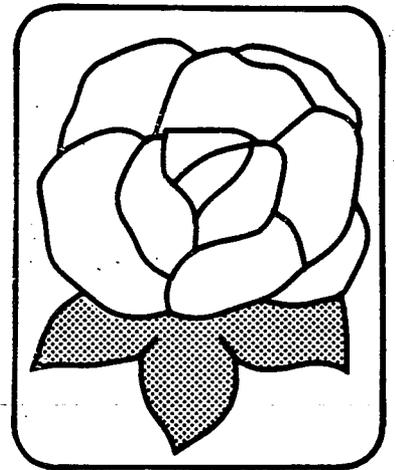


TECHNICAL REPORT

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# General Plan

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Temple City

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CITY OF TEMPLE CITY  
GENERAL PLAN TECHNICAL REPORT

APRIL, 1987

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LAND USE ELEMENT TECHNICAL REPORT

CITY OF TEMPLE CITY  
GENERAL PLAN UPDATE

April, 1987

Cotton/Beland/Associates, Inc.  
1028 North Lake Avenue  
Suite 107  
Pasadena, California 91104

#419.00

## LAND USE ELEMENT TECHNICAL REPORT

### A. Introduction

The Land Use Technical Report provides information on current land use patterns in the city. There are five major categories of land use - residential, commercial, industrial, public/institutional facilities and open space/vacant lands. Data for this technical report were obtained from 1982 aerial photos of the City; a June, 1986, windshield survey conducted by Cotton/Beland/Associates; and records provided by City staff.

Temple City was incorporated in 1960 and became a charter city in 1971. The city is located in the West San Gabriel Valley (Figure LU-1) and has an area of about 3.9 square miles. Surrounding cities are Arcadia, El Monte, Rosemead, and San Gabriel. The planning area for the city includes unincorporated areas of Los Angeles County (Figure LU-2). The following sections will describe existing land use and development trends in Temple City.

### B. Existing Land Use

For planning purposes, the City of Temple City was divided into five planning areas. Figure LU-2 shows the location and approximate acreage of each planning area. These acreages do not include streets, alleys, or flood control facilities.

Temple City has five main categories of land use: residential, commercial, industrial, public/institutional and open space/vacant. The residential land use category has three subcategories; low-density (0-6 units/acre) medium-density (7-12 units/acre) and high-density (13-36 units/acre). Table LU-1 shows the distribution of land uses within the City.





Temple City  
General Plan

Figure LU-2  
Planning Areas

TABLE LU-1  
EXISTING LAND USE

Land Use	Acreage	% of City Total
<b>Residential</b>	<b>1,604</b>	<b>67%</b>
Low Density	1,160	48%
Medium Density	310	13%
High Density	134	6%
Commercial	107	4%
Industrial	57	2%
Public/Institutional	85	4%
Open Space/Vacant	23	1%
Streets	518	22%
<b>Total</b>	<b>2,394</b>	<b>100.0</b>

Source: Temple City Planning Department, CBA, June 1986.

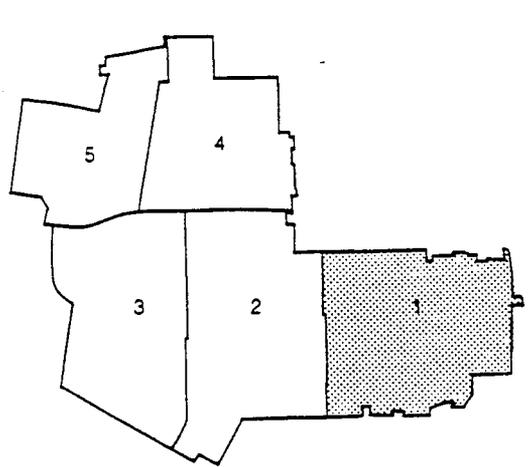
Approximately 67% of the total land area (1,584 acres) is devoted to residential use. The second largest category of land use is commercial, comprising approximately 107 acres, or 4% of the total land area in the city. Commercial land uses are concentrated along and around major arterials, particularly along Las Tunas Drive, Rosemead and Temple City Boulevards and Lower Azusa Road. Industrial uses are concentrated in the southwest part of the city by the Southern Pacific Railroad right-of-way. Public and open space land uses are scattered throughout the city. Figures LU-3 through LU-7 show generalized land use patterns for each planning area.

### C. Land Use Trends

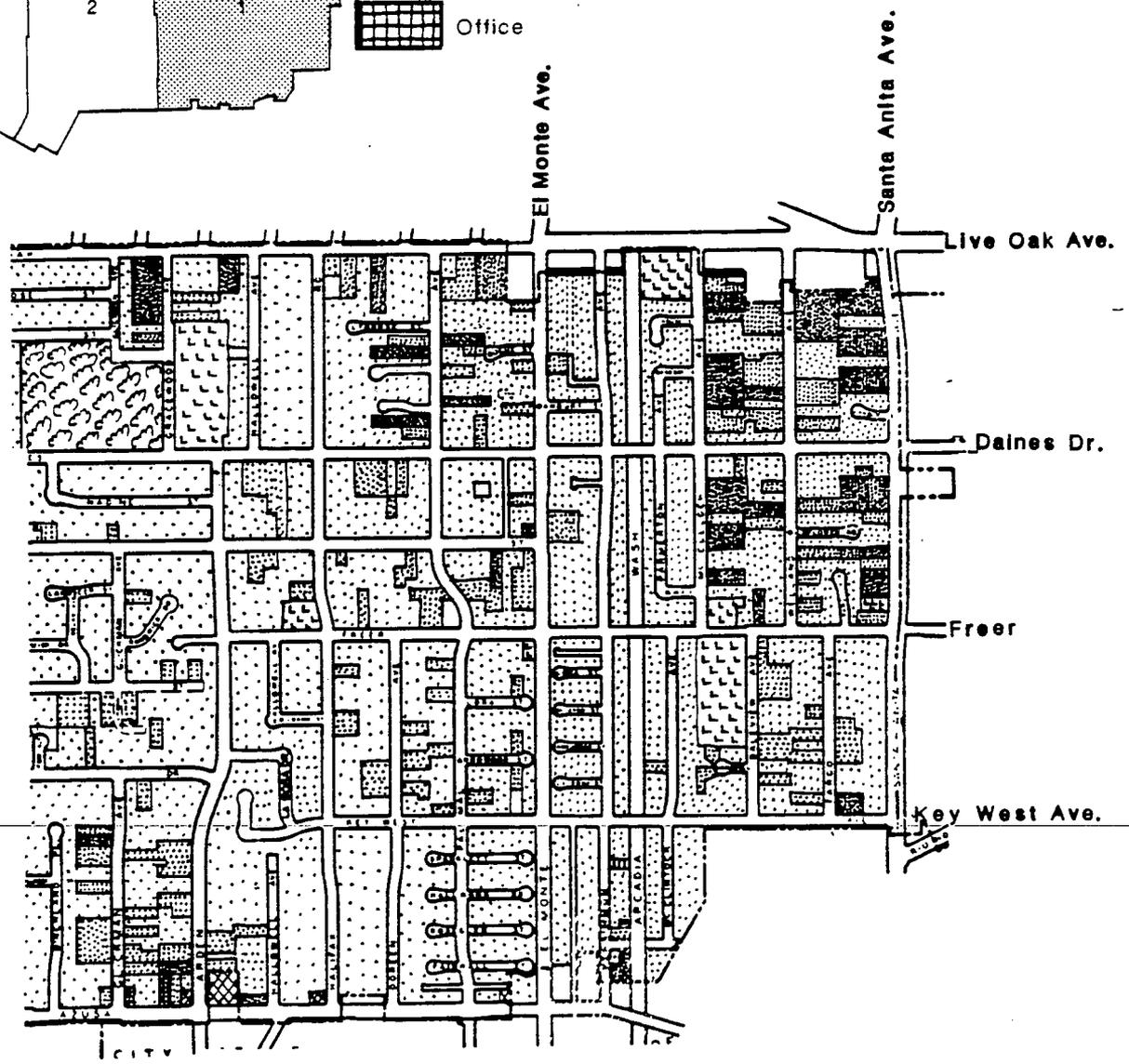
The most obvious land use trend in Temple City is the intensification of residential development. When Temple City was incorporated, about 60% of the land was zoned for medium to high density (7 to 36 units/acre) residential. However, much of this land is occupied by single-family uses.

In recent years, as land values have increased, single-family housing has been replaced with higher density housing. Most of the increased residential density has occurred around major arterials such as Rosemead Boulevard, Temple City Boulevard and Santa Anita Avenue. This growth pressure has raised issues of compatibility with other land uses.

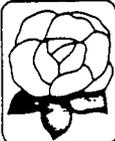
High-density residential uses bring increased traffic and noise into areas which have had a less-intense character. These higher density uses can also increase the burden on the City's infrastructure (e.g. streets, sewers, water), that was designed for less intense use. Commercial and industrial uses also have the potential of deteriorating the quality of life in residential areas with noise, odors and traffic. The industrial and commercial sections of Temple City abut and also contain residential uses within. This conflict between commercial/industrial uses and residential land use is most apparent in the southwest part of the City, below Lower Azusa Road and north of the Southern Pacific Railroad. Residential land use (single and multiple family) coexist with manufacturing uses. The residents are exposed to noise from trucks and manufacturing processes, as well as overflow parking on the area's narrow streets.



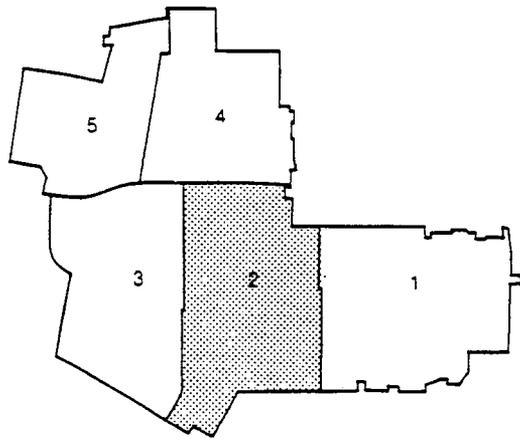
-  Single-Family  
(1 d.u./Lot)
-  Multi-Family, Low Density  
(2-3 d.u./Lot)
-  Multi-Family, High Density  
(4+ d.u./Lot)
-  Commercial
-  Office
-  Institutional
-  Industrial
-  Open Space
-  Vacant

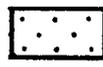
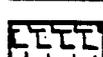
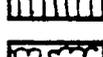
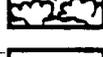


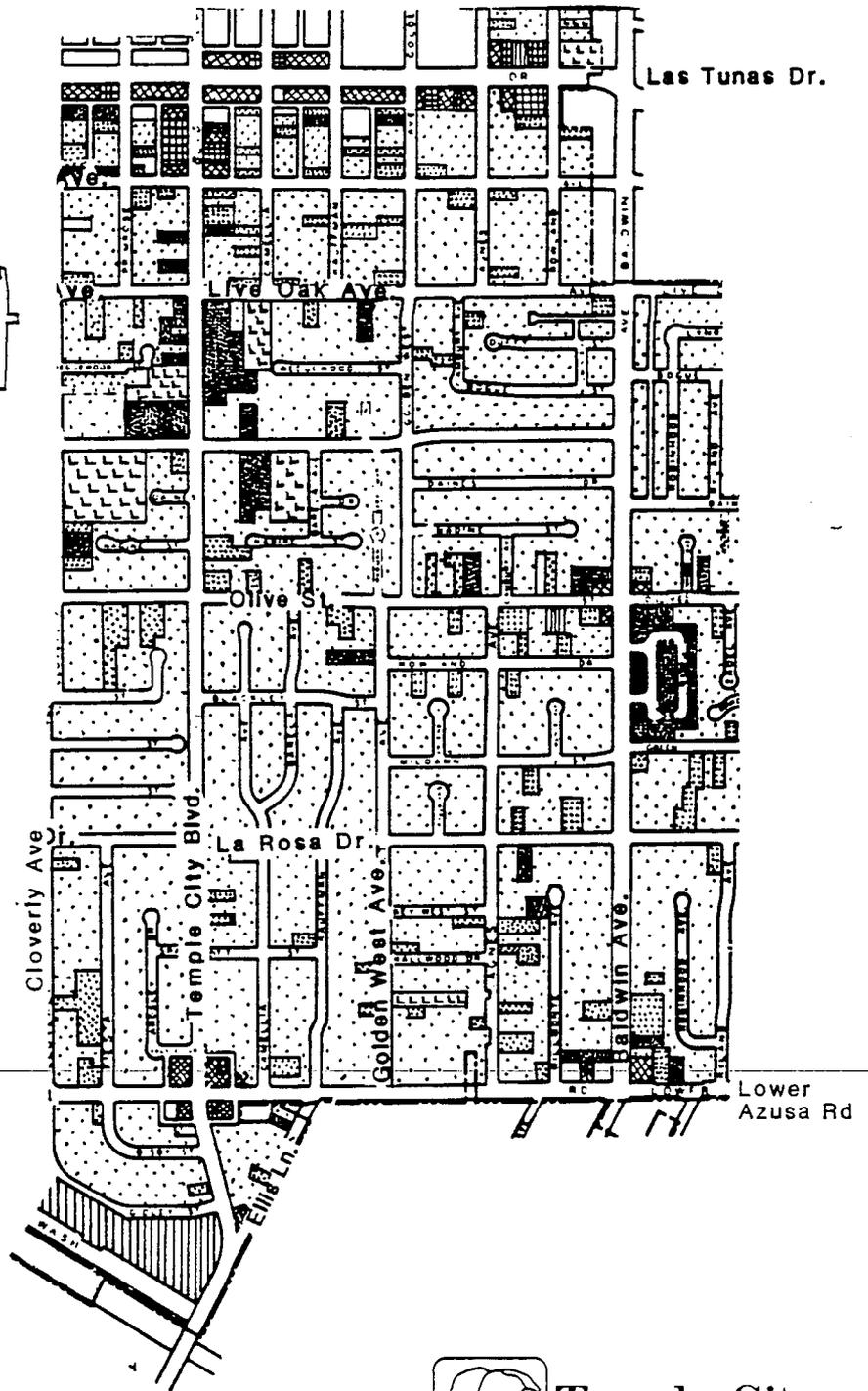
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 scale in feet  



**Temple City  
General Plan**

**Figure LU-3  
Existing Land Use  
Planning Area 1**



-  Single-Family  
(1 d.u./Lot)
-  Multi-Family, Low Density  
(2-3 d.u./Lot)
-  Multi-Family, High Density  
(4+ d.u./Lot)
-  Commercial
-  Office
-  Institutional
-  Industrial
-  Open Space
-  Vacant



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 scale in feet  

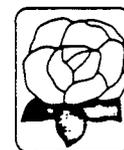
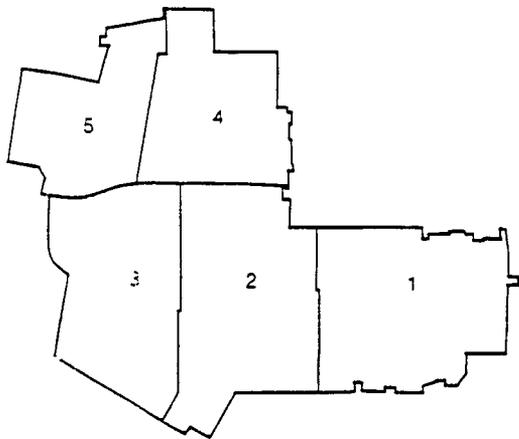
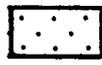
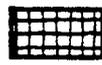
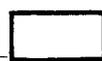
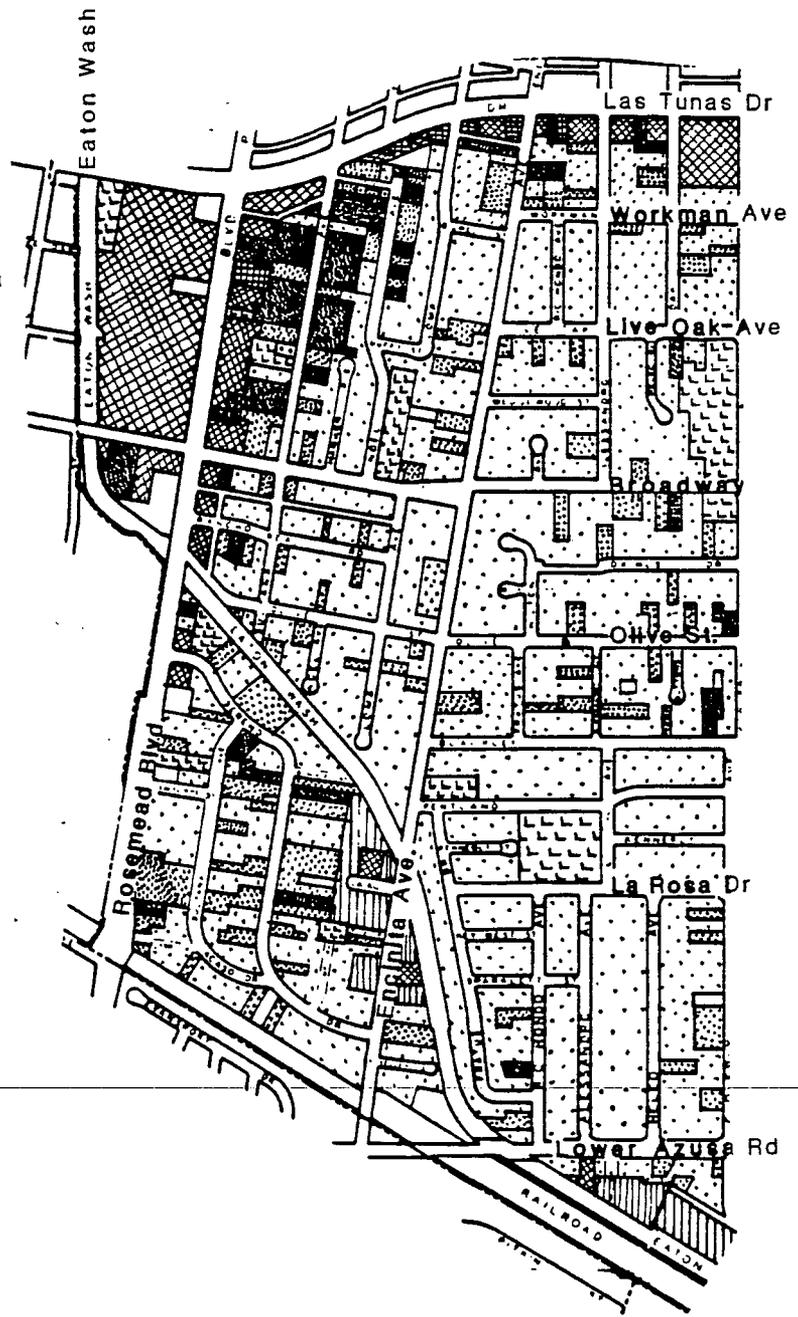


**Temple City  
 General Plan**

Figure LU-4  
 Existing Land Use  
 Planning Area 2



-  Single-Family  
(1 d.u./Lot)
-  Multi-Family, Low Density  
(2-3 d.u./Lot)
-  Multi-Family, High Density  
(4+ d.u./Lot)
-  Commercial
-  Office
-  Institutional
-  Industrial
-  Open Space
-  Vacant

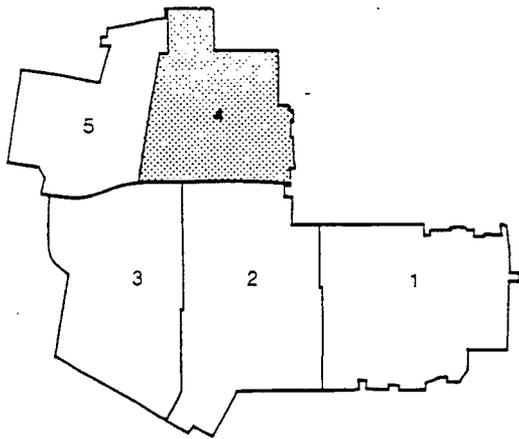


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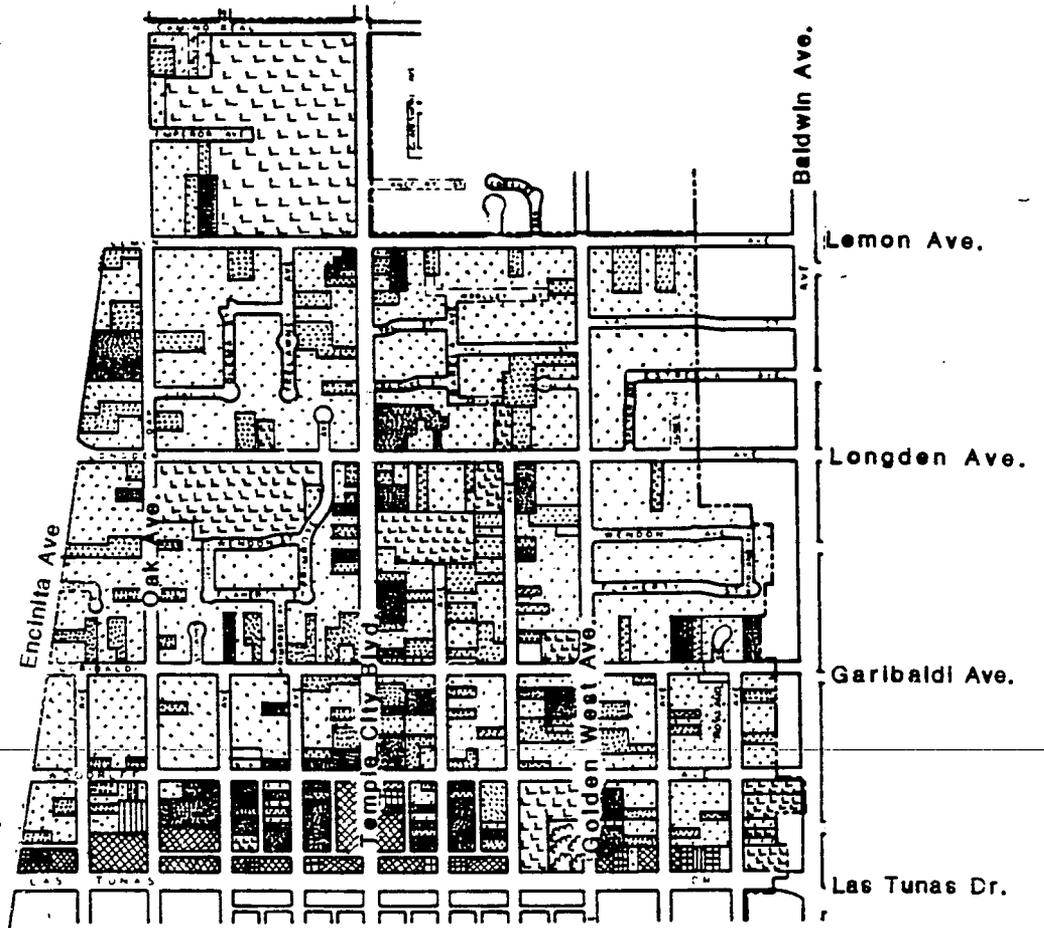


**Temple City  
General Plan**

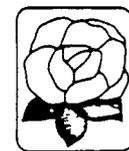
**Figure LU-5  
Existing Land Use  
Planning Area 3**



- |  |   |  |               |
|--|---|--|---------------|
|  | Single-Family<br>(1 d.u./Lot)               |  | Institutional |
|  | Multi-Family, Low Density<br>(2-3 d.u./Lot) |  | Industrial    |
|  | Multi-Family, High Density<br>(4+ d.u./Lot) |  | Open Space    |
|  | Commercial                                  |  | Vacant        |
|  | Office                                      |  |               |

