City of Santa Paula General Plan
Noise Element

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I. PURPOSE AND AUTHORITY

This element of the Santa Paula General Plan addresses noise issues, as required by California state law. Government Code Section 65302(f), requires that a Noise Element be prepared as part of a city's General Plan to identify and appraise noise problems in the community. The Government Code includes the following requirements for noise elements:

> *The noise element shall recognize the guidelines established by the Office of Noise Control in the State Department of Health Services and shall analyze and quantify to the extent practicable , as determined by the legislative body, current and projected noise levels for all of the following sources:*
>
> A. *Highways and freeways.*
>
> B. *Primary arterials and major local streets.*
>
> C. *Passenger and freight on-line railroad operations and ground rapid transit systems.*
>
> D. *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.*
>
> E. *Local industrial plants, including but not limited to, railroad classification yards.*
>
> F. *Other ground stationary noise sources identified by local agencies as contributing to the community noise environment.*
>
> *Noise contours shall be shown for all of these sources and stated in terms of community noise equivalent level (CNEL) or day-night average level (Ldn). The noise contours shall be prepared on the basis of noise monitoring or following generally accepted noise modeling techniques for the various sources identified in paragraphs (1) to (6) inclusive.*
>
> *The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise.*
>
> *The noise element shall include implementation measures and possible solutions that address existing and foreseeable noise problems, if any. The adopted noise element shall serve as a guideline for compliance with the state's noise insulation standards.*

This Noise Element contains descriptive information related to noise sources that are of concern to Santa Paula. Specific goals, policy statements, and implementation measures that carry out the goals are also presented.

The purpose of the Noise Element is to maintain the quality of life for Santa Paula residents through control of excessive or disruptive sources of noise. The goals, objectives, policies, and implementation measures in this element provide guidelines and mandates for community actions to prevent future noise exposure and control of the existing noise environment.

II. EXISTING CONDITIONS AND ISSUES

This section of the Noise Element describes how noise is measured, identifies current noise sources in the Santa Paula planning area, and addresses the legal mandates and requirements in addressing noise issues.

A. Quantification of Noise

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). In addition to the actual instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time. Typically, Leq is summed over a one hour period.

The sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Decibels cannot be added arithmetically, but rather are added on a logarithmic basis. Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than that can interrupt conversations.

Noise levels typically attenuate at a rate of 6 dBA per doubling of distance from point sources such as industrial machinery. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance.

The actual time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. The Community Noise Equivalent Level (CNEL) recognizes this characteristic by weighting the hourly Leqs over a 24-hour period. The weighting involves the addition of 5 dB to actual evening noise levels (7:00 pm to 10:00 pm) noise levels and 10 dBA to actual nighttime (10 p.m. to 7 a.m.) noise levels account
for the greater amount of disturbance associated with noise at these time periods.

Figure N-1 presents the California Department of Health, Office of Noise Control, noise

compatibility guidelines for various land uses. The compatibility table illustrates the ranges of community noise exposure in terms of what is "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable." For the most sensitive uses such as single family residential, 60 dBA CNEL is the maximum normally acceptable level. These guidelines are used to assess whether or not noise poses a conflict with land development.

B. Existing Noise Sources

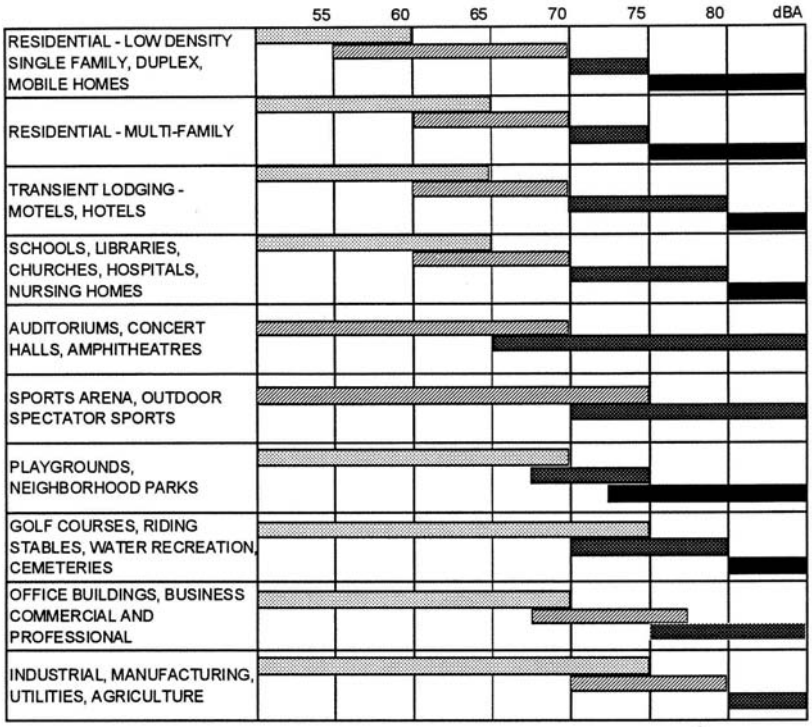
In general, noise is not a significant issue in Santa Paula. The primary noise sources affecting sensitive receptors (homes, schools, hospitals) in the city are traffic on State Routes 126 (SR 126) and 150 (SR 150), as well as aircraft operations at the Santa Paula Airport. Some industrial, commercial, and agricultural uses are also identified as noise contributors, although such sources have not generally been identified as significant noise problems. Each potential noise source affecting development in the City is described in more detail below. Estimated existing noise contours from SR 126, SR 150, and Santa Paula Airport are shown on Figure N-2 and measured noise levels are illustrated on Figure N-3, Measured Noise Levels. It should be noted that the contours presented are outdoor noise levels and only account for attenuation due to distance, not from sound wall structures or other noise barriers. The contours are intended to show generally where higher noise levels may occur.

