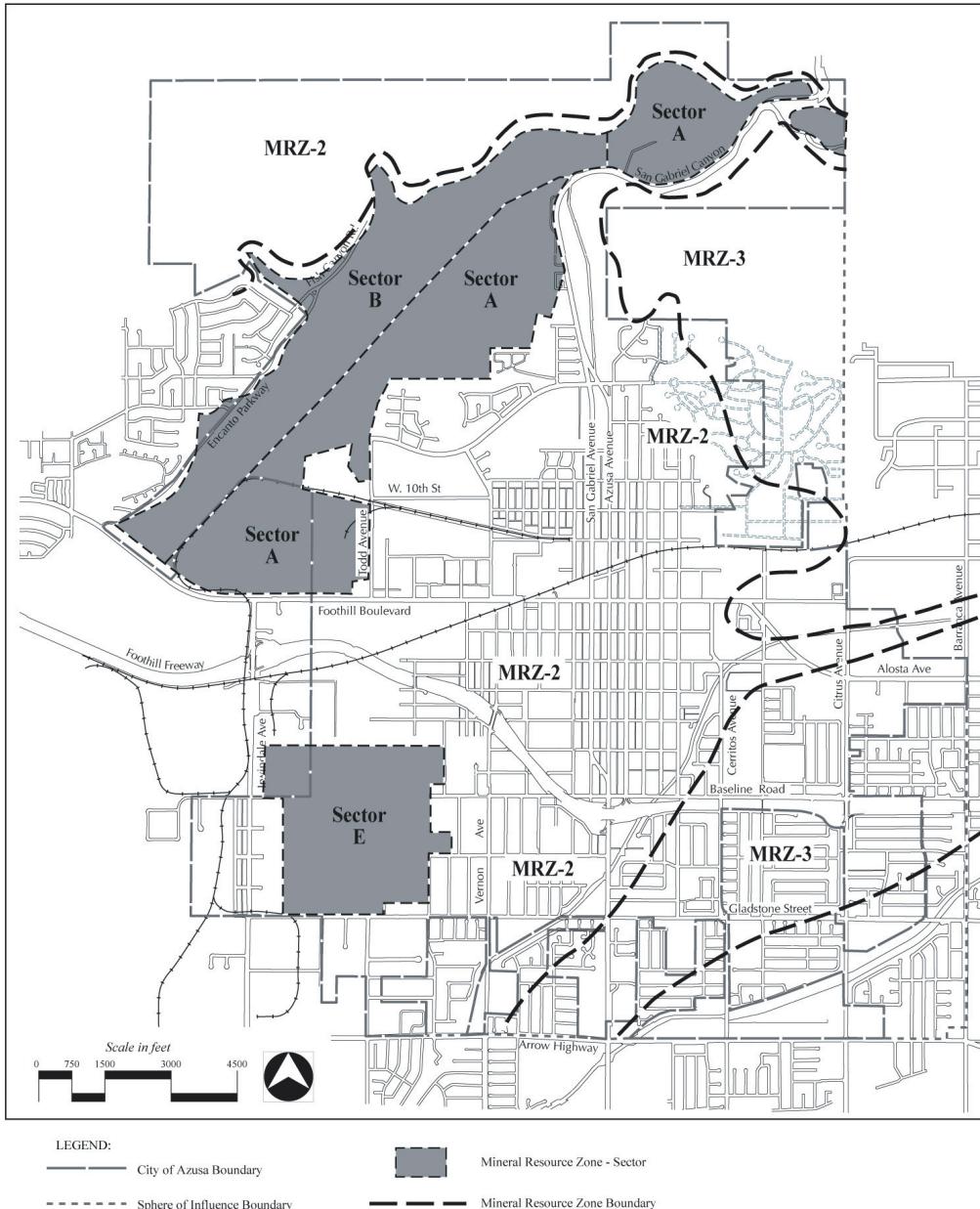


The City of Azusa has been a site of mining since gold was discovered in the area in 1857. While as much as \$12 million worth of gold was historically extracted from the Azusa area, presently only aggregate and Portland Concrete Cement are commercial commodities. Three active aggregate mining pits lie within the City, two operated by Vulcan Materials, and the third by Cemex on property owned by Waste Management, Inc., (WMI). Other areas of the City containing aggregate resources are not mined, but are devoted to other uses, including agriculture, residential, and industrial uses.

The regional aggregate market covers an area lying within approximately 50 miles of the Los Angeles Civic Center, and includes nine distinct aggregate production districts spread fairly uniformly over the Los Angeles area. The mining companies within these districts are competitors for major supply contracts within the Los Angeles region.¹ Various aggregate mining operations are currently active in all of these districts.

¹ The nine districts include: the Lower Santa Clara River-Ventura River, Simi Valley, Upper Santa Clara River, Tujunga Fan, San Gabriel Fan, San Antonio Creek Fan-Cucamonga Creek, Little Rock Creek Fan, San Lytle Creek Fan-Upper Santa Ana River, and Orange County-Temecula Valley, District. **Source:** Kohler, S.L., 1982. Mineral Land Classification of the Greater Los Angeles Area, Part IV, Classification fo Sand and Gravel Resource Areas, San Gabriel Valley Production Consumption Region. California Department of Conservation, Division of Mines and Geology. Special Report 143.

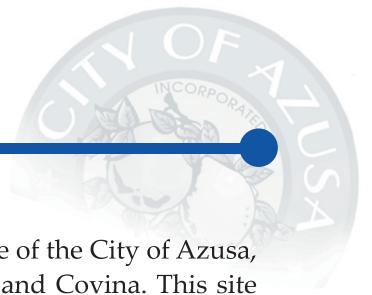
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Mineral Resource Zones in Azusa

GENERAL PLAN UPDATE

FIGURE MR-1



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Annual aggregate production in the San Gabriel Fan District has ranged from about 13.5 to 40.0 million tons since the early 1980s, with an average annual production of approximately 16.5 million tons². Aggregate from the San Gabriel Fan District is considered of very high quality, and is used to set engineering standards for concrete in large projects in the region. The local aggregate deposits are known to extend as deep as 400 to 600 feet. The current economically feasible mining depth is considered to be about 400 feet, and mining is conducted to depths of up to about 275 feet at present.³

The Vulcan operations, known as Azusa Rock, lie north of the San Gabriel River and include extraction and crushing of rock at the base of the mountain (Figure MR-2). The Vulcan Material - Azusa Rock Mine is exposed and is visible from a considerable distance within the San Gabriel Valley and Los Angeles Basin. Slope exposure and the over-steepened rock face at the Azusa Rock mining operation are of concern to the City of Azusa. This mining operation uses heavy-duty equipment and blasting to remove rock from the hillside. The rock material is transported via conveyor belt approximately two miles to the Reliance Plant, located in the Reliance Pit in the City of Irwindale. The second mine, the Vulcan Material - Reliance Azusa Mine is an open pit facility located on relatively flat terrain and, for this reason, is not as visible. Approximately one-third of the gravel pit is in Azusa, and the remaining two-thirds, including the Plant, is located in Irwindale. Rock materials from this mine are also transported via a conveyor belt to the Reliance Plant, due west of the current pit area. The third mine, the Cemex operation,

lies at the southwestern edge of the City of Azusa, near the cities of Irwindale and Covina. This site contains an older mine, now being operated for an inert landfill and building materials recycling business. Some extraction is ongoing by Cemex at the site, although, resources are close to being exhausted.

The estimated life of the Vulcan mines is about 25 to 30 years and the Cemex mine's estimated life is just a few years.