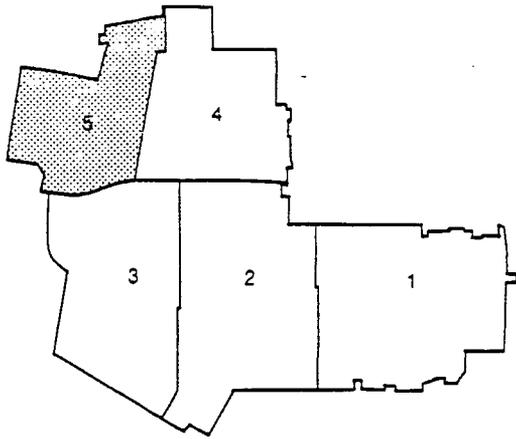


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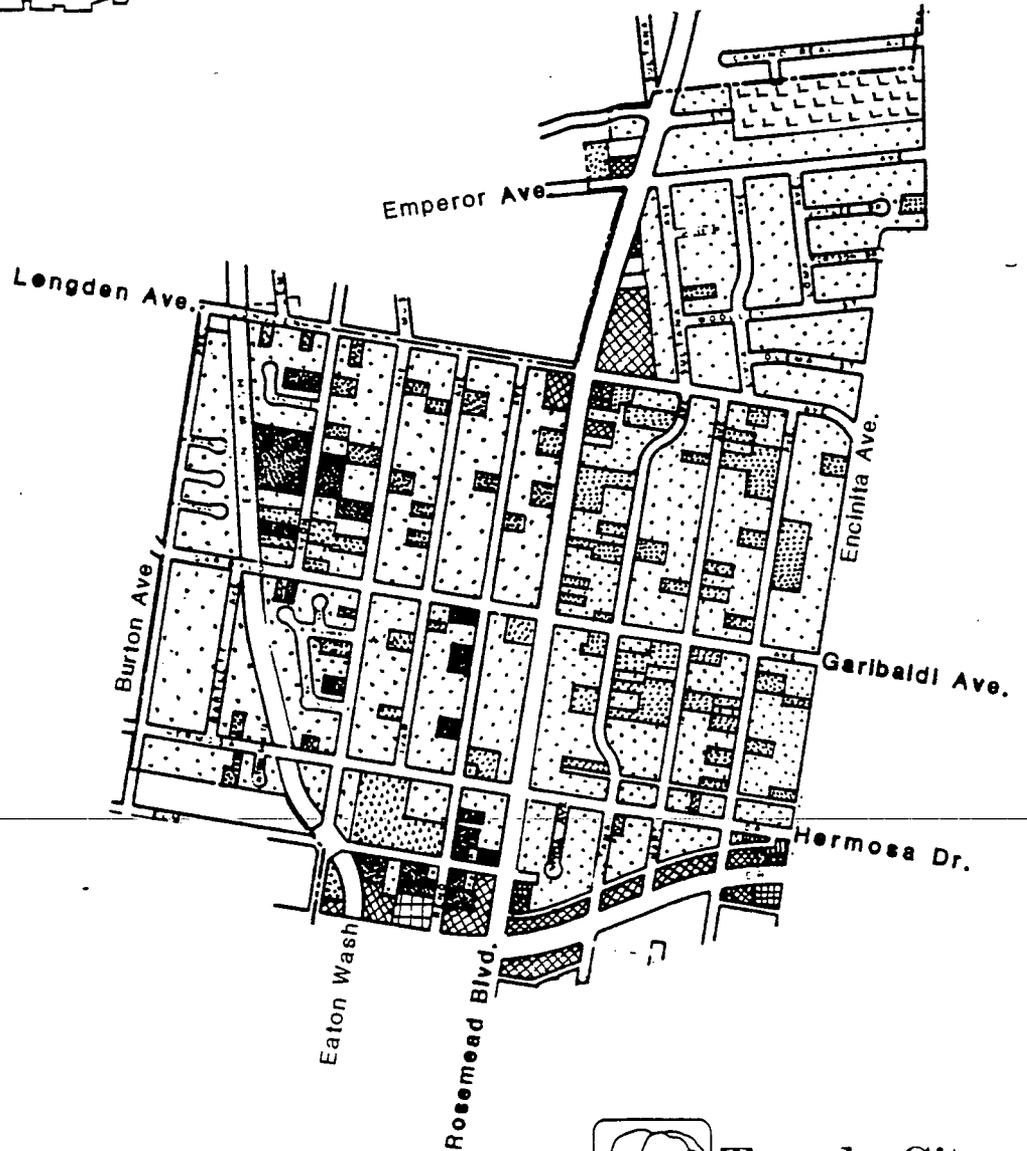


**Temple City  
 General Plan**

**Figure LU-6  
 Existing Land Use  
 Planning Area 4**



- |  |   |  |               |
|--|---|--|---------------|
|  | Single-Family<br>(1 d.u./Lot)               |  | Institutional |
|  | Multi-Family, Low Density<br>(2-3 d.u./Lot) |  | Industrial    |
|  | Multi-Family, High Density<br>(4+ d.u./Lot) |  | Open Space    |
|  | Commercial                                  |  | Vacant        |
|  | Office                                      |  |               |



North  
 0 ————— 1200  
 scale in feet

Temple City  
 General Plan

Figure LU-7  
 Existing Land Use  
 Planning Area 5

PUBLIC SAFETY ELEMENT TECHNICAL REPORT

CITY OF TEMPLE CITY  
GENERAL PLAN UPDATE

April, 1987

Cotton/Beland/Associates, Inc.  
1028 North Lake Avenue  
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#419.00

## PUBLIC SAFETY ELEMENT TECHNICAL REPORT

### A. Introduction

While Temple City has relatively minor public safety issues, they should be identified in this technical report. The City faces one public safety issue relating to natural hazards--seismicity. Temple City is located in a seismically active region and is vulnerable to damage during a major earthquake.

The city also faces some man-made hazards. One is the adequacy of water fire flow in the northeast section of the city. Other man-made hazards are those that can occur in any urban environment; i.e., traffic accidents, fires, etc.

The Public Safety Element Technical Report provides a review of emergency services available to city residents as well as detailed descriptions of the principle public safety hazards in the city.

### B. Public Safety

**Law Enforcement** - Law enforcement services for Temple City are provided under contract with the Los Angeles County Sheriff Department. The contract for fiscal year 1986-87 (beginning July 1, 1986) called for nine law enforcement personnel to be assigned to the city, with a minimum of two deputies from midnight to 8:00 a.m., to a maximum of four deputies from 4:00 p.m. to midnight. No expansion of services is anticipated in the near future. The Sheriff's Department is located at 8838 Las Tunas Drive as shown in Figure PS-1.

**Fire Protection** - Fire protection is provided by the Consolidated Fire Protection District of the County of Los Angeles. The city is served by three stations: one in Temple City, one in Rosemead, and one in San Gabriel. Figure PS-1 shows the fire stations serving Temple City. The station in Temple City is located at 5946 N. Kauffman Avenue, within the Civic Center. It serves as the headquarters for Battalion 10, and contains one engine, a utility truck, and a squad vehicle for paramedics. It is staffed by one Battalion Chief, one Captain, four Firefighters, and two Paramedics. The Captain has reported no special firefighting problems in Temple City. Access to flag lots has not been a problem as the engine unit contains 300 feet of hose, and there has so far been sufficient water pressure to fight the fires, even in the Northeast section of Temple City, where fire flow has been below accepted standards. This fire flow, however, is currently being upgraded to meet the accepted standards (see water quality section of Resource Management Technical Report for further discussion).

The City's fire insurance rating was last assessed by the Insurance Services Office (ISO) of California in 1974 and is now being reviewed. The current rating for the City is Protection Class 3. The possible ratings range from 1 (the best rating) to 10 (the worst rating). A rating of 3 is considered to be very good. City staff submits all proposed development plans to the Fire Department for their review and recommendations of required fire safety provisions prior to final approval.



### C. Environmental Hazards

**Seismic Hazards** - Although not impacted by an Alquist-Priolo Special Studies Zone, Temple City is subject to seismic hazards such as surface rupture and ground motion. Three faults are located near Temple City - The Sierra Madre, Raymond Hill and Duarte faults (see Figure PS-2). The Sierra Madre, Raymond Hill and Duarte faults are considered capable of generating surface rupture. These faults should be thought of in terms of a zone rather than a single fault trace. The Alquist-Priola Study Zone around the Raymond Hill Fault is less than one mile from the City's northern border. Of the three faults near Temple City, the Raymond Hill Fault is the closest.

In 1975, a Seismic Safety Element was prepared by Envicom for a number of cities in the West San Gabriel Valley, including Temple City. Their analysis of seismic hazards in the area is briefly excerpted below from their report "Public Safety and Seismic Safety Elements - Comprehensive General Plan, City of Monterey Park", 1975. The 1975 Seismic Safety Element by Envicom is herein incorporated into this General Plan by reference. Copies of the complete report are available at City Hall.

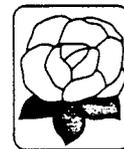
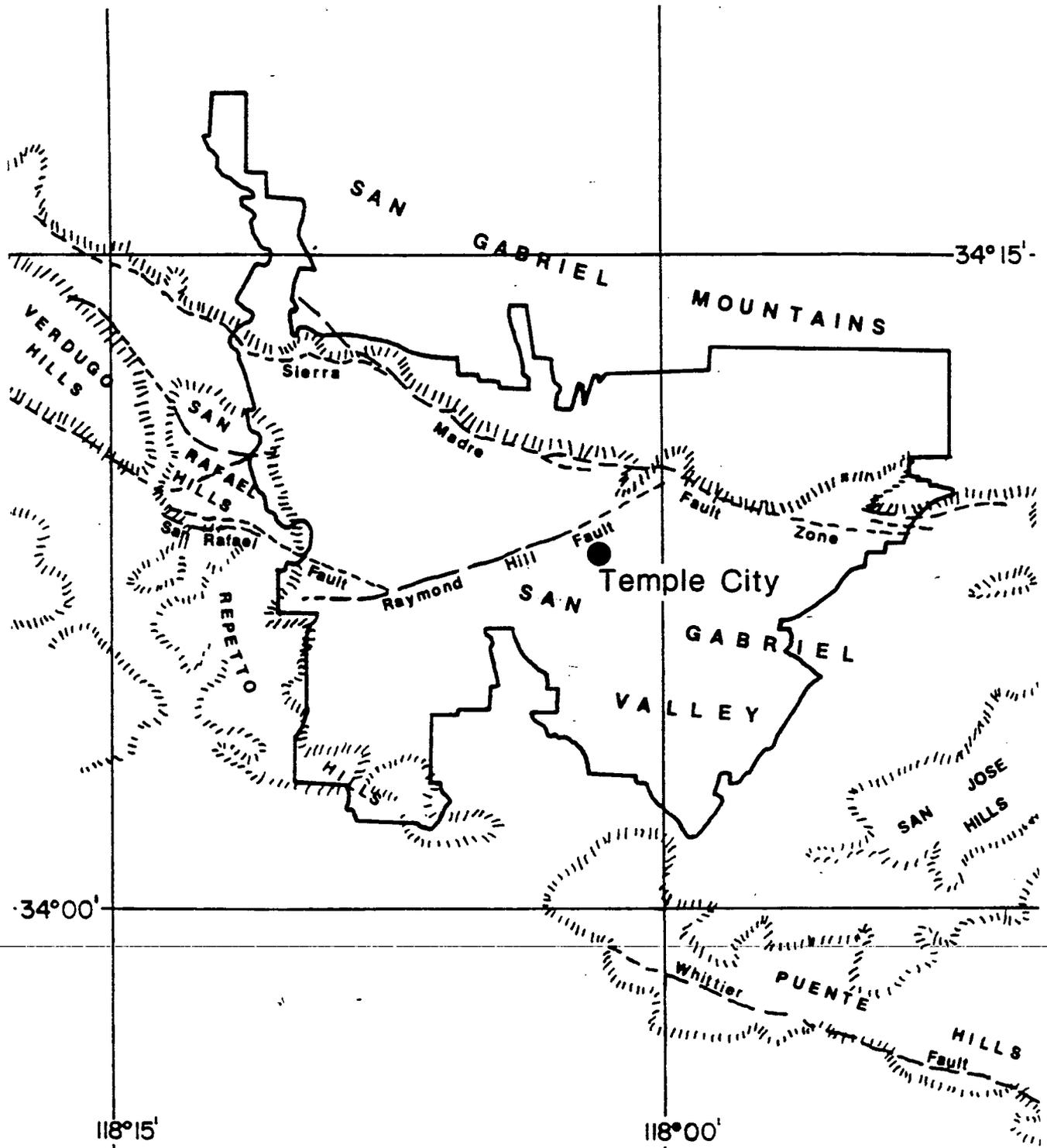
The study area in the Envicom report included the cities of Alhambra, Arcadia, Duarte, El Monte, Monrovia, Monterey Park, Pasadena, San Gabriel, San Marino, Sierra Madre, South Pasadena, and Temple City. The area can be divided into four basic geologic and physiographic units: 1) the San Gabriel Mountains on the north; 2) the San Rafael Hills on the northwest; 3) the Repetto Hills on the southwest and south; and 4) the western San Gabriel Valley in the central part of the area (Figure PS-3).

The San Gabriel Mountains to the north are composed of relatively hard, igneous and metamorphic rocks that support the steep slopes of the mountain front and the major canyons. The San Rafael Hills to the northwest are also composed of relatively hard igneous and metamorphic rocks, but the slopes are much less steep. It is this difference in physiographic development of otherwise similar rocks that suggests the relatively recent uplift along the front of the San Gabriel Mountains.

The Repetto Hills are the low-relief hills that extend southward from the San Rafael Hills beginning at about Colorado Boulevard. They are underlain by Tertiary sedimentary rocks that erode more easily and are also more susceptible to landsliding than are the igneous and metamorphic rocks to the north. The boundary between the two contrasting rock types in this area is the San Rafael fault.

The western San Gabriel Valley is underlain by Holocene (Recent) and Pleistocene alluvium up to approximately 5000 to 6000 feet in thickness. The alluvium, or valley fill, south of the Raymond Hill fault is in turn underlain by Tertiary rocks similar to those exposed in the Repetto Hills. These units vary considerably in thickness, but the maximum known thickness is 6300 feet. North of the Raymond Hill fault, the valley fill is underlain by granitic and metamorphic rocks similar to those in the hills to the west and north.





Temple City  
General Plan



SOURCE: Public Safety and Seismic Safety Elements,  
Comprehensive General Plan,  
City of Monterey Park, Envicom, April 1975.

Figure PS-3  
Location of Study Area

The most important faults within the study area are those that together form the Sierra Madre fault zone and the several branches of the Raymond Hill fault. The former is located generally at the base of the San Gabriel Mountains in the northern part of the area while the latter trends east-west to the northeast-southwest through the central part of the area.

Other faults of importance include the San Rafael fault and several faults that may extend into the eastern San Rafael Hills. The San Andreas fault is located approximately 20 miles north of the study area, but it is important as a source of earthquake shaking.

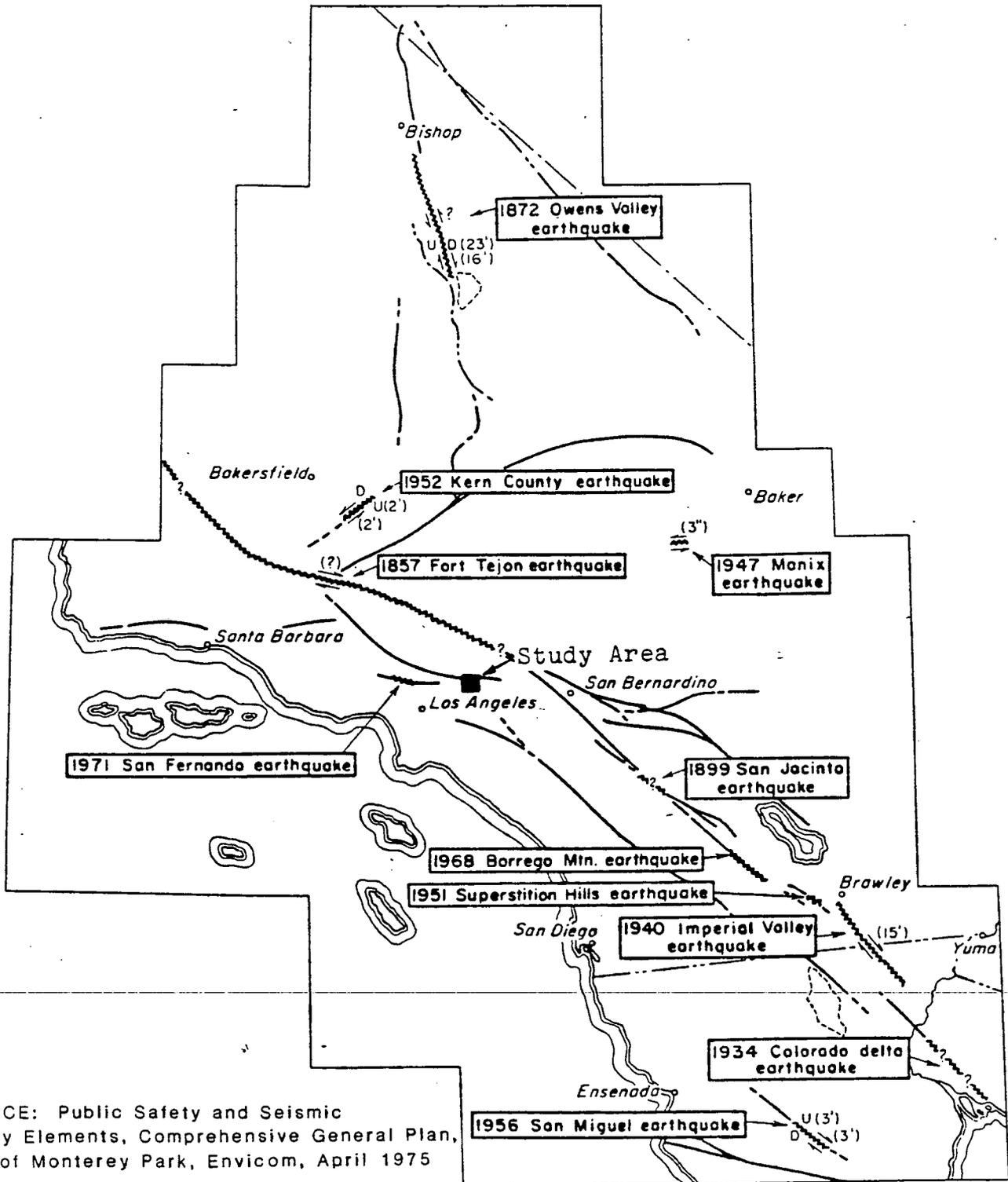
The regional seismicity of the Southern California region and its relationship to the study area are shown on Figures PS-4 and PS-5. Figure PS-4 shows historic fault breaks and the associated earthquakes, and Figure PS-5 shows all earthquakes of magnitude 6.0 and greater in the region since 1912. Some faults in Southern California show a certain level of earthquake activity or seismicity that can be taken as an indication of their capacity to generate larger earthquakes. Others, such as those mentioned above as being important to the study area, do not have earthquakes clustered along or near them, and their potential for generating damaging earthquakes must be derived from other evidence.

The Sierra Madre fault system, the fault system that bounds the south flank of the San Gabriel Mountains, extends from Cajon Pass on the east to at least the San Fernando area on the west. Major fault segments include the Cucamonga, Sierra Madre, San Fernando, and possibly the Santa Susana and San Cayetano faults at the west end of the system. Faults associated with the Sierra Madre within or near the study area, and included here within the overall system of faulting, include the Duarte and Lower Duarte faults on the east and numerous unnamed segments along the extent of the Sierra Madre fault zone.

The primary evidence for the recent activity of this fault system is the 1971 San Fernando earthquake. This magnitude 6.4 earthquake occurred as the result of the upward movement of the mountains by about 5 feet along a length of approximately 10 miles between Sylmar and Big Tujunga Canyon. It established that this fault zone is active, and the source of potentially damaging earthquakes.

Additional evidence of recent movement are faulted Holocene (Recent) alluvial gravels in the Arroyo Seco and older alluvium at several other locations, scarps on the fans near Cucamonga (Eckis, 1928), and the presence of fossil soil containing small roots underlying the thrust fault some 700 feet into the front of the range exposed during the excavation of the Glendora Tunnel (Proctor et al, 1970). This tunnel is 6.2 miles long, extending from San Dimas Wash to Morris Dam, and was built by the Metropolitan Water District in 1968. The following description is excerpted from Proctor, Payne and Kalin (1970).

Information on the Duarte and Lower Duarte faults is not as complete as for the Sierra Madre fault proper, but they apparently offset Holocene river gravels with a resulting 200 foot groundwater anomaly. They are, therefore, considered active along with the main trace of the Sierra Madre fault.



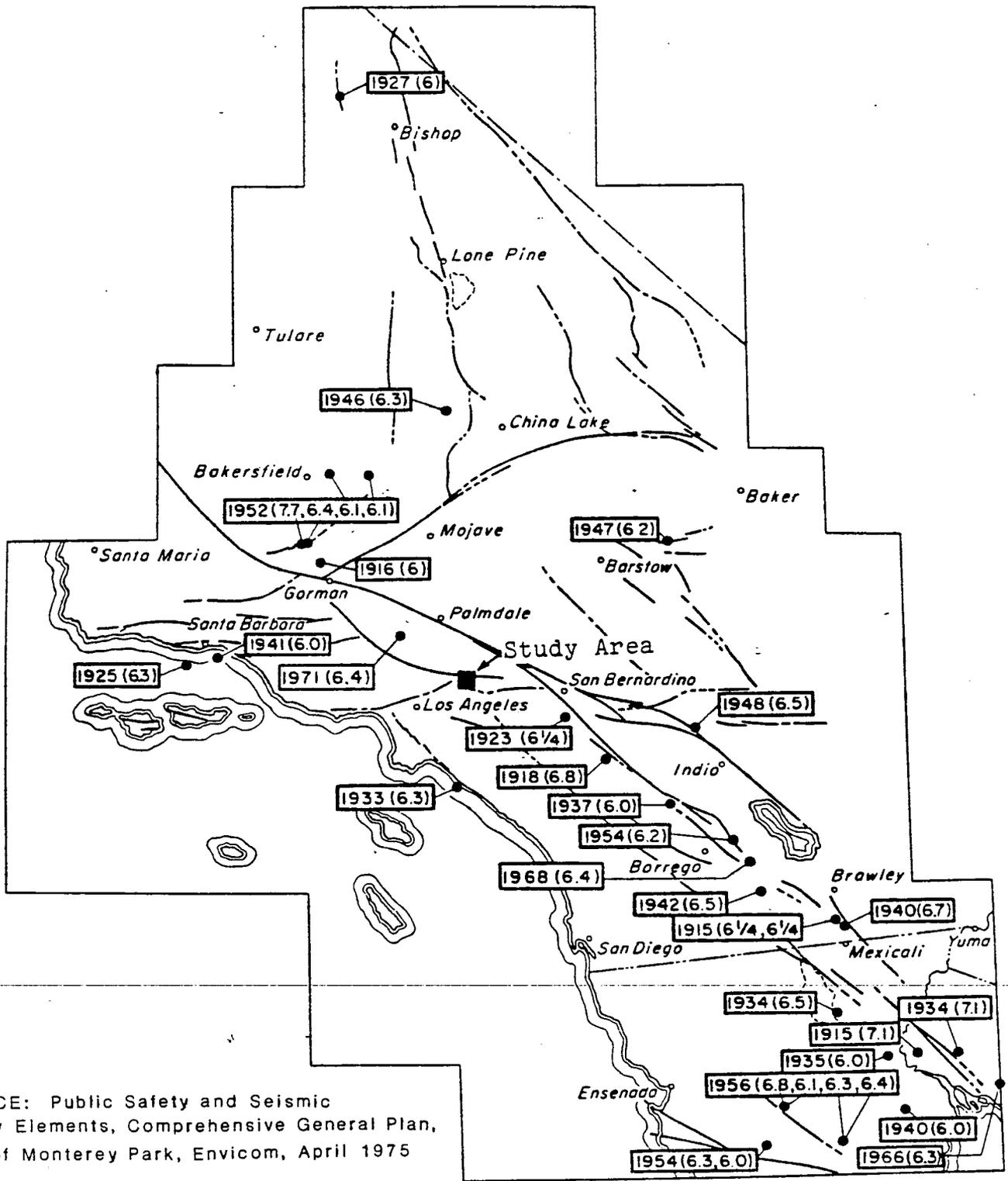
SOURCE: Public Safety and Seismic Safety Elements, Comprehensive General Plan, City of Monterey Park, Envicom, April 1975

▲ North



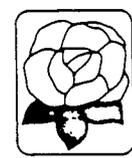
Temple City  
General Plan

Figure PS-4  
Historic Fault Breaks and Associated Earthquakes  
in the southern California Region



SOURCE: Public Safety and Seismic Safety Elements, Comprehensive General Plan, City of Monterey Park, Envicom, April 1975

▲ North



Temple City General Plan

Figure PS-5  
Earthquakes of Magnitude 6.0 and Greater  
in the southern California Region, 1912-1972

The Raymond Hill fault is a reverse, left-slip fault with a known length of 12 miles, extending through the cities of Monrovia, Arcadia, San Marino, Pasadena, South Pasadena and Highland Park area of Los Angeles.

