CHAPTER

9

NOISE ELEMENT

INTRODUCTION

The acoustical environment relates directly to a community's quality of life. By recognizing existing sources of noise pollution and taking reasonable steps to mitigate future impacts, the City may achieve an amiable environment and preserve the well-being of the community. Noise has been linked directly to human health and, aside from general annoyances, excessive noise is a source of discomfort, interferes with sleep, and disrupts communication and relaxation.

In addition to Highway 101, which represents the dominant noise source in the community, the ambient noise environment in Greenfield is defined by local traffic on city streets, commercial and industrial uses, active recreation areas of parks, and outdoor play areas of schools. Due to relatively low existing traffic volumes on city streets, the ambient noise environment in most of the City's residential areas is also low.

As development occurs, additional noise pollution will emerge as a temporary impact of construction. This Noise Element provides a basis for comprehensive local policies to control and abate environmental noise and to protect the community from excessive noise exposure.

Information included in the Noise Element Technical Study (See Appendices) provided the City with a basis for determining appropriate locations and patterns for land use designations to minimize noise impacts related to incompatible land uses.

Goals and policies included in this Element are intended to protect existing regions of the planning area whose noise environments are deemed acceptable and also those locations throughout the community deemed "noise sensitive". In addition, the goals and policies address protection of existing noise-producing commercial and industrial uses in the City of Greenfield from encroachment by noise-sensitive land uses.

Consistency with State Law

Government Code 65302(f) establishes the requirement for a Noise Element to "identify and appraise noise problems in a community" and to "analyze and quantify, to the extent practicable, . . . current and

projected noise levels." This Noise Element must identify these sources of noise and provide noise contours – distances at which a predicted noise level will occur. The intent of the Noise Element is to provide useful information and policies to prevent development in areas that are unsuitable due to excessive noise.

GOALS, POLICIES AND PROGRAMS

Goal 9.1
Protect the community from the harmful and annoying effects of exposure to excessive noise.

Policy 9.1.1
Noise compatibility of proposed new development shall be determined based on the land use compatibility table shown in **Figure 9-1** and the standards contained within **Tables 9-1** and **9-3** for determining noise compatibility.

Policy 9.1.2
New development of noise-sensitive uses shall not be allowed where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 9-1 as measured immediately within the property line or within an outdoor activity area (location designated by the City) of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 9-1.

Policy 9.1.3
Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 9-1 as measured immediately within the property line of lands designated for noise-sensitive uses.

Note: For the purposes of the Noise Element, transportation noise sources are defined as traffic on public roadways and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Other noise sources are presumed to be subject to local regulations, such as a noise control ordinance. Non-transportation noise sources may include industrial operations, outdoor recreation facilities, Heating, Ventilation, Air Conditioning (HVAC) units, loading docks, etc.

Policy 9.1.4
Where a proposed non-residential land use is likely to produce noise levels exceeding the performance standards of Table 9-1 at existing or planned noise-sensitive uses, an acoustical analysis shall be required as part of the environmental review process so that noise mitigation may be included in the project design. The requirements for the contents of an acoustical analysis are provided in Table 9-2.

Policy 9.1.5
Noise created by a new transportation noise source shall be mitigated so as not to exceed the levels specified in Table 9-3 at outdoor activity areas or interior spaces of existing noise-sensitive land uses.

Policy 9.1.6
Existing noise-sensitive uses may be exposed to increased noise levels due to construction of roadway improvement projects as a result of increased roadway capacity, increases in travel speeds, etc. It may not be practical to reduce increased traffic noise levels consistent with those contained Table 9-3. Therefore, as an alternative, the following criteria may be used as a test of significance for roadway improvement projects:

i. Where existing traffic noise levels are less than 60 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +5 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant; and
ii. Where existing traffic noise levels range between 60 and 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +3 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant; and
iii. Where existing traffic noise levels are greater than 65 dB Ldn at the outdoor activity areas of noise-sensitive uses, a +1.5 dB Ldn increase in noise levels due to roadway improvement projects will be considered significant.

Policy 9.1.7
Where noise mitigation measures are required to achieve the standards of Tables 9-1 and 9-3, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

Note: Existing dwellings and new single-family dwellings may not be subject to City review with respect to satisfaction of the standards of the Noise Element. As a consequence, such dwellings may be constructed in areas where noise levels exceed the standards of the Noise Element. The City is not responsibility to ensure that such dwellings meet these noise standards, or the noise standards imposed by lending agencies such as U.S. Department of Housing and Urban Development (HUD), the Federal Housing Administration (FHA) and the State of California Department of Veteran Affairs (Cal Vet). If homes are located and constructed in accordance with the Noise Element, it is expected that the resulting exterior and interior noise levels will conform to the HUD/FHA/Cal Vet noise standards.