Roadways. Table N-1 shows current noise levels along several of the most heavily traveled roads in Santa Paula. SR 126, SR 150, Harvard Boulevard, and Peck Road (near the freeway) are the only local roadways that currently carry enough traffic to produce significant noise levels. Current noise conditions are described below.

SR 126. SR 126, the Santa Paula Freeway, is the primary east-west route crossing the City. Traffic is relatively light for a freeway, ranging from 18,000 average daily traffic volume (ADT) just east of the City to 34,000 ADT immediately west of town. In the vicinity of Tenth Street, the average distance to the 60 dBACNEL noise contour from the freeway centerline in the absence of any intervening barriers is about 230 feet. In general, current land uses adjacent to the freeway are not noise sensitive. The exception is between Peck Road and Steckel Road, where residential development on both sides of the freeway is within the 60 dBA CNEL noise contour. North of the freeway, this residential development extends nearly to Palm Avenue. This level of noise exposure would be considered "conditionally acceptable" using the Land Use Compatibility Matrix (see Figure N-1).

SR 150. SR 150 is the primary access between SR 126 and Ojai, with traffic volumes of approximately 12,000 ADT. It is a major north-south corridor linking downtown Santa Paula with the residential areas at the northern end of the City. The 60 dBA noise contour produced by traffic on this roadway is located approximately 80 feet from the roadway centerline. Thus, only residential development directly adjacent to the road would experience noise levels above 60 dBA CNEL. In general, the primary areas of noise concern are north of Saticoy Street, where traffic speeds increase and residential development is more prevalent.

Figure N-1. Noise Compatibility Matrix



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.

Source:
Calif. Dept. of Health,
Guidelines for Preparation and Content of Noise Elements of General Plans, 1976

Noise Compatibility Matrix Figure N-1

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Figure N-2. Existing Noise Contours

Existing Noise Contours Figure N-2

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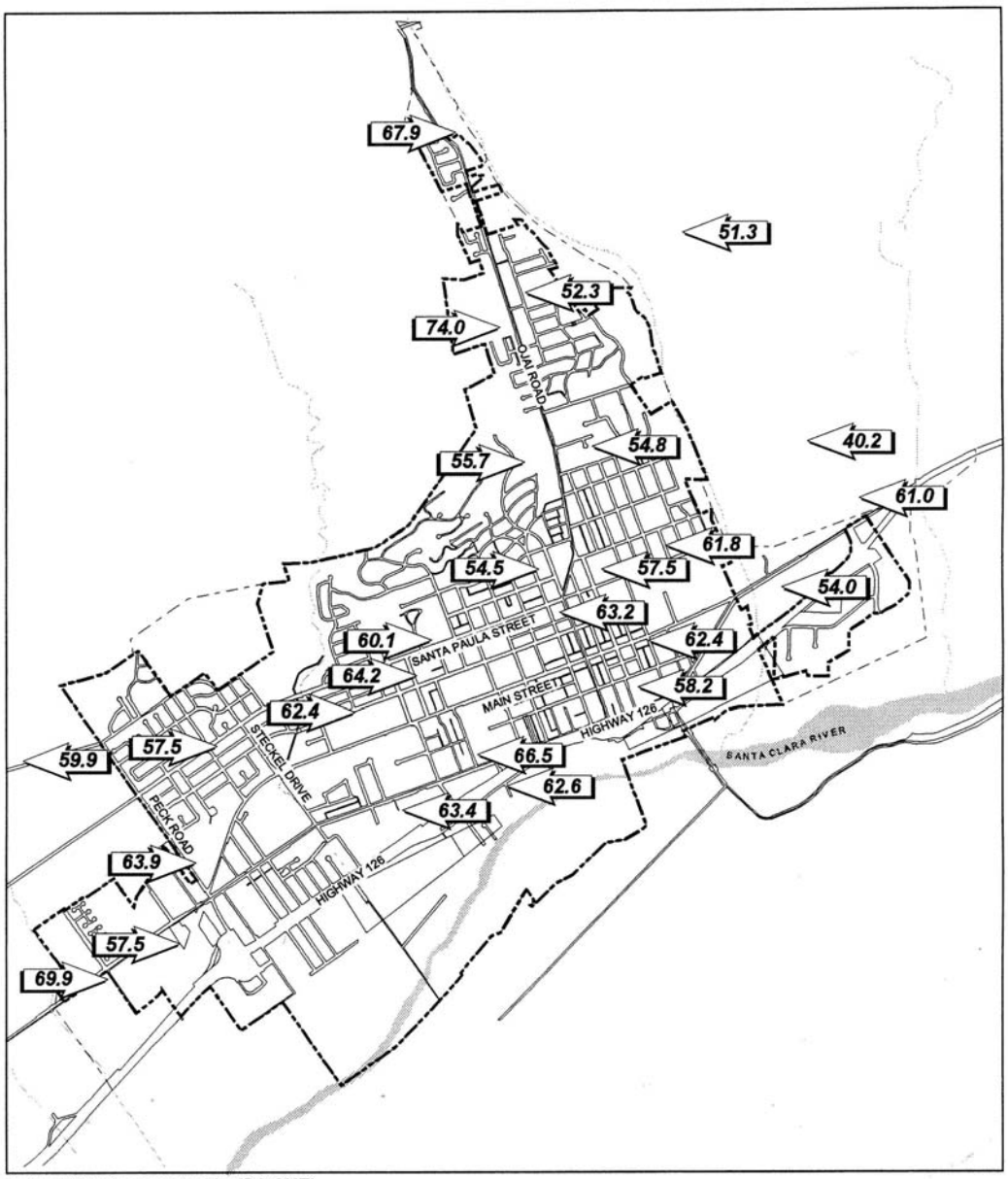
Figure N-3. Location of Measured Noise Levels



