NOISE ELEMENT AND ACTION PROGRAM

FOR THE

CITY OF EAST PALO ALTO GENERAL PLAN

December 1986

CITY OF EAST PALO ALTO

City Council

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Jesse Smith III, P.E., Director of Public Works
Rod D. Barger, Senior Planner/Zoning Hearing Officer

Approved

Planning Commission: November 24, 1986
City Council: December 15, 1986

RESOLUTION NO. 00356

A RESOLUTION ADOPTING THE EAST PALO ALTO GENERAL PLAN NOISE ELEMENT AND ACTION PROGRAM

WHEREAS, the Noise Element of the East Palo Alto General Plan has been prepared, in part, to respond to changes in State requirements and guidelines, and in part, to reflect changes in local land use conditions and policies; and

WHEREAS, adoption of Noise Element represents a key part of the completion of the East Palo Alto General Plan; and

WHEREAS, the Noise Element was reviewed at a Public Hearing and approved by the East Palo Alto Planning Commission on November 24, 1986; and

WHEREAS, the Noise Element was also the subject of a Public Hearing by the East Palo Alto City Council and was approved on December 15, 1986; and

WHEREAS, Negative Declaration #25-86, for this Element, was also approved at the above-reference hearings.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of East Palo Alto that the Noise Element and Implementation Program, attached hereto, is hereby adopted into the East Palo Alto General Plan.

PASSED AND ADOPTED by the City Council of the City of East Palo Alto this 15th day of December, 1986, by the following vote:

AYES: ABRICA, BLAKEY, BOSTIC, COATS, and MOUTON

NOES: NONE

ABSENT: NONE

Barbara A. Mouton
Mayor

ATTEST:

Frederic A. Howell
City Clerk

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INTRODUCTION

Noise is a form of environmental pollution which can and does directly affect the quality of life of people everywhere. It is an inherent part of the urban environment. In the past, noise was accepted as an unpleasant but inevitable part of urban growth and development. However, today significant steps are being taken to recognize the problems presented by noise and to establish various noise control measures to reduce, and where possible, prevent high levels of noise exposure.

The determination between desirable and undesirable noise is frequently a subjective judgment. However, the louder the noise level, the more interference it causes. In an effort to assist in controlling noise, the State of California, via Section 65302(g) of the California Government Code requires that cities and counties adopt Noise Elements as a part of their General Plan. The content of such elements is guided by the following:

> "Government Code Section 65302(g): A noise element, which shall recognize guidelines adopted by the Office of Noise Control pursuant to Section 46050.1 of the Health and Safety Code, and which quantifies the community noise environment in terms of noise exposure contours for both near and long-term levels of growth and traffic activity. Such noise exposure information shall become a guideline for use in development of the land use element to achieve noise compatible land use and also to provide baseline levels and noise source identification for local noise ordinance enforcement.
>
> The sources of environmental noise considered in this analysis shall include, but are not limited to, the following:
>
> (1) Highways and freeways.
>
> (2) Primary arterials and major local streets.
>
> (3) Passenger and freight on-line railroad operations and ground rapid transit systems.
>
> (4) Commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test stands, and all other ground facilities and maintenance functions related to airport operation.
>
> (5) Local industrial plants, including, but not limited to, railroad classification yards.

(6) Other ground stationary noise sources identified by local agencies as contributing to the community noise environment.

The noise exposure information shall be presented in terms of noise contours expressed in community noise equivalent level (CNEL) or day-night average level (L/dn). CNEL means the average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m. and after addition of 10 decibels to sound levels in the night before 7 a.m. and after 10 p.m., L/dn means the average equivalent A-weighted sound level during a 24-hour day, obtained after addition of 10 decibels to sound levels in the night before 7 a.m. and after 10 p.m.

The contours shall be shown in minimum increments of 5db and shall continue down to 60 db. For areas deemed noise sensitive, including, but not limited to, areas containing schools, hospitals, rest homes, long-term medical or mental care facilities, or any other land-use areas deemed noise sensitive by the local jurisdiction, the noise exposure shall be determined by monitoring.

A part of the noise element shall also include the preparation of a community noise exposure inventory, current and projected, which identifies the number of persons exposed to various levels of noise throughout the community.

The noise element shall also recommend mitigating measures and possible solutions to existing and foreseeable noise problems.

The state, local, or private agency responsible for the construction, maintenance, or operation of those transportation, industrial, or other commercial facilities specified in paragraph 2 of this subdivision shall provide to the local agency producing the general plan, specific data relating to current and projected levels of activity and a detailed methodology for the development of noise contours given this supplied data, or they shall provide noise contours as specified in the foregoing statements.

It shall be the responsibility of the local agency preparing the general plan to specify the manner in which the noise element will be integrated into the city or county's zoning plan and tied to the land use and circulation elements and to the local noise

ordinance. The noise element, once adopted, shall also become the guideline for determining compliance with the state's noise insulation standards, as contained in the Seciton 1092 of Title 25 of the California Administrative Code".

These statutes serve as the guideline for the creation of the City of East Palo Alto's Noise Element. Of all general plan requirements, the noise element is the most specific in content and method of preparation. It seeks to protect residents from noise that would jeopardize their health or welfare. Because transportation systems and industry contribute greatly to noise problems in areas where there are homes, schools, and hospitals, the noise element should influence proposals for the type and location of land uses and transportation facilities in the land use and circulation elements.

PURPOSE

The purpose of the noise element of the East Palo Alto General Plan is to examine and evaluate in quantitative terms the major noise sources within East Palo Alto and to establish citywide goals and policies in combination with significant implementation measures aimed at preserving and improving the noise level quality for the community.

