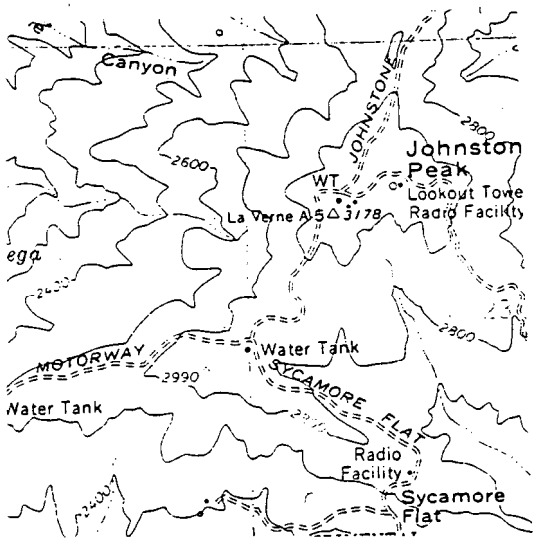
VII.
SAFETY ELEMENT

INTRODUCTION

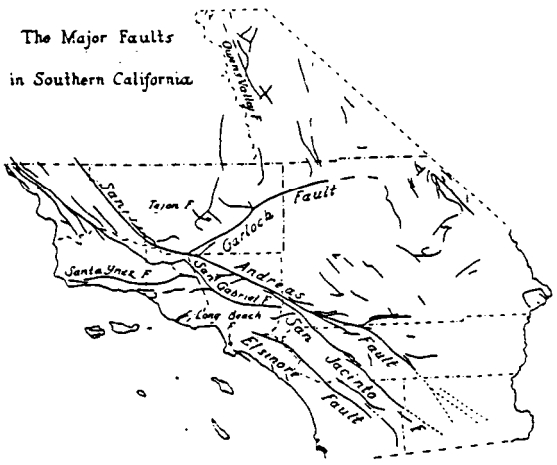
The Safety Element's purpose is to reduce deaths, injuries, property damage, and economic and social dislocation resulting from natural hazards including flooding, mudslides and soil creep, tsunamis and seiches, land subsidence, earthquakes, avalanches, other geologic phenomena, levee or dam failure, certain types of urban and wildland fires, and building collapse. It is the primary vehicle for identifying the hazards that municipalities must consider when making land use decisions.

FINDINGS

Findings establish the foundation for this element's, goals, objectives, plan proposals and implementation measures. The information for the summary of findings is drawn from a review of existing reports, the previous element input from City Staff and the comments of the General Plan Advisory Committee. A detailed assessment was made of safety element concerns including:



- Surface Rupture
- Ground Shaking
- Liquefaction
- Seiches
- Dam Failure
- Flooding
- Multi-hazard planning
- Seismic and Abatement Survey



The City is in the Southern California seismic area

Surface Rupture

A surface rupture is a break in the ground's surface and the associated deformation resulting from the movement of a fault. Ground rupture could occur along the surface traces of the "potentially active" Sierra Madre Fault which crosses the northern portion of the City. A "potentially active" fault is one that evidences surface displacement during the last two million years. The City is not in an Alquist-Pirillo zone.

Ground Shaking

The City will probably experience ground shaking from earthquake activity that is most likely associated with the faults in the surrounding area. Ground shaking of moderate to severe intensity could be expected from seismic activity along the Sierra Madre Fault or other nearby faults of significance. There is potential for landsliding in hillside areas. Sedimentary bedrock units consisting primarily of siltstones and shales are the least stable of the major geologic units underlying San Dimas.

