Noise

This section of the Background Report describes the existing conditions of the City of Elk Grove relative to Noise.

The major noise sources in the City of Elk Grove consist of State Route 99 and local traffic on streets, commercial and industrial uses, active recreation of parks, outdoor play areas of schools, and railroad operations. Each of these noise sources is discussed individually below.

Transportation Noise Sources

Roadway Traffic Noise Levels

The Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA-RD-77-108) with the Calveno vehicle noise emission curves was used to predict existing and cumulative traffic noise levels within the City of Elk Grove. The FHWA Model is the traffic noise prediction model currently preferred by the Federal Highway Administration, the Sate of California Department of Transportation (Caltrans), and most county and city 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 still considered acceptable for the development of General Plan traffic noise predictions.

Table 4-1 shows existing traffic volumes, noise levels and distances to traffic noise contours for the major roadways located within the City of Elk Grove. **Figure 4-1** illustrates the noise contours for the major roadways.

Railroads

According to the Railroad Atlas of North America, there are two sets of railroad tracks operated within the Planning Area. The Union Pacific Railroad (UPRR) tracks run from north to south near Franklin Boulevard and form the western boundary of the City. The California Traction Company Railroad (CTCRR) tracks run from north to south through the center of the City near Elk Grove-Florin Road.

In order to quantify train activity and the associated noise levels along the CTCRR tracks, a continuous noise monitoring of railroad activity was conducted on both the UPRR and CTCRR tracks in 2002. The results were compared to similar data previously collected. Although daily train usage of these tracks varies, based upon the results of this and previous monitoring periods, it was determined that approximately twenty trains per day are operated along each set of tracks. The Sound Exposure Level (SEL) of individual trains was recorded along with the duration and maximum noise level during the monitoring program. The aggregate of the data collected indicates that at a distance of 100 feet, the average train operating on these tracks will produce an SEL of approximately 105 dB with usage of the warning horn, and approximately 100 dB without the usage of the horn. Trains are generally required to sound warning horns within 800 feet of at-grade crossings located within the City of Elk Grove.

Airports

There are two existing airports within the Planning Area. These airports are the Sunset Sky Ranch Airport and Franklin Field. Sunset Sky Ranch Airport is a privately owned public use airport, while Franklin Field is operated by the Sacramento County Department of Airports.

The noise impacts from these airports were analyzed in the Sunset Skyranch Airport Comprehensive Land Use Plan (CLUP) and the Franklin Field Comprehensive Land Use Plan (CLUP), both adopted by the Airport Land Use Commission in December 1988 and amended in December 1992. The data for these airports was obtained from these two comprehensive land use plans.

The aircraft noise generation of the airports in the Area varies. The Sunset Skyranch Airport CLUP, incorporated by reference, includes noise contours for the various airports. Specific locations and operational