APPROACH

The State, through its planning enabling laws has empowered cities to regulate development with specific regard to noise capability. In order to establish an effective strategy for reducing noise impacts, however, an evaluation must be made of noise characteristics, sources, and the various control standards so that effective goals and policies for noise abatement and control can be established, and workable and valid implementative programs can be instituted. General noise level guidelines are provided herein based upon an evaluation of the literature and conventional practice. Over the long term, the reduction of noise levels to these guidelines should result in an environment where unstrained verbal communication is possible anywhere in the City.

NOISE DEFINED

Noise is defined as "loud, discordant or disagreeable sound", or simply as "unwanted sound". Whether a particular sound is considered "noise" depends upon the judgement of the listener. The sources of noise that contribute to East Palo Alto's noise environment are primarily: vehicular traffic on the major arterials and Bayshore Freeway, aircraft overflights from the Palo Alto Municipal Airport, the Southern Pacific spur line, and stationary sources, such as industries and business. Figure 1 illustrates the (1977) noise contours in East Palo Alto.

PROPERTIES OF SOUND

It is important that a basic understanding of the properties of sound and terminology be provided in order to arrive at a basis for formulating goals and policies, and interpreting the methods used in implementing effective noise control techniques. Therefore this non-technical analysis is provided.

Sound waves travel through the air in the form of small presssure changes, alternately above and below a static atmospheric presssure. This air pressure is measured by a barometer. The average deviation in air pressure above or below the static value is called sound presssure, which is related to the loudness of a sound.

To measure the relative pressure of different sound, the decibel is used (abbreviated db). It is equal to 20 times the logarithm of the rates of sound pressure to reference pressure 0.0002 degree/cm^2:

$$\text{Sound presssure level (db)} = 10 \log_{10} \frac{\text{measured pressure}}{\text{reference pressure.}}$$

This is a convenient tool to indicate the ratios of loud sounds to softer ones. A sound with 10 times the presssure of another is 20 db louder and each succeeding 10-fold increase adds another 20 db to the level of sound:

10	times the pressure	=	20 db louder
100	times the pressure	=	40 db louder
1,000	times the pressure	=	60 db louder
10,000	times the pressure	=	80 db louder
100,000	times the pressure	=	100 db louder

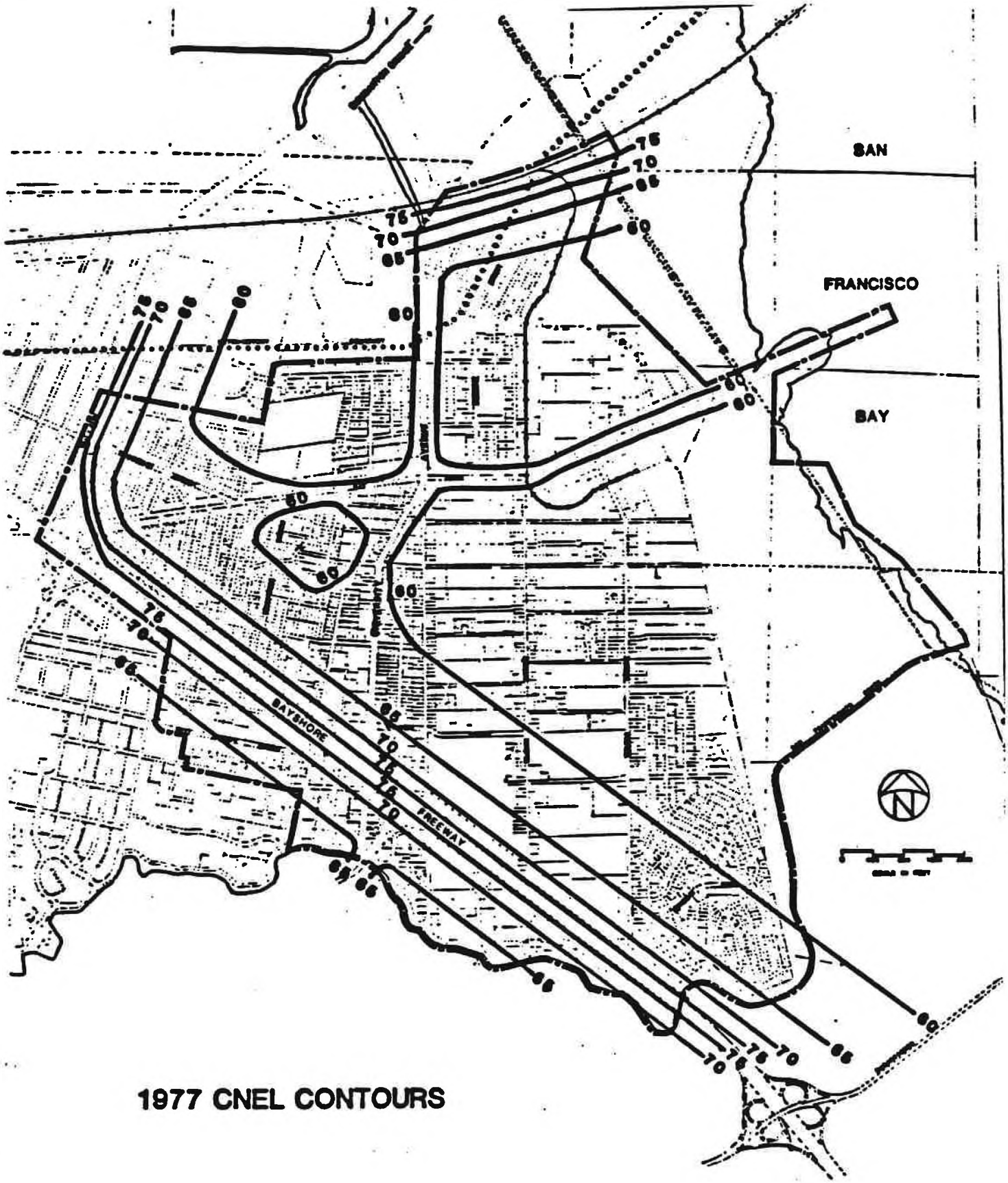
Table A illustrates this factor as it relates to various sound sources.