Age-dating of soil in cracks associated with the fault, as exposed in a trench in San Marino, yielded a Carbon-14 date of 3000 years before present (Payne and Wilson, 1974). Assuming the soil is the same age or younger than the cracks, fault movement has probably occurred within the past 3000 years.

Surface cracks reported by Proctor (1974) may be the result of tectonic creep, or may be caused by groundwater removal in the Raymond Basin causing differential settlement along the fault planes. Significant cracks were first reported in 1970 at the San Marino High School girls gym and boys shops. In 1972 cracks developed on the south side of Sunnyslope Reservoir, along the trace of the fault. Cracking activity has since diminished at both sites. Cracked streets and curbing at the intersection of Avenue 67 and Hough Street west of the Arroyo Seco may be the result of small movements of the fault. Perennial springs at Arroyo Seco Park in South Pasadena appear to be on fault traces, and several stream channels shown left-slip offsets of 500 to 800 feet. Three closed depressions or sag ponds are known along the fault.

Firm data on which to base an estimate of a recurrence rate for the Raymond Hill fault is not available. Recorded earthquakes cannot be definitely assigned to the fault, measurements of crustal strain have not been made, and offsets of geologic units are too indefinite to be useful. Dr. Clarence Allen of Caltech has suggested that a magnitude 7.5 earthquake may be assumed to occur along the Raymond Hill-Santa Monica-Malibu Coast fault on the average of about once in every 5000 years. This rate suggests a recurrence interval of about 500 years for a magnitude 6.5 event, and about 100 years for a magnitude 5.6 event. The latter two earthquakes are more pertinent to the levels of risk considered herein.

Of those faults located within the study area, the Sierra Madre fault zone and its major branches, such as the Duarte and Lower Duarte faults, and the Raymond Hill fault are considered active and a significant hazard with respect to ground-rupture.

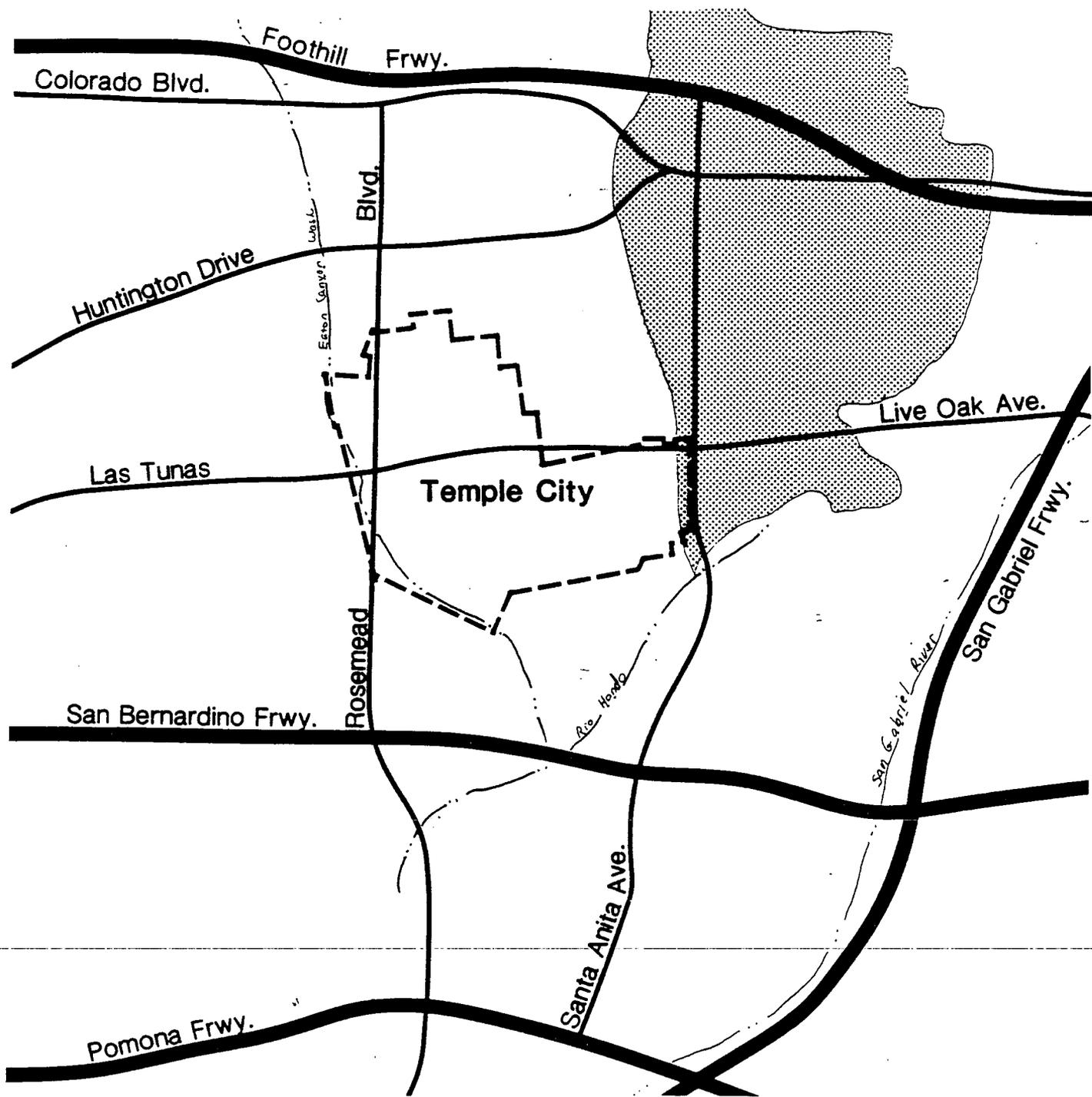
A 1982 report by the State Division of Mines and Geology indicates that there is a 50% probability that an earthquake with a Richter scale magnitude of 8.3 will occur within the next 20 to 30 years on or near the San Andreas Fault. Energy released from an 8.3 earthquake as measured on the Richter scale would be nearly 1,000 times as great as the 1971 earthquake in Sylmar, which registered 6.4 on the Richter scale. A quake of 8.3 magnitude would also be more than 10 times greater than the 1983 earthquake in Coalinga. In the event of a major earthquake, Temple City would experience very strong shock and would sustain some damage to buildings. Temple City has no high-rise buildings, but there are some unreinforced masonry structures in the City. Only two have been positively identified, since City staff is only made aware of them when plans are submitted for review. These two buildings are a furniture store at 5843 Temple City Boulevard (owned by the City) and the American Legion Building at 9522 Las Tunas Drive.

**Flood Hazards** - Because of its location in the San Gabriel Valley, Temple City is not vulnerable to flooding. The only inundation hazard to the city would be the complete collapse of the Santa Anita Dam, which is located in Monrovia and Arcadia northeast of Temple City. A failure of the Santa Anita Dam would inundate fairly large portions of Arcadia, Monrovia and a small part of Temple City. Most of the flooding in the Temple City vicinity would be confined to the area east of the Arcadia Wash (See Figure PS-6). The failure of the Santa Anita Dam is considered unlikely.

The Eaton Wash, a flood control drainage channel, runs along the western border of the city. Maintained by Los Angeles County flood Control District, the wash is a concrete-lined open ditch. The Arcadia Wash runs through the eastern section of the city. Figure PS-7 shows the location of these flood control/drainage channels.

This figure also shows existing storm drains in the city, as well as streets in need of storm drains. According to the Public Works Department, the north-south streets drain well because the prevailing slope of the land is from north to south. Sometimes there are drainage problems on east-west streets, however.

Some of the cul-de-sacs also have drainage problems. On some of these streets, the storm water pools in the closed end of the cul-de-sac. In one area in particular, water is always present at the end of a "T" street in what is essentially an open drain. this "T" street is located in Planning Area 2.



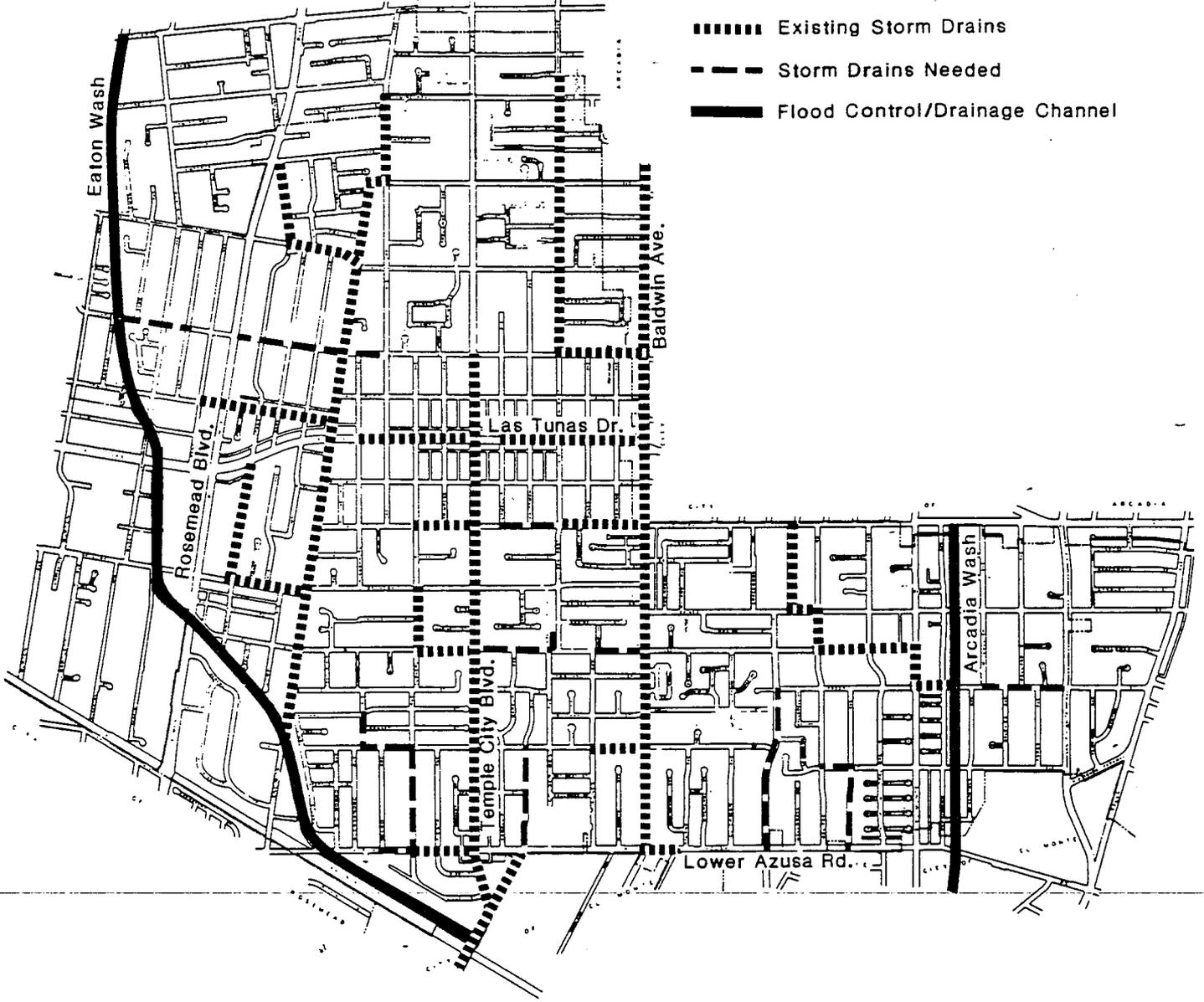
 Flood Inundation Potential

▲ North

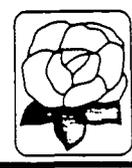


Temple City  
General Plan

Figure PS-6  
Flood Hazard

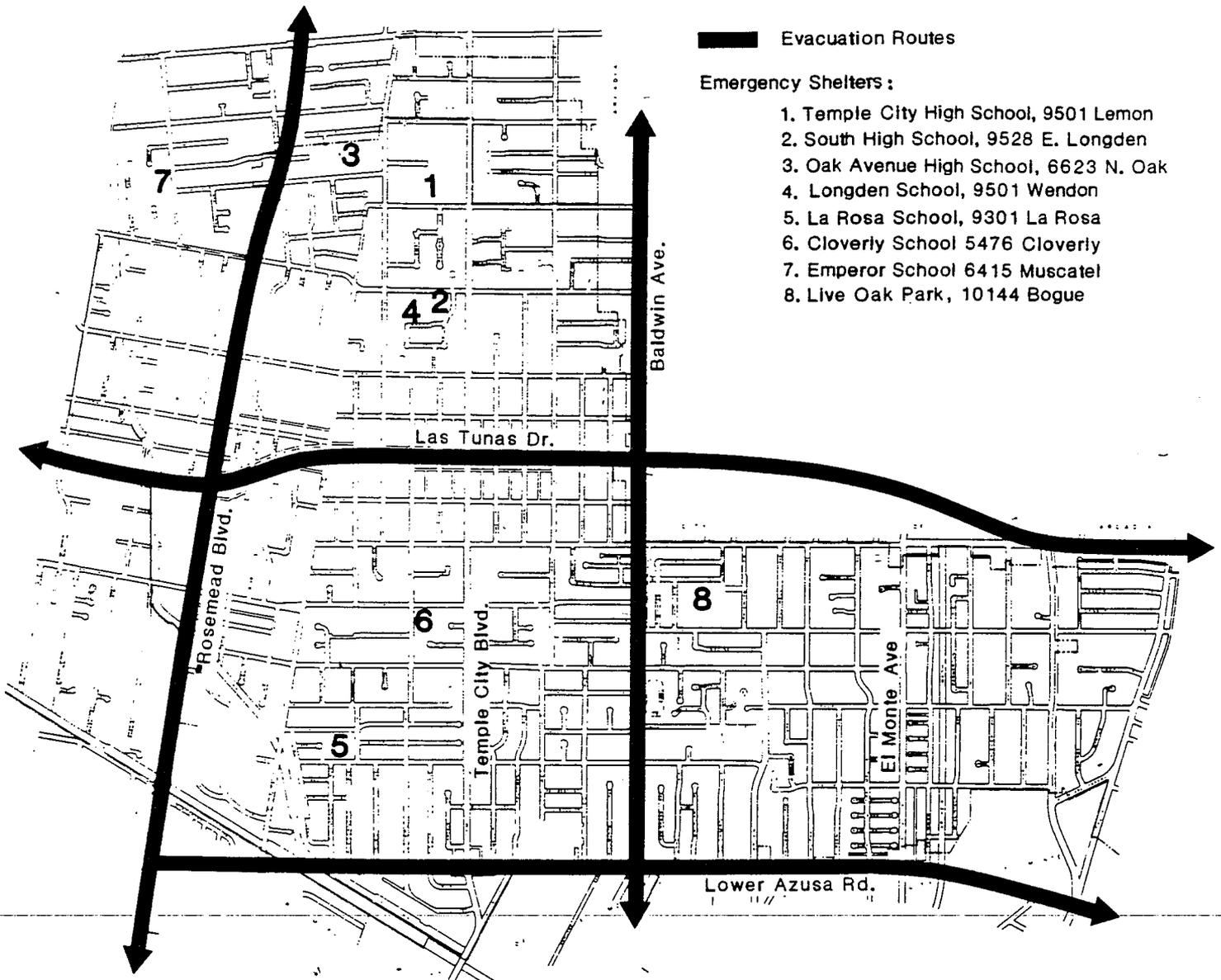


 North  
 0 2500  
 scale in feet  

**Temple City**  
**General Plan**

**Figure PS-7**  
**Storm Drains**



Evacuation Routes

Emergency Shelters :

1. Temple City High School, 9501 Lemon
2. South High School, 9528 E. Longden
3. Oak Avenue High School, 6623 N. Oak
4. Longden School, 9501 Wendon
5. La Rosa School, 9301 La Rosa
6. Cloverly School 5476 Cloverly
7. Emperor School 6415 Muscatel
8. Live Oak Park, 10144 Bogue

North

0 2500  
scale in feet



Figure PS-8  
Civil Defense Evacuation  
Routes & Emergency Shelters

In the event of an emergency, the City has designated evacuation routes as well as emergency shelters where residents can go for assistance. These evacuation routes and emergency shelters are shown in Figure PS-8.

**Disaster Preparedness** - Temple City has a written Emergency Operations Plan in conformance with the State Emergency Services Act.

In the event of a major earthquake or some other type of disaster, the City also has a mutual aid agreement with two hospitals. These two hospitals are: San Gabriel Community Hospital in the City of San Gabriel and Arcadia Methodist in the City of Arcadia. The location of these hospitals relative to Temple City is shown in Figure PS-9. In addition to agreements with hospitals, the City also has available agreements for contract services in other agencies regarding disaster preparedness.

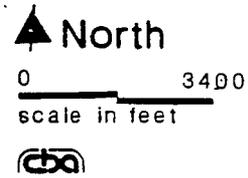
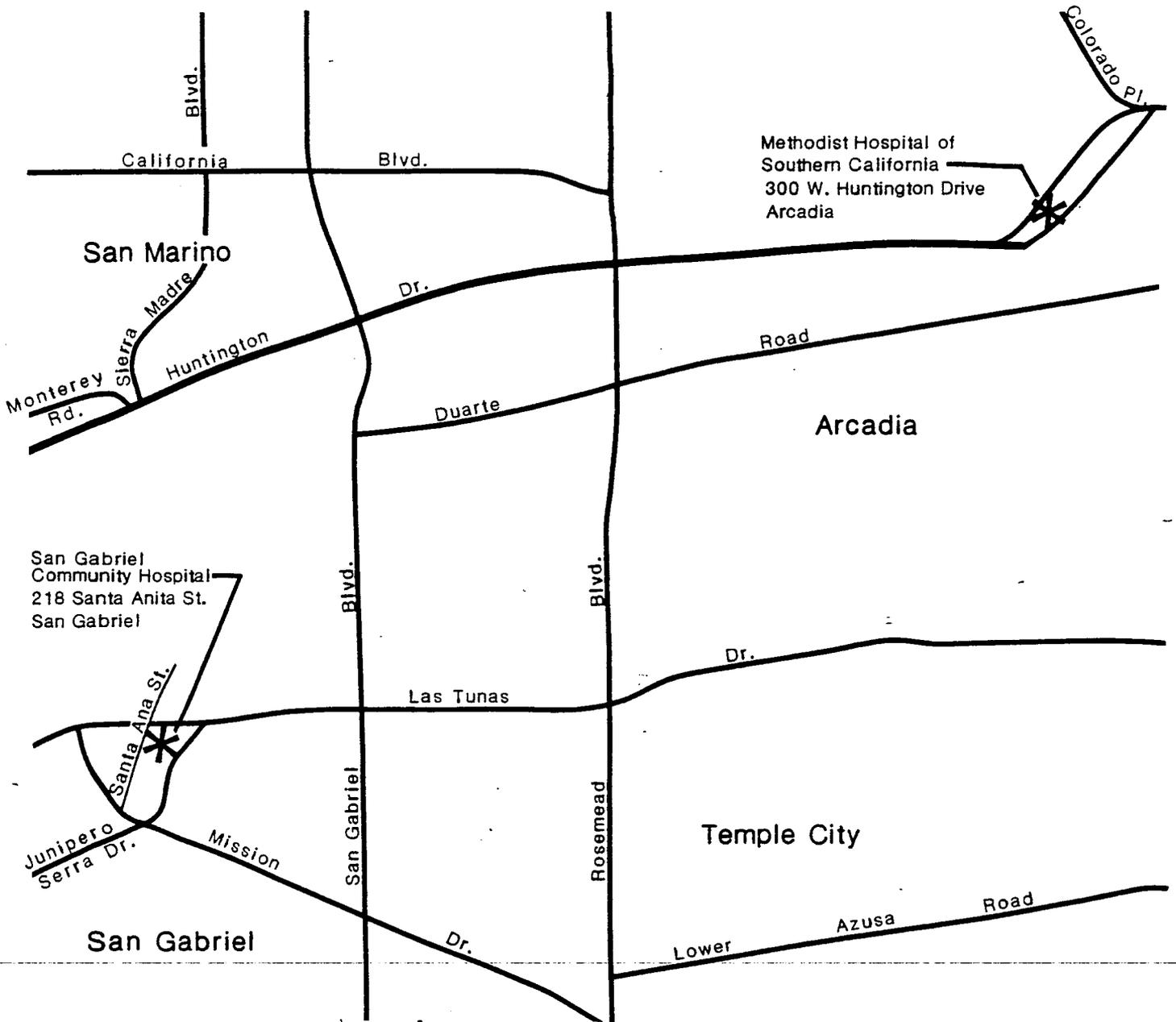


Figure PS-9  
Location of Hospitals  
Serving Temple City

RESOURCE MANAGEMENT ELEMENT TECHNICAL REPORT

CITY OF TEMPLE CITY  
GENERAL PLAN UPDATE

April, 1987

Cotton/Beland/Associates, Inc.  
1028 North Lake Avenue  
Suite 107  
Pasadena, California 91104

#419.00

## RESOURCE MANAGEMENT ELEMENT TECHNICAL REPORT

### A. Introduction

The State of California requires every City and County to describe in their General Plan ways to preserve and manage natural resources. Temple City is an urbanized area and has been for some time. As an urban area, the availability of natural resources within the planning area is limited. This technical report will focus on such existing natural resources as air quality, water resources, and open space.

### B. Natural Resources

Air Quality - The South Coast Air Basin climate is semi-arid and is characterized by moist, mild winters and hot, dry summers. Wind patterns in the Basin vary seasonally; westerly winds predominate in the summer months and northeasterly winds in the winter months. The dominant daily wind pattern consists of a daytime sea breeze blowing inland from the ocean followed by a nighttime land breeze flowing from the inland areas toward the coast. Wind direction and speed (as well as the presence of atmospheric temperature inversions) determine how air pollutants are transported and dispersed throughout the Basin. The atmospheric temperature inversions compound the pollution problem. In summer, the air within the high pressure center over the ocean sinks and warms. Near the ocean's surface, the air cools by contact with the cool water. This forms a shallow, well-mixed layer of marine air about 1,000 feet deep capped by a massive layer of warm air. Pollutants emitted near the ground remain trapped within that shallow layer. As each pollution source adds to that easterly moving layer, the air reaching the eastern portion of the Basin can become highly polluted with both visible and invisible pollutants. The pollutants become more concentrated until either the temperature inversion breaks or surface winds increase to disperse the pollutants horizontally. The primary contributors to poor air quality in the City of Temple City are cars and trucks operating in the region.

The South Coast Air Quality Management District (SCAQMD) monitors pollutant levels within the South Coast Air Basin. The Basin is divided into 37 source/receptor areas, and a monitoring station is located within each area. Temple City is located in Source/Receptor Area 9 and the monitoring station is in Azusa, east of Temple City. 1985 air quality data for Source/Receptor Area 9 indicates that sampled pollutant levels were generally within State and Federal standards, with the exception of ozone. Ozone emissions exceeded the State or Federal standards for 166 days in 1985 (see Table RM-1).

Water Quality - Temple City is currently served by five different water purveyors. Each company also serves areas outside the City boundaries. Three of the companies are private investor-owned utilities: Southern California Water Company, California American Water Company and East Pasadena Water Company.