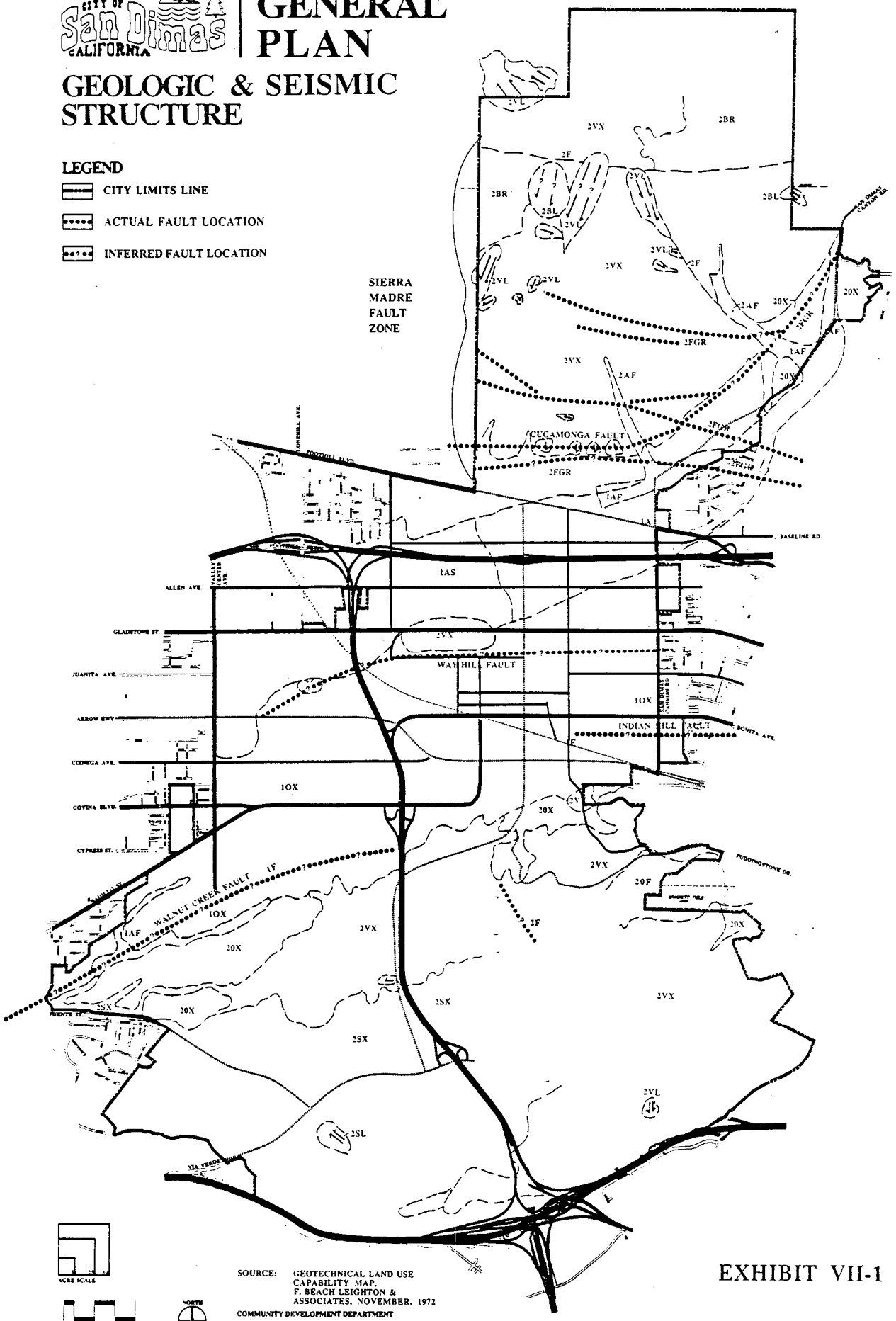
Liquefaction

In San Dimas there is a low potential for liquefaction which is a condition where subsurface soils become liquid in nature. Soils most prone to liquefaction are medium to fine sand fractions located in areas where the water

CITY OF San Dimas CALIFORNIA

GENERAL PLAN

GEOLOGIC & SEISMIC STRUCTURE



SOURCE: GEOTECHNICAL LAND USE CAPABILITY MAP, F. BEACH LEIGHTON & ASSOCIATES, NOVEMBER, 1972

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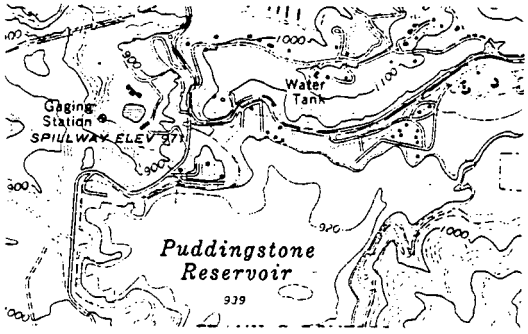
EXHIBIT VII-1

table is high. Since these unfavorable conditions overlap in few areas of the community, the overall liquefaction potential is low. The areas are generally north of Way Hill, southeast of the spreading grands, and in the central-southwestern end of the City limit and also in flood plains of San Dimas Wash near the western-central part of the City.