The decibel values (dB(A) or dbA) are for those sound levels measured using the A-weighting network of a standardized sound level meter. The A-weighting network closely approximates the frequency response of the human ear, and the associated levels can be time averaged to yield average sound pressure levels which have been widely correlated wtih degrees of community impact and annoyance.

The noise contour is a line on a map where anywhere along that line the same sound pressure level prevails.

The noise exposure level is the combination of a noise level in A-weighted decibels and a time duration for that noise level. For example, an "L80" designation indicates a sound pressure level that is exceeded 80% of the time. This designation is sometimes used to determine the ambient or background noise exposure level.

FIGURE 1
1977 CNEL CONTOURS



Although applicable to any type of noise source, Community Noise Equivalent Level (CNEL) values are generally used to show noise contours around airports. CNEL is specifically a time weighted measure to more heavily weight nighttime noise.

A noise problem usually consists of three distinct components: a source, transmission path, and a receiver. To abate the noise problem, one or more of the components have to be eliminated, changed, or controlled. The implementation section of this element will discuss the various methods and techniques that can be used to handle noise problems.

TABLE 1
VARIOUS NOISE SOURCES

APPARENT LOUDNESS	SELECTED SOURCES	DECIBELS	RATIO TO 0 db	COMMUNITY REACTION TO OUTDOOR NOISE
Deafening	Jet Aircraft	140	10,000,000	
	Threshold of Feeling	130	3,162,000	
Painfully Loud	Chipping Hammer	110	316,200	
	Noisy Industrial Area, School Area	100	100,000	Vigorous Action
Very Loud	Aircraft Low Flyover, Loud Street Noise, Park Area	90	31,620	
	Noisy Office, Vacuum Cleaner	80	10,000	
Loud	Freeway Traffic	70	3,162	
	Average Street Noise, Average Office	60	1,000	Threats Widespread Complaints
Moderate	Light Traffic, Average Residence, 2 Person Converstion	50	316	
	Private Office, School, Classroom	40	100	Occasional Complaints
Faint	In Home, Quiet Surburb, Bedroom	30	32	
	Rustling Leaves	20	10	No Noticeable Action
Very Faint	Normal Breathing	10	3	
	Threshold of Audibility	0	1	

METHODS OF MEASURING NOISE

Within the spectrum of noise problems in East Palo Alto, there are three commonly used methods of noise measurement which will suffice in this Element. The most common unit used in the measurement of sound is the decibel (db). Precision sound level measurements are made with an instrument called a sound level meter. The sound level measurements (in decibels, db) are adjusted through frequency filters on the meter which remove specific parts of the total sound spectrum. The most commonly used frequency filters are called A, B, and C networks. The "A-weighted network is most used since it measures frequencies approxiamating the response of the human ear at moderate sound levels. The A-weighted network is abbreviated as db(A). It should be noted that dB(A) values do not give the full picture since additional data, such as exposure time and spectral analysis, are needed to quantify the subjective magnitude of sound.

The second most common method is the Community Noise Equivalent Level (CNEL). This measurement method has been derived for use in measuring the reaction of the communtiy to airport-related noises. This method also has general applicability to measurement of general noise levels in the community. This system provides an average noise level during a 24-hour day, adjusted to an equivalent level which is "period-weighted" so as to assign greater importance to noise during evening and nightime periods relative to daytime periods. This weighting is justified on the basis that people's tolerance to noise is lower during evening and nighttime than during the day. This system is adopted for assessment of aircraft noise and is used by the California Department of Aeronautics. A disadvantage of CNEL is that the measurements and calculations are difficult and time consuming.
The third most common method is the statical A-Weighted Noise Level (L_{10}). L_{10} represents an A-weighted level which is exceeded 10 percent of the time over the duration of the sample noise measurement and represents a measure of the higher level, shorter duration sounds. This measurement method has been utilized for reassessment of noise impact from traffic, where it has been applied to the peak traffic flow periods. The Federal Highway Administration standards for federally assisted road construction are expressed in maximum L_{10} levels during the noisiest hour of the day. Because it represents a measure of the higher order sound level occurring during the measurement period, the system has the disadvantage of not considering the impact of noise during nighttime hours when people have a lower tolerance of noise. The L_{10} measurement method, becaue of its less complicated procedures, is more adaptable to community resources -- equipment and personnel.

In completing the Community Plan and EIR for East Palo Alto in 1982, San Mateo County established a review procedure of measuring noise by using the CNEL method. In an effort to utilize existing information available, this Element will also utilize the CNEL method. However, in future Noise Element updates, the

City should utilize the L_{10} system since the method has several advantages over other systems. These include:

1. The L_{10} system is easy to use and sound equipment can be made available to the City through purchase (or borrowing if necessary);

2. The L_{10} system is used by CalTrans for determining noise levels along state highways. Noise levels for US 101 and University Avenue generally are available upon request;

3. The L_{10} system, although not as accurate or precise as other more complicated systems, is adequate for general planning purposes where there is a need to determine the location and degree of noisiness simply and quickly.

NOISE SOURCES

As mentioned earlier in this Element, East Palo Alto's noise environment is primarily influenced by vehicular traffic on the major arterials, Bayshore Freeway, aircraft overflights from the Palo Alto Municipal Airport, the Southern Pacific spurline, and stationary sources, such as industries and businesses.

Vehicle Noise

Vehicle noise contributes most to the overall ambient level in East Palo Alto. The factors which contribute to noise generated from vehicles are: noise emissions from the vehicle, number of vehicles on the roadway, average vehicle speed, and road surface condition. At 50 feet away, typical moving automobile noises are:

58 dBA at 25 mph
61 dBA at 30 mph
66 dBA at 40 mph
70 dBA at 50 mph
73 dBA at 60 mph

Compact cars, trucks and accelerating vehicles increase the ambient traffic noise levels significantly. The ambient noise level would remain the same at a traffic density of 100 automobiles per mile, if 84 of those automobiles were replaced by four trucks. Thus 100 automobiles make the same noise as 4 trucks and 16 automobiles. Vehicular noise is controlled by the California Motor Vehicles Code and generally enforced by local law enforcement officials.