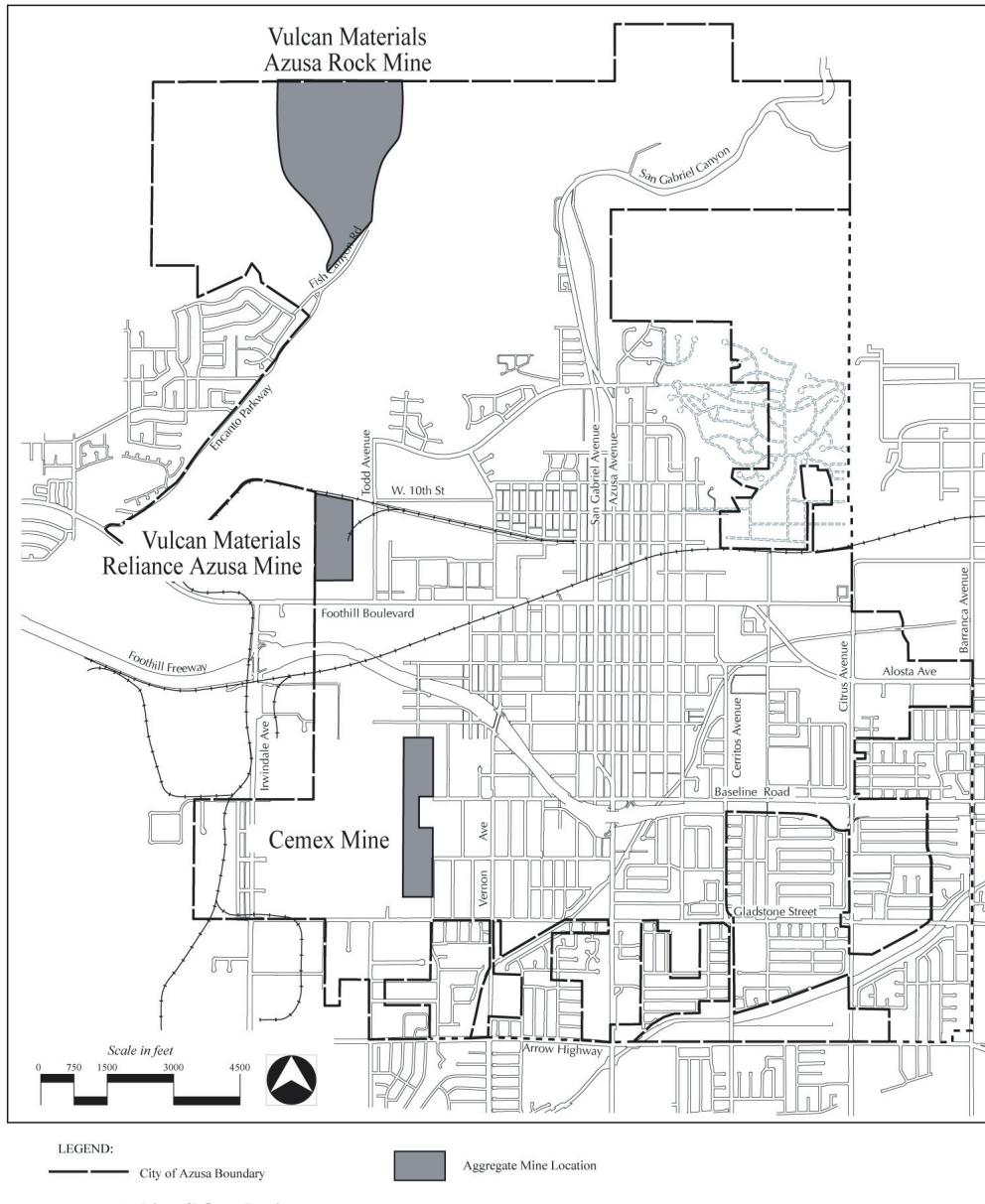
The mines continued operation and ultimate reclamation poses several issues for the City of Azusa that are addressed in General Plan Goals and Policies. These include:

- Protection of mineral resources through policies balancing regional mineral resource needs with local land use control.
- Policy standards for current and new surface mining operations to address control of slope excavations; control of erosion and sedimentation; protection of surface and ground water quality; protection of fish and wildlife; maintenance of adequate setbacks from adjacent land uses; control of noise, dust, vibration, dirt, fugitive dust, litter, odors and lighting, truck traffic issues, and aesthetics.
- Protection of public health and safety related to active mining and reclamation including slope stability, attractive nuisances for children, exposure of groundwater and possible contaminants, and prevention of illegal waste disposal.
- Regulation of long-term reclamation planning and implementation to ensure that when the mines cease to be mined, that they are replaced with uses that are compatible with neighboring activities and are beneficial to the community.

² Miller, Russell V., 1997. Changes in Construction Aggregate Availability in Major Urban Areas of California Between the Early 1980s and the Early 1990s. *California Geology*, January/February 1997: pp. 3-17.

³ City of Irwindale, Mining and Reclamation Impact Study, Vol. II, Technical Report, March 1999, p. 145.

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Aggregate Mines in Azusa
GENERAL PLAN UPDATE

FIGURE MR-2



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- SMARA requires cities to incorporate into their General Plans Mineral Resource Management Policies (MRMPs) for the beneficial management of mineral resource areas within their jurisdictions (See Cal. Public Resources Code, Section 2762; Cal. Code of Regulations, Title 14, section 3676). The MRMP must (1) recognize the mineral information provided by the State; (2) assist in the management of land uses which are incompatible with the development with the development of minerals in areas designated as having statewide/regional mineral significance; and (3) emphasize the conservation and development of identified mineral deposits. In addition, the MRMP should promote zoning that restricts encroachment of incompatible land uses in those areas that are conserved for mineral use and impose conditions that would prevent conflicts between extraction activities and other land uses. The policies contained in this section of the "Natural Environment" Element of the Azusa General Plan are the City's Mineral Resource Management Policies".

Vision

Over time, Azusa's hillsides and river basin will be reclaimed from quarrying. In its place, the mining sites will be restored with natural looking grades and slopes, and native vegetation will be abundantly planted thereby increasing habitat for flora and fauna.

Mineral Resources Goals and Policies

The City recognizes that it is underlain by an alluvial fan, created by the San Gabriel River, which is largely classified as MRZ 2 and MRZ 3 by the State Department of Conservation, Division of Mines and Geology. Known as the San Gabriel Fan mining district, the area is composed of rich and deep alluvial fan deposits at the base of the San Gabriel Mountains. These mineral deposits are important resources, and availability of these mineral re-

sources is vital to sustained economic growth and development within the region.

The General Plan contains policies that manage these mineral resources. General Plan policies recognize the continued operation of the vested quarry in the Open Space land use designation (although no new mining of the hillsides is envisioned), allowing the access of what has been projected to be 90 million cubic yards or rock, sand, and gravel. In addition, mining would be permitted in the West End District with a use permit, providing additional access to material in the MRZ zones. Additional mining policies are as follows.

GOAL

1 BALANCE THE NEED FOR MINERAL RESOURCES EXTRACTION WITH THE CITY'S GOALS TO MINIMIZE BIOLOGICAL, AESTHETIC AND OTHER IMPACTS.

POLICIES

- 1.1 Pursue reducing regional demand for aggregate resources. (MR1 and MR9)
- 1.2 While permitting existing mineral resource extraction and processing, if necessary, encourage relocating mining operations to less environmentally sensitive and less visible locations and to areas of more compatible land uses. (MR2, MR3, MR7, and MR8)
- 1.3 While permitting mineral resource extraction and processing, limit depth of mining and limit disturbances of undisturbed areas. (MR3, MR7, and MR8)
- 1.4 Limit effects of mining operations on residents, businesses, and visitors to Azusa. Effects include but are not limited to visual impacts, noise, dust, and truck traffic. (MR2, MR4, MR5, MR6, MR7, MR8, MR10, and MR11)

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- 1.5 Limit effects of mining operations on biological and recreational resources. Effects include but are not limited to effects on adjacent vegetation of runoff, erosion, and dust, effects due to vegetation removal, effects on wildlife and recreationalists of noise and vibration. (MR2, MR4, MR5, MR6, MR7, MR8, and MR10)
- 1.6 Minimize additional visual changes to the hillsides visible from Azusa. (MR2, MR4, MR5, MR6, MR7, MR8, and MR10)
- 1.7 Encourage timely reclamation and conversion of mines to other uses. (MR2, MR3, MR4, MR5, MR6, MR7, and MR9)
- 1.8 However, recognizing the community's strong interest in improving and accelerating reclamation and reducing the environmental impacts of existing vested mining, trade-offs affecting ongoing operations may be considered through a formal development agreement based on appropriate public participation and environmental review. (LU5, LU11, and LU24)

Mineral Resources Implementation Programs

MR1 INTERAGENCY COORDINATION

Work with other jurisdictions in the region to encourage aggregate recycling, for example:

- support other jurisdictions' approval of projects involving aggregate recycling; and
- participate in regional programs supporting aggregate recycling.