Locations of Measured Noise Levels, LEQ Figure N-3

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Table N-1. Existing Estimated Roadway Noise Levels

Roadway	Existing ADT	Existing dBA CNEL at 100 ft from centerline
State Route 126	35,000	75.2
State Route 150 between Santa Barbara and Telegraph	14,000	58.4
State Route 150 between Santa Paula and Say Rd.	12,000	62.4
Harvard Boulevard between Steckel and Peck	10,800	62.2
Peck Rd between Santa Paula and Telegraph	4,100	56.5
Foothill Road between Briggs and Peck	1,400	54.5
Adams Canyon Road	N/A	46.3

Harvard Boulevard. Harvard Boulevard is a primary east-west corridor that parallels SR 126, with traffic volumes exceeding 14,000 ADT. This was the main highway through town before SR 126 was built. As a result, most of the development along this road is commercial or industrial in nature, and thus not sensitive to noise impacts. However, there is scattered noise-sensitive residential development between Peck Road and Steckel Drive. Homes that directly front on Harvard Boulevard are within the 60 dBA contour, which extends approximately 100 feet from the roadway centerline.

Peck Road. Peck Road carries significant traffic (11,400 ADT) between SR 126 and Harvard Boulevard. Although the 60 dBA noise contour extends approximately 116 feet from the roadway centerline, there is no noise-sensitive development along this portion of Peck Road. North of Harvard Boulevard, traffic is much lighter (4,100 ADT), with noise levels commensurately less.

Santa Paula Airport. Santa Paula Airport is an uncontrolled public-use airport encompassing about 38 acres south of SR 126. Its single 2,650-foot runway generally supports private propeller-driven aircraft. No commercial service has been extended to the airport. The airport's 52,000 operations in 1990 were the lowest number of any airport in the County, and accounted for about 12 percent of all the operations countywide. The Airport Land Use Plan indicates that the number of operations is not expected to rise significantly by 2010, partly because the airport is uncontrolled, and partly because the local geography (mountains, city) severely limits its expansion potential.

Aircraft noise is generally not a problem in the City (noise levels for the airport are also illustrated on Figure N-2, Existing Noise Contours). The general traffic pattern zone is south of the City, over the Santa Clara River. Local ordinance requires that aircraft maintain an altitude of at least 1,500 feet above sea level when approaching or departing the City. The primary noise concern noted by the public relating to the airport is aerobatics, which are periodically practiced east of the City. The airport property is surrounded by industrial development on either end of the runway. The

Santa Paula Freeway provides a barrier to the north, while there is generally no development to the south due to the presence of the Santa Clara River.

Industrial Operations. Industrial development is located along Telegraph Road, Peck Road, Main Street and south of the freeway adjacent to the airport. Noise generated by plant operations and heavy equipment may impact nearby residential areas, parks, schools, and a mental care facility. For example, some residents living near the Calavo plant on Main Street near Peck Road have noted that there are periodic loud noises in the early morning hours due to truck operations. These residents indicate that this is an annoyance, and have occasionally filed complaints with the City. The Weyerhauser plant has also been noted as a noise source. However, industrial operations have not been formally identified as a major issue since the Noise Element's adoption in 1974.

Commercial Operations. Commercial operations located in the area of Laurie Lane, Steckel Drive, Harvard and Palm Streets, Main and 7th Streets, and in the Downtown, may produce noise that affects nearby sensitive land uses such as residential developments and schools. However, these effects are generally minor. Noise due to commercial uses has not been a significant issue in the community.

Agricultural Operations. Noise from tractors and other agricultural equipment such as frost control are the major sources of agricultural noise. Many of these noise sources lie outside the City and are related to seasonal operations. Packing operations, including refrigeration trucks, and movement of farm equipment are sources of noise that have the potential to affect the City, but are not a constant source of noise. Farm equipment movement usually occurs on Santa Paula Street and Harvard Boulevard during busy agricultural times of the year. While these sources may periodically affect City residents they are usually outside the City's jurisdiction to enforce noise ordinances.

Santa Paula Branch Line Railroad. Historically, there was significant rail traffic on the Santa Paula Branch of the Southern Pacific Railroad Line that runs through the City. Passenger trains used to connect Santa Paula with Ventura, Fillmore and the cities of northern Los Angeles County. However, regular rail traffic has stopped, primarily because the railroad tracks have been removed between Piru and Santa Clarita, and the corridor in that area is privately owned. Now the tracks are used infrequently in Santa Paula. The Fillmore Western Rail Road operates three round trip excursion trains (tourist oriented) during daytime hours on weekends between Fillmore and Santa Paula. The railroad is also used by local agricultural operations in Santa Paula and occasionally by Hollywood film productions that use the City as a backdrop. Current operations on the rail line have not created a serious noise concern.