Aircraft Noise

Aircraft noise from the Palo Alto Municipal Airport contributes to the noise environment. The existing noise contour of 60 CNEL extends over the Baylands into East Palo Alto. The airport is a single runway facility usable by general aviation small aircraft up to 12,500 lbs. The runway is heavily used with current operations numbering 265,000 flights per year.

Railroad Noise

Although not currently used heavily, East Palo Alto is served by a Southern Pacific freight line which forms the northeastern boundary of the University Gardens residential area and serves the Ravenswood Industrial Park, particularly those uses abutting the line west of Demeter Street and the area between Bay Road and Weeks Street. Noise generated by freight trains is generally higher than passenger trains due to a higher precentage of freight operations at night and frequent switching of cars into sidings. In general, average noise levels are:

	Feet from Track
76 L_{dn}	100
73 L_{dn}	200
67 L_{dn}	400
61 L_{dn}	800
55 L_{dn}	1,600

Using this generalized table, noise from the spur line would be attenuated to 60L_{dn} at Fordham Street in University Gardens.

Stationary Sources

Stationary noise sources are found in all land uses in the community, particularly industrial and commercial but also residential and institutional. In industrial areas, noises are generated by such activities as loading and unloading, fabrication, handling of materials and equipment, operating machinery, and vehicular traffic. In commercial areas, noises are generally associated with retail stores and service facilities. Noise generated by institutions can be attributed to the congregation of people. Noise generated in residential areas can be attributed to power equipment, television, radio, recorders dogs, and children at play.

NOISE LEVELS IN EAST PALO ALTO

Noise levels in East Palo Alto are certain to increase. Table 2 shows CNEL contours for 1995 (projected) in East Palo Alto from noise generated by the major transportation corridors. These projections were based on an estimated population increase

of 20% by 1995, roughly equivalent to that projected under the East Palo Alto 2000 Committee Final Report. For the major traffic corridors, the projections also represent the 1982 Community Plan. In many residential areas, noise will exceed that normally considered acceptable, 60 CNEL or less. Increased industrial development will also impact residential noise by on-site activity and increased truck and rail traffic. Because of the existing congestion on University Avenue, and increased volumes due to the connection of University Avenue to the Dumbarton Bridge, other City streets will experience heavier use. Pulgas Avenue in particular, is likely to experience greatest change due to its direct access to the industrial park and the large lot area. Because existing land use along Pulgas is primarily residential from East Bayshore to Weeks Street, noise impacts will be particularly noticeable.

The City was quite concerned over potential noise and air quality impacts resulting from the connection of University Avenue to the Dumbarton Bridge. For this reason, pre- and post-opening measurements were taken by consultants under contract with the City's part of an overall noise and air quality study. The results of the study confirmed increased noise levels and, at that time, that the increase was most significant during the morning commute hours between 6:00 a.m. and 8:00 a.m. Surprisingly, the southbound traffic on University Avenue had relatively more of an impact than the northbound traffic during evening commute hours between 4:00 p.m. and 6:00 p.m. Figure 3 and 4 show the locations of the noise samples and a graphic portrayal of the results, respectively. The measurements at each location are shown in Table 2.

TABLE 2
NOISE MEASUREMENT LEVEL (dBA) IN EAST PALO ALTO, CALIFORNIA

Location	Average before Opening		Average After Opening		Change in Levels	
	AM	PM	AM	PM	AM	PM
1	49.4	57.9	58.4	57.3	9.0	-0.6
2	58.6	52.4	56.3	59.3	-2.3	6.9
3	56.3	56.4	63.7	58.4	7.4	2.0
4	49.6	65.5	49.3	58.3	-0.3	-7.2
5	48.0	48.9	54.8	58.5	6.8	9.6
6	50.0	58.5	48.5	53.6	-1.5	-4.9
7	47.4	62.4	48.2	61.4	0.8	-1.0
8	55.4	51.6	56.7	54.3	1.3	2.7

Note: Sound level measurements were made on August 23 and 24 and September 6, 1984 before the Connector was opened. After the Connector was opened on September 18, 1984 measurements were taken on September 26 and October 12, 1984.

Of the four major sources of noise in East Palo Alto, vehicle noise is the major contributor. The noise from railroad, aircraft and the Bayshore Freeway will essentially be equivalent.

For residential development, noise generated within the development is anticipated to be generally acceptable and similar to existing ambient levels for existing residential uses. Discounting development impacted by major arterials, new residential levels will generally be in the 30-40 L_{dn} range (using a generalized formula for computation where L_{dn} = 10 "log population density" + 22 dB[5], and discounting vehicular noise). Where residential development occurs in areas with noise levels greater than 60 CNEL, mitigation measures must be incorporated into development plans. Increased noise from industrial development will be a function of the types of uses and densities. In terms of acreage of industrial development allowed, the 1982 Community Plan provides for a balance of industrial uses and the low residential acreage. Point source noise from the industrial park can be mitigated on an individual basis.

In summary, the major noise generators anticipated under the 1982 Community Plan are the major arterial streets. These are believed to be consistent with projections in other related elements of the General Plan and with the East Palo Alto 2000 Committee Final Report. They are summarized in tabular with projected noise levels in Table 3.

C. Mitigation

The noise identified in the Noise Element may be mitigated by restricting the types of industrial uses permitted adjacent to residential areas, limiting the types of industrial uses permitted in the light industrial zone, and by requiring noise mitigation measures as part of the development review process.