MR2 MINE SITES REDEVELOPMENT

Provide incentives for the timely redevelopment of mine sites and revegetation with na-

tive plants to General Plan designated post reclamation uses. Incentives can include:

- target high value land use, including land use type, density bonus, etc.;
- redevelopment incentives;
- early permitting for proposed postreclamation land uses, when proposed prior to the completion of mining; and
- increased density or other variations in development requirements where appropriate.

MR3 MINING ORDINANCE

Continue to:

- require a Conditional Use Permit for mining activities.
- require a Conditional Use Permit and Reclamation Plan Amendment for:
 - permit amendments to increase area or volume mined; and
 - changes to timing of mining and reclamation.
- Require compliance review of Conditional Use Permits and Reclamation Plans every five years, as appropriate.

MR4 RECLAMATION PLANS

Require Reclamation Plans to propose a post reclamation use consistent with the General Plan designation for the site, and to establish compatible post mining conditions.

MR5 MINE PLANS

Mine plans shall be designed such that phases of mined area can be reclaimed at the completion of each phase. Upon completion of each phase of mining, reclamation efforts shall be initiated within one year. Reclamation efforts shall continue in a timely fashion.

MR6 MINING COMPANY COORDINATION

Work with mine operators to reclaim areas where mining is completed as soon as pos-



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sible, rather than waiting for completion of all phases of mining. Provide incentives such as approval of requested amendments to permits or streamlined permit processing.

MR7 MINIMIZING MINING AND RECLAMATION IMPACTS

Mine and reclamation plans shall include measures to minimize the mining and reclamation impacts. Measures shall include, but are not limited to:

- mining in areas not visible to inhabited areas;
- rock staining to minimize the contrast between mined and unmined areas;
- reclaiming of mined areas and revegetation with native plants shall be initiated within one year of the site's completion. Reclamation and revegetation shall continue in a timely manner;
- temporary covering or revegetation with native plants idle mining areas prior to reclamation;
- installing and maintaining a screening, where feasible, to block views of mining activity and/or equipment; and
- state of the art dust control measures.

MR8 AMEND CODES AND ORDINANCES

Amend the Development Code and other ordinances regulating mining to require:

- computer generated photo-realistic visual simulations to be submitted with any mining and/or reclamation plan or proposed change to a mining and/or reclamation plan. The visual simulations are required to show views of the mine site from up to three locations in Azusa selected by the Planning Division under several scenarios – (1) existing, (2) at the cessation of mining, (3) post reclamation, and (4) at key interim points during mining and reclamation;
- mining and reclamation resulting in natural appearing contours and to require ac-

tions to minimize visual effects of mining activities (e.g. rock staining to minimize scars on slopes in visible locations);

- that the consideration of the appearance of mined areas both during mining and reclamation and postreclamation be addressed in mining and reclamation plans;
- the reclamation and recontouring of the existing “reclaimed areas”; and
- the continual use of best available or state of the art extraction, conveyance, and reclamation practices.

MR9 INNOVATIVE RECLAMATION TECHNIQUES

Encourage mine operators to continue to explore innovative and creative reclamation techniques.

MR10 OVERBURDEN USE

Encourage the use of overburden for backfill where needed.

MR11 MINING STUDY

Conduct a planning study for the hillside quarry adjacent the landfill area, and the Gun Club area, to determine specific strategies to be used to mitigate existing environmental impacts.

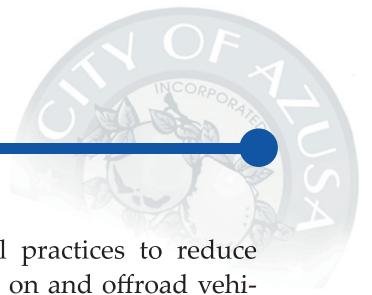
Projects that could realistically be completed in the next five years:

Amend the Development Code, Conditional Use Permit requirements, and other ordinances for mining activities.

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Mineral Resources Program Implementation Matrix

| No. | Name | City of Azusa | | | | | | | | | | City of Azusa | | | | |
|---------|---|---|---|------------------------------------|---------|---------|---|--------------------------------|---|-------------------------------------|------------------------------|---------------------|--------------|--------------------|-------|-------------------------------|
| | | Administration (Admin., Info. Tech., Transportation, and/or City Clerk) | Community Development (Planning, Business Licenses, Code Enforcement, Building) | Economic Development/Redevelopment | Finance | Library | Light & Water (Electricity, Solid Waste, & Water) | Parks Planning and Development | Public Safety (Police & Emer. Services) | Public Works (Engineering & Maint.) | Recreation & Family Services | Planning Commission | City Council | Los Angeles County | Other | |
| Program | | Responsible Agency | | | | | | | | | | Funding Source | | | | Schedule * as funding permits |
| MR1 | Interagency Coordination | ● | ● | | | | | | | | | ● | | | | Ongoing |
| MR2 | Mine Sites Redevelopment | | ● | ● | | | | | | | | ● | ● | ● | | Ongoing |
| MR3 | Mining Ordinance | | ● | | | | | | | | | ● | | | | Ongoing |
| MR4 | Reclamation Plans | | ● | | | | | | | | | ● | | | | Ongoing |
| MR5 | Mine Plans | | ● | | | | | | | | | ● | | | | Ongoing |
| MR6 | Mining Company Coordination | | ● | | | | | | | | | ● | ● | | | ● Ongoing |
| MR7 | Minimizing Mining and Reclamation Impacts | ● | ● | | | | | | | | | ● | ● | | | ● Ongoing |
| MR8 | Amend Codes and Ordinances | | ● | | | | | | | | | ● | | | | Ongoing |
| MR9 | Innovative Reclamation Techniques | ● | ● | | | | | | | | | ● | ● | | | ● Ongoing |
| MR10 | Overburden Use | | ● | | | | | | | | | ● | ● | | | ● Ongoing |
| MR11 | Mining Study | ● | ● | | | | | | | | | ● | ● | | | 2006 |



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Air Quality

On a regional basis, the physical characteristics and patterns of land development can affect air quality by influencing travel mode choices. Conventional suburban development patterns that separate uses necessitate the extensive use of personal cars for travel. This over-reliance on cars occurs when jobs and housing are far away from each other and alternative forms of transportation are not available. When streets are not designed to be pedestrian friendly, people become even more dependent on cars for daily travel. This in turn may contribute to air quality problems.

New Urbanist development patterns locate jobs, housing, and recreation in closer proximity to each other, resulting in shorter and fewer trips by car, thus reducing vehicle miles traveled (VMT) and motor vehicle emissions. Allowing people to be less dependent on cars by providing and promoting alternative forms of transportation, such as buses, rail transit, walking or biking, has the potential to improve or mitigate air quality problems. The Air Quality Element works together with the Land Use and Mobility Elements to propose a mixture of innovative land use and transportation measures to protect open spaces and air quality while meeting market demands for new development.

Statutory Requirements

In addition to the seven mandatory elements, other optional elements may be included in the General Plan. Azusa's Air Quality Element is one such element.

Air Quality Big Ideas

The Big Ideas for the Air Quality Element are:

- Use sound planning and design practices to reduce vehicular and source emissions.

- Use efficient operational practices to reduce emissions from quarries, on and offroad vehicles, and industrial uses.