Table 4-1
FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Roadway	From	To	ADT	Ldn at 100 ft.	Distance to 60 dB Ldn	Distance to 65 dB Ldn
Big Horn Blvd.	Franklin Blvd.	Laguna Blvd.	17595	65.0	215	100
Big Horn Blvd.	Laguna Blvd.	Elk Grove Blvd.	30089	67.3	307	143
Big Horn Blvd.	Elk Grove Blvd.	Kammerer Rd.	N/A	0.0	0	0
Bilby Rd.	Franklin Blvd.	Bruceville Rd.	822	51.7	28	13
Bond Rd.	East Stockton Blvd	Elk Grove Florin Blvd.	46892	69.2	413	192
Bond Rd.	Elk Grove Florin Rd.	Bradshaw Rd.	11854	63.3	165	77
Bond Rd.	Bradshaw Rd.	Grant Line Rd.	6128	60.4	106	49
Bradshaw Rd.	Vintage Park Rd.	Calvine Rd.	14205	64.1	186	86
Bradshaw Rd.	Calvine Rd.	Bond Rd.	9917	62.5	147	68
Bradshaw Rd.	Bond Rd.	Grant Line Rd.	5931	60.3	104	48
Bruceville Rd.	Jacinto Rd.	Sheldon Rd.	5897	60.2	104	48
Bruceville Rd.	Sheldon Rd.	Laguna Blvd.	17158	64.9	211	98
Bruceville Rd.	Laguna Blvd.	Elk Grove Blvd.	8162	61.6	129	60
Bruceville Rd.	Elk Grove Blvd.	Bilby Rd.	1348	53.8	39	18
Bruceville Rd.	Bilby Rd.	Eschinger Rd.	640	50.6	24	11
Calvine Rd.	Power Inn Rd.	Elk Grove-Florin Rd.	28037	67.0	293	136
Calvine Rd.	Elk Grove-Florin Rd.	Bradshaw Rd.	15250	64.4	195	91
Calvine Rd.	Bradshaw Rd.	Grant Line Rd.	7137	61.1	118	55
Center Pkwy.	Sheldon Rd.	Jacinto Rd.	13901	64.0	184	85
Elk-Grove Blvd.	I-5	Franklin Blvd.	10258	62.6	150	70
Elk Grove Blvd.	Franklin Blvd.	Bruceville Rd.	18253	65.1	220	102
Elk Grove Blvd.	Bruceville Rd.	West Stockton Blvd.	19243	65.4	228	106
Elk Grove Blvd.	West Stockton Blvd.	East Stockton Blvd.	34700	67.9	338	157
Elk Grove Blvd.	East Stockton Blvd	Elk Grove-Florin Rd.	34898	68.0	339	157
Elk Grove Blvd.	Elk Grove-Florin Rd.	Waterman Rd.	12790	63.6	174	81
Elk Grove Blvd.	Waterman Rd.	Grant Line Rd.	5529	60.0	99	46
Elk-Grove Florin	Vintage Park Rd.	Calvine Rd.	30553	67.4	310	144
Elk Grove-Florin	Calvine Rd.	Bond Rd.	31829	67.6	319	148
Elk Grove-Florin	Bond Rd.	Elk Grove Blvd.	26981	66.8	286	133
Elk Grove-Florin	Elk Grove Blvd.	East Stockton Blvd.	7342	61.2	120	56
Eschinger Rd.	SR 99	Carroll Rd.	383	48.4	17	8

Roadway	From	To	ADT	Ldn at 100 ft.	Distance to 60 dB Ldn	Distance to 65 dB Ldn
Excelsior Road	Gerber Rd.	Calvine Rd.	6399	60.6	109	51
Excelsior Road	Calvine Rd.	Sheldon Rd.	4705	59.3	89	41
Franklin Blvd.	Calvine Rd.	Laguna Blvd.	18699	65.2	224	104
Franklin Blvd.	Laguna Blvd.	Elk Grove Blvd.	9548	62.3	143	66
Franklin Blvd.	Elk Grove Blvd.	Hood Franklin Rd.	1547	54.4	42	20
Franklin Blvd.	Hood Franklin Rd.	South of Hood Franklin	640	50.6	24	11
Grant Line Rd.	SR99	East Stockton Blvd.	24085	66.3	265	123
Grant Line Rd.	East Stockton Blvd.	Bradshaw Rd.	11952	63.3	166	77
Grant Line Rd.	Bradshaw Rd.	Sheldon Rd.	9744	62.4	145	67
Grant Line Rd.	Sheldon Rd.	Calvine Rd.	11211	63.0	159	74
Grant Line Rd.	Calvine Rd.	Sloughhouse Rd.	14491	64.1	189	88
Harbor Point Dr.	Laguna Blvd.	Elk Grove Blvd.	4990	59.5	93	43
I-5	-	South of Hood Franklin	23583	72.7	700	325
I-5	Hood Franklin Rd.	Elk Grove Blvd.	22583	72.5	680	316
I-5	Elk Grove Blvd.	Laguna Blvd.	21025	72.2	648	301
I-5	Laguna Blvd.	Meadow View/Pocket Rd.	33975	74.3	893	414
Hood Franklin Rd.	I-5	Franklin Rd.	1878	55.3	48	22
Kammerer Rd.	Franklin Rd.	Bruceville Rd.	N/A	0	0	0
Kammerer Rd.	Bruceville Rd.	West Stockton Blvd.	2134	55.8	53	24
Laguna Blvd.	I-5	Franklin Rd.	32327	67.6	322	150
Laguna Blvd.	Franklin Blvd.	Bruceville Rd.	34606	67.9	337	157
Laguna Blvd.	Bruceville Rd.	West Stockton Blvd.	47910	69.3	419	194
Laguna Blvd.	West Stockton Blvd.	East Stockton Blvd	44581	69.0	399	185
Laguna Springs Dr.	Elk Grove Blvd.	Laguna Ridge Drive	N/A	0	0	0
Laguna Ridge Dr.	Big Horn Blvd.	Poppy Ridge Rd.	N/A	0.0	0	0
Laguna Ridge Dr.	Poppy Ridge Rd.	Kammerer Rd.	N/A	0.0	0	0
Power Inn Rd.	Calvine Rd.	Elsie Ave.	20782	65.7	240	111
Poppy Ridge Rd.	Franklin Rd.	West Stockton Blvd.	N/A	0.0	0	0
Sheldon Rd.	Center Parkway	West Stockton Blvd.	19335	65.4	229	106
Sheldon Rd.	West Stockton Blvd.	East Stockton Blvd	24513	66.4	268	124
Sheldon Rd.	East Stockton Blvd	Elk Grove-Florin Rd.	18155	65.1	219	102
Sheldon Rd.	Elk Grove-Florin Rd.	Bradshaw Rd.	15733	64.5	199	93