Source/ Receptor Area No.	Location of Air Monitoring Station	Carbon Monoxide				Ozone				Nitrogen Dioxide				Sulfur Dioxide			
		Max. Conc. in PPM 1-Hour	No. Days Exceeded		State > 20 PPM 1-Hour	Max. Conc. in PPM 1-Hour	No. Days Standard Exceeded		State > .10 PPM 1-Hour	Max. Conc. in PPM 1-Hour	No. Days Std. Exceeded		Federal > .14 PPM 24-Hours	State > .05 ppm 24-hours b)	Max. Conc. in PPM 1-Hour	No. Days Std. Exceeded	
			Federal > 9.3 ppm 8-Hours	State > 9.1 PPM 8-Hours			Federal > .12 PPM 1-Hour	State > .25 PPM 1-Hour			Federal > .14 PPM 24-Hours	State > .05 ppm 24-hours b)					
1	Los Angeles	15	0	0	0	0	53	114	.23	0	0	0	0	.07	0	0	
2	H. Los Angeles	17	7	0	10	0	35	79	.32	4	0	0	0	.05	0	0	
3	Lennox	24	64	0	67	9	8	16	.27	8	2	0	0	.06	0	0	
4	Long Beach	14	3	0	4	0	13	32	.35	5	0	0	0	.32	0	0	
5	Whittier	14	1	0	1	0	60	108	.29	2	0	0	0	.06	0	0	
6	Reseda	15	9	0	9	0	78	139	.21	0	0	0	0	.03	0	0	
7	Burbank	19	16	0	20	0	73	127	.21	0	0	0	0	.05	0	0	
8	Pasadena	13	0	0	0	0	125	167	.21	0	0	0	0	.03	0	0	
9	Azusa	7	0	0	0	0	129	168	.16	0	0	0	0	.04	0	0	
10	Glendora c)	NM	NM	NM	NM	NM	130	180	NM	NM	NM	NM	NM	NM	NM	NM	
11	Pomona	13	0	0	0	0	98	138	.20	0	0	0	0	NM	NM	NM	
12	Pico Rivera	13	0	0	0	0	92	129	.25	1	0	0	0	.09	0	0	
13	Lynwood	29	51	0	54	11	22	49	.27	2	0	0	0	.07	0	0	
14	Newhall	NM	NM	NM	NM	NM	86	132	NM	NM	NM	NM	NM	NM	NM	NM	
15	Lancaster	10	0	0	0	0	49	110	.11	0	0	0	0	NM	NM	NM	
16	La Habra	21	1	0	3	1	59	99	.25	2	0	0	0	.04	0	0	
17	Anaheim	18	4	0	4	0	37	65	.24	0	0	0	0	.08	0	0	
18	Los Alamitos	NM	NM	NM	NM	NM	12	32	NM	NM	NM	NM	NM	.06	0	0	
19	Costa Mesa	13	1	0	1	0	7	29	.22	0	0	0	0	.04	0	0	
20	El Toro	8	0	0	0	0	26	61	.30	0	0	0	0	NM	NM	NM	
21	Norco-Corona	NM	NM	NM	NM	NM	85	137	NM	NM	NM	NM	NM	NM	NM	NM	
22	Riverside Rub.	8	0	0	0	0	127	176	.17	0	0	0	0	.02	0	0	
23	Riverside Mag.	16	0	0	0	0	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
24	Perris	NM	NM	NM	NM	NM	75	137	NM	NM	NM	NM	NM	NM	NM	NM	
25	Hemet c)	NM	NM	NM	NM	NM	7	27	NM	NM	NM	NM	NM	NM	NM	NM	
26	Banning	NM	NM	NM	NM	NM	48	95	NM	NM	NM	NM	NM	NM	NM	NM	
27	Palm Springs	4	0	0	0	0	36	92	.09	0	0	0	0	NM	NM	NM	
28	Indio	NM	NM	NM	NM	NM	19	69	.19	0	0	0	0	NM	NM	NM	
29	Upland	8	0	0	0	0	115	170	.32	0	0	0	0	.02	0	0	
30	Ontario	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
31	Chino c)	NM	NM	NM	NM	NM	90	131	.32	0	0	0	0	NM	NM	NM	
32	Fontana	6	0	0	0	0	136	179	.16	0	0	0	0	.03	0	0	
33	San Bernardino	9	0	0	0	0	125	173	.20	0	0	0	0	.03	0	0	
34	Redlands	2	0	0	0	0	116	160	.29	0	0	0	0	NM	NM	NM	
35	Lake Gregory	NM	NM	NM	NM	NM	139	175	.34	0	0	0	0	NM	NM	NM	

ppm - Parts by volume per million parts of air.

ug/m<sup>3</sup> - Micrograms per cubic meter of air.

NM - Pollutant not monitored.

ND - No data available.

AGM - Annual Geometric Mean.

a) - The Federal (3-hours > .50 ppm) and State (1-hour > .50 ppm) standards were not exceeded.

b) - Twenty-four hours > .05 ppm with 1-hour ozone > .10 ppm, or with 24 hours TSP > 100 ug/m<sup>3</sup>.

c) - Data period: Glendora - from April 1, 1984; Hemet - from July 17, 1984; Chino - from April 23, 1984.



SOURCE: South Coast Air Quality Management District, 1984

Table RM-1  
Air Quality Data

Source/Receptor Area No.	Location of Air Monitoring Station	Suspended Particulates (Hi-Vol)						Lead (Hi-Vol)				Sulfate (Hi-Vol)		Visibility	
		Total Samples Collected	Max. Conc. ug/m <sup>3</sup>	No. Samples Exceeded		Percent AGM		Max. Conc. ug/m <sup>3</sup>	No. Occasions Standard Exceeded		Max. Conc. ug/m <sup>3</sup>	No. Samples Ex. Stand. > 25 ug/m <sup>3</sup> - 24-Hours	Location	Days Not Meeting State Standard e)	
				Federal >260 ug/m <sup>3</sup>	State >100 ug/m <sup>3</sup>	Federal >75 ug/m <sup>3</sup>	State >60 ug/m <sup>3</sup>		Federal 1.5 ug/m <sup>3</sup> Qrtly Avg.	State 1.5 ug/m <sup>3</sup> Mo. Avg.					
1	Los Angeles	47	148	0	23	30.0	62.5	1.24	0	0	27.4	L. A.	ND		
2	W. Los Angeles	55	121	0	4	17.5	17.5	1.08	0	0	26.4	BUR AP	14		
3	Lennox	57	156	0	17	13.3	41.6	1.99	0	0	26.7	LAX AP	25		
4	Long Beach	59	195	0	15	18.0	47.5	1.40	0	0	22.2	LB AP	13		
5	Whittier	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	WJF	2		
6	Reseda	60	134	0	7	0	22.0	1.10	0	0	22.9				
7	Burbank	13	166	0	3	4.8	31.0	1.23	0	0	10.2				
8	Pasadena	55	133	0	15	4.1	30.1	1.19	0	0	25.4				
9	Azusa	43	195	0	10	43.7	79.6	0.97	0	0	27.6				
10	Pomona	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM				
11	Pico Rivera	53	172	0	25	26.6	58.3	1.24	0	0	20.6				
12	Lynwood	59	199	0	31	40.0	75.0	2.05	0	0	24.9				
13	Newhall	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM				
14	Lancaster	56	180	0	10	0	21.3	0.57	0	0	11.1				
16	La Habra	59	237	0	19	19.8	49.8	1.09	0	0	21.9	EL TORO	3		
17	Anaheim	58	204	0	6	14.4	43.0	1.11	0	0	20.1	MCAS			
18	Los Alamitos	58	218	0	7	29.6	62.0	1.74	0	0	19.5				
19	Costa Mesa	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM				
22	El Toro	61	179	0	7	0	16.5	0.48	0	0	14.9	MARCH AFB	18		
23	Norco-Corona	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM				
23	Riverside Rub.	59	278	1	44	76.9	121.1	0.91	0	0	22.8				
23	Riverside Mag.	61	205	0	37	50.2	87.8	0.99	0	0	22.6				
24	Perris	60	193	0	35	27.4	59.3	0.48	0	0	15.9				
28	Hemet c)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM				
29	Banning	57	277	1	4	0	17.3	0.33	0	0	22.2				
30	Palm Springs	61	113	0	6	0	63.3	0.31	0	0	8.9				
30	Indio	57	280	1	10	30.6	63.3	0.35	0	0	11.7				
32	Upland	58	178	0	31	24.9	56.1	0.79	0	0	22.6	NORTON AFB	37		
33	Ontario	54	267	1	16	51.7	89.6	1.12	0	0	28.3	ONT AP	51		
33	Chino c)	38	205	0	5	52.0	90.1	0.55	0	0	24.7				
34	Fontana	60	317	1	18	46.6	83.3	0.46	0	0	23.8				
34	San Bernardino	58	219	0	18	42.5	78.1	0.90	0	0	23.4				
35	Redlands	59	217	0	12	24.2	55.3	0.35	0	0	21.0				
37	Lake Gregory	58	113	0	3	0	0	0.22	0	0	10.3				

d) - Preponderance of suspended particulates data collected in 1984 were of the high-volume, glass-fiber filter type (not PM<sub>10</sub>). Therefore, suspended particulates continue to be compared to previous California TSP standards.

e) - Visibility standard is 10 miles or greater on days when relative humidity is less than 70%.

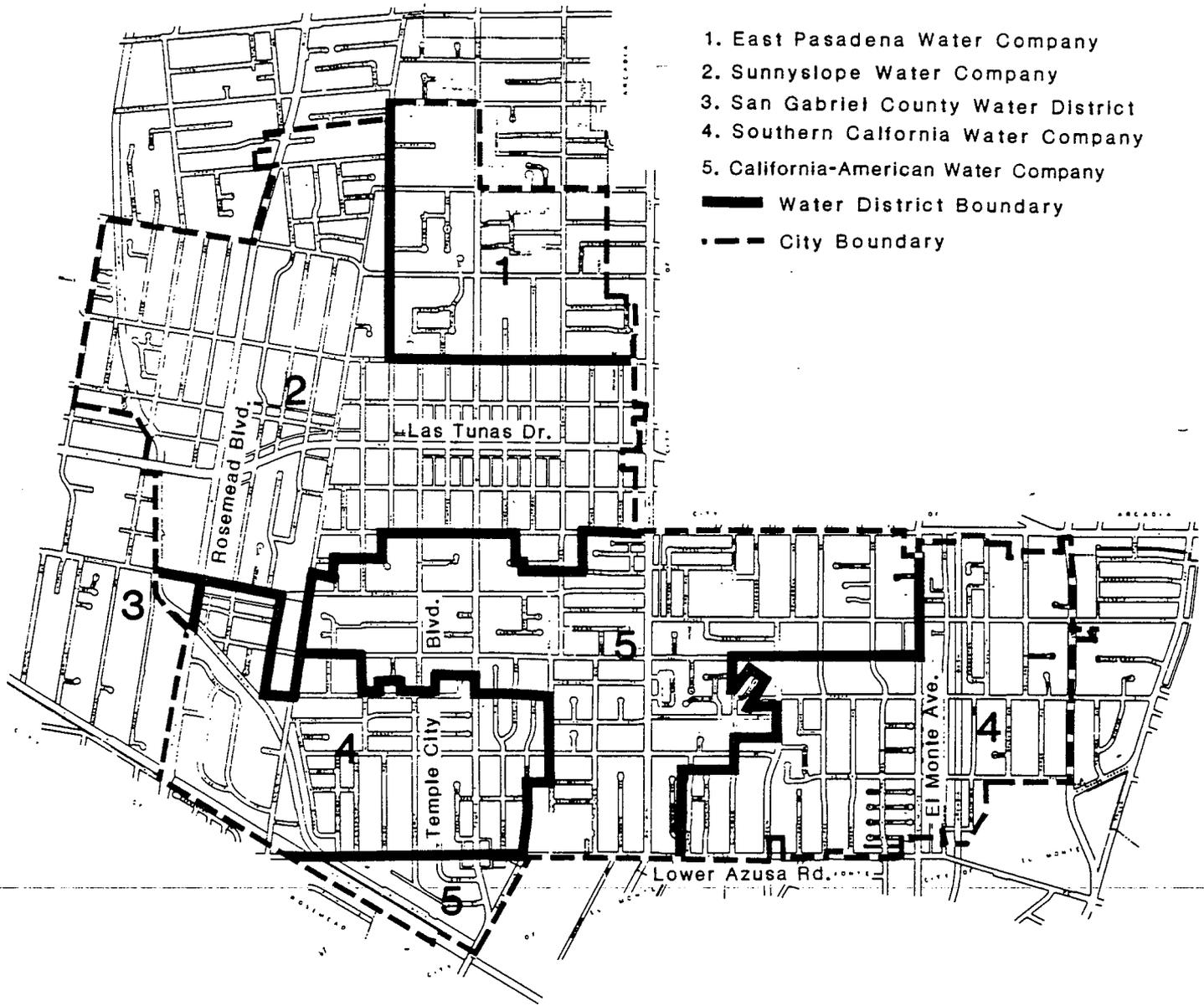


Table RM-1 (cont.)  
Air Quality Data

TABLE RM-2  
WATER COMPANIES SERVING TEMPLE CITY

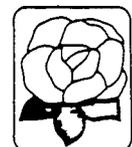
Name of Company	Area (Sq. Mi.)	% of City	General Location
Sunny Slope Water Company	1.222	31.72	North central & NW
Southern California Water Company	1.222	31.72	SW & SE
California American Water Company	1.021	26.50	South central
East Pasadena Water Company	.372	9.65	NE
San Gabriel County Water District	.017	.44	SW

Source: Water System Adequacy Study, Temple City Planning Department, 1982.



- 1. East Pasadena Water Company
- 2. Sunnyslope Water Company
- 3. San Gabriel County Water District
- 4. Southern California Water Company
- 5. California-American Water Company
- Water District Boundary
- - - City Boundary

 North  
 0 ————— 2500  
 scale in feet  



**Temple City  
 General Plan**

**Figure RM-1**  
**Areas in Temple City Served**  
**by Water Companies**

Sunny Slope Water Company is a mutual company owned by its customer-users, and San Gabriel County Water District is publicly owned by the Los Angeles County Water District. The five water companies serve the areas of the City shown in Table RM-2 and Figure RM-1.

All of Temple City's water is pumped from 33 wells in the local area. Both Sunny Slope Water Company and East Pasadena Water Company have wells north of the Raymond Hill fault and pump from the Raymond Basin. In addition, all of the companies have wells south of the Raymond fault in the San Gabriel Water Basin which extends southward to the Whittier Narrows area and is fed primarily from the San Gabriel watershed. The Raymond Hill fault follows, in a very general way, along the north side of Huntington Drive from east of the Los Angeles County Arboretum west into San Marino and beyond. The fault acts as an underground dam against which water backs up forming an underground reservoir. Likewise, the San Gabriel water basin also backs up behind faults in the Whittier Narrows area and in the Montebello Hills and Puente Hills, again forming an underground reservoir. These two underground supplies serve as the City's only source and primary storage. In total, the five companies also have approximately 15.5 million gallons in above-ground storage in reservoirs. Southern California Water Company, however, maintains no above-ground storage or reservoirs but rather depends solely on the underground supply and on pumps and wells for pressure and supply. Figure RM-2 shows well locations in the city.

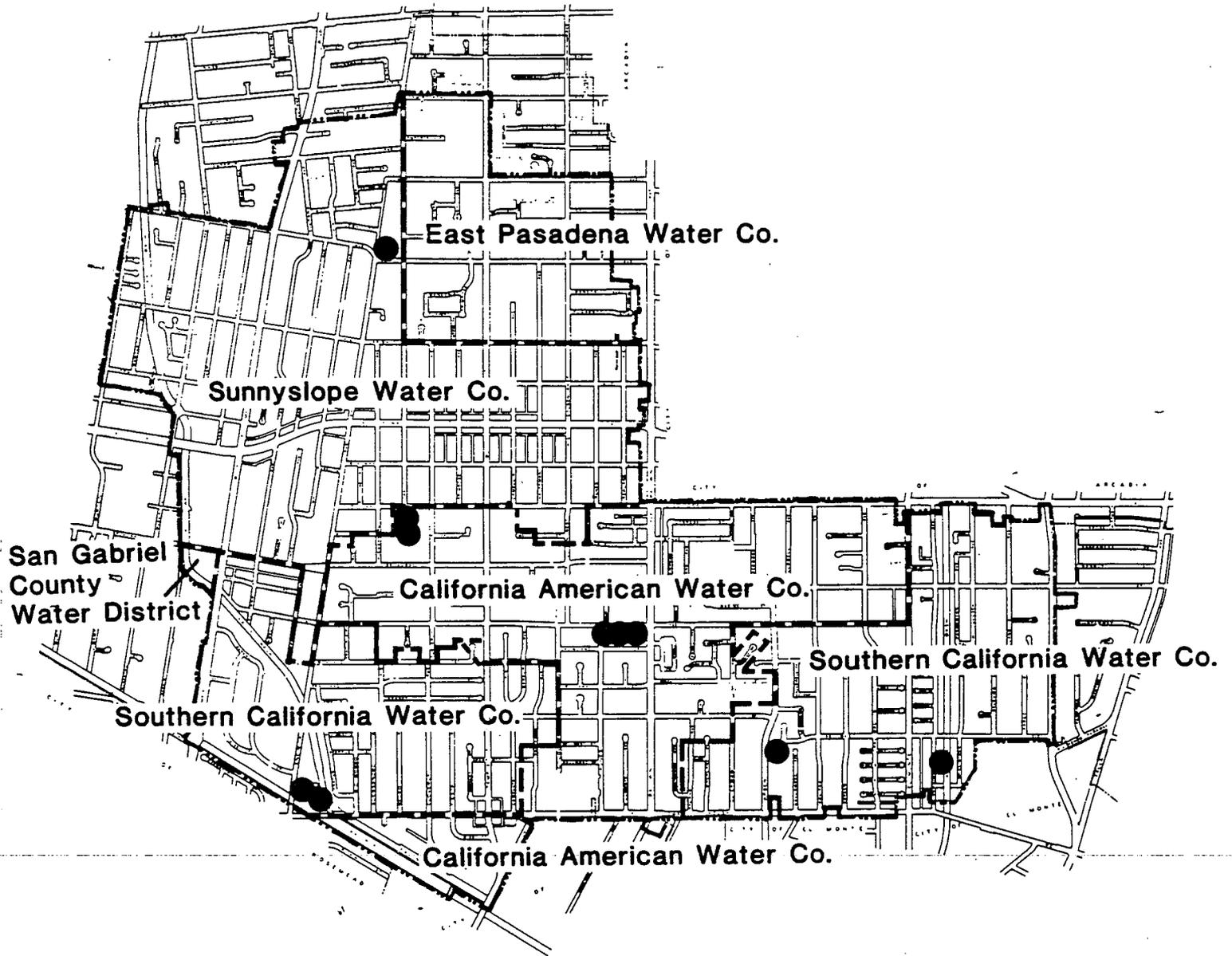
According to a report prepared by the City Planning Department in 1982 ("Water System Adequacy Study"), all water systems serving Temple City are maintained in a safe manner in terms of quality, pressure and flow to meet the demands of normal domestic use. However, in the northeast section of the City, fire flow is considered to be inadequate, water main size is substantially smaller on average than in other areas, the density of fire hydrants is less than in other parts of the City, and the water rates for equivalent usage are as much as twice as expensive as in other parts of the City. The inadequacies are not an immediate threat to public safety. The northeast area is shown in Figure RM-3.

Fire flows in the northeast section of the city range from less than 500 to 700 gallons per minute (gpm). Generally, low density residential areas require a fire flow of 1,250 gpm. City staff have developed a Water System Master Plan for upgrading the water system (particularly fire flows) in the Northeastern area. The upgrading and master planning is being done by East Pasadena Water Company. They are one year into the correction process.

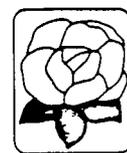
Open Space - Temple City is an urban area with very little open space land. Virtually all of the City's open space is in its parks and schoolyard playgrounds.

Approximately 19 acres are occupied by the City parks. City school yards comprise approximately 4 acres of useable open space. The locations of the parks and schools are shown in Figure RM-4. These facilities are described below.

Live Oak Park - Live Oak is a fifteen acre community park. Park facilities include a meeting room, an auditorium, a craft room,

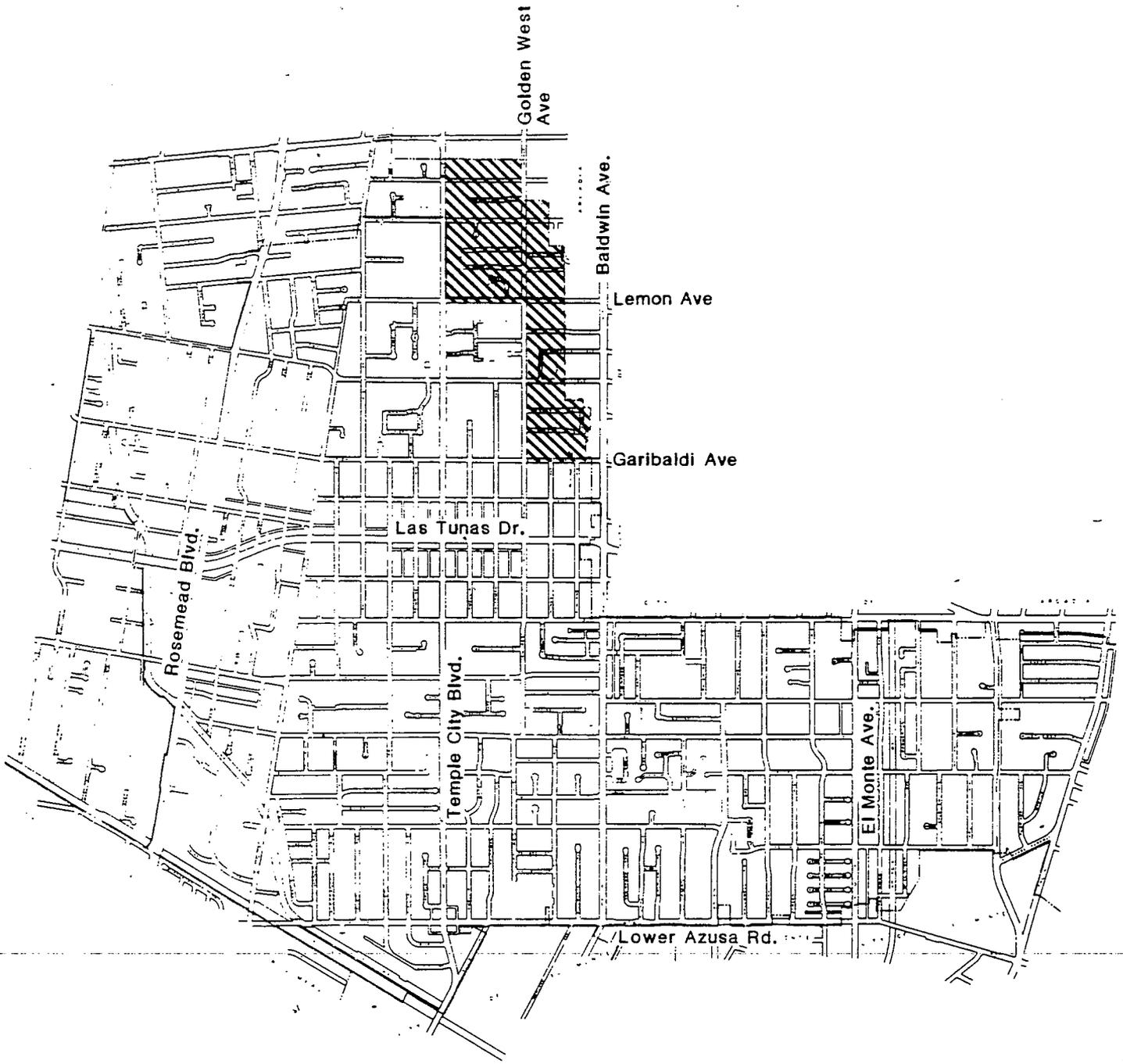


 North  
 0 2500  
 scale in feet

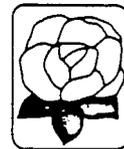


Temple City  
General Plan

Figure RM-2  
Water Well Locations

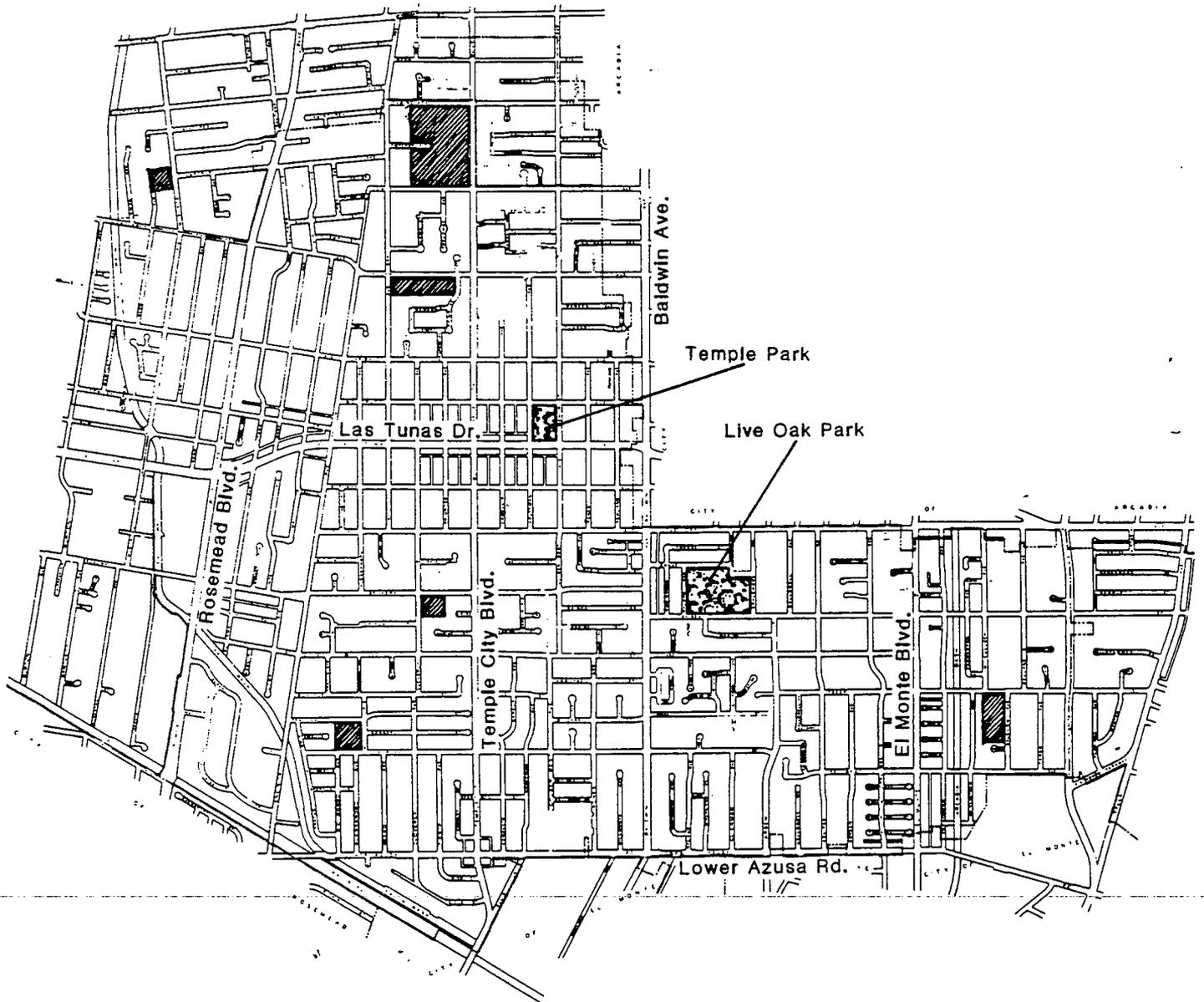


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 0 2500  
 scale in feet



**Temple City**  
**General Plan**

**Figure RM-3**  
**Area of Insufficient Fire Flow**

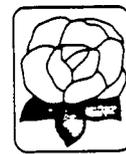


School Playgrounds and Facilities

Parks



0 2500  
scale in feet



Temple City  
General Plan

Figure RM-4  
Parks and Recreation Facilities

restrooms, kitchen, administrative offices and a multi-purpose room. Recreation facilities include a grassed play area, play apparatus area, ball wall, hard court area, wading pool, seven tennis courts, two Little League softball diamonds, picnic tables and barbeque areas.