Air Quality Existing Conditions

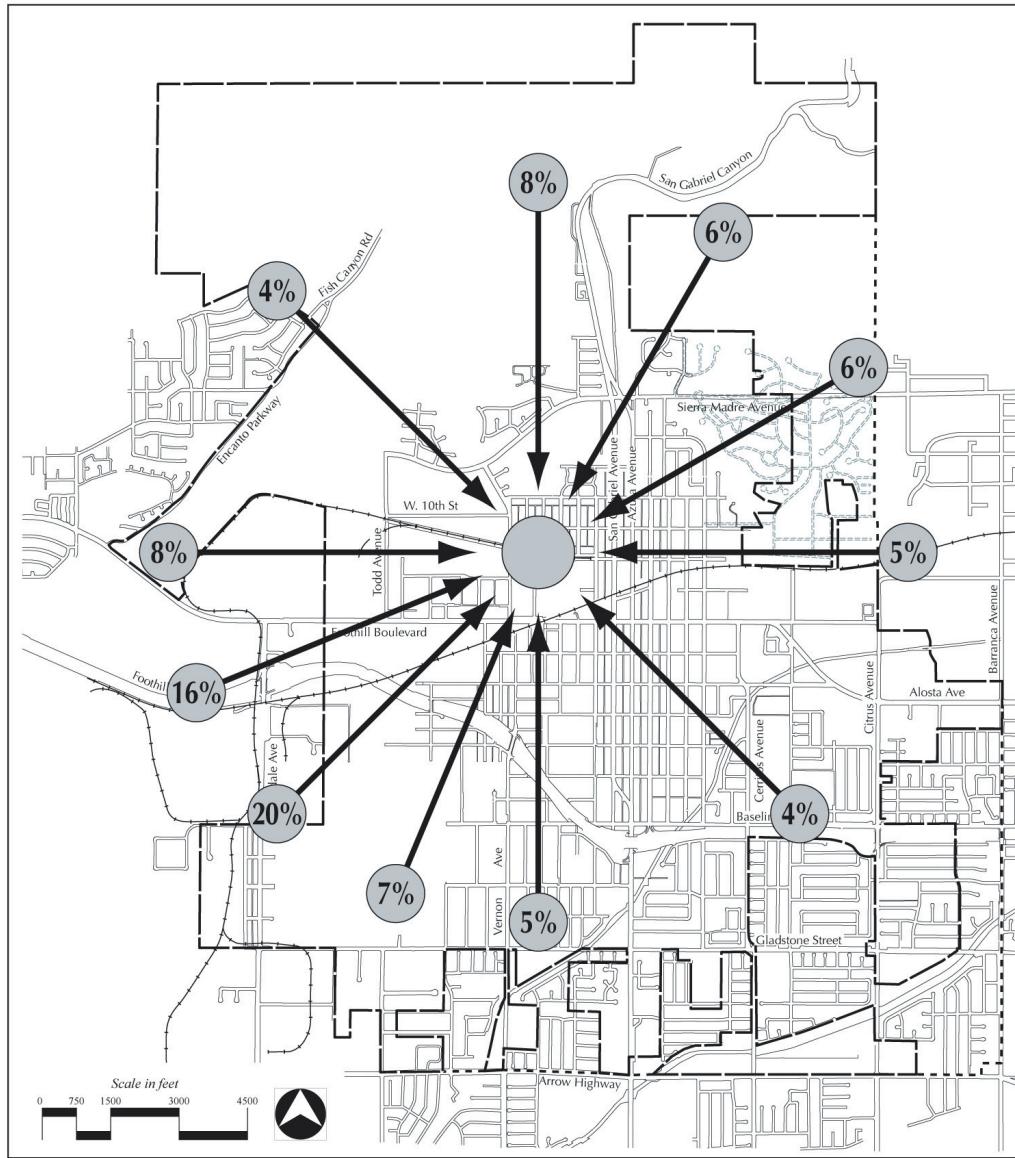
Several factors contribute to the unique air quality issues in Azusa, including the local mountains, the prevalence of industrial activities, and weather patterns. Three sources of pollution (including particular matter) within the City are automobiles, heavy diesel trucks, and rock mining and quarrying. Among the many pollutants generated by these sources are microscopic particles of dust and debris known as PM10, which can damage the lungs if inhaled. The air monitoring station in Azusa continually records high readings of this pollutant.

Unfortunately, much of the pollution in Azusa's air is transported by wind from areas southwest of the City, including pollution from Los Angeles' busy freeways and Irwindale's mining operations (Figures AQ-1 and AQ-2).

Air Quality Planning Issues are:

- **PM10 Reduction.** Azusa records some of the highest readings in the State of this pollutant. The City has an opportunity to develop a closer working relationship with the South Coast Air Quality Management District (SCAQMD) in order to devise strategies for reducing PM10.
- **Land Use Conflicts.** Certain sources of air pollution within the City, such as major truck routes and industrial areas, may cause problems because they are located near pollution-sensitive uses such as residential areas, hospitals, and outdoor recreation areas.
- **Air Quality Plan.** The City currently has no comprehensive air quality management plan. The adoption of an air quality component of the General Plan would help ensure that future development is sensitive to concerns about air pollution.

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LEGEND:

- City of Azusa Boundary
- - - Sphere of Influence Boundary

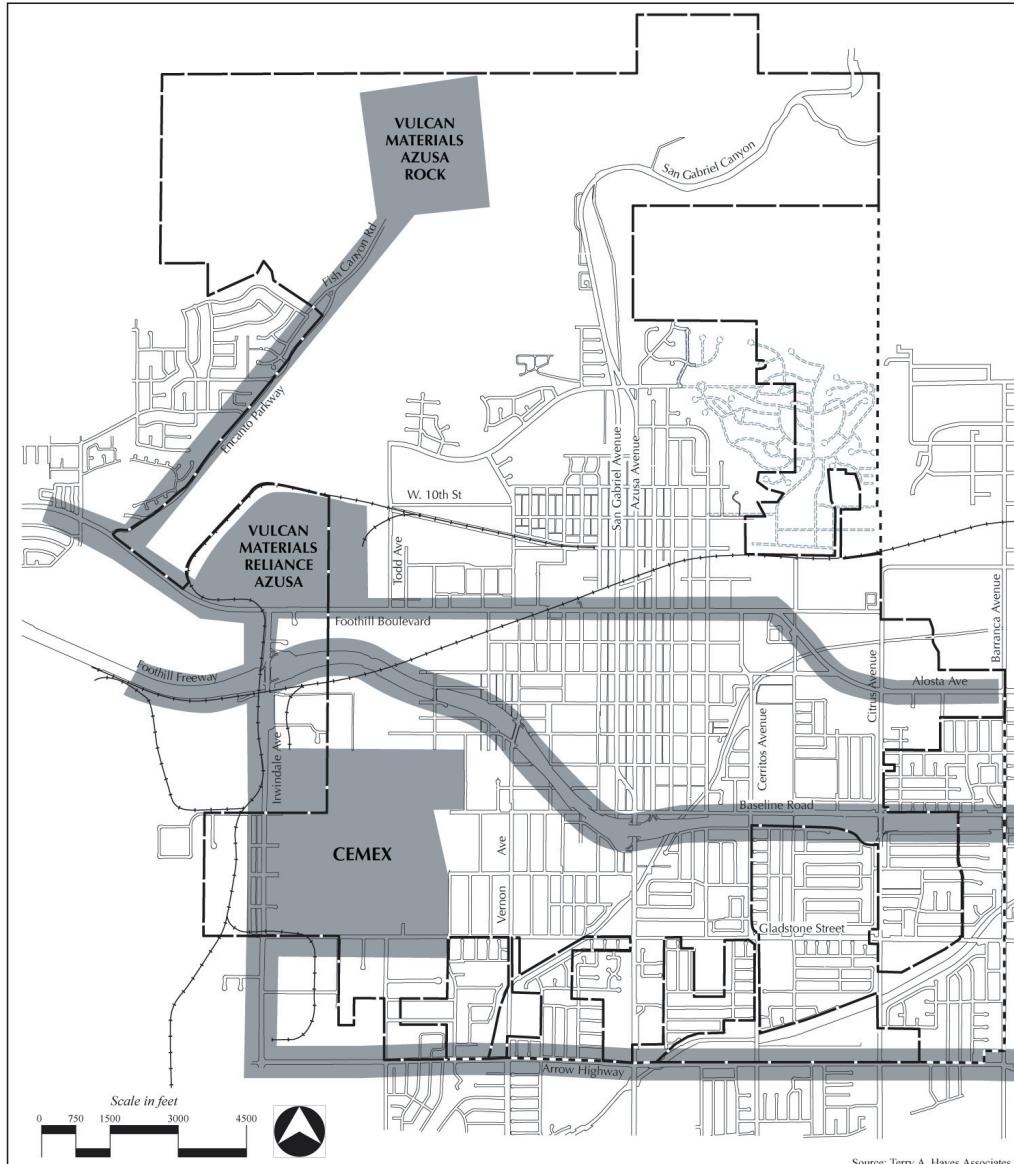


Annual Wind Direction in the City of Azusa
GENERAL PLAN UPDATE

FIGURE AQ-1



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LEGEND:

- Significant Emissions Areas
- City of Azusa Boundary
- Sphere of Influence Boundary



Probable Significant Emissions Areas in Azusa

GENERAL PLAN UPDATE

FIGURE AQ-2

Chapter 5: Natural Environment

Vision

While ever so slight, Azusa's air quality has improved as a result of less emission from Azusa sources, and a decrease of pollutants from regional sources.