MITIGATING NOISE PROBLEMS

Areas intended for people such as houses, yards, parks, and offices -- should be protected with lower sound levels than other areas such as factories, parking, and landscaped areas. The criterion for residential areas is the preservation of the ability to engage in normal conversation in even the most actively used areas. In other areas, sound levels should be low enough to protect people from exposure to intolerable and uncomfortable noise sources.

The most effective method of noise control is to prevent noise from being generated. Transportation facilities, especially major roadways with heavy traffic, are the major sources of noise in the community. Efforts over the long term will be necessary to reduce the generation of this noise.

FIGURE 2
PROJECTED 1995 CNEL CONTOURS

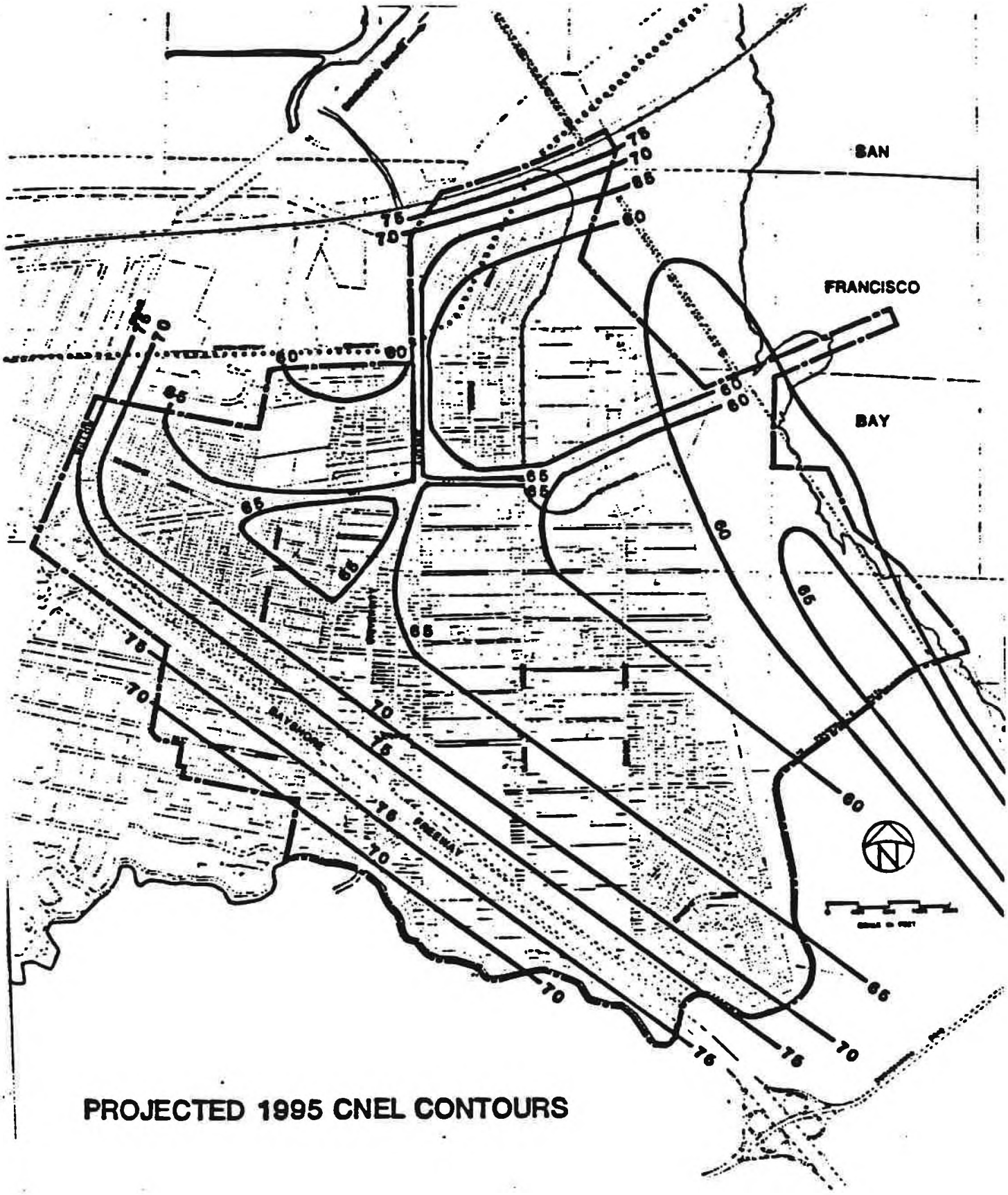
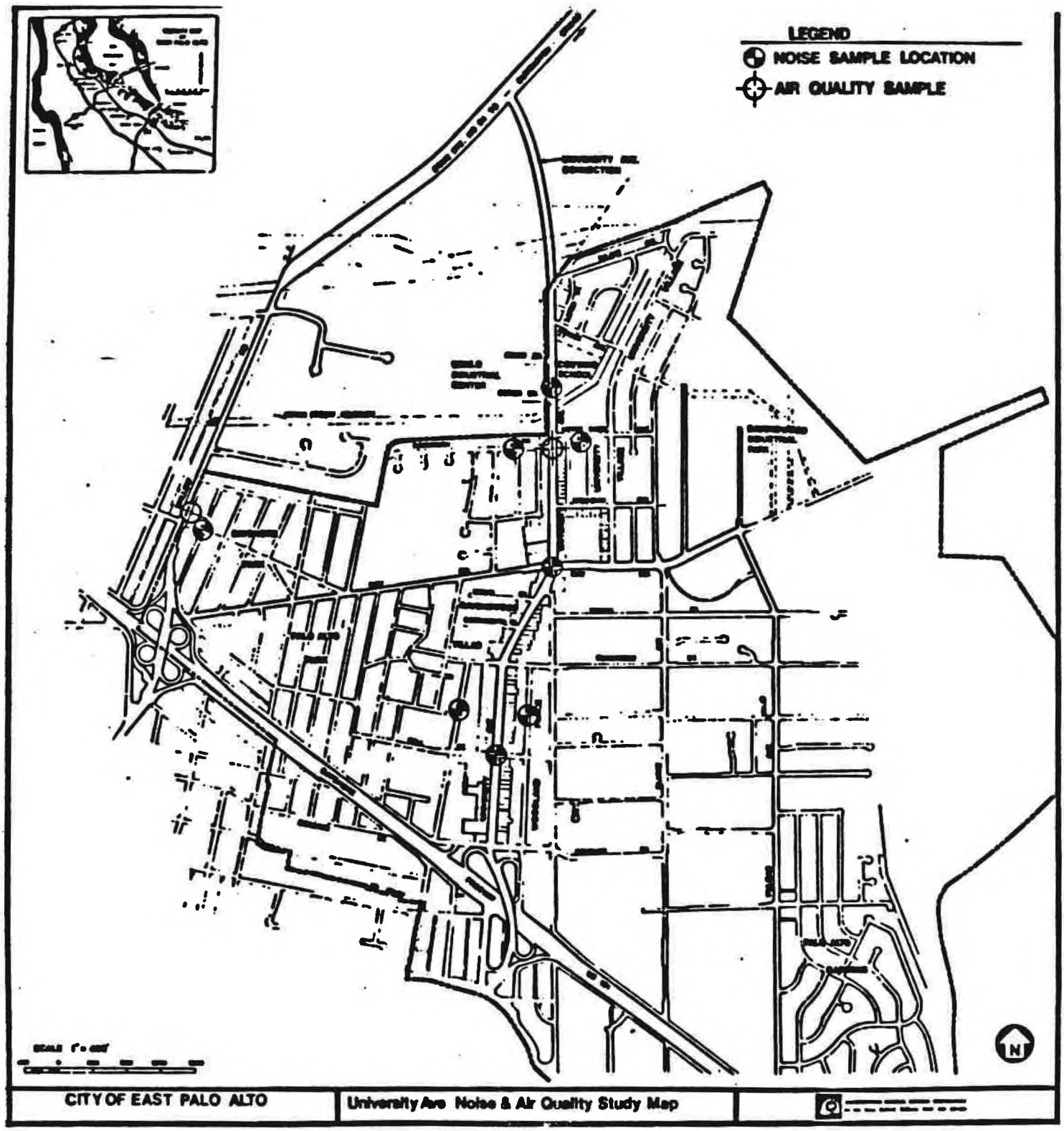
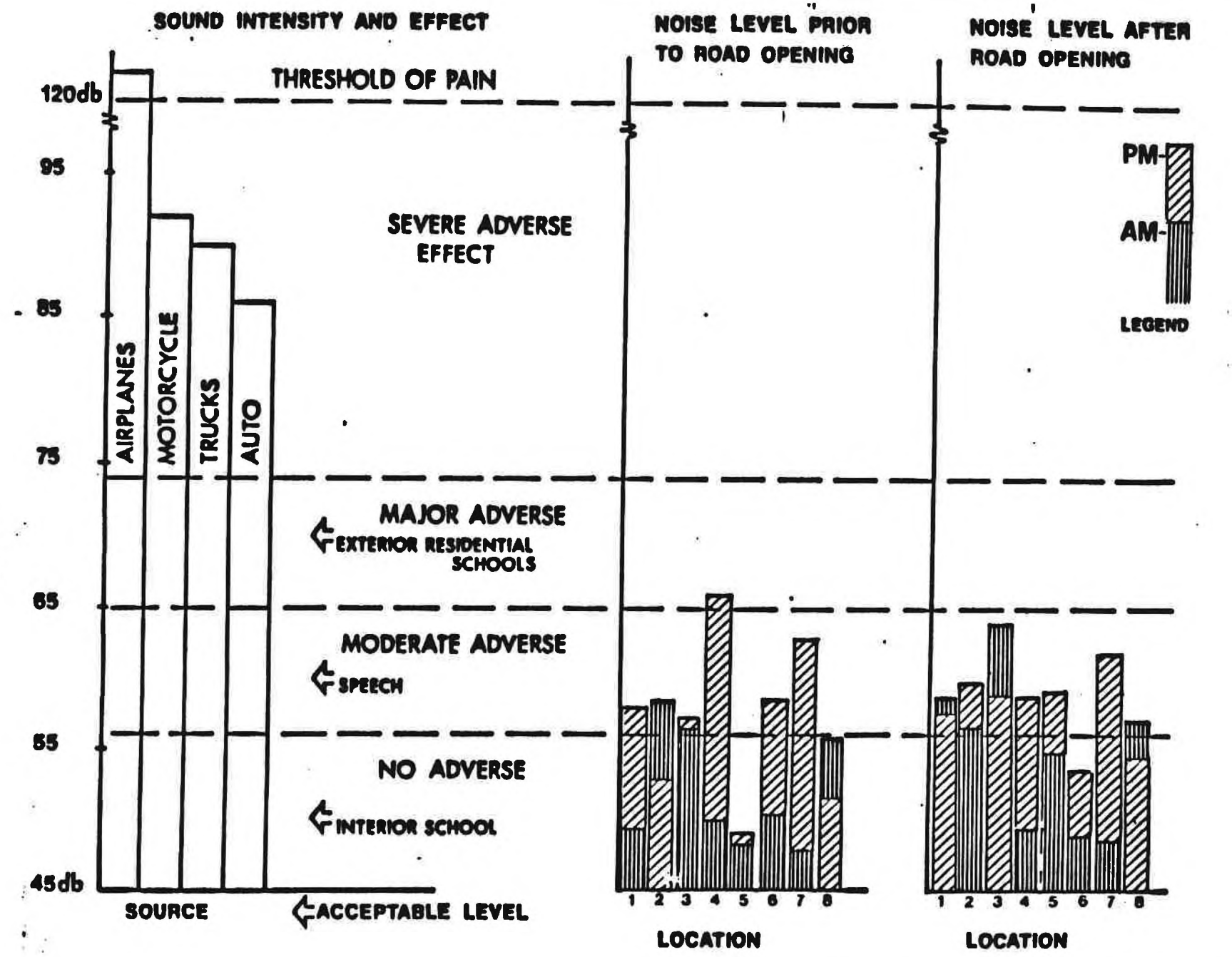