Seiches

Due to the presence of Puddingstone Reservoir and San Dimas Canyon Reservoir in San Dimas, seiches, or earthquake-generated waves, are a potential hazard. These waves are generated in enclosed or restricted bodies of water such as lakes or reservoirs and are similar to the sloshing of water in a bucket or bowl when shaken or jarred. The waves can be tens of feet high or more and can have devastating effects on people and property within their reach. Since the easiest way out for the water is over the lowest side of the enclosure, the greatest effects are usually felt in the mouths of feeding streams or when the water overtops the dam, dumping large volumes of water on areas downstream.



Puddingstone Dam serves as a reservoir and recreation

Dam Failure

Dam failure at Puddingstone Reservoir in the eastern portion of San Dimas is not expected to significantly impact existing developed areas. Available data indicates Walnut Creek would

be innundated by dam failure at Puddingstone Reservoir.

Failure at the San Dimas Canyon Reservoir or the Puddingstone Diversion Dam both located above the northern portion of the City, would effect primarily City-owned properties such as public rights-of-way. (New standards prohibit building in the flood plain.)

Flooding

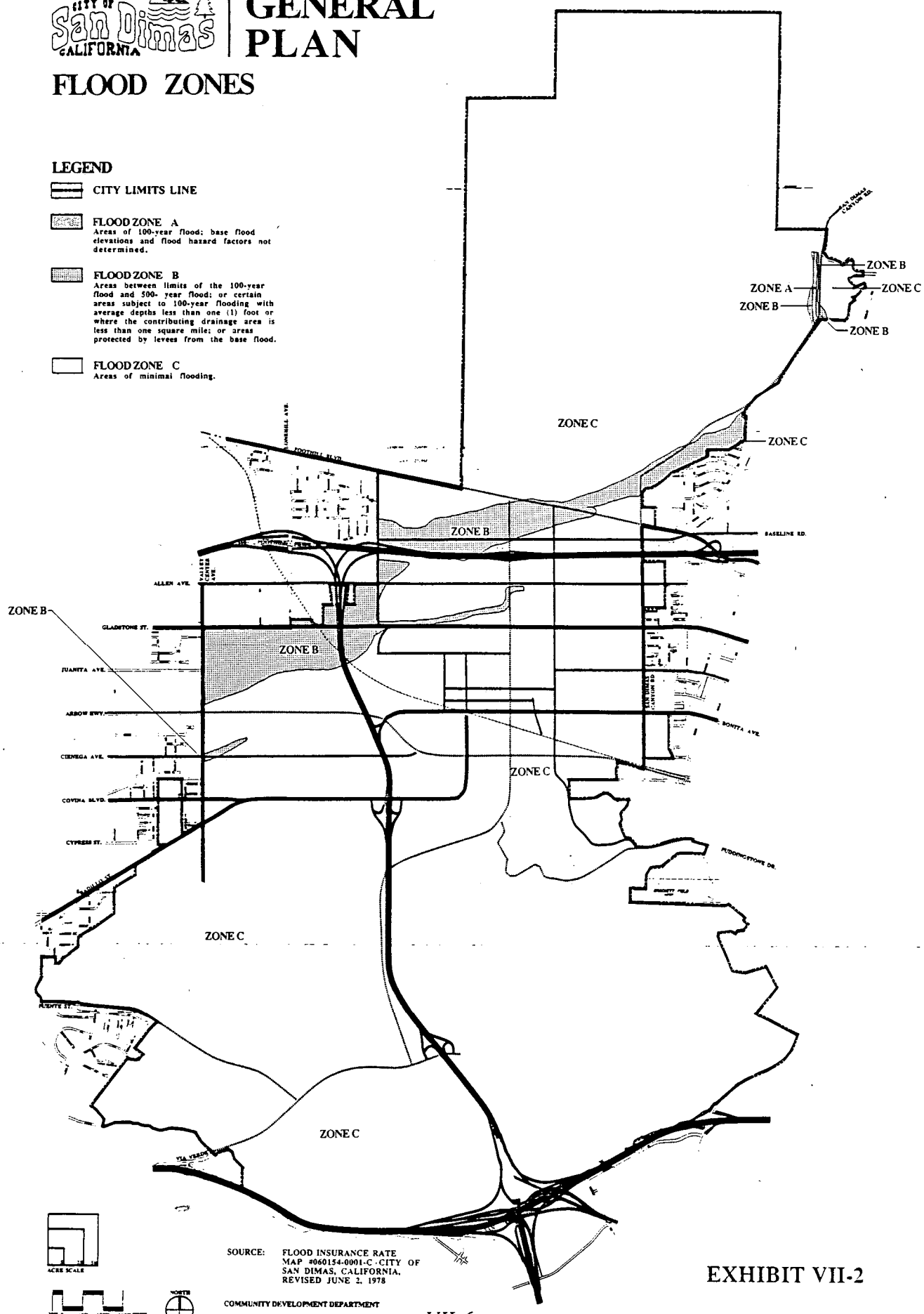
San Dimas has three flood zone designations: A9, B and C. Flood Zone A9, which is defined as subject to flooding in a hundred year storm, covers a small stretch of the San Dimas Canyon Wash south of Golden Hills Road. Areas included in Flood Zone B, which means they could be impacted in a 100-500 year storm, are located along the San Dimas Canyon Wash and just south and west of the Foothill Freeway north of Arrow Highway. The balance of the City is within a Flood C designation which is defined as subject to minimal flooding