Air Quality Goals and Policies

GOAL

1 IMPROVE AIR QUALITY IN AZUSA AND REDUCE EXPOSURE TO AIR POLLUTANTS.

POLICY

- 1.1 Integrate air quality concerns into land use planning decisions (AQ1 through AQ4, and AQ8).
- 1.2 Integrate air quality concerns into site design review (AQ1 and AQ5).
- 1.3 Reduce pollutant emissions from quarry operations, off-road vehicles use areas, industrial uses, and vehicular traffic (AQ4, and AQ6 through AQ8).
- 1.4 Participate in regional air quality planning strategies (AQ8).
- 1.5 Consider encouraging the use of "green roof" construction technologies. (AQ1)

Air Quality Implementation Programs

AQ1 DESIGN REVIEW

Through design review processes:

- Encourage setbacks and landscaping to create buffer zones between residential and industrial land uses, as specified in the City Design (land use component) Element;
- Encourage maximum allowable setbacks of residential and other sensitive uses along busy streets and adjacent to busy

intersections. In mixed-use developments, residential units should be placed on upper levels as opposed to street level, or in the rear of the development as opposed to the street edge;

- Require facilities for the needs of automobiles, pedestrians, bicyclists, and transit riders in site design and site amenities;
- Encourage energy-efficient design elements in new development including appropriate site orientation, solar design, use of landscaping, and insulating materials, to reduce energy consumption for heating and cooling; and
- Maximize indoor air quality by incorporating adequate ventilation into site design and orientation. Encourage use of windows that open and close, pollution-reducing plants and indoor trees, nontoxic building materials and finishes, and ventilation systems.

AQ2 LAND USE PATTERNS ENCOURAGING ALTERNATIVE TRANSPORTATION

Encourage land use patterns that enable people to use alternative transportation methods such as transit, walking, and cycling in their day-to-day activities. Expand opportunities for people to live and work in close proximity.

AQ3 PROMOTE MIXED-USE DEVELOPMENT

Promote mixed-use development that provides commercial services close to residential zones and employment centers, enabling citizens to walk or bicycle to services rather than drive.

AQ4 ENVIRONMENTAL REVIEW

Through environmental review processes:

- Conduct an air quality analysis for all industrial development proposals and



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- require pollutant-reducing mitigation measures for proposals that may generate significant levels of air pollution; and
- Evaluate the potential for a use to result in objectionable odors for proposed industrial, manufacturing, processing, and food and beverage production operations.

AQ5 PROVIDE SIDEWALKS, BICYCLE LANES, AND BUS SHELTERS

Continue to require new development and significant renovation projects to include sidewalks, bicycle lanes, and bus shelters allowing for easy use of alternative modes of transportation.

AQ6 REDUCE AUTO EMISSIONS

Reduce automobile emissions:

- by reducing low-speed and idling emissions at major intersections that operate at Level of Service E or F; and
- from idling vehicles at drive-thru restaurants and similar commercial operations by requiring a two-window system and sufficient pass-through lanes.

AQ7 CODE ENFORCEMENT, POLICING, AND MONITORING

- Provide consistent and effective code enforcement of all probable fugitive dust emitters such as automobiles, off road vehicles, heavy diesel trucks, and quarries to assure that fugitive dust emissions are minimized.
- Actively monitor dust control strategies and report infractions to the South Coast Air Quality Management District.

AQ8 CITY POLICY AND LEADERSHIP IN AIR QUALITY IMPROVEMENT

- The City should provide leadership by actively promoting the extension of transit systems, including bus and light rail, and locate higher density development along transit corridors.
- The City should provide leadership in the goal to improve air quality by implementing trip reduction strategies for City employees, providing bicycle lockers, storage facilities, and showers, and using low-emission fuels for City fleet vehicles.
- The City should proactively work with regional agencies such as the South Coast Air Quality Management District and the Southern California Association of Governments in the development and implementation of regional air quality strategies.
- The City should work with the Azusa Unified School District, Azusa Pacific University, and Citrus College to develop and publish educational materials regarding air quality, impact of pollution on people, plants and animals, what citizens can do to improve air quality, and how to register air quality complaints or concerns.
- The City's Light & Water Department should provide leadership in promoting conservation and other programs that improve air quality.

Projects that could realistically be completed in the next five years:

- Block 36 mixed-use development project
- Modifying Development Code
- Construct sidewalks, bike lanes, and bus shelters

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Air Quality Program Implementation Matrix

| No. | Name | City of Azusa | | | | | | | | | | City of Azusa | | | | Schedule * as funding permits | | | | | | | |
|---------|--|---|---|------------------------------------|---------|---------|---|--------------------------------|---|-------------------------------------|------------------------------|---------------------|--------------|--------------------|-------|-------------------------------------|-------------------------------|--------|---------------|------------------|------------|-------------|---------------|
| | | Administration (Admin., Info. Tech., Transportation, and/or City Clerk) | Community Development (Planning, Business Licenses, Code Enforcement, Building) | Economic Development/Redevelopment | Finance | Library | Light & Water (Electricity, Solid Waste, & Water) | Parks Planning and Development | Public Safety (Police & Emer. Services) | Public Works (Engineering & Maint.) | Recreation & Family Services | Planning Commission | City Council | Los Angeles County | Other | General Funds | Assessment or other Districts | Grants | Redevelopment | Development Fees | Other Fees | State Funds | Federal Funds |
| Program | | Responsible Agency | | | | | | | | | | Funding Source | | | | | | | | | | | |
| AQ1 | Design Review | ● | | | | | | | | | | ● | | ● | | Ongoing | | | | | | | |
| AQ2 | Land Use Patterns Encouraging Alternative Transportation | | ● | | | | | | | | | ● | | | | | Ongoing | | | | | | |
| AQ3 | Promote Mixed-Use Development | | ● | | | | | | | | | ● | | | | | Ongoing | | | | | | |
| AQ4 | Environmental Review | | ● | | | | | | | | | ● | | | | | Ongoing | | | | | | |
| AQ5 | Provide Sidewalks, Bicycle Lanes, and Bus Shelters | | ● | ● | | | | ● | | | | ● | | ● | ● | | Ongoing | | | | | | |
| AQ6 | Reduce Auto Emissions | | ● | | | | ● | | | | | ● | | | | | Ongoing | | | | | | |
| AQ7 | Code Enforcement, Policing, and Monitoring | | ● | | | | | | ● | | | ● | | | | | Ongoing | | | | | | |
| AQ8 | City Policy and Leadership in Air Quality Improvement | | ● | | | | | | | ● | | ● | | | | | Ongoing | | | | | | |



Chapter 5: Natural Environment

Noise

Statutory Requirements

Government Code Section 65302(f) states:

A noise element which shall identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify, to the extent practicable, as determined by the legislative body in current and projected noise levels for all of the following sources:

- (1) *Highways and freeways.*
- (2) *Primary arterials and major local streets.*
- (3) *Passenger and freight on-line railroad operations and ground rapid transit systems.*
- (4) *Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance function related to airport operations.*
- (5) *Local industrial plants, including, but not limited to, railroad classification yards.*
- (6) *Other ground stationary noise sources, including, but not limited to, military installations, identified by local agencies as contributing to the community noise environment.*

Noise Big Ideas

The Big Ideas for the Noise Element are:

- Use noise level standards when considering land use planning and development proposals.
- Develop programs that route trucks and other noisy users away from neighborhoods.
- Consider grade separation crossings with the railroad.