Policy 9.1.8
Obtrusive, discretionary noise generated from residences, motor vehicles, commercial establishments, and/or industrial facilities should be minimized or prohibited.

Policy 9.1.9
Since activities associated with agricultural operations (such as crop dusting, tractor operations, and machinery operation, etc.) are recognized as noise sources that may be considered annoying to some residents, and these activities can occur during the daytime and nighttime hours, new development of residential uses adjacent to agricultural uses shall provide full disclosure of potential noise sources to future residents consistent with the right to farm ordinance anticipated for adoption by the City.

Program 9.1.A
The City has adopted and will update as necessary a Noise Ordinance to govern nuisance noise introduced by construction, or residential, commercial, or industrial uses. The purpose of this Ordinance is to regulate excessive noise produced by sources including, but not limited to, car stereos, parties, commercial and industrial activities (except where approved by the City), and other discretionary noise observed to be a nuisance to adjacent communities or businesses.

Goal 9.2
Protect the economic base of the City by preventing the encroachment of noise-sensitive land uses into areas affected by existing noise-producing uses.

Policy 9.2.1
New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected noise levels from transportation noise sources which exceed the levels specified in Table 9-3, unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Table 9-3. Where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 9-3 or the performance standards of Table 9-1, an acoustical analysis shall be required as part of environmental review so that noise mitigation may be included in the project design.

Table 9-1
Noise Level Performance Standards for New Projects
Affected by or Including Non-Transportation Noise Sources

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}, dB	55	45

1. Each of the noise levels specified above shall be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises (e.g., humming sounds, outdoor speaker systems). These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

2. The City can impose noise level standards which are more restrictive than those specified above based upon determination of existing low ambient noise levels.

3. Fixed noise sources which are typically of concern include, but are not limited to the following:

HVAC Systems	Cooling Towers/Evaporative Condensers
Pump Stations	Lift Stations
Emergency Generators	Boilers
Steam Valves	Steam Turbines
Generators	Fans
Air Compressors	Heavy Equipment
Conveyor Systems	Transformers
Pile Drivers	Grinders
Drill Rigs	Gas or Diesel Motors
Welders	Cutting Equipment
Outdoor Speakers	Blowers

4. The types of uses which may typically produce the noise sources described above include but are not limited to: industrial facilities including pump stations, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

Table 9-2
Requirements for an Acoustical Analysis

An acoustical analysis prepared pursuant to the Noise Element shall:	
A.	Be the financial responsibility of the applicant.
B.	Be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics.
C.	Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
D.	Estimate existing and projected cumulative (20 years) noise levels in terms of L_{dn} or CNEL and/or the standards of Table 9-1, and compare those levels to the adopted policies of the Noise Element.
E.	Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modifications to buildings which contain noise-sensitive land uses.
F.	Estimate noise exposure after the prescribed mitigation measures have been implemented.
G.	Describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures

Table 9-3
Maximum Allowable Noise Exposure Transportation Noise Sources

Land Use	Outdoor Activity Areas[1] L_{dn}/CNEL, dB	Interior Spaces	
		L_{dn}/CNEL,dB	L_{eq}, dB[2]
Residential	65	45	--
Transient Lodging	65[3]	45	--
Hospitals, Nursing Homes	65	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	65	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Notes:

1. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.
2. As determined for a typical worst-case hour during periods of use.
3. In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.

Table 9-4
Noise Standards for New Uses Affected by Transportation Noise
City of Greenfield Noise Element

New Land Use	Outdoor Activity Area - Ldn	Interior - Ldn/Peak Hour Leq1	Notes
All Residential	60-65	45	2, 3, 4
Transient Lodging	65	45	5
Hospitals & Nursing Homes	60	45	6
Theaters & Auditoriums	---	35	
Churches, Meeting Halls, Schools, Libraries, etc.	60	40	
Office Buildings	65	45	7
Commercial Buildings	65	50	7
Playgrounds, Parks, etc.	70	---	
Industry	65	50	7

Notes:

1. For traffic noise within the City of Greenfield, Ldn and peak-hour Leq values are estimated to be approximately similar. Interior noise level standards are applied within noise-sensitive areas of the various land uses, with windows and doors in the closed positions.
2. Outdoor activity areas for single-family residential uses are defined as back yards. For large parcels or residences with no clearly defined outdoor activity area, the standard shall be applicable within a 100-foot radius of the residence.
3. For multi-family residential uses, the exterior noise level standard shall be applied at the common outdoor recreation area, such as at pools, play areas or tennis courts. Where such areas are not provided, the standards shall be applied at individual patios and balconies of the development.
4. Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.
5. Outdoor activity areas of transient lodging facilities include swimming pool and picnic areas.
6. Hospitals are often noise generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.
7. Only the exterior spaces of these uses designated for employee or customer relaxation have any degree of sensitivity to noise.

Table 9-5
Noise Standards for New Uses Affected by Non-Transportation Noise
City of Greenfield Noise Element

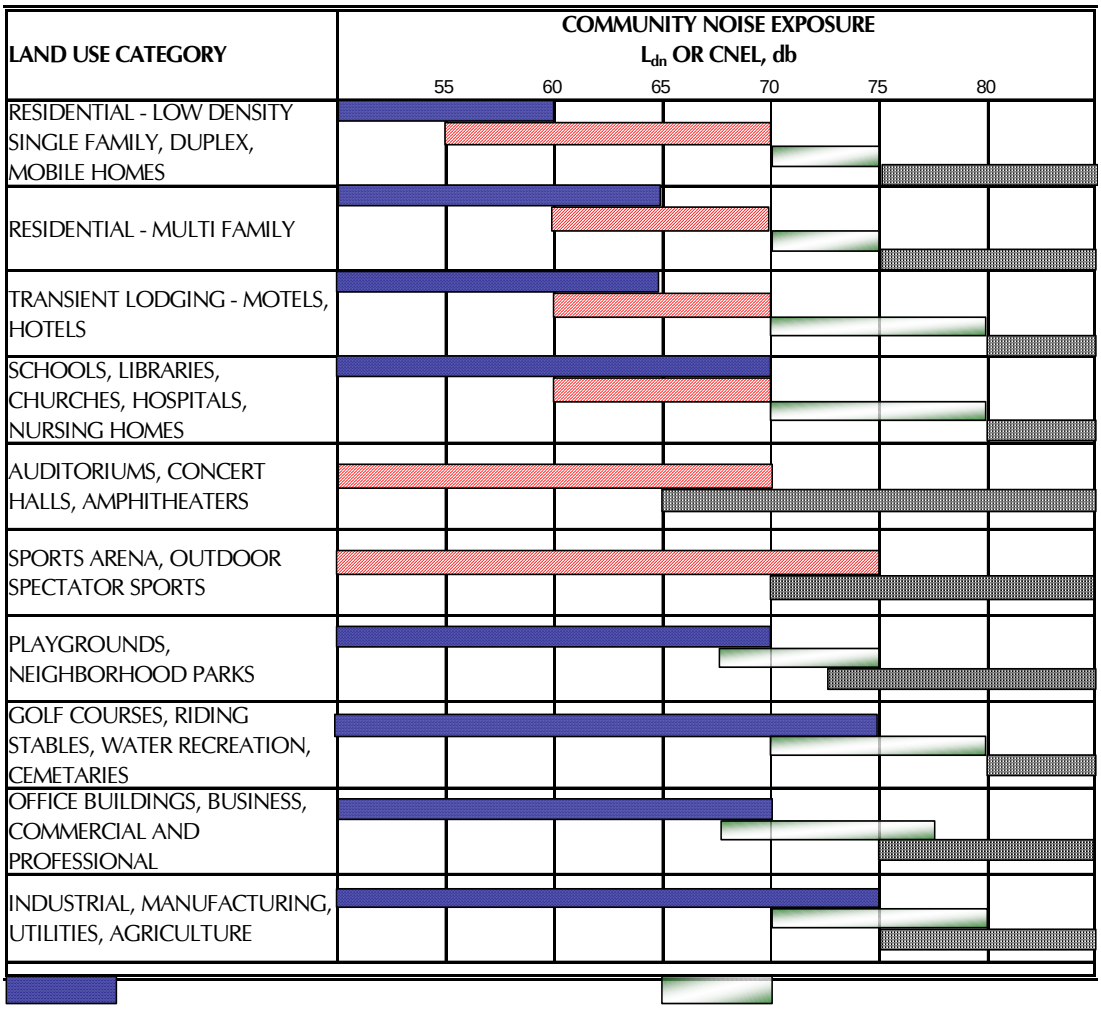
New Land Use	Outdoor Activity Area - Leq		Interior - Leq	Notes
	Daytime	Nighttime	Day and Night	
All Residential	50	45	35	1, 2
Transient Lodging	55	---	40	3
Hospitals & Nursing Homes	50	45	35	4
Theaters & Auditoriums	---	---	35	
Churches, Meeting Halls, Schools, Libraries, etc.	55	---	40	
Office Buildings	55	---	45	5, 6
Commercial Buildings	55	---	45	5, 6
Playgrounds, Parks, etc.	65	---	---	6
Industry	65	65	50	5