Roadway	From	To	ADT	Ldn at 100 ft.	Distance to 60 dB Ldn	Distance to 65 dB Ldn
Sheldon Rd.	Bradshaw Rd.	Grant Line Rd.	7010	61.0	116	54
State Route 99	Eschinger Rd.	Grant Line Rd.	29802	73.0	738	342
State Route 99	Grant Line Rd.	Elk Grove Blvd.	28474	72.8	715	332
State Route 99	Elk Grove Blvd.	Laguna Blvd.	27755	72.7	703	326
State Route 99	Laguna Blvd.	Sheldon Rd.	37790	74.0	864	401
State Route 99	Sheldon Rd.	Calvine Rd.	40697	74.4	908	421
State Route 99	Calvine Rd.	Stockton Blvd.	39716	74.3	893	415
Waterman	Calvine Rd.	Vintage Park Rd.	502	49.5	20	9
Waterman	Calvine Rd.	Bond Rd.	6035	60.3	105	49
Waterman	Bond Rd.	Grant Line Rd.	7306	61.2	120	56
Wilton Rd.	Grant Line Road	Dilllard Rd.	7277	61.1	119	55

Figure 4-1: Noise Contours

Figure 4-1, cont.

information for each of the airports discussed with the CLUPs are provided below.

Sunset Skyranch Airport

The Sunset Skyranch Airport is located near the intersection of Grant Line Road and Bradshaw Road along the southeast portion of the City. The airport's single paved runway is 2,780 feet long by 35 feet wide, with a gross weight-bearing strength of approximately 12,000 pounds. A parallel 1,900 by 25 foot gravel ultra-light runway also exists. The airport has 53 open tie-downs, 22 T-hangars, and 7 transient parking spaces. Ultra-lights operate at the airport, with annual operations estimated to be 30,000. The theoretical runway capacity is estimated to be 130,000 annual operations. Because touch-and-go operations are restricted, the airport serves primarily as an aircraft parking facility.

Franklin Field

Franklin Field is located approximately one mile northeast of the intersection of Twin Cities Road and Franklin Boulevard near the southern portion of the Planning Area. Franklin Field is a visual flight rated (VFR) airport having two perpendicular runways: a north/south runway (18-36) that is 3,295 feet long and 60 feet wide, and an east/west runway (9-27) which is 31,000 feet long and 60 feet wide. A 650 feet by 250 feet run-up apron and a tie-down apron (430 feet by 120 feet) exist. A wind cone and segmented circle are maintained to assist pilots. There are a total of 42 tie-down spaces, 23 from transient aircraft. There are also four T-hangars. No fixed-base operator exists. The sole use of Franklin Field is by general aviation aircraft, both single and multi-engine types, for training and touch-and-go activity. Crop dusters also use the facility during the planting and spraying season. There are an estimated 50,000 aircraft operations and 6 based aircraft at the airport.