FIGURE 3
UNIVERSITY AVENUE NOISE AND AIR QUALITY STUDY MAP





CITY OF EAST PALO ALTO	NOISE INTENSITY	CONSTRUCTION CONTROL SERVICES CORPORATION

FIGURE 4
NOISE INTENSITY

TABLE 3
PROJECTED NOISE LEVELS UNDER 1982 COMMUNITY PLAN

	1981 Community Plan
Cooley Avenue (4,500)*	
Additional Vehicle Trips/Day	5,216
Projected Noise Levels (L_{dn})	60
Clarke AVenue (3,000)*	
Additional Vehicle Trips/Day	6,916
Projected Noise Levels (L_{dn})	55-60
Pulgas Avenue (4,900)*	
Additional Vehicle Trips/Day	7,528
Projected Noise Levels (L_{dn})	60-65
Relative Increase Over Existing Level	5dB

* 1982 traffic volume in trips per day

The second major factor in diminishing noise is control over the path the noise follows from it source to its receiver. Sound barrier walls, earth berms, and acoustical design of buildings are examples of ways to interrupt the path of noises.

The final method of affecting the noise environment is by modifying the receiver of the noise. This can be accomplished by requiring the sound insulation of structures, acoustical site planning, and acoustical architectural design. The principal method used in requiring sound attenuation in construction is through the use of the building code. In communities where the building code is already administered by a well-established municipal organization, additional specifications in the building code can be a convenient and inexpensive way to require acoustical construction practices such as sound insulation of sealed windows.

The arrangement of buildings on a site can be used to minimize noise impacts. If incompatible land uses already exist, or if a noise sensitive activity is planned, acoustical site planning often provides a successful technique for noise attenuation.

Some techniques which can be employed to shield noise are: 1) increasing the distance between the source and the receiver; 2) placing non-residential land uses such as parking lots, maintenance facilities, and utility areas between the source and the receiver; 3) locating barrier-type buildings parallel to the noise source; and 4) orienting the residences away from the noise.

Noise can be controlled in a building by the use of architectural design. By giving attention to acoustical considerations in the planning of room arrangements, placement of windows, building height, balconies and courtyards, the architect may achieve significant noise impact reduction without the need for costly acoustical construction.

NOISE GUIDELINES

The noise control guidelines presented in Table 4 are to identify widely accepted, realistic, and attainable noise standards for the community. The sound level guidelines are useful in selecting a means to accomplish this. The guidelines serve as a benchmark for evaluating specific projects, plans, and ordinances where noise is an important consideration. The figures are based on the measured levels of sound that will not interfere with an individual's activities or threaten physical or psychological well-being. In general, efforts must be made to reduce the levels of sound in the community so that they remain below "acceptable" limits. However, because of existing development patterns and roadway location, an ideal sound environment may not be possible in every case. Efforts to mitigate the undesirable levels will be pursued wherever possible, balanced with other community goals.

TABLE 4
NOISE CONTROL GUIDELINES

LAND USE[1]	DAYTIME[3] Interior[4]	DAYTIME[3] Exterior[5]	NIGHTIME[3] Interior[4]	NIGHTIME[3] Exterior[5]
RESIDENTIAL[2]	45	55	35	45
COMMERCIAL	45	60	45	60
INDUSTRIAL	55	65	65	65
OPEN SPACE				
Intensive	45	60	45	60
Passive	45	55	35	45
TRANSPORTATION		70		
Freeways and Arterials		65		
Arterials and Collectors		60		
Minor Streets				

[1]At the boundary of any two land use areas with different Sound Environment Guidelines, the land use with the louder standards should be responsible for buffering its noise, so as not to violate the sound environment of the adjacent land use.

[2]All values are in CNEL, Ldn, or dB. The general sound environment should remain at or below the stated guideline.

[3]Daytime extends form 7 a.m. to 10 p.m.

[4]The interior sound levels exclude noise produced within the subject building or unit, whichever is smaller.

[5]The extrior sound levels apply primarily in the areas most used by people for noise-sensitive activities (for example, in the patio and backyard areas of residential areas). It is recognized that there can be areas of transition between the louder and quieter areas. The transition extent of these areas should vary in accordance with the noise sensitivity of activities likely to occur in these areas and with the suitability of noise attenuation methods other than distance.

GOALS AND POLICIES

The following goals and policies are encouraged to establish a sound attenuation program for East Palo Alto.

GOAL I: TO CONTROL NOISE GENERATED BY TRANSPORTATION FACILITIES AND OTHER NOISE SOURCES

POLICIES

1. Support legislation regulating noise produced by motor vehicles.

2. Evaluate new transit systems to ensure that they do not worsen the noise environment.

3. Reduce roadway noise through the design of roads, use of quiet pavement surfaces, and application of traffic management techniques such as rerouting, controlling intensity and speed, and reduction of stopping points.

4. Continue to work with local airport officials to further minimize flight pattern noise and urge modifications to aircraft design or the use of other aircraft to reduce noise production.

5. Control individual sources of noise, including industrial machinery, through the design review process.

GOAL II: TO CONTROL THE PATH OF NOISE FROM THE SOURCE TO THE RECEIVER

POLICIES

1. Use barriers or buffers along roadways to reduce the noise in adjacent areas.

2. Encourage the State, County, and City to install sound walls along freeways and heavily used streets where they abut residential uses.