Temple City Park - This is a four-acre "passive" park designed for rest and relaxation. The park contains a small area with play apparatus, picnic tables and barbeque areas.

School Playgrounds - The City's Parks and Recreation Department operates four elementary school playgrounds in the Temple City Unified School District and one elementary school playground in the El Monte Elementary School District. The facilities located on these school sites are typical of those found on elementary school sites.

Other Recreation Facilities - The Parks and Recreation Department operates the gymnasiums at Oak Avenue Intermediate School and Temple City High School. In addition, the Department jointly operates the swimming pool at the high school during the summer months with Los Angeles County and the District.

The two parks and four school playgrounds comprise the park space available in the City for a total of 23 acres of park space. The National Recreation and Parks Association (NRPA) recommends a minimum of 2.5 acres of park space for every 1,000 residents. Using this recommendation and based on the City's 1985 population of 30,735, the City should have approximately 77 acres of park area. Since Temple City has very little vacant land, the provision of 77 acres of park land is unrealistic. However, some additional park lands may be acquired in the future.

### C. Cultural Resources

Historical Buildings - Most of Temple City's development has taken place after 1940, but a number of buildings are more than 50 years old and some are fine examples of architecture of their time. No survey has been conducted, however, and no buildings in Temple City are listed on the National Register of Historic Places. Neither do any buildings have state or local landmark status.

Archaeological Sites - No known or suspected archaeological sites exist within Temple City.

CIRCULATION ELEMENT TECHNICAL REPORT

CITY OF TEMPLE CITY  
GENERAL PLAN UPDATE

April, 1987

Cotton/Beland/Associates, Inc.  
1028 North Lake Avenue  
Suite 107  
Pasadena, California 91104

#419.00

## A. INTRODUCTION

This Technical Report is concerned with describing and analyzing the existing system of roadways in Temple City. The roads in Temple City occupy 508 acres of land, or 20.9 percent of the City's total land area.

## B. EXISTING ROADWAY CLASSIFICATION SYSTEM

Temple City's road network is characterized mainly by local streets feeding into a few collectors and arterials which carry heavier amounts of traffic. No freeways run through Temple City, although the City is close to Interstates 10 and 210, which run East-West and Interstate 605, which runs North-South. Access to Interstate 210 is provided by Rosemead Boulevard, Baldwin Avenue, and Santa Anita Avenue. Access to Interstate 10 is provided by Rosemead Boulevard and Santa Anita Avenue, with access onto and off the freeway westbound from Temple City Boulevard and access on and off the freeway eastbound from Baldwin Avenue. The roads which access the Interstate 605 are Live Oak Avenue and Lower Azusa Road.

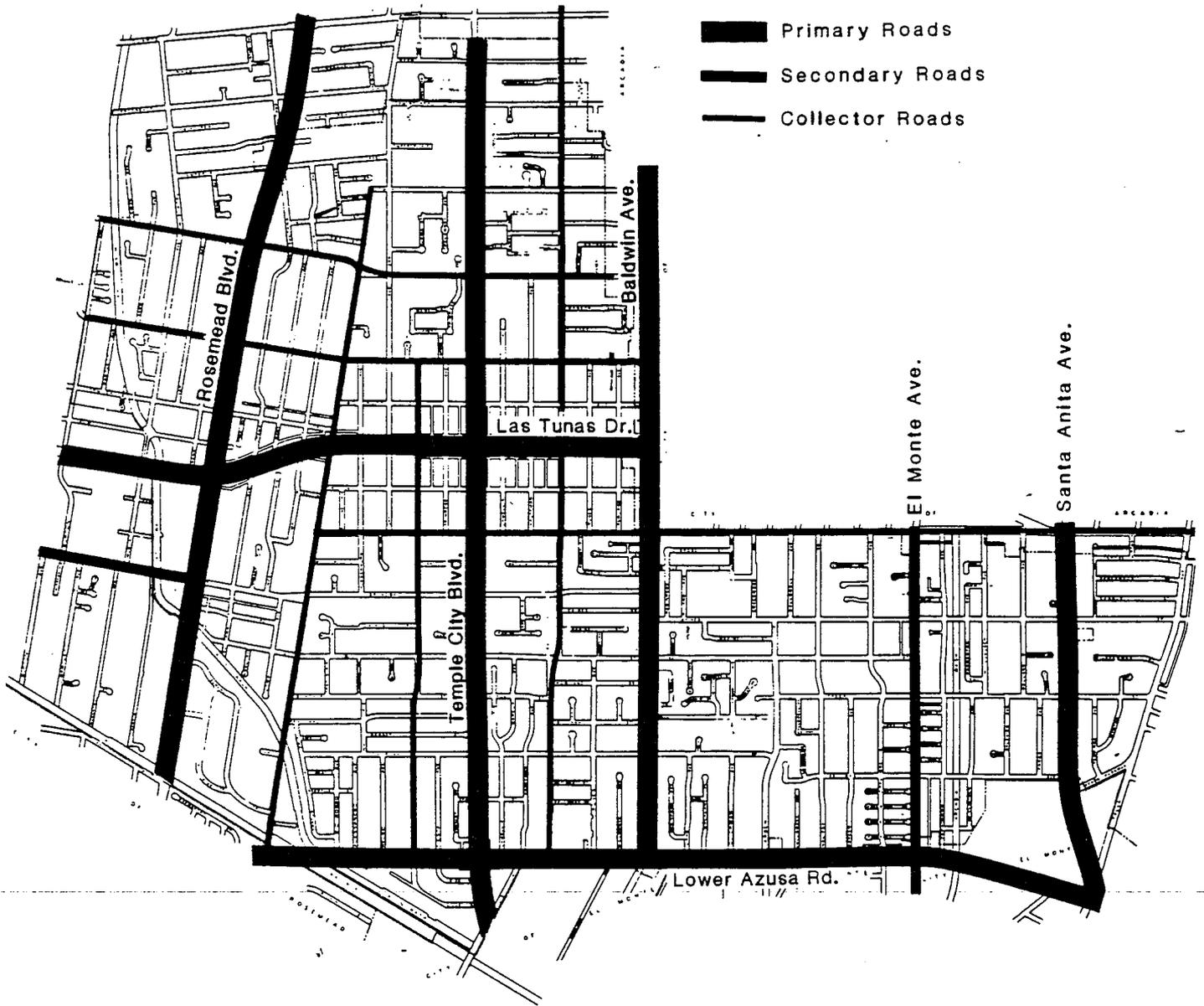
The roads which access the freeways are also the heaviest travelled roads, and most have been categorized as primary roads. The primary roads provide regional, subregional, intra-city and inter-city travel. They have more than one lane in each direction, with a majority of traffic comprised of through traffic. Primary roads include Rosemead Boulevard, Las Tunas Drive, Santa Anita Avenue, Lower Azusa Road, Baldwin Avenue and Temple City Boulevard.

Secondary roads are generally designed for more intra-city travel rather than providing direct access to individual parcels. They also link local roads with the primary roads. Secondary roads include El Monte Avenue and Broadway west of Rosemead Boulevard. Figure CIR-1 shows the roadway classification system in Temple City.

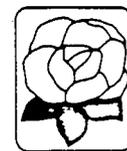
Collector roads are designed to carry traffic from the local streets to the primary roads. The right-of-way of this road type is variable but generally averages about 60 feet. Traffic volumes also vary with volumes up to 15,000 vehicles per day though the average collector road has volumes less than 10,000 vehicles per day at any given segment. Roads in this classification include Encinita Avenue, Live Oak Avenue, Longden Avenue, Cloverly Avenue, Golden West Avenue and Garibaldi Avenue.

Local streets are designed to connect individual parcels with the City's larger circulation system. The remaining roads not classified in the above categories are included in this category. Local roads with rights-of-way less than 50 feet are considered to be substandard.

Temple City also has a number of cul-de-sac streets in its residential areas. This type of street can be less convenient since they can only be accessed from one end, but in not allowing through traffic, they are quieter and safer for residents of these streets.



▲ North  
 0 — 2500  
 scale in feet



Temple City  
 General Plan

Figure CIR-1  
 Roadway Classification System



Private Streets

North

0 2500

scale in feet



Temple City  
General Plan

Figure CIR-2  
Private Streets

The City also contains 23 private streets as indicated on Figure CIR-2. Maintenance of these streets has been a problem since not all residents on the streets have agreed to maintain them to appropriate standards.

The City Department of Public Works has a continuous preventive maintenance program for streets. On a six year cycle, all primary and secondary roads are treated with chip and slurry to keep them in good repair.

### C. LEVELS OF SERVICE

A roadway's ability to handle the current traffic load can be described in terms of level-of-service. The level-of-service is the ratio of the road's design capacity to the existing volumes. The resulting ratio then permits the road to be placed into one of six level-of-service categories. The six levels-of-service are generally described as follows:

Level-of-Service A: This is a condition of free flow traffic, accompanied by low traffic volumes and high speeds. Traffic densities will be low, with uninterrupted flow speeds controlled by driver desires, speed limits, and physical roadway conditions. There is little or no restriction in maneuverability due to the presence of other vehicles and drivers can maintain their desired speeds with little or no delay.

Level-of-Service B: This occurs in the zone of stable flow, with operating speed beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom to select their speed and lane of operation. Reductions in speed are not unreasonable with a low probability that traffic flow will be restricted. The lower limit (lowest speed, highest volume) of this level-of-service has been used in the design of rural highways.

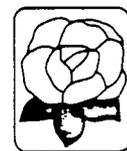
Level-of-Service C: This is still in the zone of stable flow, but speeds and maneuverability are more closely controlled by the higher traffic volumes. Most of the drivers are restricted in their freedom to select their own speed, change lanes, or pass. A relatively satisfactory operating speed is still obtainable with service volumes suitable for urban design practice.

Level-of-Service D: This level-of-service approaches unstable flow, with tolerable operating speeds being maintained though significantly affected by changes in operating conditions. Fluctuations in volume and temporary restrictions to flow may cause substantial drops in operating speeds. Drivers have little freedom to maneuver and comfort and convenience are low.

Level-of-Service E: This level-of-service cannot be described by speed alone but represents operations at lower operating speeds than the other levels of service (generally about 30 miles per hour), with traffic volumes at or near the design capacity of the roadway. Traffic flow is unstable and there may be stoppages for short periods. This level of service is associated with the operation of a roadway at design capacity.



 North  
 0 ————— 2500  
 scale in feet



**Temple City**  
**General Plan**

**Figure CIR-3**  
**Roadways at or Near**  
**Design Capacity**

Level-of-Service F: This level-of-service describes a forced-flow operation at low speeds where volumes are above the design capacity of the roadway. In the extreme cases, both speed and volume can drop to zero. These conditions usually result from queues of vehicles backing up from a restriction ahead. The section of the roadway under study will serve as a storage area during parts or all of the peak hour period. Speeds are substantially reduced and stoppages may occur for short or long periods of time because of the congestion ahead.

The level-of-service can be calculated if the design capacity for average daily traffic and the existing traffic volumes are known. This information was obtained from Newport Traffic Studies which provided both peak-hour and 24-hour volumes for selected roadway segments in Temple City. The 24-hour traffic counts were substituted for Average Daily Traffic (ADT) counts to calculate the existing level of service.

The traffic counts indicated in Table C-1 was obtained using automatic machine counters at intersections which regularly overcount multi-axled trucks. As a result, the actual number of vehicles using any given segment of roadway will be somewhat overestimated, depending on the number of trucks using the particular segment of roadway. In most of Temple City, truck traffic is not heavy enough to cause a significant error in the counts.

The level-of-service calculation is then determined by using the 24-hour vehicle volumes and assuming a design capacity of 6,000 vehicles for each lane in one day.

As evident from examination of Table C-1, certain portions of the City's system of primary roadways are operating at or near design capacity. This is compounded by excessive peak-hour volumes on all major roadways serving the city and the surrounding region. At present the entire length of Rosemead Boulevard through Temple City is operating at Level of Service F. Lower Azusa Road also handles traffic beyond its designed capacity east of Baldwin Avenue. All other roads appear to provide satisfactory service as determined by Level of Service D or better.

In addition to the surface roads through Temple City, the region's freeway network in the vicinity of the City is handling peak-hour volumes that exceed their design capacity. Those roadway segments in Temple City operating at or near their design capacity are indicated in Figure CIR-3.

#### D. ROAD CONDITIONS

The majority of roads in Temple City are in good condition. Figure CIR-4 shows those roads which need to be brought up to standard, either by adding curbs, lights, resurfacing or widening. These streets are scheduled for improvement by the Public Works Department.

## INTRODUCTION

State law requires that every county and city prepare and adopt a comprehensive, long-range plan to serve as a guide for the physical development of that jurisdiction. The plan must consist of an integrated and internally consistent set of goals, policies, and implementation measures. In addition, the plan must focus on those issues that are of the greatest concern to the community and be written in a clear and concise manner. State law requires that a general plan contain seven elements. These seven mandated elements include the following issue areas: 1) land use, 2) circulation, 3) housing, 4) conservation, 5) open space, 6) noise, and 7) safety.

The Temple City General Plan Update is divided into two sections - a Technical Report and a section called the General Plan which contains the above mentioned elements. The Technical Report serves as a support document for the General Plan elements in that it contains base data on the City such as land use information and demographics. These data are then used to develop the General Plan Goals, Policies and Implementation Measures for each element. Most of the data for this Technical Report were obtained from the 1980 U.S. Census of Population and Housing, the State Department of Finance, and the Southern California Association of Governments (SCAG). Over the life of the General Plan, this information can be updated as more recent information on the City becomes available.

The Technical Report is divided into six sections that correspond with the topics covered in the General Plan elements. These sections are: Land Use, Public Safety, Resource Management, Circulation, Noise and Housing.

## E. ALTERNATE MODES OF TRANSPORTATION

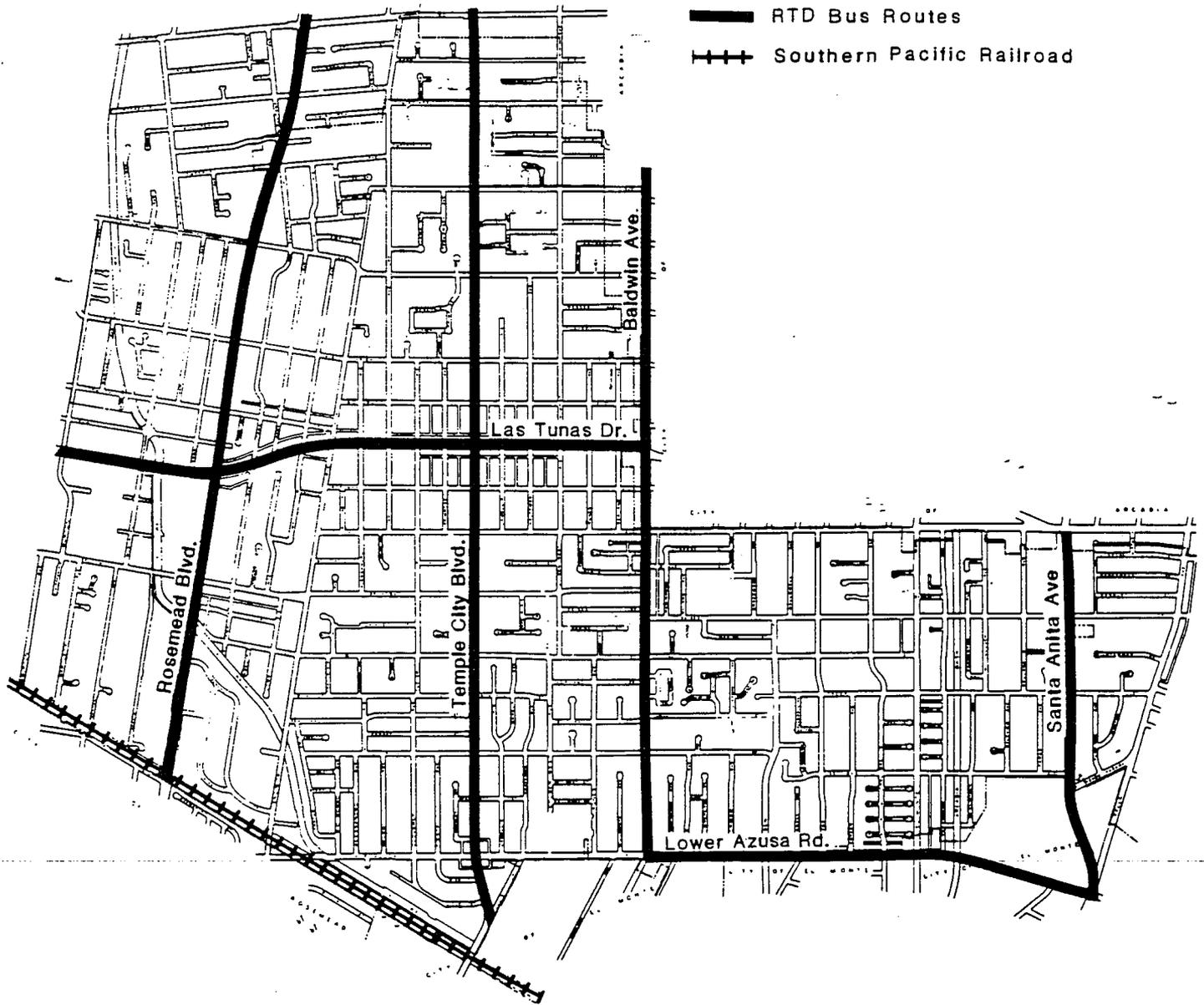
Public Transportation: The Southern California Rapid Transit District has several lines which serve Temple City. The routes are shown on Figure CIR-5. To encourage mass transit patronage, the City will be installing bus bench shelters at 50 sites along the RTD routes.

Railroads: Only one railroad, the Southern Pacific, crosses through Temple City along its southern boundary between Rosemead Boulevard and Temple City Boulevard.

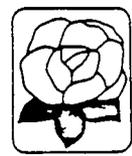
Utilities and Transmission Lines: No major utilities or transmission lines pass through Temple City.

Pedestrians: Since commercial areas are close to residential areas, many people in Temple City walk instead of drive. The City is currently deficient in sidewalks. In response to this deficiency, a Master Plan of sidewalks has been adopted.

Bicycles: Temple City has no bikeways, and there are no plans in the immediate future for any. To encourage the use of bicycles for transportation, sidewalk parking of bicycles is allowed in commercial areas.



 North  
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 scale in feet



**Temple City**  
**General Plan**

Figure CIR-5  
 Other Transportation Routes

HOUSING ELEMENT TECHNICAL REPORT

CITY OF TEMPLE CITY  
GENERAL PLAN UPDATE

April, 1987

Cotton/Beland/Associates, Inc.  
1028 North Lake Avenue  
Suite 107  
Pasadena, California 91104

#419.00

## HOUSING ELEMENT TECHNICAL REPORT

### A. Introduction

#### Purpose of Report

The California Legislature has established a policy to promote the attainment of decent housing and a suitable living environment for all households in the state. Recognizing that the attainment of this goal requires the cooperative participation of local government, the State has mandated that all cities include a housing element as part of their adopted General Plans.

The Temple City Housing Element identifies and analyzes existing and projected housing needs and sets forth goals and policies for the preservation, improvement and development of housing for all economic segments of the community. The Housing Element is divided into a technical report and goals, policies and programs section. This allows for easy updating of the various parts as new information is available. The information provided in this technical section on the demand for and supply of housing in Temple City is the basis for the formulation of the goals, policies, and programs.

The technical report of the Housing Element analyzes both the demand for and supply of housing in Temple City. On the demand side, the report assembles available data on demographic trends, household characteristics and employment characteristics. Age of the population, household size, income constraints, and other data help determine the housing needs of existing and potential Temple City residents. The housing supply section looks at the housing stock conditions and provides data on the age, type, and condition of existing housing, along with the trends of recent housing construction. Physical, market, and government constraints to meeting the housing needs are then assessed, and analysis of opportunities to help better meet the local and regional housing needs concludes the technical report.

Temple City is centrally located in the West San Gabriel Valley, bounded by the communities of Arcadia, El Monte, Rosemead, San Gabriel and unincorporated areas of Los Angeles County. The City has an area of 2,468 acres (3.86 square miles), 65% of which is used for residential purposes.

The City of Temple City was incorporated as the 69th city in Los Angeles County on May 25, 1960. It became the 75th charter city in California on May 25, 1971. Figure 1 shows the Temple City's regional setting in the Greater Los Angeles area.



B. Demographic Characteristics

Population

Temple City experienced rapid growth in the decade following its incorporation in 1960. The City's population grew from 24,000 in 1960 to 29,673 in 1970, a 28% population increase. By comparison, the population for Los Angeles County grew by 17% for the same period.

By 1970, Temple City's population had stabilized. Census data indicate that the City's population declined by 701 persons from 1970 to 1980.

In 1980, Temple City had a total population of 28,972. Department of Finance estimates indicate that the City's population was 31,150 in 1986, a 7.5% growth over the six year period. Some of this growth, however, is due to recent annexation activity. Table 1 illustrates the growth since 1970 of Temple City and its neighboring cities in the San Gabriel Valley.

TABLE 1  
POPULATION TRENDS  
TEMPLE CITY AND SURROUNDING CITIES 1970-1985

CITY	YEAR				Percentage Increase		
	1970	1975	1980	1985	1970-1975	1975-1980	1980-1985
TEMPLE CITY	29,673	30,050	28,972	30,735	1.3%	-3.6%	6.1%
El Monte	69,892	72,600	79,494	89,600	3.9%	9.5%	12.7%
Arcadia	45,138	46,000	45,993	47,536	1.9%	Negligible	3.4%
Rosemead	40,972	41,200	42,604	45,431	0.6%	3.4%	6.6%
San Gabriel	29,336	29,500	30,072	31,735	0.6%	1.9%	5.5%

Source: 1970, 1980 U.S. Census; State Department of Finance

Race and Ethnicity

Table 2 compares the race/ethnic composition of Temple City in 1970 and 1980. Temple City is predominantly white (89.9%) with a growing non-white and Hispanic population. Temple City's Hispanic population grew from 8.9% of the total population in 1970 to 12.9% in 1980. Similarly, the proportion of Indian, Asian and Pacific Islander components of the total population have grown from 1.8% to 9.9% over the same period.