Non-Transportation Noise Sources

The production of noise is a result of many processes and activities, even when 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 land uses upon existing noise 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 representative fixed noise sources in the City of Elk Grove are provided below. Refer to **Figure 4-2** for the mapped locations of these sites. These uses are intended to be representative of the relative noise generation of such uses, and are intended to identify specific noise sources that should be considered in the review of development proposals. The following examples are not intended to be a comprehensive list of all noise sources within the City. 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 sources are proposed to be located near noise-sensitive land uses.

Paramount Petroleum – 10090 Waterman Road

Operations at the Paramount Petroleum facility consist of storing and transporting petroleum. According to Ron Edingfield, Terminal Manager of Paramount Petroleum, operations at this facility take place 24-hours a day, seven days a week. The most significant noise-producing equipment at this facility includes two large boilers, forklifts, air compressors, and other equipment related to this process. The plant generates approximately fifty truck trips on a typical day.

The Paramount Petroleum facility was in operation at the time this report was being prepared, and a short-term measurement of the primary noise-producing portion of the facility was collected. At a distance of approximately 150 feet, this portion of the plant caused an average measured noise level of 61 dB. Mr. Edingfield was unaware of any noise complaints associated with the operation of this facility, and there are currently no specific plans for expansion of the facility.

Weyerhaeuser – 10628 Waterman Road

Operations at the Weyerhaeuser facility consist of manufacturing corrugated boxes. According to Paul Wimber, General Manager of Weyerhaeuser, operations at this facility are slightly seasonal. Generally two 10-hour shifts take place each day from January to October and two 8-hour shifts the remainder of the year. Most months this facility is operating from 5am one day to 1am the following day. The most significant noise-producing equipment at this facility is the cyclone located on the north end of the building. The purpose of the cyclone is to collect clippings and trim from the manufacturing process. The plant generates approximately 20-25 truck trips on a typical day.

The Weyerhaeuser facility was in operation at the time this report was being prepared, and a short-term measurement of the cyclone was collected. At a distance of approximately 100 feet from the cyclone an average measured noise level of 73 dB was measured. Mr. Wimber was unaware of any noise complaints associated with the operation of this facility, and there are currently no specific plans for expansion of this facility.

Georgia-Pacific – 10399 E. Stockton Boulevard

Operations at the Georgia-Pacific facility consist of manufacturing adhesives. According to Ronald Kellogg, Assistant Plant Manager of Georgia-Pacific, operations at this facility take place 24-hours a day, seven days a week. The most significant noise-producing equipment at this facility includes motors, agitators, forklifts, air compressors, and other equipment related to this process. The plant generates approximately 20 truck trips on a typical day.

The Georgia-Pacific facility was in operation at the time this report was being prepared, and a short-term measurement of the primary noise-producing portion of the facility was collected. At a distance of approximately 50 feet, this portion of the plant caused an average measured noise level of 59 dB. Mr. Kellogg was unaware of any noise complaints associated with the operation of this facility, and there are currently no specific plans for expansion of this facility.

Suburban Propane – 10450 Grant Line Road

Operations at the Suburban Propane facility consist of storage and distribution of propane. According to Pat Hicks of Suburban Propane, operations at this facility take place 24-hours a day, seven days a week. The most significant noise-producing equipment at this facility includes horns, whistles, and bells. The plant generates approximately 40 truck trips on a typical day.

The Suburban Propane facility was in operation at the time this report was being

Figure 4-2 – Location map

Figure 4-2 – Location map, cont.

prepared, however, no noise measurements were obtained. At this time Mr. Hicks was unaware of any noise complaints associated with the operation of this facility, and there are currently no specific plans for expansion of this facility.

Decore-ative Specialties – 9191 CMD Court

Operations at Decore-ative Specialties facility consist of the manufacturing of cabinet doors. According to John Girouex, Company Safety/Training Manager of Decore-ative Specialties, operations at this facility take place 7am-5pm Monday through Friday, although partial operations may continue up to midnight, and occasionally on Saturday. The majority of noise-producing equipment is indoors at this facility, with the exception of the sawdust collecting bag house, located on the east end of the building. The plant generates approximately 5-10 truck trips on a typical day.

The Decore-ative Specialties facility was in operation at the time this report was being prepared, however, no noise measurement was obtained. Mr. Girouex was unaware of any noise complaints associated with the operation of this facility, and there are currently no specific plans for expansion of this facility.