The Santa Paula Branch Line was purchased by the Ventura County Transportation Commission in 1995. It is uncertain what the ultimate use of the rail corridor will be. Part of the long-term strategy being considered by both Ventura County and Los Angeles County is to revive the rail line for commuter use. Expansion of the excursion trains from Fillmore and increased freight use are goals of VCTC. A multi-purpose trail system may also be implemented within the right-of-way. Land use plans for development near the corridor should consider the potential for railroad operations to resume in the future.

Nuisance Noise. Sources of nuisance noise identified by the community are loud music

from portable radios, car stereos, and barking dogs. These and other such nuisance noises are common to cities and are addressed generally in the Enforcement section of the Noise Element.

City Noise Ordinance. The City of Santa Paula Noise Ordinance (Chapter 93 of the Santa Paula Municipal Code) regulates noise in the City. The ordinance regulates against loud or unnecessary noise, and defines sources of such noise. Operation of machines, construction work, loud voices, and other sources of noise are restricted by time of day and to the degree that they annoy or disturb other people.

III. FUTURE CONDITIONS

This section discusses noise conditions anticipated to occur in the City at buildout of the General Plan.

A. Traffic Noise

SR 126, SR 150, Harvard Boulevard, and Peck Road (near the freeway) are the only local roadways that carry enough traffic to produce significant noise levels and are illustrated in Figure N-4, Future Noise Contours. These noise levels were calculated to give a "worst case" scenario and do not account for noise attenuation from buildings or other barriers. Future noise conditions are described below for SR 126, SR 150, and other existing and planned major roads. Table N-2 shows the estimated ADT for selected road segments and the estimated dBA CNEL at 100 feet from the centerline of each roadway.

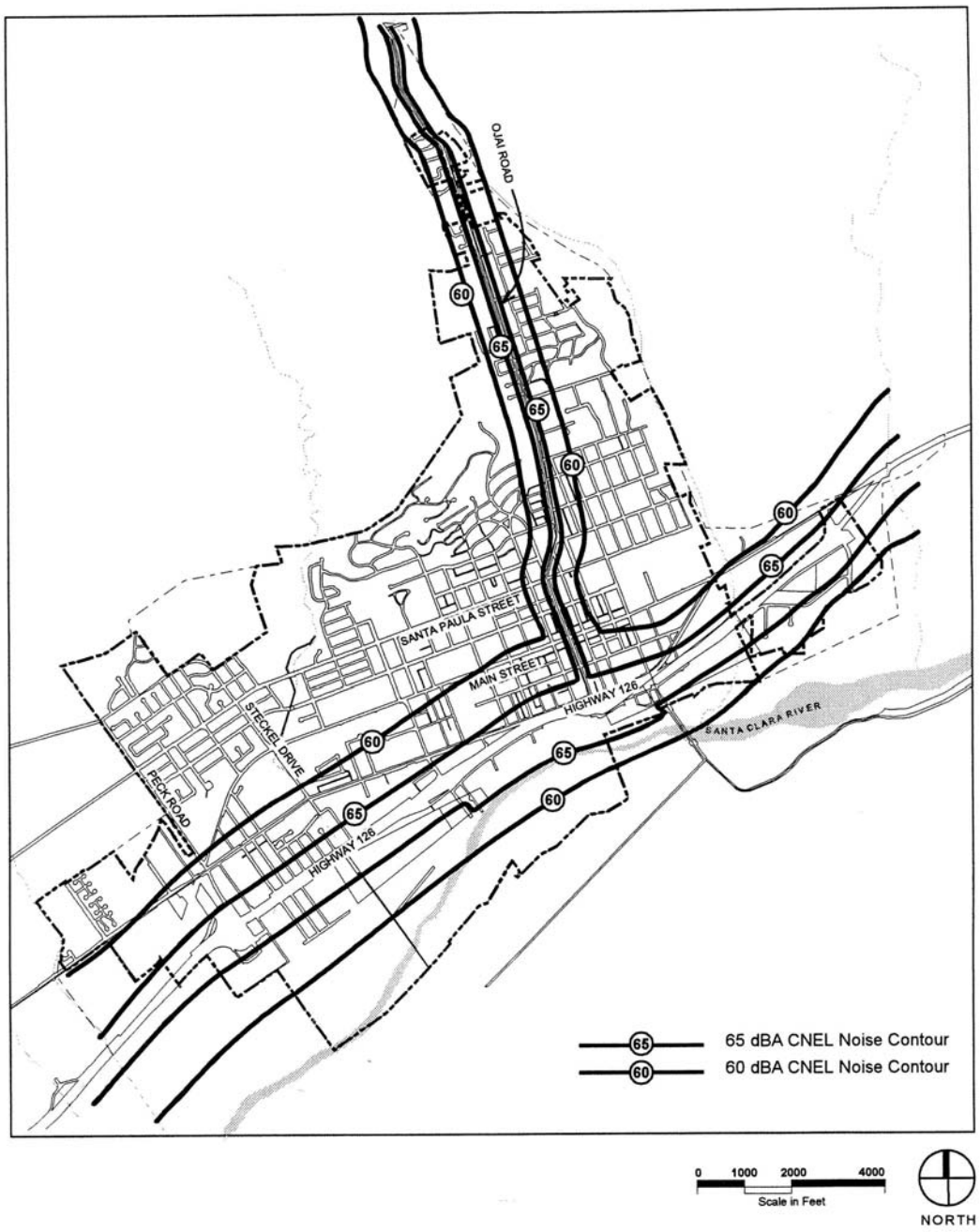
Table N-2. Estimated 2020 Roadway Noise Levels