Notes:

1. Outdoor activity areas for single-family residential uses are defined as back yards. For large parcels or residences with no clearly defined outdoor activity area, the standard shall be applicable within a 100-foot radius of the residence.
2. For multi-family residential uses, the exterior noise level standard shall be applied at the common outdoor recreation area, such as at pools, play areas or tennis courts. Where such areas are not provided, the standards shall be applied at individual patios and balconies of the development.
3. Outdoor activity areas of transient lodging facilities include swimming pool and picnic areas, and are not commonly used during nighttime hours.
4. Hospitals are often noise generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.
5. Only the exterior spaces of these uses designated for employee or customer relaxation have any degree of sensitivity to noise.
6. The outdoor activity areas of office, commercial and park uses are not typically utilized during nighttime hours.

General: The Table 5 standards shall be reduced by 5 dB for sounds consisting primarily of speech or music, and for recurring impulsive sounds. If the existing ambient noise level exceeds the standards of Table 5, then the noise level standards shall be increased at 5 dB increments to encompass the ambient.

Figure 9-1
LAND COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS



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.

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.

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.

CLEARLY UNACCEPTABLE
New construction or developemtn clearly should not be undertaken.

SETTING

OVERVIEW

The major noise sources in Greenfield consist of Highway 101 and local traffic on city streets, commercial and industrial uses, active recreation areas of parks and outdoor play areas of schools. Each of these noise sources is discussed individually below.

Roadways

A primary source of noise in Greenfield is the sound generated from vehicles traveling over roadways. Roadway noise is a combination of direct noise emission from the vehicle and the sound from tires passing over the road surface. In addition, large truck traffic can dramatically contribute to roadway noise, as the sound generated from jake-brakes, large tires, and diesel engines greatly exceeds noise from passenger cars and light trucks.

Roadway noise is most apparent near the actual roadways, though acoustical conditions can dramatically change the nature and intensity of the noise. The elevation of the roadways relative to adjacent receptors can affect the level of noise, as can dense vegetation and topography. Because Greenfield is relatively flat, there is little opportunity to use topography to minimize roadway noise. In addition, the current and anticipated levels of traffic may not warrant the extensive improvement required to improve roadway noise. As such, the location and protection of new developments should be considered to insure that residential or other sensitive uses are not compromised by extraneous roadway noise.

Various measures can be implemented in new developments to lessen noise impacts on new neighborhoods. These include strategic placement and protection of sensitive uses and the utilization of berms and other attenuating devices.

Levels of noise are generally measured in terms of noise contours – delineations of areas where a predicted level of noise (measured in decibels dB) can be expected. Generally, noise contours predict the distance in feet from a source of noise that a receptor must be in order to experience a specified level (in dB) of noise. The accepted threshold for comfortable ambient noise in a residential are is 65 dB. Prolonged levels above 65 dB are considered to be an annoyance when they occur in residential areas. The following table presents typical sound levels of common noise sources.

Table 9-6
Typical A-Weighted Maximum Sound Levels of Common Noise Sources

Decibels	Description
130	Threshold of pain
120	Jet aircraft take-off at 100 feet
110	Riveting machine at operators position
100	Shot-gun at 200 feet
90	Bulldozer at 50 feet
80	Diesel locomotive at 300 feet
70	Commercial jet aircraft interior in flight
60	Normal conversation speech at 5-10 feet
50	Open office background level
40	Background level within a residence
30	Soft whisper at 2 feet
20	Interior of recording studio

The Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA-RD-77-108) with the Calveno vehicle noise emission curves was used to predict traffic noise levels within the

Greenfield City Limits. The FHWA Model is the traffic noise prediction model currently preferred by the Federal Highway Administration, the State of California Department of Transportation (Caltrans), and most city and county governments, for use in traffic noise assessment. Although the FHWA Model is in the process of being updated by a more sophisticated traffic noise prediction model, the use of RD-77-108 is considered acceptable for the development of General Plan traffic noise predictions.