Multi-Hazard Planning

The San Dimas Multi-Hazard Functional Planning Guidance document is an informal, working document. The City Manager is responsible for preparation of this document. The Civic Center will serve as a referral Center. The preferred emergency center commence post is at the City Yard. The San Dimas High School and Lone Hill Intermediate School will

GENERAL PLAN

FLOOD ZONES



SOURCE: FLOOD INSURANCE RATE MAP #060154-0001-C CITY OF SAN DIMAS, CALIFORNIA, REVISED JUNE 2, 1978

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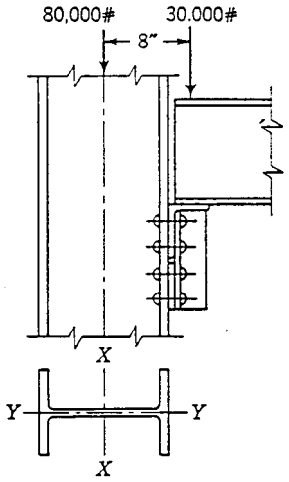

Seismic abatement is a priority program

serve as aide stations. Emergency routes used for evacuation would depend on a number or variables such as the type and location of the emergency. In general, east/west routes would be Arrow Highway, Foothill Boulevard, and I-210. The north/south route would be San Dimas Avenue.

Seismic and Abatement Survey

In December 1989, the City updated the Seismic and Abatement Survey. This survey identified eight (8) buildings which were constructed using unreinforced masonry. These buildings are defined as Category I buildings and are located on Bonita Avenue in Frontier Village.

DEVELOPMENT POLICIES

A development policy is a general plan statement that guides action; it includes:

- Goals
- Objectives
- Policies
- Plan Proposals
- Implementation Measures

Please refer to section I for a detailed definition and explanation of how the Plan proposals (land use map) and implementation measures are referenced.

These development policies are summarized in a matrix on page VIII-14.

GOALS STATEMENT S-1:

TO MAINTAIN SAN DIMAS SAFE FROM NATURAL, SEISMIC AND PUBLIC SAFETY HAZARDS

	OBJECTIVES:		POLICIES:
1.1	Manage development of San Dimas to protect areas subject to geologic hazards.	1.1.1	Continue to adopt updated versions of the Uniform Buildng Code and require all new private and public construction to conform to its earthquake resistant design provisions.
		1.1.2	Review and update, as appropriate, the Multi-Hazard Functional Planning Guidance document.
		1.1.3	Require that adequate soils, geologic and structural evaluation reports be prepared, by registered soils engineers, engineering geologists, and/or structural engineers, as appropriate, for all new development.
		1.1.4	Require that geological reports, building plans and the appropriate sections of environmental impact reports be reviewed by registered engineering geologists and/or structural engineers.
		1.1.5	Evaluate disaster plans and potential effectiveness in light of various earthquake intensities.
		1.1.6	Encourage the creation of county-wide systematic review of emergency preparedness organizations, schools, police departments and programs.
		1.1.7	Establish a volunteer citizens Disaster Group to help during emergencies.
		1.1.8	Locate facilities that are necessary for post-disaster emergency services in areas of low geologic hazard risk.

	OBJECTIVES:		POLICIES:
1.2	Minimize damage to public and pri-ate property from flooding.	1.2.1	Continue to require any new development to mitigate flooding problems identified by the National Flood Insurance Program as a condition of approval.
		1.2.2	Ensure that development in the hillside area is regulated to reduce erosion potential.
1.3	Provide for the safe use and transportation of hazardous materials and wastes.	1.3.1	Discourage the location of new high risk industrial and relocation of existing hazardous uses unless adequate mitigation measures are included.
		1.3.2	Consider a program to develop a plan for household hazardous waste.
		1.3.3	Encourage low risk industries within the City and monitor the risks associated with existing industries such as the production and transfer of gas.