Roadway	Existing ADT	ADT 2020	Existing dBA CNEL at 100 ft from centerline	2020 dBA CNEL at 100 ft from centerline	Increase in dBA CNEL
State Route 126	35,000	70,100	76.8	79.8	3.0
State Route 150 between Santa Paula and Say Road	12,000	16,300	62.7	64.0	1.3
Harvard Boulevard between Steckel and Peck	10,800	23,700	62.2	65.6	3.4
Peck Road between Santa Paula and Telegraph Road	4,100	15,900	58.0	63.9	5.9
Foothill Road between Briggs and Peck Road	1,400	12,500	56.1	65.6	9.5
Adams Canyon	N/A	23,600	46.3	64.0	17.7

SR 126. (the Santa Paula Freeway) is the primary east-west route crossing the City. The projected future ADT for the freeway west of 10th Street is 70,000, with an average distance to the 60 CNEL noise contour line at about 1650 feet.

Noise sensitive residential developments between Peck Road and Steckel Drive, where residential developments on both sides of the freeway are within the 60 dBA noise contour would be affected. Residences along Harvard Boulevard north of the freeway would also be affected by noise from SR 126.

Figure N-4 future contours



Future Noise Contours Figure N-4

N-11

SR 150. SR 150 is the primary access between SR 126 and Ojai and would expect an increase in ADT ranging from approximately 5,000 to 7,000. The 60 dBA noise contour produced by buildout traffic ranges from approximately 78 feet in the downtown area to 147 feet in the area of Say Road from the centerline of SR150. Residential development adjacent to the road would expect levels in this range.

Harvard Boulevard. Harvard Boulevard is a primary east-west corridor that parallels SR 126, with ADT anticipated to reach 19,200 between Peck Road and Steckel Drive where residential uses are located. Homes that directly front Harvard Boulevard are within the 60 dBA contour, which will extend approximately 189 feet from the roadway centerline.

Peck Road. Peck Road carries significant traffic between SR 126 and Harvard Boulevard and would be expected to reach an ADT of 13,000 between Santa Paula Road and Telegraph Road at General Plan buildout. The future noise level within 100 feet of the centerline of Peck Road is estimated at 63.9 dBA CNEL. This level of noise exceeds the normally acceptable level for residences and Blanchard School located along this portion of Peck Road.

Adams Canyon Road. Adams Canyon Road is located northwest of Santa Paula and has been identified as an area of potential expansion in the Land Use Element. This primarily rural area currently experiences daytime ambient noise levels of less than 50 dBA. If the area was full developed, an ADT of approximately 22,000 could be expected with a dBA CNEL of 64.0 within 100 feet of the road centerline. Such levels would exceed normally acceptable levels for residential use.

B. Other Future Noise Sources

Santa Paula Airport. Under the Airports Comprehensive Land Use Plan Update for Ventura County, land uses are restricted in the airport vicinity for safety reasons, and are primarily limited to activities that minimize human exposure to aviation hazards. Future use of the airport is not expected to significantly increase over existing conditions, and, therefore, would not be considered a major noise issue in the foreseeable future. Noise contours for projected future (2010) airport operations are shown on Figure N-3. The Ventura County Transportation Commission is currently updating its Airports Comprehensive Land Use Plan. Although no significant increase in traffic at Santa Paula Airport is currently anticipated the City will need to work with the VCTC in its planning effort to ensure that aircraft noise does not become a major issue.

Industrial Operations. Future industrial development in the City of Santa Paula would generally be located away from existing and planned residential and other sensitive uses that would be incompatible with industry. Therefore, noise associated with industrial activities would be expected from sources such as truck traffic serving industrial operations. Future noise from industrial activity is not anticipated to be a major issue and will be addressed on a case-by-case basis.

Commercial Operations. Generally, noise impacts from commercial operations are minor and mostly related to traffic and machinery. This condition is not expected to worsen significantly with buildout of the General Plan. Future commercial development would be located in a pattern that would not significantly affect sensitive uses. Enforcement of the City's Noise Ordinance and

implementation of policies of the Noise Element will assist to further reduce noise impacts related to commercial operations.

Agricultural Operations. Agricultural noise sources are not considered to be a major source of noise existing in the City. Sporadic noise from farm operations is anticipated to continue in and around the City Santa Paula. Packing operations and movement of farm equipment are sources of noise likely to continue in the future, but are not expected to become major noise issues for the community. Noise from outside of the City is not easily regulated by City ordinance or plans.

Santa Paula Branch Line Railroad. The line was purchased by the Ventura County Transportation Commission in 1995. It is uncertain what the ultimate use of the rail corridor will be. Part of the long-term strategy being considered by both Ventura County and Los Angeles County is to revive the rail line for commuter use. A multi-purpose trail system may also be implemented within the right-of-way. It is expected that the Fillmore Western Company may increase excursion use along the corridor and that freight service will also increase. Depending upon future development and demand for such services, the line could become more active. Noise from the line would be intermittent, but could be a potentially significant source of future noise for the sensitive uses in the vicinity of the corridor.