Noise Existing Conditions

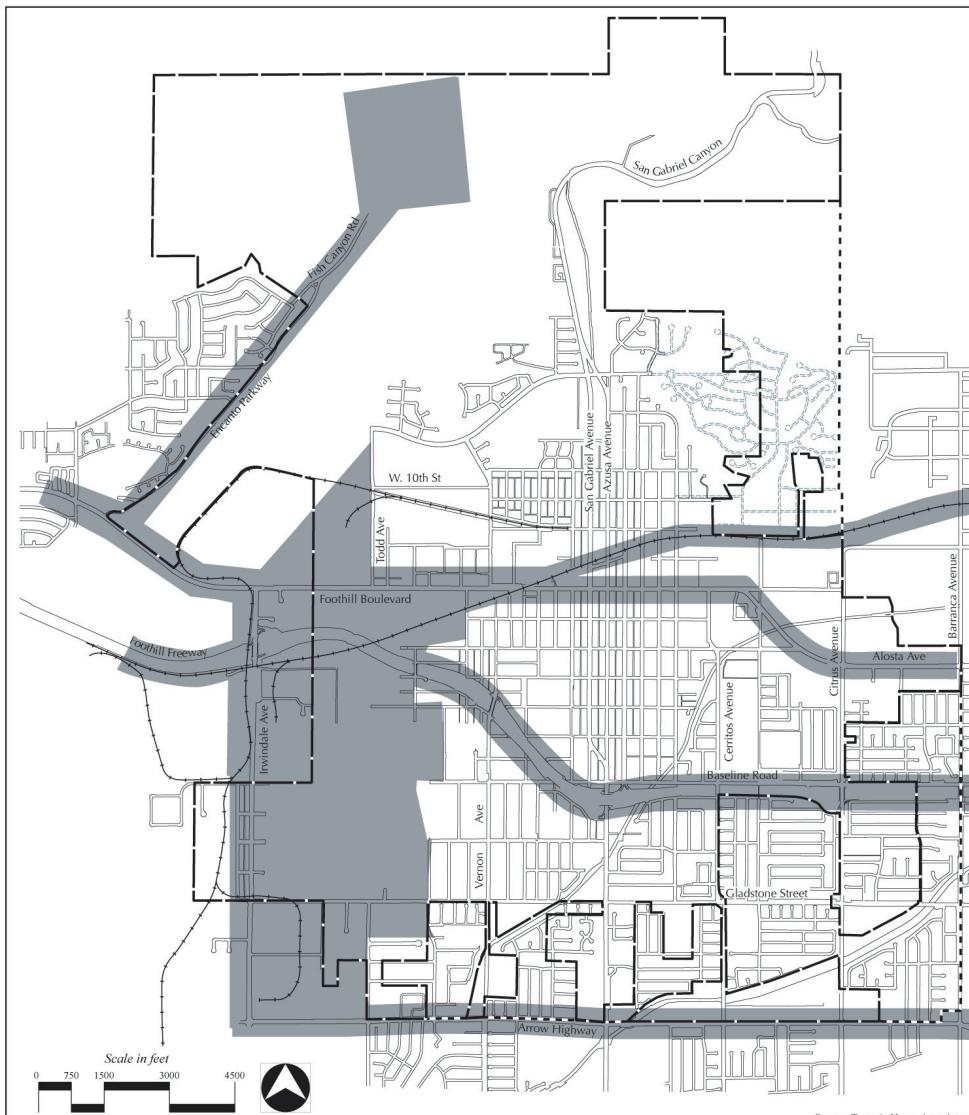
Noise sources within the City include, but are not limited to, an outdoor shooting range, rock/gravel mining and quarrying operations (including truck noise), and heavy truck noise along the City's major streets and freeway (Figure N-1). Noise complaints stemming from these sources all share one common factor: they affect the residential areas that are located near the noise source. The gun club and quarrying operations primarily affect homes located in the foothill areas of the City, while homes located along the railroad tracks, the 210 Freeway, and major streets such as Gladstone Street, Arrow Highway, and Irwindale Avenue, are most affected by transportation noise.

Noise levels throughout the City have steadily increased over the past 20 years as development and the accompanying activity and traffic it brings has escalated. As a result, many of the City's policies with regard to noise control have become outdated and are no longer applicable.

Noise Planning Issues are:

- There are many locations throughout the City where homes are located close to major noise sources. New development in hillside areas may be exposed to noise from the gun club as well as mining operations.
- Due to the fact that background noise levels have risen over the past 20 years, the City's existing noise ordinance is difficult to enforce and is in need of revision.
- Noise reduction can take many forms, including noise walls, double-pane windows, heavy landscaping, and strategic location and orientation of buildings and activities. Each may be appropriate for different situations throughout the City.

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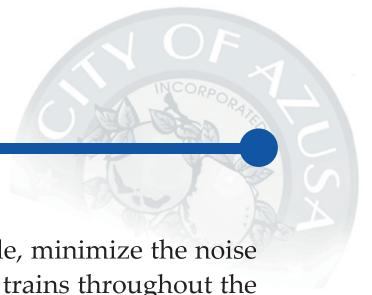
LEGEND:

- High Noise Areas
- City of Azusa Boundary
- Sphere of Influence Boundary



High Noise Areas in Azusa
GENERAL PLAN UPDATE

FIGURE N-1



Chapter 5: Natural Environment

Vision

A decrease in the ambient noise level for all areas of Azusa.

Noise Goal and Policies

GOAL

1 MAINTAIN COMMUNITY NOISE LEVELS THAT MEET HEALTH GUIDELINES AND ALLOW FOR A HIGH QUALITY OF LIFE.

POLICY

- 1.1 Integrate noise considerations in the City's land use planning and project approval process (N1, N2, N3, N5, N6, N10, N11, and N12).
- 1.2 Protect those areas of the City where the existing noise environments are considered unacceptable or "noise sensitive" (Figure N-2) (N4 through N9, N12, N14, N16, N17, and N18).
- 1.3 Maintain or reduce noise levels within acceptable levels adjacent to existing or planned major transportation facilities such as freeways, major highways, railroads, and light rail transit (N5 through N8, N10, N13, N14, and N15).
- 1.4 Maintain or reduce noise levels within acceptable levels adjacent to industrial processing and mining activities and the San Gabriel Valley Gun Club. (N9 through N12, N16, N17).
- 1.5 Establish policy for outdoor activities including but not limited to sports, music, and festivals. (N19)

- 1.6 To the extent feasible, minimize the noise levels generated by trains throughout the city. (N20)

Noise Implementation Programs

N1 NOISE AS AN EVALUATION FACTOR FOR NEW DEVELOPMENT

Include noise impacts as an evaluation factor in the consideration of the siting, design and construction of new residential, commercial, industrial developments or public/semi-public facilities such as parks, schools, convalescent homes, assisted living facilities and hospitals. (Table N-1)

N2 NEIGHBORHOOD DESIGN PROGRAM

Implement a neighborhood design program to route through traffic away from residential areas.

N3 DESIGN GUIDELINES TO REDUCE NOISE

Create design guidelines for residential developments adjacent to transportation facilities to maximize site planning, building design and amenities, and building orientation as methods to reduce noise.

N4 ADDRESS NOISE SENSITIVE USES

Noise sensitive uses are to be specifically addressed in decisions affecting the location of commercial, institutional, and industrial land uses or activities that typically generate excessive noise.

N5 ACOUSTICAL ANALYSIS FOR TRANSPORTATION ADJACENT DEVELOPMENT

Require acoustical analyses for new residential developments located adjacent to freeways, highways, or local roadways that have traffic

Chapter 5: Natural Environment

TABLE N-1: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

| Land Use Category | Community Noise Exposure (dBA, CNEL) | | | | | |
|---|--------------------------------------|----|----|----|----|----|
| | 55 | 60 | 65 | 70 | 75 | 80 |
| Residential - Low Density Single-Family, Duplex, Mobile Homes | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Residential - Multi-Family | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Transient Lodging - Motels Hotels | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Auditoriums, Concert Halls, Amphitheaters | | | | | | |
| | | | | | | |
| | | | | | | |
| Sports Arena, Outdoor Spectator Sports | | | | | | |
| | | | | | | |
| | | | | | | |
| Playgrounds, Neighborhood Parks | | | | | | |
| | | | | | | |
| | | | | | | |