3. Use the California Environmental Quality Act and Design Review processes to establish the exact type and level of noise control appropriate to specific projects.

GOAL III: TO TAKE MEASURES TO REDUCE ADVERSE EFFECTS OF NOISE ON THE RECEIVER OF THE NOISE

POLICIES

1. When determining land use, consider the associated noise levels and their adverse effects on the occupants of adjacent properties.
2. Educate the public on the effects of noise through the use of pamphlets, brochures, and other media.

NOISE ELEMENT ACTION PROGRAM

Section 65302(g) of the Government Code requires that the Noise Element contain a program which specifies how the goals, policies, and standards are to be implemented. This section of the Element lists the implementation measures which will assist in supporting its goals and policies.

1. Zoning regulation revisions will be made to include specific noise emission standards by various land use categories.

2. Zoning regulation amendments will define areas which are noise impacted and which would require that a noise study be prepared prior to site approval and development. The enforcement of such provisions shall be accomplished through the Design Review process or through the Planning Commission's Public Hearing process.

3. Update the noise control ordinance prepared by the County and adotped by the City in order to establish noise standards for source noise levels in residential, commercial, industrial, and public property uses.

4. The requirements of the California State Code respecting acoustical review of certain types of new residential structures shall be adopted by the City and such regulations will be considered for application to all types of new residential structures.

5. An active program of enforcement of the California Vehicle Code regulations concerning excessive vehicle noise should be considered for implementation by the Police Department.

6. The City's roadway facility program will be reviewed relative to the use of signalization, surface maintenance, and equipment used in work to reduce noise impacts.

7. The City will deligently work towards a joint agreement with other local governments to establish a cooperative program with the Airprot Committee of the Palo Alto Municipal Airport and the Federal Aviation Administration to help abate unnecessary noise from that Airport.

8. Any Environmental Impact Reports prepared for either public or private projects shall address noise impacts and should propose feasible mitigation measures for abating or alleviating any noise activities created by such projects.

9. A public information program on noise should be instituted. Such program could include noise information to interested persons regarding methods that might be used to reduce noise levels in noise impacted areas and prevent high noise levels in other areas.

10. Engage the assistance of the City of Menlo Park to reduce the noise from industrial operations located adjacent to residences in East Palo Alto.

11. Review and report by no later than September 1987 on appropriate cost-effective noise standards for equipment operated by public agencies.

CITY OF EAST PALO ALTO

COMMUNITY DEVELOPMENT DEPARTMENT

NEGATIVE DECLARATION

A notice, pursuant to the California Environment Quality of 1970, as amended (Public Resources Code 21,000, et seq.) that the project for a Noise Element of the proposed East Palo Alto General Plan

when implemented will not have a significant impact on the environment.

PLANNING APPLICATION NO.: GP-069

OWNER: City of East Palo Alto

APPLICANT: City of East Palo Alto

ASSESSOR'S PARCEL NO.: N/A

PROJECT DESCRIPTION AND LOCATION

Noise Element of the proposed East Palo Alto General Plan. Location is City wide.

FINDINGS AND BASIS FOR A NEGATIVE DECLARATION

The Community Development Department has reviewed the initial study for the project and, based upon substantial evidence in the record, finds that:

1. The project will not adversely affect water or air quality or increase noise levels substantially;

2. The project will not have adverse impacts on the flora or fauna of the area;

3. The project will not degrade the aesthetic quality of the area;

4. The project will not have adverse impacts on traffic or land use;

5. In addition, the project will not:

   a. Create impacts which have the potential to degrade the quality of the environment.

   b. Create impacts which achieve short-term to the disadvantage of long-term environmental goals.

c. Create impacts for a project which are individually limited, but cumulatively considerable;

d. Create environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

The City of East Palo Alto has, therefore, determined that the potential environmental impact of the project is insignificant.

MITIGATION MEASURES (if any) included in the project to avoid potentially significant effects.

Please see the attached sheet entitled "Mitigation Measures"

RESPONSIBLE AGENCY CONSULTATION

INITIAL STUDY

The East Palo Alto Community Development Department has reviewed the Environmental Evaluation of this project and has found that the probable impacts are potentially insignificant. A copy of the initial study is attached.

REVIEW PERIOD: November 12, 1986 to November 24, 1986

All comments regarding the correctness, completeness,, or adequacy of this Negative Declaration must be received by the City Community Development Department, 2415 University Avenue, East Palo Alto, no later than 5:00 p.m., November 24, 1986

CONTACT PERSON:

Rod Barger

J6G00100
Form G001

CITY OF EAST PALO ALTO

ANALYSIS YES AND MAYBE RESPONSES IN THE ENVIRONMENTAL EVALUATION CHECKLIST

6(L) The creation of the noise element is a part of the overall work program which will result in the adoption of the General Plan and Noise Element. It will require amending the existing Community Plan/EIR.

MITIGATION MEASURES

6(L) The contents of the proposed noise element have been created so that it addresses noise issues in the City and so that it is substantively similar to the noise analysis presented in the existing Community Plan/EIR. Because of the similarity in content, and because it was found that the analysis in the Community Plan/EIR had no adverse impacts, it is staff's position that the proposed noise element (also) will not create any adverse impacts.

TABLE OF IMPACTS AND MITIGATION MEASURES
FOR NOISE ELEMENT OF THE PROPOSED
EAST PALO ALTO GENERAL PLAN

November 1986

Area of Impact	Scale of Impact before mitigation				Mitigation Measures*	Scale of Impact After mitigation		
	None	Minor	Moderate	Major		None	Minor	Moderate
1. Land suitability and geology	X							
2. Vegetation and wildlife	X							
3. Physical resources	X							
4. Air quality, water quality, sonic	X							
5. Traffic and transportation	X							
6. Land Use and General Plan		X			6(L)	X		
7. Aesthetic, cultural and historic	x							

*See attached listing of numbered mitigation measures.