IV. GOALS, OBJECTIVES, AND POLICIES

In this element, GOALS are statements that provide direction and state the desired end condition. The OBJECTIVES state a specific step toward goal achievement. POLICIES are specific statements that guide decision-making. They indicate a clear commitment by the city and generally serve as mandatory criteria. IMPLEMENTATION MEASURES support the goals, objectives, and policies by providing specific programs and standards to carry out the Noise Element policies.

The goals, objectives, and polices that follow include both general goals for limiting noise exposure and measures to address specific noise sources in the City. These areas were selected with input from the Santa Paula City Council and the community as important topics for the Noise Element.

GENERAL GOALS

1.1 Existing exposure of citizens to excessive noise sources should be reduced.

1.2 Development should mitigate undue generation of noise.

1.3 The City of Santa Paula should consider the noise environment as part of land use planning.

TRAFFIC NOISE

Objective

1(a) Minimize the adverse effect of traffic-generated noise on residential and other noise sensitive land uses from noise and highways.

Policies

1.a.a. Use the land use/noise compatibility matrix shown on Figure N-1 to determine the appropriateness of land uses relative to roadway noise. (IM 2, 3, 3a, 3b, 11a)

1.b.b. Work with Caltrans to landscape or install mitigation elements along freeways and highways adjacent to existing residential subdivisions or noise-sensitive uses to reduce noise impacts. (IM 11a, 18)

1.c.c. Work with Caltrans to mitigate the negative effects of noise attributable to new freeways by elevating or depressing them or incorporating other noise attenuation elements. (IM 18)

1.d.d. Minimize noise attributable to vehicular travel in pedestrian oriented areas and residential neighborhoods by inhibiting through trips through the use of diagonal parking, one-way streets, road dips, cul-de-sacs, and other traffic controls. (IM 10)

1.e.e. Provide for the development of alternative transportation modes, such as bicycle paths and pedestrian walkways, to minimize the number of automobile trips. (IM 24)

1.f.f. Require that new equipment and vehicles purchased by the City comply with noise performance standards consistent with the best available noise reduction technology. (IM 15, 16)

1.g.g. Work with local agencies and businesses to provide public transit services that reduce traffic and associated noise. (IM 24, 25)

1.h.h. Work with public transit agencies to ensure that the buses, vans, and other vehicles used do not generate excessive noise levels. (IM 15, 25)

1.i.i. Consider the use of rubberized asphalt paving material for future road paving and re-paving. Studies have indicated that such paving material can result in a 3 to 5 dBA reduction in noise. (IM 10)

1.j.j. Consider the use of speed humps and other "traffic calming" devices to reduce traffic noise in residential areas. (IM 10, 10a)

AIRPORT NOISE

Objective

2(a) Minimize the effect of air traffic noise generated by the existing and future operations of the Santa Paula Airport on residences and other noise sensitive land uses.

Policies

2.a.a. Coordinate with airport officials to address operational noise as conflicts are identified. (IM 14)

2.b.b. Work with airport officials to address noise concerns from aerobatics and air shows on a case by-case basis. (IM 14)

2.c.c. Consider the land use/noise compatibility matrix (Figure N-1) when determining the appropriateness of land uses in the Airport vicinity. (IM 2, 14)

RAILROAD NOISE

Objective

3(a) Minimize the noise effect of railroad operations on residential uses and other sensitive land uses.

Policies

3.a.a. Work with all railroad operators and the Ventura County Transportation Commission to properly maintain lines and establish operational restrictions during the early morning and late evening hours to reduce impacts in residential areas and other noise sensitive areas. (IM 20, 23)

3.b.b. Work with all railroad operators to install noise mitigation features where operations impact existing adjacent residential or other noise sensitive uses. (IM 18, 20, 23)

3.c.c. Consider the land use/noise compatibility matrix (Figure N-1) when determining the appropriateness of land uses in the rail line vicinity. (IM 2)

INDUSTRIAL AND COMMERCIAL NOISE

Objective

4(a) Minimize noise spillover from industrial and commercial operations, including the packing industry, into adjacent residential neighborhoods and other sensitive uses.

Policies

4.a.a. Require that automobile and truck access to industrial and commercial properties adjacent to residential areas be located at the maximum practical distance from the residential area. (IM 11, 11a)

4.b.b. Require that all parking for industrial and commercial uses adjacent to residential areas be enclosed within a structure, buffered by walls, and/or limited hours of operation. (IM 5, 8, 9, 10)

4.c.c. Limit the use of leaf blowers, motorized lawn mowers, parking lot sweepers, or other high-noise equipment on commercial properties if their activity will result in noise which adversely affects residential areas. (IM 12)

4.d.d. Require that the hours of truck deliveries to industrial and commercial properties adjacent to residential uses be limited unless there is no feasible alternative or there are overriding transportation benefits by scheduling deliveries at another hour. (IM 11, 11a)

AGRICULTURAL OPERATION NOISE

Objective

5(a) Minimize noise impacts associated with seasonal and ongoing agricultural operations.

Policy

5a.a. Work with the agricultural industry to address conflicts on a case-by-case basis and develop noise mitigation as practicable. (IM 17)

MIXED RESIDENTIAL/COMMERCIAL NOISE

Objective

6(a) Minimize the local noise impacts associated with the development of residential units above ground floor commercial uses where permitted.