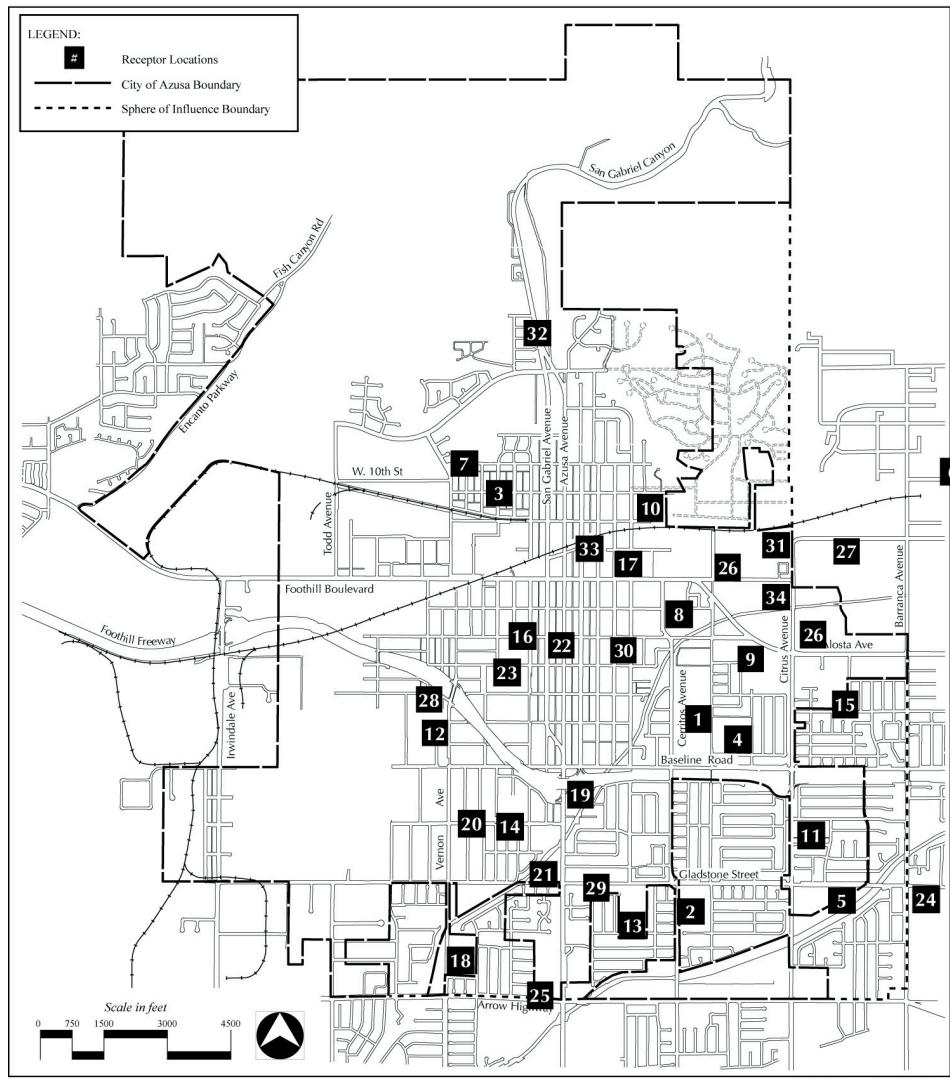


Chapter 5: Natural Environment

TABLE N-1: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

| Land Use Category | Community Noise Exposure (dBA, CNEL) | | | | | |
|--|--------------------------------------|----|----|----|----|----|
| | 55 | 60 | 65 | 70 | 75 | 80 |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Office Buildings, Business Commercial and Professional | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Industrial, Manufacturing, Utilities, Agriculture | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| <p> Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.</p> <p> Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditionally will normally suffice.</p> <p> Normally Unacceptable - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.</p> <p> Clearly Unacceptable - New construction or development should generally not be undertaken.</p> | | | | | | |
| <p>SOURCE: California Office of Noise Control, Department of Health Services.</p> | | | | | | |

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Source: Terry A. Hayes Associates

- | | | | |
|----------------------------------|--------------------------------|---|--|
| 1. Azusa High School | 10. Dalton School | 19. Alpha Infant Care & Pre School | 28. Erhardt Convalescent Home |
| 2. Cancer School | 11. Magnolia School | 20. Azusa Day School | 29. Villa Azusa |
| 3. Longfellow School | 12. Mountain View School | 21. Charter Oak Unified School District | 30. Soldiers Senior Village |
| 4. Foothill School | 13. Murray School | 22. Friends N Pals Pre School | 31. Mankowski Homes |
| 5. Gladstone Street School | 14. Paramount School | 23. Operation Headstart | 32. Silverado Assisted Living |
| 6. Sandburg School | 15. Powell School | 24. Rainbow Christian Pre School | 33. Library |
| 7. Hodge School | 16. Slauson School | 25. Santa Fe Kid Co | 34. Foothill Vista Senior Mobile Home Park |
| 8. Lee School | 17. St. Frances of Rome School | 26. Azusa Pacific University | |
| 9. Light & Life Christian School | 18. Valleydale School | 27. Citrus College | |
| 10. | | | |



Noise Sensitive Receptor Locations

GENERAL PLAN UPDATE

FIGURE N-2



Chapter 5: Natural Environment

volumes that equal or exceed 20,000 vehicles per day, or that are adjacent to a City-designated truck route.

N6 ACOUSTICAL ANALYSIS FOR RAIL ADJACENT DEVELOPMENT

Require an acoustical analysis for new residential developments located within 200 feet of an active or planned railroad or light rail transit line.

N7 ADVOCACY OF ELECTRIC TRAINS

Actively coordinate with regional agencies to advocate electrification of light rail and freight trains.

N8 GRADE SEPARATIONS TO ELIMINATE BELLS AND HORMS

Work with the railroads and/or the Public Utilities Commission in the planning process of rail crossings. Explore opportunities for grade separations at crossings, where feasible, to reduce or eliminate the need for crossing gate bells and approach horns.

N9 SAN GABRIEL VALLEY GUN CLUB

Explore ways to limit the hours of operation to restrict weekend use. Consider restricting the types of weapons (no rifles, shotguns, automatic weapons). Consider the feasibility of enclosing the facility or relocating the facility to an enclosed structure within an industrial zone in the City.

N10 USE NOISE CONTOUR MAPS TO DETERMINE ACCEPTABLE NOISE LEVELS FOR DEVELOPMENT

If new development is proposed for an area shown on Noise Element Contour Maps to be within the "Conditionally Acceptable," "Normally Unacceptable," or "Clearly Unacceptable" noise range for the proposed land use (as shown in Table N-1), require acoustical analysis and implementation of provisions

to reduce exposure to noise, such as window glazing and other forms of sound insulation. (Figure N-3)

N11 ACOUSTICAL ANALYSIS FOR INDUSTRIAL AND COMMERCIAL DEVELOPMENT

Require an acoustical analysis for new industrial and commercial developments that include outdoor activities or processes.

N12 ACOUSTICAL ANALYSIS FOR COMMERCIAL, INSTITUTIONAL, AND/OR INDUSTRIAL ADJACENT DEVELOPMENT

Require an acoustical analysis for commercial, institutional, or industrial developments that directly adjoin an existing residential use or residential zone.

N13 IMPLEMENTATION OF ABATEMENT MEASURES FOR STATE FACILITIES

Ensure that all noise abatement measures for State operated transportation facilities, such as the Interstate 210 Freeway are implemented in a timely fashion.

N14 MITIGATE TRANSPORTATION RELATED NOISE

Mitigate the impact of transportation-related noise in residential areas by: 1) actively coordinating with Caltrans to build sound walls; 2) enacting design guidelines to improve siting, orientation, and shielding of residential uses adjacent to freeways and busy arterials; 3) imposing strict building standards for window glazing and noise-attenuating building materials in new residential construction; and 4) implementing traffic calming measures to slow traffic in residential neighborhoods.

N15 NEW TRUCK ROUTES

Review existing City designated truck routes and develop a new truck route plan that minimizes truck traffic adjacent to existing and planned residential neighborhoods.

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N16 NOISE COMPLAINTS AS EVALUATION FACTOR IN RENEWAL OF CUP

Include verified noise complaints as an evaluating factor during the renewal of existing conditional use permits.

N17 NOISE COMPLAINT DATABASE

Compile and maintain a database to be shared by all City departments regarding noise complaints relating to industrial activities and processes.

N18 ENFORCEMENT OF REGULATIONS

Encourage the enforcement of all state and federal safety and health regulations related to occupational, stationary and vehicular noise sources.