Temple City had a total Black population of 55 in 1980, which is less than 1% of the total population. Compared to Los Angeles County, Temple City has a considerably higher ratio of white to non-white population (see Table 2). However, a trend toward a more ethnically balanced community appears to be evolving as other racial groups, particularly Asian and Pacific Islanders, continue to establish residency in Temple City.

According to a scenario developed by the Southern California Association of Governments, ethnic population in the Southern California region may increase from 39% of the total population in 1980 to at least 48% and as much as 58% by the year 2000 if current immigration trends continue. This growing ethnic population may have an impact on housing in at least two respects. First, recent immigrant households tend to have a higher rate of renting, which may increase demand for rental housing in a market which is already in short supply of such housing. Second, recent immigrant households tend to be larger, which may lead to greater demand for larger-sized housing units.

TABLE 2  
POPULATION BY RACE/ETHNICITY

	1970		1980		L.A. County 1980
	Number	Percent	Number	Percent	Percent
White	29,103	98.1	26,055	89.9	68.7
Black	23	0.1	55	0.2	12.6
Other (1)	547	1.8	2,862	9.9	18.7
Total	29,673	100.0	28,972	100.0	100.0
Hispanic (2)	2,576	8.9	3,740	12.9	27.6

(1) Includes Asian, Pacific Islander, American Indian and Eskimo. The 1980 Census included a separate category for Asian and Pacific Islander which comprised 5.1 percent of the population of Temple City.

(2) The Census had a separate category for those who reported themselves as Hispanic. However, the people in the Hispanic category are also counted in the White, Black or Other category.

Source: 1970, 1980 U.S. Census

### Age Characteristics

Temple City's population is maturing. From 1970 to 1980, the median age in Temple City rose from 28 to 34.2. Table 3 illustrates the change occurring within each age bracket when viewed as a percentage of total population. From 1970 to 1980, the percentage of persons 14 years or younger decreased from 25% to 20.7%. During the same time period, the percentage of persons 55 years of age or older increased from 23.3% in 1970 to 25% in 1980.

Another reflection of age can be determined by the number of children enrolled in school. From 1970 to 1984, enrollment in the Temple City Unified School District declined by 14.3% for the first through sixth grade levels. This decline is part of a national trend of declining enrollments in elementary schools, and is due partially to a decline in the fertility rates and the recent tendency of married couples to have fewer children or to postpone having children. In Temple City, declining enrollments also reflect the growing number of elderly and middle-aged households with grown children.

TABLE 3  
AGE COMPOSITION OF THE POPULATION

Age Group	1970 % of Total	1980 % of Total
0- 4	8.3	5.9
5- 9	9.0	6.6
10-14	8.4	8.1
15-19	7.5	8.7
20-24	6.3	7.2
25-34	13.7	14.7
35-44	10.9	13.3
45-54	12.4	10.2
55-64	10.6	10.9
65+	12.9	14.4

Source: 1980 U.S Census

### Population Projections

Temple City is currently almost completely developed and has very little vacant land left. Population increases in the future are likely to be small and would primarily come from intensification of land use where low density housing exists on land zoned for higher densities. Temple City population could also increase through annexation or an increase in household size.

## C. Household Characteristics

### Household Size

Since 1970, Temple City has experienced an overall decrease in household size, from 2.87 persons per household in 1970 to 2.67 persons per household in 1980. This decline reflects State and national trends toward smaller household size, which can be attributed to such factors as:

- the growing tendency of single persons to establish an independent household and remain single for a longer period of time.
- the trend of married couples to have fewer or no children.
- the higher incidence of divorce, which splits one household into two.
- a greater proportion of the over-60 population which is made up largely of one and two-person households.

These factors have created additional pressures on the housing market by increasing demand. There are indications, however, that the trend toward smaller households may be reversing in Temple City. As Table 4 indicates, estimates for 1986 show an increase in household size from 2.67 persons per household in 1980 to 2.75 in 1986. This shift may be due to the growing number of immigrant households with extended families, or may be a response to rising housing costs. It is too soon to determine whether this shift is a long-term trend toward larger families or a short-term response to economic realities.

TABLE 4  
HOUSEHOLD SIZE IN TEMPLE CITY

	1970	1980	1986*
Occupied Housing Units	10,175	10,689	11,447
Persons in Households	29,198	28,539	30,557
Average Size of Households	2.87	2.67	2.75

Source: 1980 U.S. Census

\*State Department of Finance Estimates

## Special Needs Households

In addition to the foregoing analysis of total housing needs, Section 65583(a)(6) of the Government Code requires an analysis of special housing needs in the community. This section will address the special needs of handicapped, elderly, female-headed, family, one-person, and overcrowded households.

Handicapped - 1,243 handicapped individuals resided in Temple City in 1980, or 4.3% of the total population. Because of their disability, 620 of these handicapped persons were prevented from working. Handicapped persons represent a unique segment of the community since they may require specialized accommodations in public facilities and housing. Accessibility is a primary concern for the handicapped, as seemingly minor changes in elevation, such as a curb or step, can present an insurmountable barrier to a person confined to a wheelchair.

Elderly - Of the City's 28,972 residents in 1980, 4,167 were 65 years of age or older, which represents 14.2% of the total population. Many elderly households live on fixed incomes, and rising housing costs can create serious housing problems. Of the total elderly population in Temple City, 278, or 6.7%, have incomes below the poverty line.

Female Headed Households - The number of female-headed households in Temple City was 1,074 in 1980, which accounts for 10.1% of total households. Women have traditionally held lower-paying jobs and have not had the educational opportunities to compete in the professional job market. Census data for 1980 reports the median income level for female-headed households as \$14,071, or 68.4% of the median income of \$20,576 for all households in Temple City. Women with children may experience particular difficulty in obtaining suitable housing within their ability to pay.

Family Households - In 1980, approximately 8,000 households were comprised of families. This is 75 percent of the City's households. Approximately 11 percent of all Temple City households are defined as large families (five or more persons).

Overcrowded Households - According to the U.S. Census Bureau, a housing unit is considered "overcrowded" when the unit is occupied by more than one person per room. In 1980, 3.4% of Temple City's housing units were overcrowded. This percentage is down slightly from the 1970 rate of 3.6%. Temple City's incidence of overcrowding is lower than that of Los Angeles County and the State as a whole. In 1980 there were 11.2% overcrowded housing units in the County and 7.4% overcrowded housing units Statewide.

A total of 2,032 persons were living in overcrowded housing units in Temple City in 1980. Of these, 800 (39.3%) were renters. Although overcrowding does not appear to be a serious problem in Temple City, a continued increase in average household size could aggravate the situation unless the market responds with larger housing units in the future.

Homeless Persons - According to Department of Housing and Urban Development (H.U.D.) estimates, Los Angeles County has approximately 31,000 to 34,000 homeless persons. The majority of the homeless are found near downtown Los Angeles and towards some of the beaches. The homeless are, for the most part, unnoticeable in Temple City and the City operates no services for the homeless. Charitable organizations, mostly religious, have traditionally cared for the homeless in Temple City. The organizations interviewed provide food and clothing and refer the homeless to shelters either in Pasadena or to People for People, an Alhambra-based organization which cares for homeless persons. Some religious organizations receive requests for aid every week, while others get no more than an average of one request per month.

**Income Characteristics**

In 1980, Temple City had a median household income of \$20,576 per year - somewhat higher than the County median household income of \$17,453. Comparison to neighboring cities can be seen in Table 5. According to 1980 census data, 271 Temple City families fall below the poverty line. Of the total population, 1,382 persons (4.7%) have incomes below the poverty level as determined by the Census. This percentage is highest among the city's Black and Hispanic population, as indicated in Table 6.

Poverty level thresholds are established by the Census Bureau based on national averages. They do not take into account regional variations in the price of food, clothing and shelter. Table 7 outlines the national poverty level income thresholds established for 1979.

**TABLE 5  
MEDIAN HOUSEHOLD INCOME  
TEMPLE CITY AND REGION - 1979**

City	Median Income	Percent of County Median
TEMPLE CITY	\$20,576	118%
El Monte	13,679	78%
Arcadia	24,886	143%
Rosemead	15,761	90%
San Gabriel	16,967	97%

Source: 1980 U.S. Census

TABLE 6  
POVERTY STATUS BY  
RACE/ETHNIC GROUP - 1980

Race/Ethnic Group	% Below Poverty Line
Asian and Pacific Islander	2.3%
White	4.1%
Hispanic	10.4%
Black	42.0%
Total	4.7%

Source: 1980 U.S. Census

TABLE 7  
INCOME THRESHOLDS AT THE POVERTY LEVEL BY SIZE OF FAMILY IN 1979  
(National)

Size of Family Unit	Weighted Average Thresholds	Number of Dependents									
		None	1	2	3	4	5	6	7	8 or more	
1 Person <sup>1</sup>	\$ 3,686	3,774									
Under 65 yr.	\$ 3,774	3,479									
65 yr. & Over	\$ 3,479										
2 Persons <sup>2</sup>	\$ 4,723										
HH under 65	\$ 4,876	4,858	5,000								
HH 65 & over	\$ 4,389	4,385	4,981								
3 Persons	\$ 5,787	5,674	5,839	5,844							
4 Persons	\$ 7,412	7,482	7,605	7,356	7,382						
5 Persons	\$ 8,776	9,023	9,154	8,874	8,657	8,525					
6 Persons	\$ 9,915	10,378	10,419	10,205	9,999	9,693	9,512				
7 Persons	\$11,237	11,941	12,016	11,759	11,580	11,246	10,857	10,429			
8 Persons	\$12,484	13,356	13,473	13,231	13,018	12,717	12,334	11,936	11,835		
9 or more Persons	\$14,812	16,006	16,144	15,929	15,749	15,453	15,046	14,677	14,586	14,024	

1. Unrelated individual.
2. Householders.

Source: U.S. Census, 1980.

The World Almanac and Book of Facts, 1983, Published annually by Newspaper Enterprises, Inc., New York, p.216.

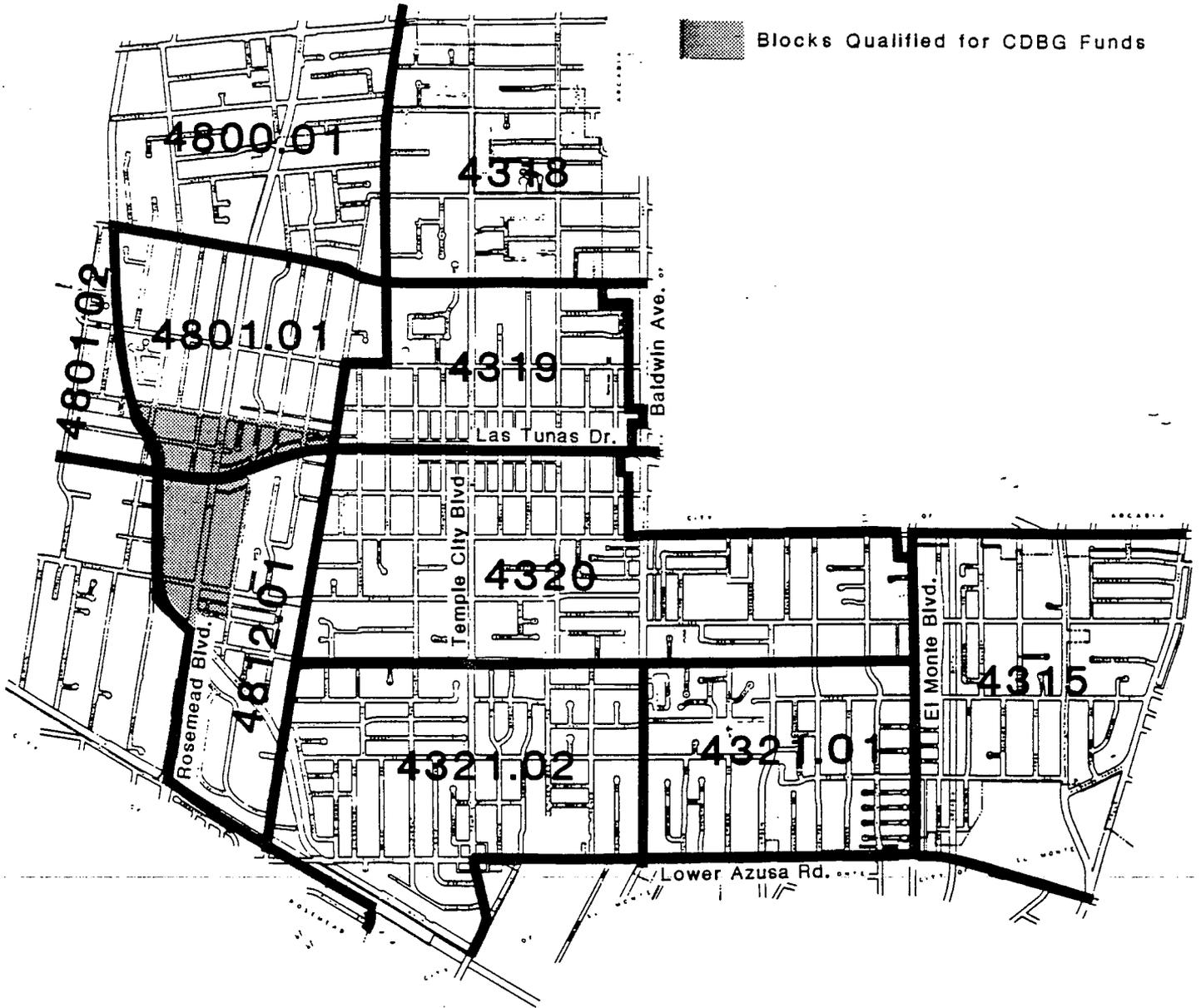
Note: Poverty level thresholds are established by the Federal Bureau of the Census based on national averages. They do not take into account regional variations in the price of food, clothing, and shelter. The estimates are therefore much more conservative than the definition of low income households used in other federal programs.

According to the U.S. Department of Housing and Urban Development, a low or moderate income area is a census tract or block group in which more than 50% of the households earn less than 80% of median household income for the region. Of the 32 census block groups in Temple City, only two are considered low or moderate income areas. These areas are identified in Figure 2.

In assessing existing household needs, it is necessary to consider housing affordability. An "affordability gap" is said to exist where the cost of housing exceeds a household's ability to pay. A standard measure of affordability is 30% of gross household income. Those households paying more than 30% of their income are considered to be overpaying for housing and in need of housing assistance.

Table 8 indicates the number of households in Temple City paying more than 30% of gross income for housing by income group. In 1980, 1,309 renter households were spending more than 30% of their gross income. Of these households, 1,042 (80%) were lower income households, earning less than 80% of the regional median income (\$14,050 or less). A total of 976 owner-occupied households were also spending at least 30% of their gross household income for housing in 1980, of which 496 (51%) were lower income. Overall, approximately 21% of Temple City's households were paying more than 30% of gross income for housing in 1980. This compares favorably to Los Angeles County as a whole, where 42% of all households were overpaying for housing in 1980 under this definition of affordability.

Table 9 gives a comparison of 1980 housing costs in Temple City to surrounding areas. The median value of owner-occupied housing approximates that of the County, while the median rent is 11% higher than the County median. Table 10 details some of the more recent housing costs for Temple City by summarizing data on houses which were purchased in 1985 and advertised rents.



North

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scale in feet



Temple City  
General Plan

Figure HE-2  
Census Tracts

TABLE 8  
HOUSING EXPENDITURES AS A PERCENTAGE  
OF INCOME - 1980

Income/Percent Spent on Housing	Renter Households		Owner Households	
	No.	Percent	No.	Percent
Less than \$10,000				
Spent less than 30.0%	109	11.0%	585	60.1%
Spent 30.0% or more	879	89.0%	389	40.0%
\$10,000 - \$19,999				
Spent less than 30.0%	860	68.1%	1,182	81.8%
Spent 30.0% or more	403	32.0%	263	18.2%
\$20,000 or more				
Spent less than 30.0%	865	97.0%	3,809	92.2%
Spent 30.0% or more	27	3.0%	324	7.8%

Source: 1980 U.S. Census

TABLE 9  
1980 HOUSING COSTS  
TEMPLE CITY AND REGION

Jurisdiction	Median Value	Median Rent
TEMPEE CITY-	\$ 86,700	\$ 272
El Monte	66,000	229
Arcadia	139,500	296
Rosemead	70,000	234
San Gabriel	86,100	250
Los Angeles County	87,400	244

Source: 1980 U.S. Census

TABLE 10  
 TEMPLE CITY HOUSING COSTS

1985 Single-Family Housing Unit Resale Price

Unit Type	Median	Average	Range
1 Bedroom	\$ 82,000	\$ 79,400	\$ 55,000-\$102,000
2 Bedroom	105,000	108,600	60,000- 245,500
3 Bedroom	125,000	125,700	66,000- 200,000
4 Bedroom	145,000	145,300	109,100- 225,000

1986 Rental Housing Advertised Monthly Rent

Unit Type	Median	Average	Range
<b>Detached Unfurnished</b>			
1 Bedroom	\$ 350	\$ 350	---
2 Bedroom	650	658	\$ 450-\$ 850
3 Bedroom	900	858	700- 950
<b>Attached Unfurnished</b>			
0 Bedroom	\$ 395	\$ 402	\$ 395- 525
1 Bedroom	465	468	425- 525
2 Bedroom	550	610	525- 850
3 Bedroom	950	873	695- 975

Source: California Market Data Cooperative, Inc.  
 Temple City Times

Using the current guidelines established by HUD, households should not be expected to spend more than 30% of their gross income on housing. In 1986, very low income households (earning less than \$8,775 per year) should not have rental or monthly mortgage payments exceeding \$219 per month. In Temple City, no units were found which were available at that cost.

## D. Employment Characteristics

### Employment Characteristics of Residents

Temple City's total labor force was 13,674 in 1980. Approximately 37% of those employed worked in the technical, sales and administrative support occupations. Another 22% worked in managerial occupations. The remaining 40% were employed as skilled craftspersons or laborers.

The composition of the city's labor force changed somewhat from 1970 to 1980. Women accounted for just 38% of the market in 1970. By 1980, 6,050 women were in the work force, or 44% of the total labor force.

### Employment Generation in Temple City

SCAG estimates that 7,395 jobs were provided within Temple City in 1984. Although this figure is expected to rise to 12,214 by the year 2010, it is apparent that a considerable portion of Temple City's workforce must commute to locations outside the city's borders. Thus, regional employment growth trends will continue to have an impact on employment growth and housing demands in Temple City.

In 1980, employment in Los Angeles County totalled 3,940,100. Between 1970 and 1980, total employment increased at an annual average rate of 1%, the lowest growth rate of the six counties in the Southern California region. In 1970, the County accounted for 76% of total employment within the six county region; by 1980, this percentage dropped to 70%, and by 1990 the rate is expected to drop to 62%.<sup>1</sup> A moderate trend toward decentralization of growth away from Los Angeles County may contribute to a slowing of employment growth for the city.

<sup>1</sup>Source: Southern California Association of Governments

### E. Housing Characteristics

As of January 1, 1986, the California Department of Finance estimated a total of 11,447 dwelling units in Temple City. Seventy-six percent of these units were built before 1960, and a little over seven percent have been built since 1970. Table 11 shows the housing stock by year built.

TABLE 11  
AGE OF TEMPLE CITY HOUSING STOCK

Year Built	Units	Percent
1939 or earlier	1,444	12.9
1940-1949	3,022	26.9
1950-1959	4,033	35.9
1960-1969	1,939	17.3
1970-1979	599	5.3
1980-1984	207	1.8
Total	11,244	100.0

Source: 1980 U.S. Census  
L. A. County Building Permit Records

Tables 12 and 13 summarize building permit activity in Temple City for new housing construction from 1977 through 1984. As indicated, 43% of all new housing units constructed during this period were detached single family structures. Of the new housing units, 39% were within multiple family structures and 18% were attached single family (townhouse) structures.

Although there is no apparent trend in terms of the percentage of single family, as opposed to multiple-family development in Temple City, there is a perceptible shift away from high-density structures (5 units) and toward lower density structures (2-4 units) and townhouse development (see Table 12). This trend may be the result of consumer preference for this type of housing, or may be the result of the city's land use controls and development regulations which tend to encourage medium density development.

TABLE 12  
 PERMITS ISSUED FOR NEW HOUSING CONSTRUCTION  
 1977 - 1984

Year	Total	Single-Family		Multiple-Family	
		Detached	Attached	2-4 Unit Structure	5+ Unit Structure
1977	36	13	0	18	5
1978	46	20	0	26	0
1979	65	32	0	28	5
1980	74	26	4	28	16
1981	51	23	28	0	0
1982	28	6	14	8	0
1983	44	26	18	0	0
1984	10	6	0	4	0
<b>Total</b>	<b>354</b>	<b>152</b>	<b>64</b>	<b>112</b>	<b>26</b>

Source: L. A. County Building Permit Records

TABLE 13  
 HOUSING TYPE AS A PERCENTAGE  
 OF TOTAL NEW HOUSING UNITS

Year	Percent of Total New Housing Units by Type		
	Single-Family Detached	Single-Family Attached	Multiple-Family
1977	36%	0%	64%
1978	43	0	57
1979	49	0	51
1980	35	5	60
1981	45	55	0
1982	21	50	29
1983	59	41	0
1984	60	0	40
1977-1984	43%	18%	39%

Source: L. A. County Building Permit Records

The great majority of the housing stock of Temple City is single-family, either attached or detached as evidenced in Table 14, with almost 86% of the stock classified as single family. This table also reflects the increase in development of multiple-family housing in the city since 1970.

**TABLE 14**  
**TYPE OF HOUSING UNIT - 1970 to 1986**

Type of Housing Unit	1970		1980		1986	
	#	%	#	%	#	%
Single-Family	9252	88.8	9486	85.9	9816	85.8
2-4 units	410	3.9	501	4.5	565	4.9
5+ units	757	7.3	1050	9.5	1066	9.3
Mobile Home	0	0	0	0	0	0
<b>Total</b>	<b>10,419</b>	<b>100.0</b>	<b>11,037</b>	<b>100.0</b>	<b>11,447</b>	<b>100.0</b>

Source: 1970, 1980 U.S. Census  
California Department of Finance

**Tenure and Vacancy**

Of the 10,689 occupied housing units in Temple City in 1980, 65.8% were owner-occupied. As indicated in Table 15, the ratio of owner-occupied to renter-occupied housing has grown slightly since 1970, and remains considerably higher than the ratio for the County as a whole.

In 1980 there were 348 vacant housing units. The vacancy rate for renter-occupied housing was 3.0%, while the vacancy rate for owner-occupied housing was 0.8%. By comparison, the vacancy rate for the County in 1980 for renter and owner occupied units was 3.9 and 1.8 percent respectively. The State Department of Finance reported an estimated 1986 vacancy rate of 2.84% for Temple City, compared to Los Angeles County's vacancy rate of 3.45%.

TABLE 15  
TENURE IN TEMPLE CITY  
AND LOS ANGELES COUNTY 1970 - 1980

	Temple City		Los Angeles County	
	Owner	Renter	Owner	Renter
<u>1970</u>				
Percent	65.3	32.3	46.5	49.3
Total	7,181	3,552	1,179,321	1,252,038
<u>1980</u>				
Percent	65.8	31.1	48.5	51.5
Total	7,268	3,426	1,323,397	1,407,072
Percent Change	+0.5	-1.2	+2.0	+2.2

**Housing Condition**

1980 census data indicates that 76% of Temple City's housing units were constructed prior to 1960. This fact is significant, since many components of a residential structure begin to require repair or replacement after twenty years, including roof, heating and cooling equipment, and exterior surface materials.

According to a statistical report published by the County of Los Angeles Building and Safety Division, there were 1062 additions, alterations, and repairs in Temple City between 1979 and 1983 with a total value of \$10,737,880. This figure reflects improvements to over 10% of the city's housing stock, which suggests that an active cycle of voluntary maintenance and improvement exists in Temple City. The City is estimated to have a total of 91 housing units that are substandard. Substandard in this case means that the structure either needs some form of major repair (such as a new roof or electric wiring) or the home needs to be replaced. In Temple City most of the estimated 91 substandard housing units are probably in need of repair, not replacement.

**Regional Housing Needs**

A projection of housing needs must focus on two aspects of the housing market: (1) the unmet housing need of existing residents, including the special needs

of the elderly, handicapped, and female-headed households, and (2) new housing demand generated by population growth, new household formations, employment growth, replacement of demolished units, and the creation of a desirable vacancy rate.

A housing market is not limited to local political boundaries. Therefore, Temple City's projection of housing need must be coordinated with projections at the regional level. The Southern California Association of Governments is responsible for calculating each locality's share of housing need in the Southern California region.