Policies

6.a.a. Require that commercial uses developed as part of a structure containing residences on upper floors not be noise intensive. (IM 4)

6.b.b. Require that building design of structures designed for commercial and residential uses prevent transfer of noise from the commercial to the residential use. (IM 3, 4)

6.c.c. Require common wall and floors between commercial and residential uses to be constructed to minimize the transmission of noise and vibration. (IM 3, 4)

CONSTRUCTION NOISE

Objective

7(a) Minimize the impacts of construction noise on adjacent uses.

Policies

7.a.a. Require that construction activities adjacent to residential units be limited as necessary to prevent adverse noise impacts. (IM 8, 8a, 12, 13)

7.b.b. Require that construction activities employ feasible and practical techniques which minimize the noise impacts on adjacent uses. (IM 8, 8a, 12, 13)

NOISE TRANSMISSION

Objective

8(a) Ensure that buildings are constructed to prevent adverse noise transmission between different uses located in the same structure and individual residences in multifamily buildings.

Policies

8.a.a. Establish design criteria for commercial buildings that prevent the transmission of significant and unacceptable noise between individual tenants and businesses. (IM 1, 3, 4, 6, 7, 8-11)

8.b.b. Establish design criteria for multi-family buildings that prevent the transmission of significant and unacceptable noise between individual residential units. (IM 4)

GENERAL NOISE

Objective

9(a) Maintain baseline information regarding the noise environment of the City.

Policies

9.a.a. Consider establishing a citizen group to monitor nuisance noise and other noise sources in the City. (IM 12, 13)

9.b.b. Monitor and update data regarding the City's current and projected noise levels. (IM 21, 22)

9.c.c. Employ technological advances in noise impact mitigation as they become available. (IM 22)

V. IMPLEMENTATION MEASURES

This section of the Noise Element indicates the actions and programs that shall be carried out by the City of Santa Paula to implement the goals, objectives, and policies of the Noise Element. These implementation measures, together with the policies, establish and guide the City's annual budget process and day-to-day decision-making so there is continuing progress toward attainment of the goals and objectives. Some policies and implementation measures may need to be re-examined and revised during the plan's time frame. Implementation measures with a letter following the measure number (i.e., 3a) have been added during revision, update, or amendment processes. This number/letter system was used to eliminate the need for renumbering as subsequent additions or revisions to implementation measures are made.

The City of Santa Paula shall take the following actions to implement noise goals, objectives, and policies.

ORDINANCE AND DEVELOPMENT STANDARDS

1. Amend the development code as necessary to account for the policies and programs contained in the Noise Element.

2. Establish exterior land use noise compatibility standards in the Development Code for all new development based on the guidelines shown on Figure N-1 of this Noise Element.

3. Incorporate in the development code requirements that limit maximum interior levels to 45 dBA Ldn in all new residential construction.

3a. For new development within the generalized 60 dBA CNEL noise contour as shown in Figure N-4 of this Noise Element, project applicants shall fund site-specific noise studies to mitigate project impacts. The determination of whether a project site is within the 65 dBA contour is the responsibility of the Planning Department.

3b. When development is subject to noise levels requiring mitigation, the following measures shall be considered and preference shall be given in the following order:

    1. *Site layout, including setbacks, open space separation and shielding of noise sensitive uses with non-noise-sensitive uses.*
    2. *Acoustical treatment of buildings.*
    3. *Structural measures: construction of earthen berms or wood or concrete barriers*.

4. Incorporate into the development code standards and requirements that protect inhabitants from impacts of exterior noise, prevent the transference of interior noise to the outside, prevent transference of noise between residential units and individual businesses in multi-tenant buildings, and prevent transference of noise between commercial and residential uses in mixed structures. Standards for insulation, windows, building materials, walls and roofs shall be included.

5. Include in the development code standards and requirements for parking structures and lots to prevent noise effects on-site and on adjacent noise sensitive uses. These could include the use of buffers containing landscape and/or sound walls, use of sound absorbing materials to minimize sound amplification and transmission, enclosure of the façade of parking structures facing a residence, limitation of the hours of operation of surrounding surface parking lots, and other appropriate techniques.

6. Incorporate into the Development Code requirements that all residential, health care, convalescent homes, religious facilities, and other noise-sensitive uses be reviewed (by City staff) for their presence in high noise impact areas (of 60 dBA and greater, as depicted by the Existing and Future Noise Contour Maps show on Figures N-2 and N-4 or as updated by supplemental study). When these uses are proposed within the 60 dBA contour or within fifty (50) feet of this contour, the applicant shall:

    a. Conduct field measurements by a qualified environmental scientist/acoustical engineer to determine a more precise location of existing and projected future noise levels (based on traffic projections included in the Circulation Element or as accepted by the City); and

    b. Identify and commit to measures to mitigate noise impacts (by siting of structures outside of high noise levels, insulation, attenuation, walls or buffers, landscape, or other acceptable techniques) if within the 60 dBA contour.

7. Incorporate into the Development Code requirements that all industrial, commercial, and transportation uses be evaluated by City staff, for their potential to generate noise over 60 dBA at adjacent noise sensitive uses as part of the development and environmental review process. Where a determination that noise from a project may generate noise over 60 dBA has been made by City Staff, the developer shall:

    a. Have an analysis of potential noise impacts prepared by a qualified environmental scientist/acoustical engineer; and

    b. Identify and commit to measures to mitigate noise impacts (siting of use/operations, incorporation of noise walls, berms, or insulation, or other acceptable attenuation technique).