N19 SPECIAL EVENTS

Establish noise policy for outdoor events including, but not limited to, sporting events, concerts, festivals, and special events. Policy should include standards for acceptable noise levels, permitted hours of operation, and penalties for noncompliance.

N20 RAIL NOISE

Work with the Public Utilities Commission, rail operators, and/or other entities to ensure that the noise generated by trains, including the sound of the horns, meet but do not exceed state regulations.

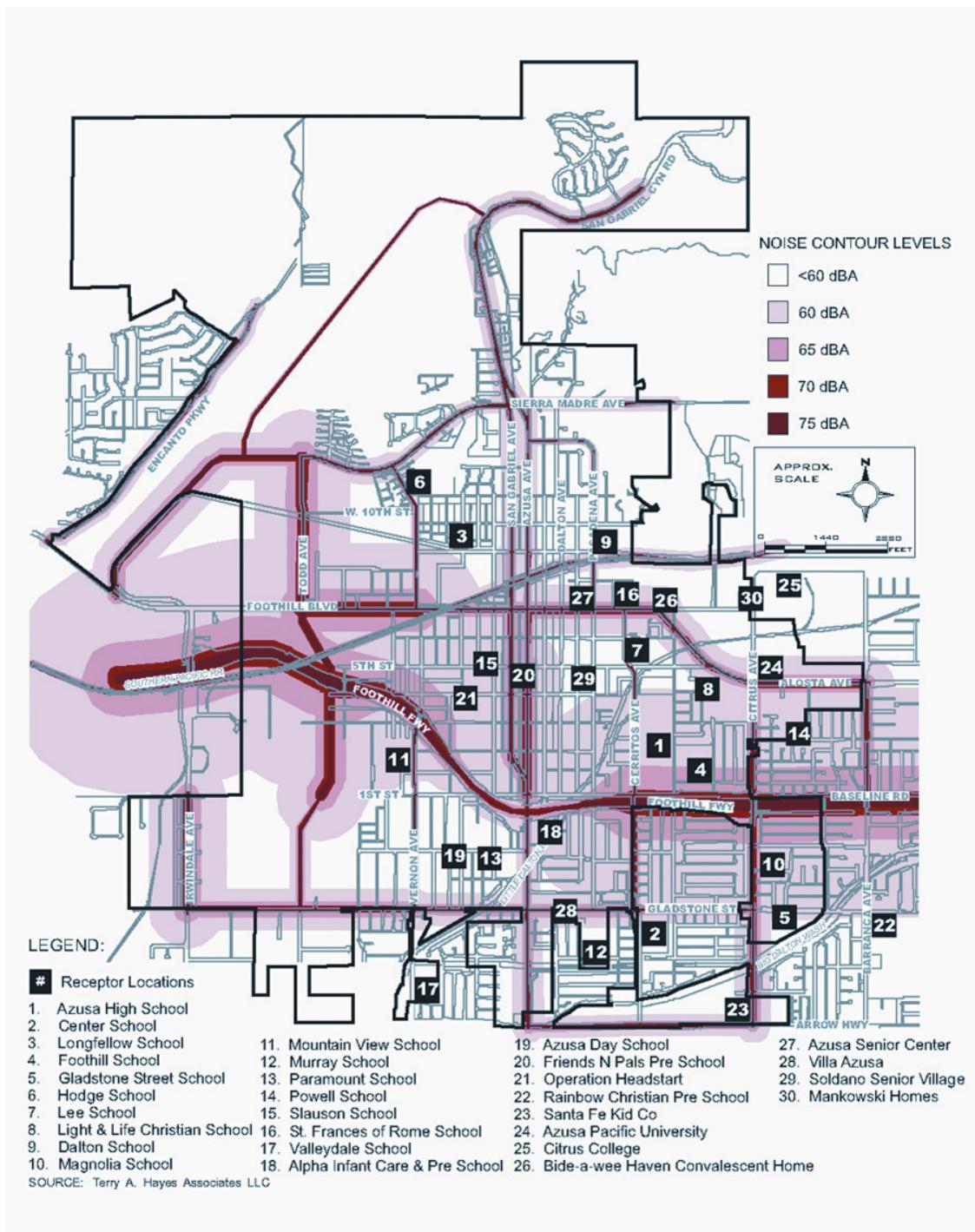
Projects that could realistically be completed in the next five years:

1. Develop design guidelines for residential uses to be located next to transportation facilities.
2. Determine special event policy.
3. Evaluate San Gabriel Valley Gun Club operations to limit noise.



Chapter 5: Natural Environment

Figure N-3
Future Noise Contours



Chapter 5: Natural Environment

Noise Program Implementation Matrix (Part 1 of 3)



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Noise Program Implementation Matrix (Part 2 of 3)

| No. | Name | City of Azusa | | | | | | | | | | City of Azusa | | | | | Schedule * as funding permits | | | | | | | |
|---------|---|---|---|------------------------------------|---------|---------|--|--------------------------------|---|-------------------------------------|------------------------------|---------------------|--------------|--------------------|-------|---------------|-------------------------------------|--------|---------------|------------------|------------|-------------|---------------|---------|
| | | Administration (Admin., Info. Tech, and/or Transportation) | Community Development (Planning, Business Licenses, Code Enforcement, Building) | Economic Development/Redevelopment | Finance | Library | Light & Water (Electricity, Solid Waste, & Water) | Parks Planning and Development | Public Safety (Police & Emer. Services) | Public Works (Engineering & Maint.) | Recreation & Family Services | Planning Commission | City Council | Los Angeles County | Other | General Funds | Assessment or other Districts | Grants | Redevelopment | Development Fees | Other Fees | State Funds | Federal Funds | Other |
| Program | | Responsible Agency | | | | | | | | | | Funding Source | | | | | | | | | | | | |
| N10 | Use Noise Contour Maps to Determine Acceptable Noise Levels for Development | ● | | | | | | | | | | ● | | | ● | | | | | | | | | Ongoing |
| N11 | Acoustical Analysis for Industrial and Commercial Development | ● | | | | | | | | | | ● | | | | | | | | | | | | Ongoing |
| N12 | Acoustical Analysis for Commercial, Institutional, and/or Industrial Adjacent Development | ● | | | | | | | | | | ● | | | | | | | | | | | | Ongoing |
| N13 | Implementation of Abatement Measures For State Facilities | ● | | | | | | | | | | ● | | | | | | | | | | | | Ongoing |
| N14 | Mitigate Transportation Related Noise | ● | | | | | | | | | | ● | | | | | | | | | | | | Ongoing |
| N15 | New Truck Routes | ● | | | | | | | | | | ● | | | | | | | | | | | | Ongoing |
| N16 | Noise Complaints As Evaluation Factor in Renewal of CUP | ● | | | | | | | | | | ● | | | | | | | | | | | | Ongoing |

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Noise Program Implementation Matrix (Part 3 of 3)

| No. | Name | City of Azusa | | | | | | | | | | City of Azusa | | | | | Schedule * as funding permits | | | | | | | |
|---------|----------------------------|--|---|------------------------------------|---------|---------|---|--------------------------------|---|-------------------------------------|------------------------------|---------------------|--------------|--------------------|-------|---------------|---|--------|---------------|------------------|------------|-------------|---------------|---------|
| | | Administration (Admin., Info. Tech., Transportation) | Community Development (Planning, Business Licenses, Code Enforcement, Building) | Economic Development/Redevelopment | Finance | Library | Light & Water (Electricity, Solid Waste, & Water) | Parks Planning and Development | Public Safety (Police & Emer. Services) | Public Works (Engineering & Maint.) | Recreation & Family Services | Planning Commission | City Council | Los Angeles County | Other | General Funds | Assessment or other Districts | Grants | Redevelopment | Development Fees | Other Fees | State Funds | Federal Funds | Other |
| Program | | Responsible Agency | | | | | | | | | | Funding Source | | | | | | | | | | | | |
| N17 | Noise Complaint Database | ● | | | | | | | | | | ● | | | | | | | | | | | | Ongoing |
| N18 | Enforcement of Regulations | ● | | | | | | | | | | ● | | | | | | | | | | | | Ongoing |
| N19 | Special Events | ● | | | | | | | | | | ● | | | | | | | | | | | | 2006 |