Plan Proposals:

Implementation Measures: a, b, c, d, e, f (See Page VII-14)

GOAL STATEMENT S-2:

PROVIDE EFFECTIVE AND EFFICIENT PUBLIC SAFETY SERVICES INCLUDING FIRE AND POLICE PROTECTION AND EMERGENCY ACCESS

OBJECTIVES:		POLICIES:	
1.4	Provide effective and efficient fire and protection services.	1.4.1	Ensure that new development is adequately served by sufficient water pressure and/or flow capacities to meet current and future standards.
		1.4.2	Ensure that existing and new development is served by adequate response times for police, fire and paramedic services.
		1.4.3	Restrict the use of flammable materials and provide additional setbacks in fire hazard zones.
		1.4.4	Provide adequate supplies of water at appropriate locations for fire suppression.
		1.4.5	Encourage new projects to have adequate fire service equipment and sprinkler systems.

Plan Proposals:

Implementation Measures: g, h, i, j, k (See Page VII-14)

IMPLEMENTATION MEASURES

a: Grading Ordinance and Erosion Control Ordinance: Continued enforcement to minimize risks associated with seismic hazards.

b: Geology and Soils Reports: Prior to hillside and flat land development these reports will be required.

c: Unreinforced Masonry Buildings: There are eight such buildings in San Dimas, located primarily in the downtown area. Prior to the issuance of any building permit, reinforcement shall be reviewed and, where appropriate, retrofitted to improve seismic safety.

d: NFIP: Continued participation in the National Flood Insurance Program. The NFIP identifies areas subject to flooding in severe storm conditions.

To mitigate flood hazards, the City participates in the National Flood Insurance Program (NFIP). The NFIP, which is administered by the Federal Emergency Management Agency, has regulations requiring communities to adopt land use restrictions for their 100-year floodplain to qualify for federally subsidized flood insurance. These restrictions include a requirement that residential structures be elevated above the level of the 100-year flood and that other types of structures be flood-proofed.

e: HMDQ: Hazardous materials will be monitored by enforcement of the Hazardous Materials Disclosure Ordin-ance. This ordinance regulates the use, siting and storage of hazardous materials. Amend the ordinance, as appropriate, following evaluation of the LACo HWMP.

f: For use in emergency situations, develop a list which identifies hazardous material sites such that emergency crews can check on these buildings. The City will coordinate with the CoHWMP in the listing of hazardous materials.

f: MHFPD: Utilize and update, as appropriate, the Multi-Hazard Functional Planning Guidance document. The document identifies the functions of various public service agencies in an emergency situation. Conduct a study to determine the structures most suitable for an emergency center. Design a program to help inform the public about MHFPD.

g: Fire Department Program: Continued implementation of the following public education programs:

1. Junior Fireman program in the elementary schools.

2. Community programs for homeowners groups and civic organizations on request.

3. "Shakie-Quakie" earthquake safety program for school children.

h: Fire Station Planning: The County of Los Angeles Fire Department is working with the City of San Dimas to plan a new fire station on City land in the vicinity of Bonita Avenue and Walnut Avenue. This station will replace Station #64.

i: Fire Hazard Areas: Fire retardant roofing (Class B or better) and brush clearance zone shall continue to be required in wild land fire hazard areas such as the foothills and Via Verde. Preserve to the extent practical the fire roads in the City's foothill areas.

j: Fire Roads: Preserve fire roads in the foothills and address the fencing of fire roads on private property.

k: Education: Implement a safety education program for children and seniors encompassing fire and police protection and geologic hazards.

l: Sheriff's Department Programs: Continued implementation of the following programs:

1. Neighborhood watch.

2. Business Watch which uses fax machines to distribute pertinent crime information to business establishments. (Note: voluntary participation program a FAX is only sent ot businesses which request service.)

3. Child alert personal safety program.

4. SANE substance abuse program.

5. Sober Graduation.

Safety Element - Goals / Implementation Matrix

Goals / Implementation		a	b	c	d	e	f	g	h	i	j	k
S-1.	Maintain San Dimas safe from natural, seismic and public safety hazards.	■	■	■	■	■	■					
S-2.	Provide effective and efficient public safety services including fire and police protection and emergency access							■	■	■	■	■