Table N-3 provides examples of the amount of attenuation that would be expected with different types of construction. For sensitive noise receptors that may be developed in or adjacent to high noise areas, construction techniques, such as those described in Table N-3, can reduce noise to acceptable interior noise standards, usually 45 dBA CNEL or less. The Sound Transmission Class (STC) shows the transmission loss in dBA

Table N-3. Sound Transmission Class (STC) of Selected Wall Materials

Wall Material	Sound Transmission Class (Transmission Loss in dBA)
Brick 10 cm to 15cm, various finishes	45 to 60
Hollow Clay Block 14 cm, various finishes	47 to 50
Solid Concrete Block 9 cm to 20 cm various finishes	47 to 62
Wood stud walls, various finishes	47 to 50
Cavity Walls 10cm to 20 cm, various finishes	47 to 50

DEVELOPMENT PERMIT REVIEW

8. The City shall review development proposals according to their potential noise impacts on abutting uses and impacts by abutting uses in accordance with the standards and requirements stipulated by this Plan and incorporated into the Development Code

8a. The City shall consider the use of temporary noise barriers, limited hours of operation, limiting times of year for construction near schools to reduce construction-related noise.

9. Development projects shall be reviewed in accordance with maximum anticipated, or "worst case" noise conditions as the basis for land use decisions and design controls to prevent future incompatibilities.

10. The City shall review the street layout of proposed residential subdivisions with the objective of reducing traffic volumes and through trips as a means to reduce noise levels. The use of road dips, diagonal parking, one-way streets, speed humps, and other traffic controls shall be considered to reduce vehicular travel and speed, provided that engineering and safety standards are met. If determined to be feasible, rubberized asphalt paving material shall be required for all new roads.

10a. Speed limits are legally set in accordance with the prevailing speed of traffic based on engineering studies. However, when feasible, consistent and necessary, the reduction of speed limits on arterials should be used to decrease ambient noise levels.

11. The City shall evaluate the noise impacts of truck deliveries on adjacent residential properties as a part of the development and environmental review process for all commercial and manufacturing uses. Where truck deliveries would have the potential to create noise exceeding 60 dBA CNEL at an adjacent noise sensitive use, the inclusion of noise mitigation techniques such as the use of sound wall or enclosure of delivery areas shall be required.

11a. To reduce noise associated with truck traffic, the City should implement the following noise reduction strategies:

- *The City, in cooperation with Caltrans, shall consider a truck noise reduction plan for Highway 150 and any other roads that experience truck traffic.*
- *The City and Caltrans shall consider limitations on hours of operation and other truck operations that could be limited to reduce noise impacts.*
- *The City should encourage the use of established designated truck routes in accordance with Figure CI-8 of the Circulation Element that avoid residential areas and confine truck traffic to major throughfares.*
- *The City should post designated areas and times to prohibit the use of jake brakes along established truck routes adjacent to sensitive uses. For postings along SR 150 and SR 126, the City should work with Caltrans to establish restrictions on the use of jake brakes.*
- *The City shall consider incorporating truck noise restrictions into the City Noise Ordinance.*

ENFORCEMENT

12. The City shall aggressively pursue enforcement of its Noise Ordinance to respond and mitigate noise violations. Nuisance noise, such as barking dogs and loud music, shall also be an enforcement priority for the City.

13. The City shall monitor and enforce implementation of noise mitigation requirements imposed as part of the project permitting process.

14. The City shall work with the Santa Paula Airport to ensure that local ordinances and state and federal regulations regarding altitudes of departing and arriving aircraft are met.

15. Enforce sections of the California Vehicle Code related to mufflers and modified exhaust systems.

EQUIPMENT IMPROVEMENTS

16. Request noise level specifications from vendors when purchasing new public equipment or vehicles to ensure that noise levels are not excessive.

17. Work with farmers in and around the City to address any identified noise problems relating to the use of farm equipment such as frost protection equipment and farm machinery routes on City streets.

INTERGOVERNMENTAL COORDINATION

18. Work with public agencies and institutions who maintain facilities in the City to ensure that the noise generated by their activities does not spill over onto adjacent properties.

19. Support the efforts of the California Department of Transportation and local transportation agencies in developing noise reduction measures for State Route 126 and State Route 150, including landscaping, sound barrier walls and elevating or depressing roads.
20. Work with the Ventura County Transportation Commission to coordinate noise control efforts planning for current and future railroad operations.

ADMINISTRATIVE

21. Maintain a data file documenting existing and future noise conditions, using the contour maps contained in this Plan. As noise assessments are conducted for proposed projects or other noise studies are performed, the data base shall be updated. The noise data shall be updated entirely at least once every five years.

22. Review and update noise standards and criteria, as necessary, at least every five years to reflect actual noise conditions and available noise control techniques.

23. Work with railroad operators to determine when noise controls may be necessary due to the adjacency of railroad lines to residential uses.

24. The City shall consider a program to encourage the use of bicycles to reduce vehicular traffic and associated noise in Santa Paula as discussed in the Circulation Element. The City shall properly maintain existing bicycle routes, and accordingly, the proposed program shall: encourage the use of bicycle education programs; and initiate public awareness programs to promote and encourage the use of bicycles.

25. Implement Transportation Management Control programs to reduce vehicular travel and associated noise in the City in accordance with goals in the Circulation Element of the General Plan.

VI. RELATIONSHIP TO OTHER ELEMENTS

The Noise Element serves to complement and inform the Land Use Element and Circulation Element of this General Plan. The Noise Element can be used to provide further information and guidance to the Land Use and Circulation Elements.