SCAG provides a five-year household growth allocation to each locality by income group, which represents that jurisdiction's "fair share" of regional housing needs.

According to SCAG's "fair-share" of housing estimate, 1472 households in Temple City are in need of assistance. Within this number, 934 households are considered very low income households (households with incomes 50% or less of the median income for the area). These households would have an income of \$10,383 or less in 1983.

SCAG estimates that the remaining 538 households in need of assistance are households whose income is between 50% and 80% of the median income for the area. In 1983 these households would have an income between \$10,384 and \$16,613.

SCAG also estimates the housing growth needs of the community. This was calculated by developing a State figure for the number of additional housing units needed in the next five years. Throughout California, this number has been disaggregated to a regional level, and then to a local level. SCAG has estimated that in Temple City, 122 housing units will be needed between the years 1986 and 1990 for all income groups. This figure represents the number of additional units that would be needed to:

1. accommodate expected household growth
2. provide a desirable vacancy rate of 5%
3. replace units demolished.

SCAG has also categorized housing unit need by income group, as shown in Table 16.

TABLE 16  
HOUSING GROWTH NEEDS BY INCOME GROUP

Total Growth 1986 to 1990	Units Affordable to very low in- come (0-50% of median)	Units Affordable to low income (50-80% of median)	Units Affordable to middle in- come (80-120% of median)	Units Affordable to high in- come (120% of median)
122 (100%)	19 (15%)	23 (19%)	23 (19%)	57 (47%)

Source: Southern California Association of Governments

## F. Housing Constraints

There are a variety of constraints on the housing market which limits its ability to respond to the housing needs of all segments of the community. Several of these constraints are discussed below, including the availability of land, market realities, and governmental regulation.

Of the 3.8 square miles of land area within Temple City's borders, only 7.5 acres (0.3%) are currently vacant and suitable for new residential development. As Table 17 indicates, existing vacant land could accommodate 73 new housing units if developed to a maximum capacity under the General Plan land use designations. A total of 27 of these housing units could be constructed on land designated for low density development (0-6 units per acre). Another 29 units could be provided within medium density areas (7-12 units per acre), and high density areas would accommodate 17 new units.

Even at maximum development, new construction on available sites would produce only 73 units, or 60% of the projected new housing need of 122 units. Moreover, it is highly unlikely that existing vacant parcels could accommodate this level of development, since this analysis does not take into consideration other development standards, required dedications, or unique characteristics which may further limit the development potential of vacant land.

If projected housing needs are to be met within the five-year time frame of this Housing Element, new housing development must take place on land not presently vacant and available for such use. In Temple City, the greatest potential for new housing development lies in underutilized land areas designed for medium or high density residential use in the General Plan. Redevelopment of these sites would generate additional housing units and, in many cases, eliminate nonconforming or substandard buildings. Constraints on redevelopment may include existing zoning and development regulations, needed public improvements, and the high cost of improved land.

TABLE 17  
DEVELOPMENT POTENTIAL OF VACANT RESIDENTIAL LAND

Land Use Category	Acres	Dwelling Unit Potential
Low Density (0-6 units/acre)	4.59	27
Medium Density (7-13 units/acre)	2.45	29
High Density (13-36 units/acre)	0.48	17
Total	7.52	73

Source: City of Temple City

### Infrastructure

Public facilities and infrastructure are generally adequate to support new residential development. However, a problem was identified in 1982 in the extreme northeast portion of the City, where tests revealed deficiencies in the water system for the area. On several occasions, proposed developments were postponed or abandoned when the necessary fire flows could not be achieved at reasonable cost.

Since 1982, progress has been made toward correcting deficiencies in the water system for this area. A master plan was prepared and accepted by the water purveyor, which outlines a ten-year program for replacement of mains and reservoirs. Furthermore, in 1984, the Los Angeles County Board of Supervisors authorized a consultant services agreement to conduct a comprehensive study of the water service area. If these efforts are successful in bringing about an improved water system, new housing developments may become feasible in this area consistent with the land use element of the General Plan.

Other infrastructure deficiencies may be site specific, i.e., deficient only with respect to a proposed development. For example, as a condition of approval of a large residential tract, a developer may be required to reconstruct a portion of an existing sanitary sewer. Other required improvements to the public infrastructure, including the provision of streets, streetlights, drainage facilities, etc., will increase the developer's costs, and may in some cases be a constraint on new housing development.

Generally, infrastructure needs do not present significant constraints to new housing development in Temple City. The city's street system is in place, with occasional need for street widening or extensions, or new cul-de-sacs. A network of sanitary and storm sewers is essentially complete, although on-site storm drains may be required at the time of subdivision. In most areas of the city, curbs, gutters, sidewalks, street trees, and other right-of-way improvements already exist. As a result, development can occur in Temple City at a lower overall cost than comparable projects on unimproved land in outlying areas.

### Market Constraints

Traditionally, the most significant constraints on the housing market are economic, including the high cost of housing and the availability of mortgage financing. Housing production and home ownership are dependent, (probably more than any other sector of the economy), on the availability of long-term financing.

As interest rates go down, the consumer's ability to purchase housing is increased. More families are able to qualify for mortgage financing at lower interest rates. The recent decline of interest rates has significantly increased building activity in Temple City. The impacts of interest rates on monthly payments is detailed in Table 18.

TABLE 18  
MORTGAGE PAYMENTS AS A PERCENTAGE OF MEDIAN  
HOUSEHOLD INCOME FOR TEMPLE CITY

Interest Rate**	\$70,000 Loan		\$80,000 Loan		\$90,000 Loan		\$100,000 Loan	
	Mo. Pay.	%*	Mo. Pay.	%*	Mo. Pay.	%*	Mo. Pay.	%*
9%	563	33	643	37	724	42	805	47
10%	614	35	702	41	790	46	878	51
11%	667	39	762	44	857	50	952	55
12%	720	42	823	48	926	54	1029	60
13%	774	45	885	51	996	58	1106	64
14%	829	48	948	55	1066	62	1185	68
15%	885	51	1012	59	1138	66	1264	70

\*Payment as a % of the 1980 Median household income for Temple City of \$20,576 per year or \$1,715 per month.

\*\*30 year term

The inability of consumers to match increases in housing costs with income earned has aggravated the "affordability gap" discussed previously. In Temple City, the situation has changed drastically since 1970, when the city's median household income (\$11,719) was nearly twice the level required (\$5,925) to qualify for a mortgage to finance a median-priced home (\$23,900). By 1980, the income required to qualify (\$26,820) exceeded the median household income (\$20,766) by \$6,054, or 29%. Moreover, in 1980, the monthly payment required to purchase a conventionally financed, median priced home in Temple City would require 45% of the median household income - considerably more than the 25-30% considered reasonable by financing experts.

Other market constraints to housing development include land and site development costs. Typically, 30 to 40 percent of the total cost of new housing is related to land and site development costs. The price of land, which varies widely by location, is particularly high in Los Angeles County due to high in-migration and the dwindling supply of land suitable for residential development. Site development costs, which include the costs of public improvements, are highly dependent on existing infrastructure, government regulations, fees, and exactions.

#### Government Constraints

Although necessary to protect the public health, safety and welfare, various governmental regulations affect the cost and supply of housing. Land use controls, building and zoning regulations, fees and exactions, and the local permit review process are the primary governmental constraints to new housing production.

#### General Plan

Land use designations in the General Plan control the density of new residential development, which affects the income potential of a project and, in some cases, may preclude development of a particular site. Of the total net land area in Temple City, 47% is designated for low density residential development, which allows densities of 0 to 6 units per acre. Of the total land area, 12.8% is designated for medium density residential which limits development to 12 units per acre. Only 5.5% of Temple City's land area is designated for high density residential, which allows densities of 13 to 36 units per acre.

#### Zoning

Zoning regulations directly affect the type and quality of new housing in a community. In Temple City, standards of development include lot size, yard setbacks, height, floor area, open space, and parking. Zoning requirements can enhance the quality of new development but may increase development costs or prevent development of housing which is affordable to lower income households without government subsidies.

### Building Codes and Property Maintenance

Building standards are necessary to ensure the safety and quality of the housing stock. Temple City uses the Los Angeles County Building Code to regulate new construction. Property maintenance regulations prevent the deterioration of existing residential structures. The fees charged by Temple City are comparable to other cities in the area and Los Angeles County.

### Permit Processing

Fees are required by the City to offset a portion of the costs incurred in reviewing and processing development proposals. Special fees such as sewer reconstruction and park development fees are designed to compensate the City for future public improvements made necessary by the new development. Table 19 gives a list of fees charged by the City for residential development.

Development review procedures can increase the time interval between project inception and start of construction, which translates to higher housing costs. In Temple City, the development review procedures include preliminary site plan review, assessment of environmental impacts, final site plan review, and building permit review. In many cases, new housing projects also involve subdivisions of land which requires additional processing time. Moreover, conditional use permits are required for all new condominium projects. Development review procedures in Temple City take an average of 30 days.



NOISE ELEMENT TECHNICAL REPORT

CITY OF TEMPLE CITY  
GENERAL PLAN UPDATE

April, 1987

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#419.00

## INTRODUCTION

Noise can be generally defined as unwanted or unpleasant sound. Of all neighborhood problems reported in a 1975 U.S. Housing Census survey, street noise led as the principal disturbance.

For most people, the usual consequences of noise are associated with an interference with speech and other communication, a distraction at home and at work, the disturbance of rest and sleep, and the disruption of various recreational pursuits. All of the foregoing can be considered components of the quality of life. Beyond the level of such inconveniences or disruptions, extreme and prolonged noise levels can cause hearing loss (either temporary or permanent), aural pain, nausea, loss of muscular control, and blurring of vision. The effects of noise are, therefore, widespread and include both psychological and social effects, as well as physiological effects.

The State of California requires each city and county to adopt a noise element in its General Plan. The noise element, recognizing guidelines set by the Department of Health Services Office of Noise Control, must describe the noise environment in terms of noise exposure contours for both near and long-term levels of growth and traffic activity. An inventory must be included for current and projected numbers of persons exposed to various levels of noise throughout the community. Noise-sensitive land uses such as hospitals and schools require identification and on-site monitoring. This information is then to become a guideline for use in the development of the land use element to achieve noise-compatible land use. Finally, the noise element shall contain a section specifying the manner in which it will be integrated into the zoning ordinance, land use and circulation elements, and local noise ordinance, along with recommendations for noise mitigation and possible solutions to current and future problems.

In order to be an effective reference for land-use decisions in Temple City and to meet State requirements, this technical report begins by describing noise and how it is measured for the purposes of this report. Assumptions used in correlating human sensitivity to noise to actual noise measurements are listed as are State guidelines for land use compatibility with the noise environment. The report then examines the existing noise conditions in Temple City, indicating major noise generators and plotting noise contours based on the noise generation. Noise-sensitive land uses are located and point source noise measurements are taken at these places. Finally, future noise patterns are predicted based on the land use element and future activity on the highways. The goals and policy section of the noise element will use this information to set land use and circulation policy and recommend implementing methods to mitigate existing and potential noise conflicts. It will also relate the noise element to the other elements in the general plan.

## CHARACTERISTICS OF NOISE

Noise and other forms of sound in air are caused by vibrations in the air pressure around its steady-state atmospheric level. Such vibrations in the case of noise (unwanted sound), are characterized by rapidly changing

frequencies and sound pressures. Human hearing is most sensitive to sounds between 500 and 10,000 cycles per second; however, the average hearing will pick up frequencies from about 20 cycles per second to 20,000 cycles per second or hertz (Hz), and sound pressures from about 0.0002 microbars to 2,000 microbars, a ratio of ten million to one. To accommodate this range of values, it is customary to use a logarithmic scale. The common logarithmic unit used to measure sound intensity is decibels (dB) where the sound pressure level in dB is defined by the relationship:

$$\text{Sound Pressure Level (dB)} = 20 \log \frac{P}{P_0}$$

P is the measured pressure and P<sub>0</sub> is the reference pressure. In particular, if P<sub>0</sub> = 0.0002 microbars, then for P = 0.0002, the sound pressure level is 0 db and for P = 2,000 microbars, the sound pressure level is 140 dB. The first reading of 0 db corresponds to the threshold of hearing and the second reading of 140 dB is the threshold before the eardrum ruptures for the average human. The decibel levels of general community noises fall in the middle range between these two extremes. Typical everyday sound levels are shown in Figure N-1, which compares human judgment of various noise levels.

A complete physical description of sound must account for its frequency, its overall sound pressure level, and the variation of both of these quantities with time. Because it is awkward to present and understand data which have three dimensions, considerable effort has been expended to develop scales which reduce the number of these dimensions. Most of the effort has been focused on combining measures of frequency and overall sound pressure levels into a quantity proportional to the magnitude of the sound as detected by the human ear. The simplest approach found to date is to electronically weight the amplitudes of the various frequencies approximately in accordance with a person's hearing sensitivity and sum the resulting weighted spectrum to obtain a single number. For such purposes, sound level meters are usually equipped with "weighting circuits" or filters that tend to represent the frequency characteristics of the average human ear for various sound intensities. Hence, readings are sometimes taken with "A-scale", "B-scale" or "C-scale" settings on the meter. The "A-scale" setting of a sound level meter filters out as much as 20 to 40 dB of the sound below 100 Hz, while the "B-scale" setting filters out as much as 5 to 20 dB of the sound below 100 Hz. The "C-scale" setting is reasonably "flat" with frequency, i.e., it retains essentially all the sound signal for the full overall frequency range. The resulting values are called "sound levels" and are identified as dBA, dBB, or dBC readings. These readings do not represent true sound pressure levels because some of the actual signal has been removed by the weighting filters.

"A-scale" sound levels are the most commonly used by many city and county noise ordinances as dBA is the standard best measure of loudness. The State Office of Noise Control, in its guidelines, requires the use of A-weighted sound level measurements. However, because the A-weighting is not a perfect solution for the accounting of human perception of the frequency characteristics of a sound, many other scales have been developed which attempt to better quantify "loudness" and/or "noisiness."

**SOUND LEVELS AND LOUDNESS OF ILLUSTRATIVE NOISES IN INDOOR AND OUTDOOR ENVIRONMENTS**  
(A-Scale Weighted Sound Levels)

dB(A)	OVER-ALL LEVEL Sound Pressure Level Approx. 0.0002 Microbar	COMMUNITY (Outdoor)	HOME OR INDUSTRY	LOUDNESS Human Judgement of Different Sound Levels
130	UNCOMFORTABLY	Military Jet Aircraft Take-Off With After-burner From Aircraft Carrier @ 50 Ft. (130)	Oxygas Torch (121)	120 dB(A) 32 Times as Loud
120 110	LOUD	Turbo-Fan Aircraft @ Take Off Power @ 200 Ft. (90)	Riveting Machine (110) Rock-N-Roll Band (108-114)	110 dB(A) 16 Times as Loud
100	VERY	Jet Flyover @ 1000 Ft. (103) Boeing 707, DC-8 @ 6080 Ft. Before Landing (106) Bell J-2A Helicopter @ 100 Ft. (100)		100 dB(A) 8 Times as Loud
90	LOUD	Power Mower (96) Boeing 737, DC-9 @ 6080 Ft. Before Landing (97) Motorcycle @ 25 Ft. (90)	Newspaper Press (97)	90 dB(A) 4 Times as Loud
80		Car Wash @ 20 Ft. (89) Prop. Airplane Flyover @ 1000 Ft. (88) Diesel Truck, 40 MPH @ 50 Ft. (84) Diesel Train, 45 MPH @ 100 Ft. (83)	Food Blender (88) Milling Machine (85) Garbage Disposal (80)	80 dB(A) 2 Times as Loud
70	MODERATELY LOUD	High Urban Ambient Sound (80) Passenger Car, 65 MPH @ 25 Ft. (77) Freeway @ 50 Ft. From Pavement Edge, 10:00 AM (76 +/- 6)	Living Room Music (76) TV-Audio, Vacuum Cleaner	70 dB(A)
60		Air Conditioning Unit @ 100 Ft. (60)	Cash Register @ 10 Ft. (65-70) Electric Typewriter @ 10 Ft. (64) Dishwasher (Rinse) @ 10 Ft. (60) Conversation (60)	60 dB(A) 1/2 as Loud
50	QUIET	Large Transformers @ 100 Ft. (50)		50 dB(A) 1/4 as Loud
40		Bird Calls (44) Lower Limit Urban Ambient Sound (40)		40 dB(A) 1/8 as Loud
	JUST AUDIBLE	(dB(A) Scale Interrupted)		
10	THRESHOLD OF HEARING			

SOURCE: Reproduced from Melville C. Branch and R. Dale Beland, Outdoor Noise in the Metropolitan Environment,  
Published by the City of Los Angeles, 1970, p.2.



**Temple City  
General Plan**



Figure N-1  
Examples of Typical Sound Levels

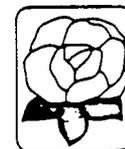
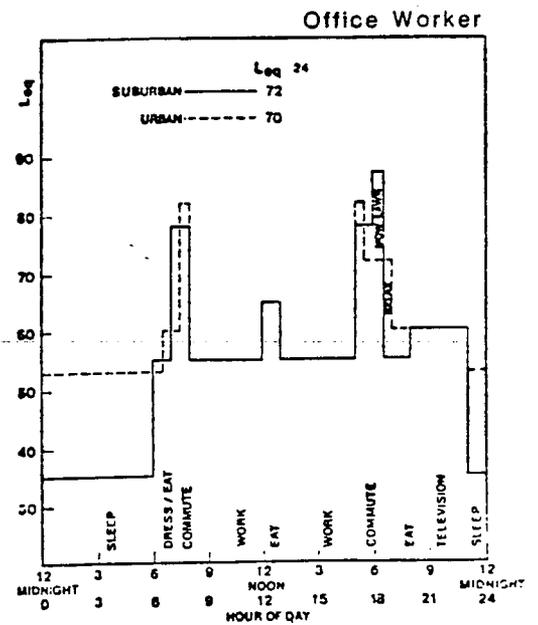
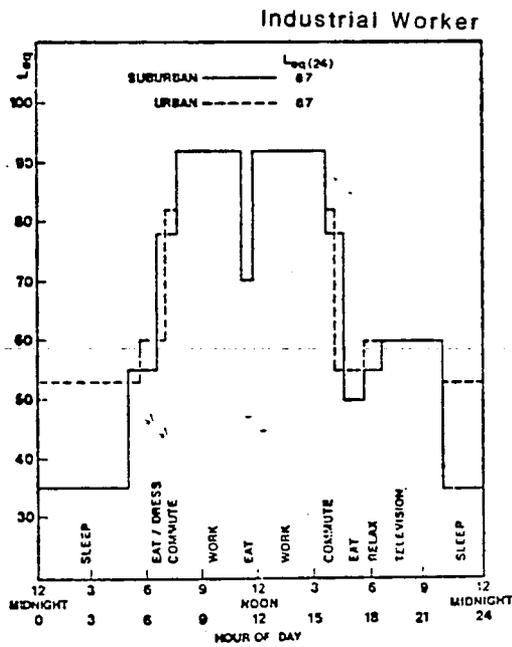
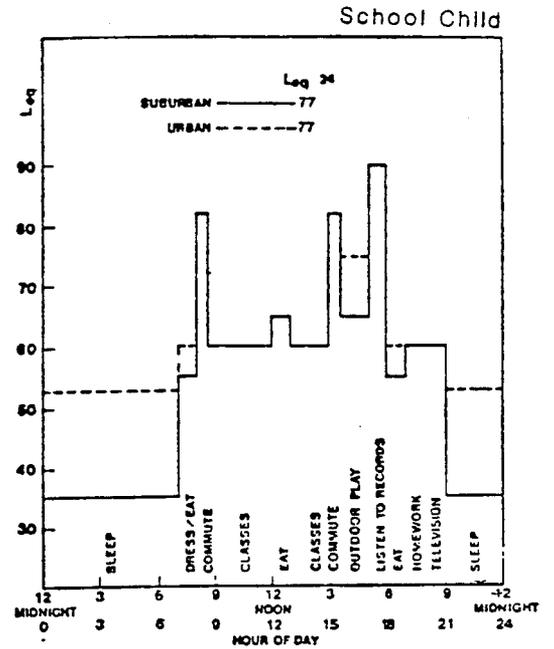
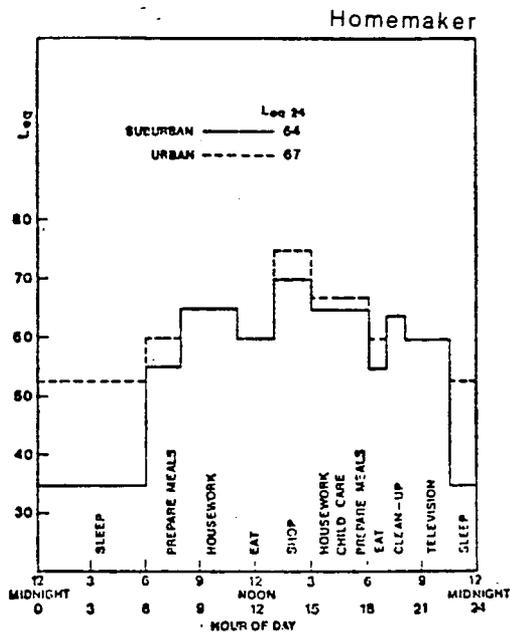
Noisiness, as opposed to loudness, is subjective and is a reflection of annoyance and is not measured well using a dBA scale alone. For two sounds with the same loudness, the one with more energy in the high audible frequency range would be considered more annoying, or noisier by the human ear. Regular warbling sounds, pure tones, and human speech are more annoying than random background noise emitting the same energy, but are also not emphasized by "A" weighted measurements. Only tests of actual human reactions to noise in any specific environment could best monitor annoyance. Without performing such tests, scales measuring noise over a length of time have been developed to correspond to the human reaction to noise.

In addition to having a given level of noise at any instant, the noise environment has a varying history over time. Human sensitivity to overall noise has been found to correlate well to the total sound energy released over time. The energy equivalent level, or  $L(eq)$  represents the sound energy over time. As the decibel scale is logarithmic, a 10 decibel increase represents a 10-fold increase in sound energy. For example, a one-hour period with 30 minutes at 60 decibels and 30 minutes at 70 decibels would have an  $L(eq)$  of 67.4 decibels, representing the sound energy released in the given time period.  $L(eq)$  measurements are A-weighted and typically computed over 1, 8, and 24 hour sample periods.

The main drawback of an  $L(eq)$  measurement is that it does not account for differences in sensitivity depending upon the time of day when the noise is present.

In order to better relate noise levels to human response, energy-averaged noise levels are weighted to account for increased sensitivity in evening at nighttime hours. The Community Noise Equivalent Level (CNEL) accounts for this sensitivity by adding 5 decibels to sound levels in the evening between 7:00 p.m. and 10:00 p.m. and adding 10 decibels to sound levels in the night between 10:00 p.m. and 7:00 a.m. This weighting relates noise measurements to observed community reaction and is one of two sound level measurements accepted by the State for use in the General Plan. The other accepted method is a day-night average level, or  $L(dn)$  which, like CNEL, is a 24-hour A-weighted energy equivalent level. The  $L(dn)$ , however, only weights the sound levels between 10:00 p.m. and 7:00 a.m. with a 10 decibel addition, but does not weight sound levels between 7:00 p.m. and 10:00 p.m. as in the case of the CNEL. For most environmental noise situations,  $CNEL = L(dn) + 0.5$  dB.

Noise measurements are meaningless without an understanding of the relationship to human sensitivity. The human response to noise is varied and extremely complex. Noise effects have been divided and described in terms of physiological effects, behavioral effects, and subjective effects. Physiological effects include both temporary effects such as startle reactions and temporary hearing threshold shifts, along with enduring effects such as



Temple City  
General Plan

Figure N-2  
Typical Daily Noise Exposure of Population Groups

Source: Environmental Protection Agency

those from prolonged sleep loss or permanent hearing damage. Behavioral effects involve interference with ongoing activities such as speech, learning, listening, or distraction from the performance of various tasks. Subjective effects are a combined result of behavioral and physiological effects and are described in such terms as "annoyance", "nuisance", "disturbance", or "dissatisfaction."

The Environmental Protection Agency, after reviewing numerous studies, has reported that permanent noise-induced hearing threshold losses of greater than 5 dBA can occur when the L(eq) during an 8-hour period each day exceeds 75 dBA or when the 24-hour L(eq) exceeds 70 dBA over many years of exposure. The EPA also reported the maximum level to protect the vast majority of the population from interference with speech or other activity outdoors at an L(dn) of 55 dBA and indoors at an L(dn) of 45 dBA. Figure N-2 shows typical daily noise exposures in L(eq) for various population groups. Since evening and nighttime noises are relatively much lower than daytime noises for these groups, L(dn) and CNEL measurements correspond closely to the 24-hour L(eq).