Table 9-7
Distances to 60 and 65 dB Ldn Contours
City of Greenfield Noise Element

			Distance to Ldn Contours, feet			
			60 dB Ldn		65 dB Ldn	
Segment	Roadway Name	Segment Description	Existing	Future	Existing	Future
1	State Route 101	All Segments	676	860	314	399
2	12th Street	Walnut Ave. to Oak Ave.	36	89	17	41
3		Oak Ave. to Elm Ave.	33	56	15	26
4	El Camino Real	North of Cypress Ave.	67	173	31	80
5		Cypress Ave. to Pine Ave.	60	158	28	73
6		Pine Ave. to Cherry Ave.	64	135	30	63
7		Cherry Ave. to Walnut Ave.	70	154	33	71
8		Walnut Ave. to Apple Ave.	76	129	35	60
9		Apple Ave. to Oak Ave.	69	123	32	57
10		Oak Ave. to Elm Ave.	62	98	29	46
11		South of Elm Ave.	51	88	24	41
12	3rd Street	Pine Ave. to Cherry Ave.	0	137	0	64
13		Cherry Ave. to Walnut Ave.	0	168	0	78
14		North of Apple Ave.	33	125	15	58
15		Apple to Oak Ave.	32	124	15	58
16		South of Oak Ave.	30	99	14	46
17	Pine Avenue	12th St to El Camino Real	10	82	5	38
18		El Camino Real to SR 101	8	125	4	58
19		East of SR 101	0	83	0	38
20	Walnut Avenue	12th St to El Camino Real	48	122	22	57
21		El Camino Real to SR 101	67	166	31	77
22		SR 101 to 3rd St.	51	271	24	126
23		East of 3rd St.	0	85	0	39
24	Oak Avenue	12th St. to El Camino Real	40	109	19	51
25		El Camino Real to 7th St.	63	107	29	50
26		7th St. to SR 101	64	114	30	53
27		4th St. to 3rd St.	26	91	12	42
28	Elm Avenue	West of 12th St.	24	70	11	33
29		12th St. to El Camino Real	52	107	24	50
30		El Camino Real to 5th St.	52	108	24	50
31		4th St. to 3rd St.	42	93	19	43
32		3rd St. to 2nd St.	14	67	7	31
33	Thorne Road	West of 12th St.	0	30	0	14
34		East of 12th St.	21	81	10	38

Source: *Bollard & Brennan, Inc., 2004*

The FHWA Model was used with traffic data obtained from published Caltrans traffic counts, the City of Greenfield, and field surveys to develop Ldn contours for Highway 101 and the major project area roadways within the City of Greenfield. The FHWA Model input data for those roadways is provided in Table 9-1. The distances from the centerlines of the major roadways to the 60 and 65 dB Ldn contours are also summarized in **Table 9-1**. **Figure 3** shows the results of continuous noise level measurements conducted adjacent to Highway 101.

Topography in the City of Greenfield does not vary considerably, as the area is fairly flat. As a result, the results of the FHWA analysis shown in Table 9-1 are considered to be reasonably representative of actual traffic noise conditions in the City. Nonetheless, it is not possible to evaluate the localized effects of topography and screening by intervening structures on traffic noise within the framework of the General Plan Noise Element. Therefore the contour distances presented in Table 1 should be considered conservative estimates of traffic noise exposure, to be supplemented by a detailed and project-specific study as needed.

The data contained in Table 9-1 are limited to Highway 101 and major area roadways. In the absence of existing and projected future traffic data for other roadways in the City of Greenfield, the distance to the 60 dB Ldn traffic noise contours for these roadways can be estimated using the nomograph shown in **Figure 4**.

Non-Transportation Noise Sources

The production of noise is a result of many processes and activities, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by Federal and State employee health and safety regulations (OSHA), but exterior noise levels may exceed locally acceptable standards. Commercial, recreational and public service facility activities can also produce noise which affects adjacent sensitive land uses.