Super Pallet Recyling – 10401 Grant Line Road

Operations at the Super Pallet Recycling facility consist of manufacturing adhesives. According to Kenneth Holder, Vice President of Super Pallet Recycling, operations at this facility take place 7am – 5pm Monday through Friday and occasionally for half a day on Saturday. The most significant noise-producing equipment at this facility includes a wood grinder, front-loaders, forklifts, nail guns, and other equipment related to this process. The plant generates approximately 5 truck trips on a typical day.

The Super Pallet Recycling facility was in operation at the time this report was being prepared, and a short-term measurement of the primary noise-producing portion of the facility was collected. At a distance of approximately 20 feet, this portion of the plant caused an average measured noise level of 74 dB. Mr. Holder was unaware of any noise complaints associated with the operation of this facility, and there are currently no specific plans for expansion of this facility.

Meek's – 10547 E. Stockton Boulevard

Operations at the Meeks facility consist of cutting engineered wood and lumber distribution. According to Tami Stafford, Assistant Manager of Meeks, operations at this facility take place 7am – 5pm Monday through Friday during the winter and 7am – 12am during the summer. The most significant noise-producing equipment at this facility includes trucks, forklifts, chainsaws, and other equipment related to this process. The plant generates approximately 15-20 truck trips on a typical day.

The Meek's facility was in operation at the time this report was being prepared, however, no noise measurement was obtained. Ms. Stafford was unaware of any noise complaints associated with the operation of this facility, and there are currently no specific plans for expansion of this facility.

General Service Commercial and Light Industrial Uses

Noise sources associated with service commercial uses such as automotive repair facilities, wrecking yards, tire installation centers, car washes, loading docks, etc., are found at various locations within the City of Elk Grove. The noise emissions of these types of uses are dependent on many factors, and are therefore, difficult to quantify precisely. Nonetheless, noise generated by these uses contribute 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 several park and school uses within the City. These uses are 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 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.

Community Noise Survey

To quantify existing noise levels in the more heavily populated portions of the City of Elk Grove, a community noise survey was performed at 7 locations within predominately residential areas (see **Figure 4-3**). These locations were each monitored for short-term periods at various times during the day and night. The results of the community noise survey are provided in **Table 4-2**.

Figure 4-3

Figure 4-3, cont.

Table 4-2
Community Noise Measurement Survey results

Site	Location	Dates	Time	L_{eq}	L_{max}	L_{50}	Estimated L_{dn}	Sources
1	Merwin F. Rose Park	5-10-02	2:18 pm	52	67	49		Local traffic, small aircraft
		8-1-02	10:42 am	49	64	47		Local traffic
		8-1-02	10:07 pm	49	57	47	55	Local traffic, wind
2	Wackman Park	5-10-02	2:55 pm	47	56	45		Local traffic, small aircraft
		8-1-02	11:05 am	45	53	45		Local traffic, small aircraft
		8-1-02	10:27 pm	49	51	49	50-55	Traffic, wind, crickets
3	Kloss Park	5-10-02	3:23 pm	52	58	51		Local traffic, small aircraft, children
		8-1-02	11:28 am	47	57	46		Local traffic, small aircraft, children
		8-1-02	10:41 pm	46	55	45	50-55	Local traffic
4	Lichenbergen Park	5-10-02	3:47 pm	49	61	48		Local traffic, birds
		8-1-02	11:45 am	50	64	47		Traffic, small aircraft
		8-1-02	10:54 pm	49	58	46		Local traffic
		8-2-02	9:18 am	55	61	54	55	Local traffic, construction
5	Foulks Park	5-10-02	4:14 pm	50	63	48		Local traffic, children
		8-1-02	11:07 pm	43	53	41		Local traffic, sprinklers
		8-2-02	8:30 am	55	66	51	55	Local traffic, children, small aircraft
6	Camden Park	5-10-02	4:46 pm	51	69	50		Local traffic, small aircraft
		8-1-02	10-08 am	58	64	58		Local traffic, wind
		8-1-02	11:28 pm	52	70	50	55	Local traffic, train horn
7	Elk Grove Park	5-10-02	5:19 pm	53	61	53		State Route 99, local traffic
		8-1-02	11:50 pm	47	52	47		State Route 99, local traffic
		8-2-02	9:38 am	55	58	55	55	State Route 99, local traffic