Activity also becomes a factor in sensitivity to noise. Hospitals are particularly sensitive as noise could prevent sleep, and therefore for many patients, noise could prevent a quick recovery. As sleep is a primary activity in residences, taking up approximately one-third of the day, these land uses are also sensitive to noise. Noise can distract from reading, studying, and listening, making schools and libraries vulnerable to noise intrusion. Noise is tolerated to a much greater extent in commercial and industrial areas, where it does not interfere with human activities as much. Figure N-3 shows guidelines for land-use compatibility with noise levels as established by the State Office of Noise Control.

#### EXISTING NOISE ENVIRONMENT

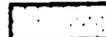
The residents of Temple City are exposed to a range of noise levels from a variety of sources common in an urban setting. The predominant source of noise in Temple City, as in most other communities, is related to the operation of motor vehicles. A number of arterials with high traffic volumes expose residents to a significant levels of noise - particularly in those areas immediately adjacent to those roadways. Rail traffic operating in the southern section of the city also contributes to the noise levels, as does the Los Angeles County El Monte Airport.

Other sources of noise within the city are from stationary sources (that is, non-transportation sources) including a variety of industrial, commercial or business activities, sports activities in parks, schools, construction activities, and a wide range of human activities in residential areas of the city. In particular, the industrial area around Natter Manufacturing impacts the surrounding residential use. The noise of the kennel operations on Encinita Avenue was negligible compared to noise emitted from vehicles on that street.

The State requirements concerning the preparation of noise elements state that an element must contain an analysis and quantification, "to the extent practicable," of existing noise levels for a variety of noise generators. Efforts to analyze and quantify noise sources in Temple City have been

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L <sub>dn</sub> OR CNEL, dB					
	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, AMPHITHEATRES	▨	▨	▨	▨	▨	▨
SPORTS ARENA, OUTDOOR SPECTATOR SPORTS	▨	▨	▨	▨	▨	▨
PLAYGROUNDS, NEIGHBORHOOD PARKS				▨	▨	▨
GOLF COURSES, RIDING STABLES, WATER RECREATION, CEMETERIES					▨	▨
OFFICE BUILDINGS, BUSINESS COMMERCIAL AND PROFESSIONAL				▨	▨	▨
INDUSTRIAL, MANUFACTURING UTILITIES, AGRICULTURE				▨	▨	▨

**INTERPRETATION**



**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.



**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 systems or air conditioning will normally suffice.



**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.



**CLEARLY UNACCEPTABLE**

New construction or development should generally not be undertaken.



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**Figure N-3  
Land Use Compatibility  
to Noise Environments**

directed toward estimating traffic-related noise on the major streets and conducting field measurements in noise-sensitive areas affected by highways, industry and the airport. The major stationary noise generators, along with the busy highways, the railroad tracks, and the airport all adversely impact nearby noise sensitive residential uses and schools.

### Road and Highway Traffic

The roads and highways surveyed include Rosemead Boulevard, Encinita Avenue, Temple City Boulevard, Baldwin Avenue, El Monte Avenue, Santa Anita Avenue, Longden Avenue, Las Tunas Drive, Broadway, and Lower Azusa Road.

Information collected included traffic volumes, percentage of truck traffic, time of day for traffic, average speed, and general acoustical conditions. With this information, the CNEL at any particular distance from the road could be estimated. Roads with average daily traffic volumes less than 5,000 vehicles generally did not have enough noise to be an issue for land-use compatibility, and they were not examined further.

The model used to estimate highway noise is one developed by the U.S. Department of Transportation, entitled FHWA Highway Traffic Noise Prediction Model (1978). Assumptions for most roads are that vehicles travel at the posted speed limit; truck traffic as a percentage of total traffic was assumed to be 2.0 percent medium-size trucks and 1.0 percent heavy trucks. Truck traffic on Las Tunas Drive was heavier and assumed to make up 5 percent of all traffic. Other assumptions were that 70 percent of all traffic occurs between 7:00 a.m. and 7:00 p.m., 15 percent occurs between 7:00 p.m. and 10:00 p.m., and 15 percent occurs between 10:00 p.m. and 7:00 a.m. Table N-1 shows the results of this model, giving CNELs for each street based on distance from the median. This information was then plotted on the noise contour map shown in Figure N-4.

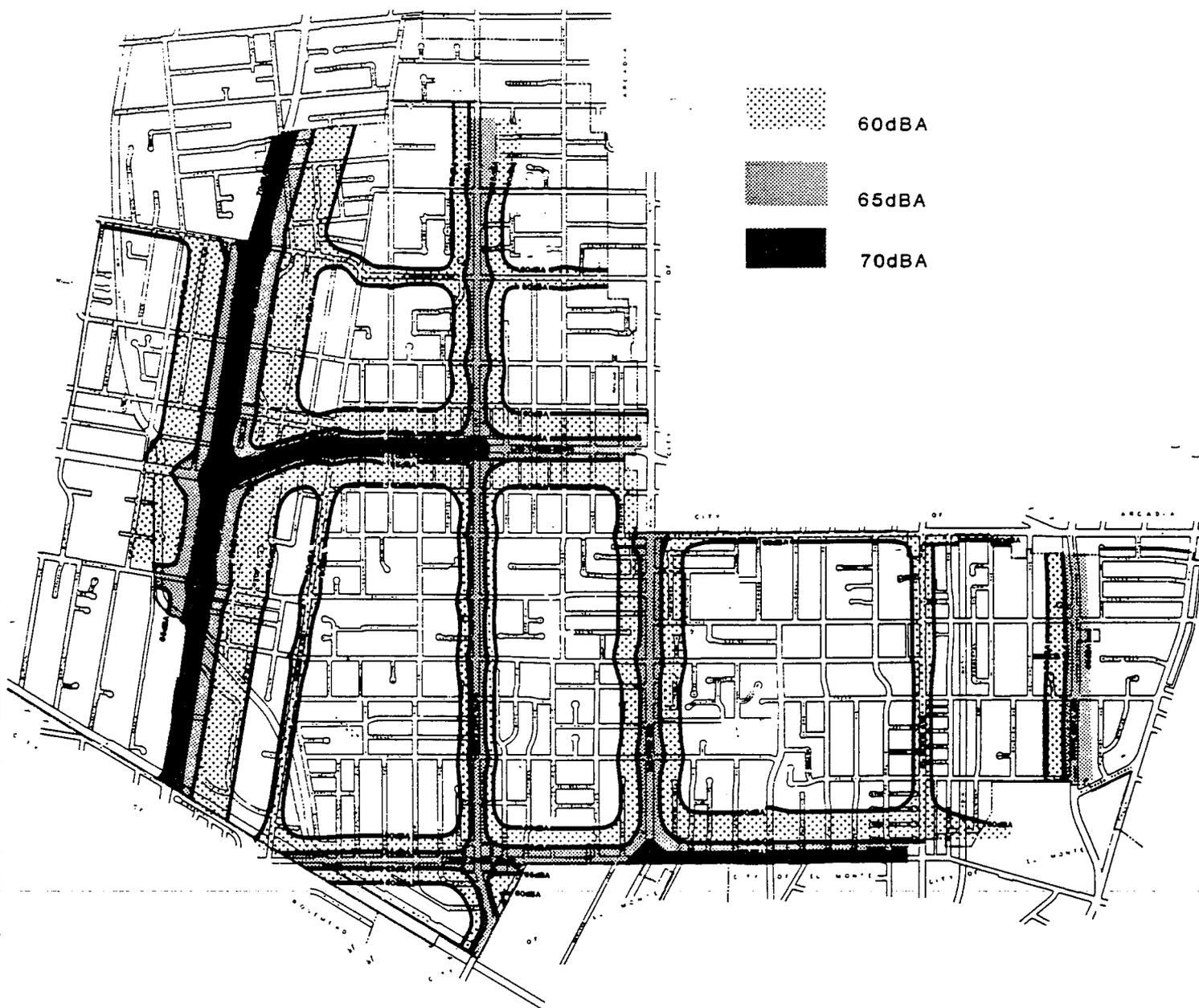
### Railroad Operations

The Southern Pacific Railroad operates a main rail line which extends along the southern border of Temple City from Rosemead Boulevard to Temple City Boulevard. A survey by Southern Pacific in June of 1986 indicated that an average of 31 trains use this main line every day. The trains are usually 6,000 feet long and are allowed to travel 60 miles per hour through this segment.

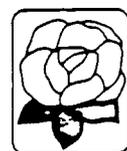
In November, 1986, noise measurements were made of two passing freight trains, each over one-mile long. The first measurement, at 100 feet from the track, indicated an energy equivalent noise level (L<sub>eq</sub>) of 79.0 decibels during the passing of the train. The second, at 50 feet from the track, indicated an L<sub>eq</sub> of 82.8 decibels. Assuming that trains are spaced equally over a 24-hour period, the CNEL at 100 feet from the track approximates 70 decibels. This noise would decrease by about 3 decibels for every doubling of distance from the track. Existing land uses are primarily industrial around the tracks, though some residences are affected by rail noise.

TABLE N-1: ESTIMATED NOISE LEVELS FROM STREET TRAFFIC (CNEL)

STREET	1986 ADT	DISTANCE FROM MEDIAN (Unshielded Site)				
		50 feet	100 feet	200 feet	400 feet	800 feet
Rosemead Blvd.						
Lower Azusa Rd-Las Tunas Dr	35,000	72.7	69.7	66.7	63.7	60.7
Las Tunas Dr-Duarte Rd	36,500	72.9	69.9	66.9	63.9	60.9
Encinita Avenue						
So. of Las Tunas Dr.	5,600	63.4	60.4	57.4	54.4	51.3
Temple City Blvd.						
S.P.R.R. - Lower Azusa Rd	14,439	67.6	64.6	61.6	58.6	55.5
Lower Azusa Rd-Las Tunas Dr	14,736	67.6	64.6	61.6	58.6	55.5
Las Tunas Dr-Camino Real	19,805	68.9	65.9	62.9	59.8	56.8
Baldwin Avenue						
Lower Azusa Rd-Olive St	18,534	68.6	65.6	62.6	59.6	56.5
Olive St-Las Tunas Dr	20,652	69.1	66.0	63.0	60.0	57.0
El Monte Avenue						
Lower Azusa Rd-Olive St	5,411	63.2	60.2	57.2	54.2	51.2
Olive St-Live Oak Ave	6,854	64.3	61.3	58.2	55.2	52.2
Santa Anita Avenue						
Grand Ave-Live Oak Ave	18,406	69.9	66.9	63.9	60.9	57.9
Longden Avenue						
W. of Rosemead Blvd	6,464	64.0	61.0	58.0	55.0	52.0
Rosemead Blvd-Temple City Blvd	7,323	64.6	61.5	58.5	55.5	52.5
E. of Temple City Blvd	6,422	64.0	61.0	58.0	55.0	52.0
Las Tunas Drive						
Muscatel Ave-Rosemead Blvd	24,032	71.1	68.1	65.0	62.0	59.0
Rosemead Blvd-Temple City Blvd	21,029	70.5	67.5	64.5	61.5	58.5
Temple City Blvd-Baldwin Ave	21,116	70.5	67.5	64.5	61.5	58.5
Broadway						
Acacia St-Rosemead Blvd.	17,883	68.5	65.5	62.5	59.4	56.4
Rosemead Blvd-Temple City Blvd	5,482	63.3	60.3	57.3	54.3	51.3
Lower Azusa Road						
S.P.R.R.-Temple City Blvd	14,087	67.4	64.4	61.4	58.4	55.4
Temple City Blvd-Baldwin Ave	20,004	68.9	65.9	62.9	59.9	56.9
Baldwin Ave-Pal Mal Ave	28,576	70.5	67.5	64.4	61.4	58.4



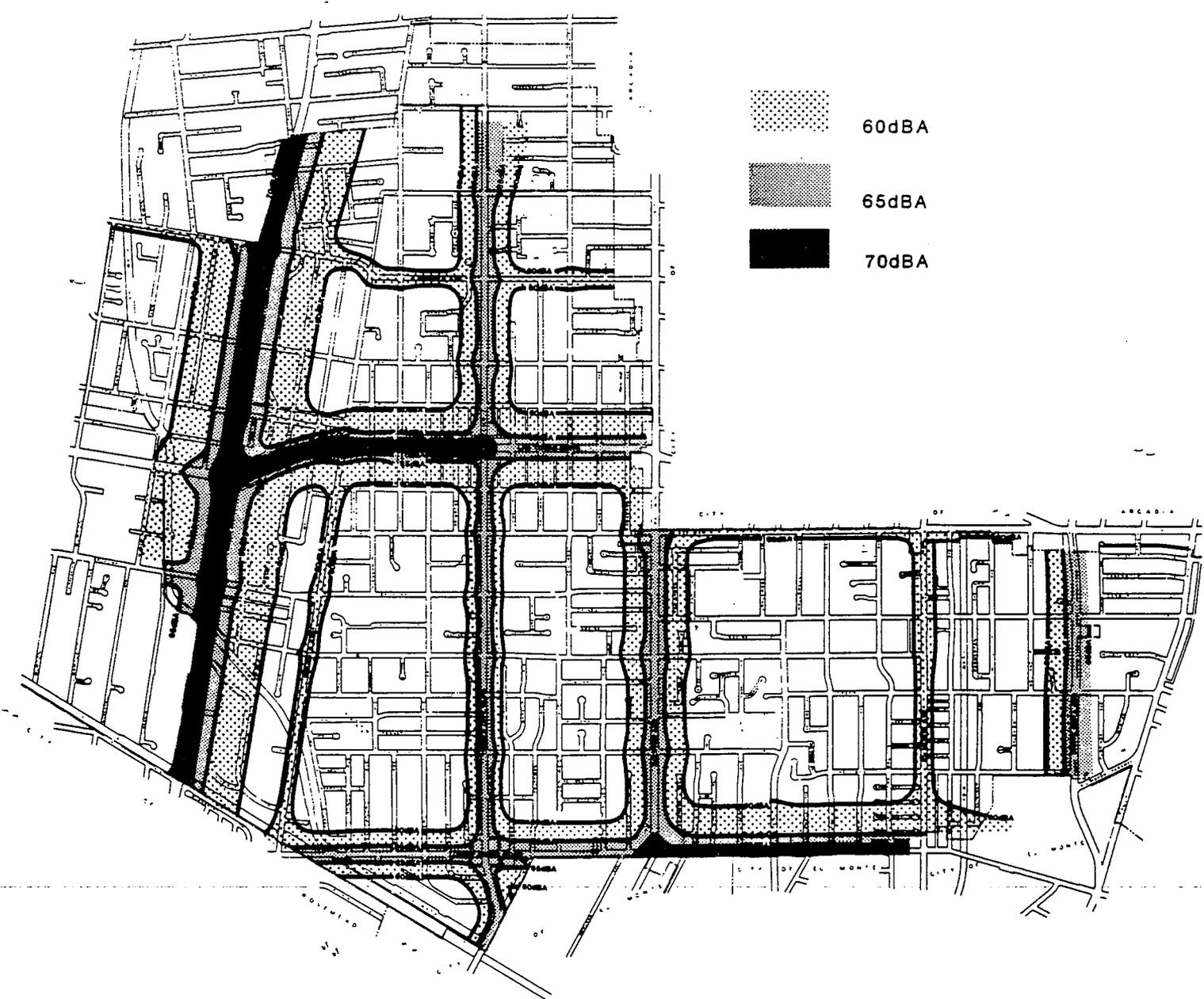
Based on model by U.S. Dept. of Transportation:  
 FHWA Highway Traffic Noise Prediction Model, 1978

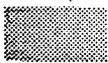


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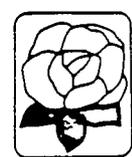
Figure N-4  
 Existing Noise Contour Map (CNEL)

SOURCE: Cotton/Beland/Associates, Inc., September 1986



 60dBA  
 65dBA  
 70dBA

Based on model by U.S. Dept. of Transportation:  
 FHWA Highway Traffic Noise Prediction Model, 1978



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Figure N-4  
 Existing Noise Contour Map (CNEL)

SOURCE: Cotton/Beland/Associates, Inc., September 1986

### Local Airport Operations

The nearest airport to Temple City is the Los Angeles County El Monte Airport, located just south of the city limits in the City of El Monte. At present, the airport serves approximately 194,000 take-offs and landings per year. Current levels of activity average between 500 and 600 flights per day.

The airport is a general aviation airport, accommodating a variety of aircraft. Most, however, are single-engine and light multi-engine propeller driven airplanes. Some turbo-props use the airport, and very few jets land and take off from the facility. The airport has been declared by the County not to impose a noise problem, which means that the 70 CNEL contour does not leave the airport property, and fewer than two jets per day use the airport. Because of the low level of noise from the airport which extends into Temple City, airport noise is not considered significant enough to affect the noise contours plotted in Figure N-4.

### Noise-Sensitive Land Uses

As discussed in the section on sound characteristics, some land uses are more sensitive to noise than others. In Temple City, the major noise-sensitive land uses include residences and schools. Fifteen sites were located for point-source measurements. A method set up by CalTrans for estimating  $L_{eq}$  was used for these point-source measurements. Since sound levels are constantly changing, samples of noise were taken every 5 seconds on a sound-level meter calibrated by instruments traceable to the National Bureau of Standards. The measurements were usually taken 50 feet from the median and were recorded on a sheet such as the one in Figure N-5. The exception is the industrial noise on Gidley Street, measured at 100 feet from the building entrances. A 95% confidence test was applied to the samples to ensure that the measurements were representative of the noise at the point. The confidence test for the sample is reproduced as follows:

TABLE N-2  
Confidence Test for Point Source Measurement Sample

Total No. of Samples	Error Limit	$L_{10}$	Error Limit	Allowable Skewing
50	1st Sample	5th Sample	10th Sample	None
100	4th Sample	10th Sample	16th Sample	One
150	7th Sample	15th Sample	23rd Sample	One
200	11th Sample	20th Sample	29th Sample	One
250	15th Sample	25th Sample	35th Sample	One
300	19th Sample	30th Sample	41st Sample	One
350	24th Sample	35th Sample	46th Sample	One
400	28th Sample	45th Sample	52th Sample	One

Note: The 95% confidence is met if the Upper and Lower Error Limits are within 3 dBA of the  $L_{10}$  Level.

Source: California Department of Transportation

If, for example, after 100 tests the 4th and 16th samples counting from the top are each within 3 dBA of the 10th sample, the sample would be within a 95 percent confidence level of equalling the actual  $L(eq)$ , and no further testing would be needed. Energy equivalents would then be applied to each decibel reading and an  $L(eq)$  would be computed based on the frequency of counts at each energy level. Table N-3 contains the results of the point-source measurements taken during the daytime in off-peak hours.

Table N-3: Point Source Measurements in Noise Sensitive Areas  
(50 feet from Street Median)

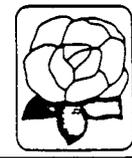
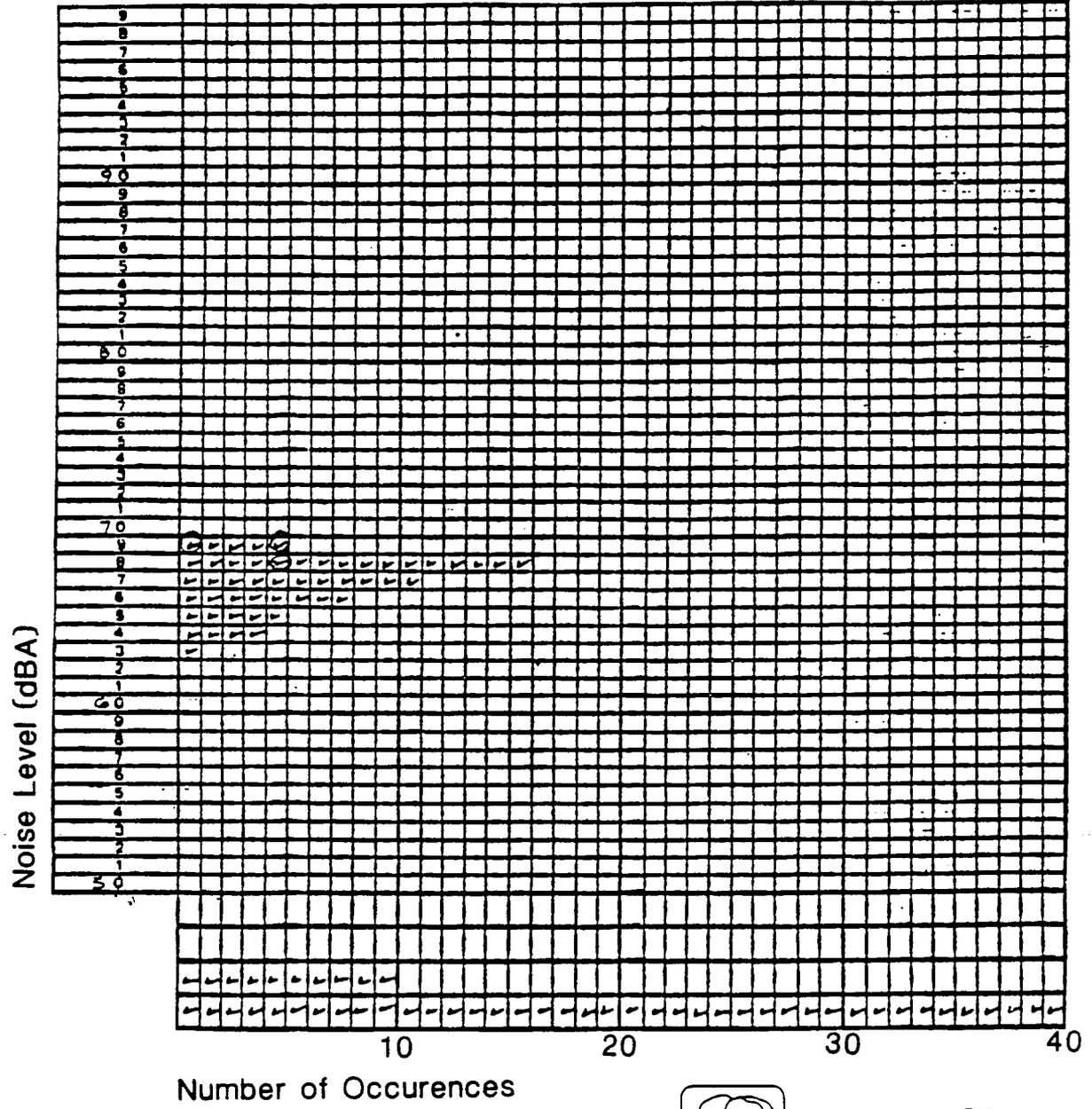
Street Location	Range	L(eq)
<u>Residential Areas</u>		
Las Tunas Drive		
West of Rosemead Blvd.	55-79 dBA	69 dBA
West of Temple City Blvd.	56-83 dBA	73 dBA
Lower Azusa Road		
West of Temple City Blvd.	50-79 dBA	69 dBA
West of Arden Drive	53-80 dBA	72 dBA
Rosemead Boulevard		
South of Longden Ave.	56-83 dBA	74 dBA
South of Broadway	57-82 dBA	74 dBA
South of Pentland St.	60-87 dBA	78 dBA
Santa Anita Avenue		
South of Daines Dr.	53-82 dBA	73 dBA
Temple City Boulevard		
South of Garibaldi Ave.	50-82 dBA	71 dBA
South of Broadway	49-78 dBA	67 dBA
Gidley Street*		
West of Temple City Blvd.	56-59 dBA	58 dBA
West of Cloverly Ave.	60-62 dBA	61 dBA
<u>Schools</u>		
Arrowhead School (from Muscatel Avenue)	40-65 dBA	54 dBA
Oak Avenue Intermediate School (from Oak Avenue)	54-62 dBA	58 dBA
Temple City High School (from Temple City Boulevard)	50-76 dBA	68 dBA
Longden School (from Longden Avenue)	50-68 dBA	62 dBA
Cloverly Avenue School/St. Luke's School (from Broadway)	49-75 dBA	65 dBA
La Rosa School (from La Rosa Drive)	43-64 dBA	54 dBA
Cleminson School (from Freer Street)	41-72 dBA	58 dBA

\*Noise coming primarily from industrial uses at 100 feet from building entrances. No vehicular traffic measured at this time.

TEST BY \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_ WIND SPEED \_\_\_\_\_

LOCATION \_\_\_\_\_

COMMENT \_\_\_\_\_



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Figure N-5  
Sample Sound Level Measurement Data Sheet

Source: California Department of Transportation