From a land use planning perspective, fixed-source noise control issues focus upon two goals: to prevent the introduction of new noise-producing uses in noise-sensitive areas, and to prevent encroachment of noise-sensitive uses upon existing noise-producing facilities. The first goal can be achieved by applying noise performance standards to proposed new noise-producing uses. The second goal can be met by requiring that new noise-sensitive uses in proximity to noise-producing facilities include mitigation measures to ensure compliance with those noise performance standards.

Descriptions of existing fixed noise sources in the City of Greenfield are provided below. These uses are intended to be representative of the relative noise generation of such uses, and are intended to identify specific noise sources which should be considered in the review of development proposals. Site specific noise analyses should be performed where noise sensitive land uses are proposed in proximity to these (or similar) noise sources, or where similar where similar sources are proposed to be located near noise-sensitive land uses.

General Service Commercial & Light Industrial Uses

Noise sources associated with service commercial uses such as automotive and truck repair facilities, agricultural staging areas, tire installation centers, car washes, and loading docks, are found at various locations within the City of Greenfield. The noise emissions of these types of uses are dependant on many factors, and are

therefore, difficult to quantify precisely. Nonetheless, noise generated by the these uses contributes to the ambient noise environment in the immediate vicinity of these uses, and should be considered where either new noise-sensitive uses are proposed nearby or where similar uses are proposed in existing residential areas.

Parks and School Playing Fields

There are parks and school uses within the Greenfield City limits, spread throughout the City. Noise generated by these uses depends on the age and number of people utilizing the respective facility at a given time, and the types of activities they are engaged in. School playing field activities tend to generate more noise than those of neighborhood parks, as the intensity of school playground usage tends to be much higher. At a distance of 100 feet from an elementary school playground being used by 100 students, average and maximum noise levels of 60 and 75 dB, respectively, can be expected. At organized events such as high-school football games with large crowds and public address systems, the noise generation is often significantly higher. As with service commercial uses, the noise generation of parks and school playing fields is variable.

Existing Industrial Uses

Noise impacts of two existing industrial uses in Greenfield were analyzed in the Noise Technical Report. Noise producing equipment identified at Cream of the Crop Carrot Processing Facility, located at 40825 12th Street, includes pressure washers and carrot peeling and chopping equipment, located within an enclosed metal building. Noise levels within the metal building in which the equipment is located are regulated by the Occupational Safety and Health Administration and must not exceed 90 dBA.

A short-term noise level measurement of plant operations was performed at the Kraft Foods CornNuts plant, located at 40906 10th Street. At a distance of approximately 225 feet, noise levels generated by this plant were measured to be approximately 63 dB Leq.

Community Noise Survey

To quantify existing noise levels in the quieter parts of the City of Greenfield, a community noise survey was performed at 5 locations in this City which are removed from major noise sources. The measurement locations were each monitored for two 15-minute periods during daytime hours and one 15-minute period during nighttime hours. The community noise survey noise measurement locations are shown on **Figure 9-2.** The results of the community noise survey are provided in **Table 9-6.**

Table 9-8
Community Noise Measurement Survey results
Greenfield Noise Element – August 24-25, 2004

Site	Location	Date	Time Period	Leq	Lmin	Lmax	Estimated Ldn	Sources
1	West Corner of 3rd Street and Pine Avenue	8/25/04	Morning	49	46	59		Wind, Hwy 101, farming equipment,
		8/24/04	Evening	64	54	74		local traffic
		8/24/04	Night	44	38	48	55	
2	West of 10th Street and El Camino Real	8/25/04	Morning	55	44	74		Wind, local traffic, industrial uses,
		8/24/04	Evening	59	54	69		Hwy 101
		8/24/04	Night	43	38	49	50	
3	South of 13th Street and Oak Avenue	8/25/04	Morning	43	35	60		Wind, local traffic, soccer,
		8/24/04	Evening	57	44	68		distant aircraft, distant traffic
		8/24/04	Night	38	34	44	45	
4	South of 11th Street and Oak Avenue	8/25/04	Morning	51	40	62		Wind, local traffic, dogs,
		8/24/04	Evening	56	48	69		light construction, distant traffic
		8/24/04	Night	40	33	48	45	
5	South of Elm Avenue Between 2nd Street and 3rd Street	8/25/04	Afternoon	59	49	67		Wind, local traffic
		8/24/04	Evening	56	45	71		
		8/24/04	Night	44	42	48	55-60	

* The noise level data collected in the evening time period are significantly higher than other measured noise levels due to high winds in the evening time period.

.