City of Baldwin Park
2020 General Plan

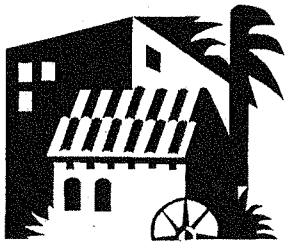
Noise Element

November, 2002

Table of Contents

List of Tables

List of Figures



NOISE ELEMENT

Introduction

Purpose of the Element

Noise control helps preserve the quality of a community. Developing effective strategies to reduce excessive noise is essential to creating a safe and compatible living and working environment. Since 1971, the Noise Element has been one of the mandatory elements of a general plan. The Noise Element is a comprehensive program for including noise control in the planning process, identifying noise-sensitive land uses and noise sources, and defining areas of noise impact. The Noise Element establishes goals, policies, and programs to ensure that Baldwin Park residents will be protected from excessive noise.

Element Scope and Content Element

The Noise Element follows guidelines in the State Government Code Section 65301(f) and Section 46050.1 of the Health and Safety Code. It quantifies the community noise environment by establishing noise exposure contours for both near-and long-term levels of growth and noise-generating activity. This information guides development of goals and policies to achieve noise compatible land uses and identifies baseline noise levels and sources to help local noise ordinance enforcement.

The Element is divided into three sections: 1) Introduction; 2) Issues, Goals and Policies; and 3) the Noise Plan. In the Issues, Goals and Policies section, noise-sensitive issues are identified, and corresponding goals and policies are established. The Plan explains how the goals and policies will be achieved and implemented.

Related Plans and Programs

Several local and State laws regulate point source noise and establish standards to protect community residents from excessive noise.

Baldwin Park Municipal Code

Baldwin Park has adopted several noise ordinances into its Municipal Code. Local law enforcement and code enforcement personnel respond to ordinance violations.

State Noise Insulation Standards

Title 25, Section 1092 of the California Government Code sets forth requirements for the insulation of multiple-family residential dwelling units from excessive and potentially harmful noise. The State indicates that locating units in areas where exterior ambient noise levels exceed 65 dBA is undesirable. Whenever such units are to be located in such areas, the developer must incorporate into building design construction features which reduce interior noise levels to 45 dBA CNEL.

California Environmental Quality Act Law and Guidelines (CEQA)

The California Environmental Quality Act requires a thorough analysis of potential environmental consequences resulting from a development project or from a plan that guides future development. Excessive noise is recognized as an environmental impact under this law. CEQA provides a means by which City officials and the general public can identify the potential noise impacts a project will have on the community, and to allow for mitigation or avoidance of such impacts.

Issue Areas

The three major noise issues in Baldwin Park are: (1) noise and land use planning; (2) transportation noise; and (3) non-transportation noise.

Noise and Land Use Planning

Certain areas of the community are subject to high noise levels. The consideration of the sources and recipients of noise early in the land use planning process is an effective method of minimizing the impacts of noise on the affected population.

Transportation Noise

Several transportation-related noise sources, including Metrolink rail operations, major arterials and collector roadways, and the freeways, impact residents living along these routes. Because the City largely cannot affect the sources of noise, mitigation efforts must focus on shielding established noise-sensitive uses and avoiding future exposure of new development.

Non-Transportation Noise

Other noise sources include commercial and industrial centers, construction noise, and property maintenance activities. These impacts are best controlled through effective land use planning and the application of City noise regulations.

Noise and Land Use Planning

Noise and land use incompatibilities can be avoided for new developments when noise is properly considered in the planning, design, and permitting of a project. The City aims to prevent future land use/noise conflicts through the planning and approval process.

Goal 1.0

Incorporate noise considerations into land use planning decisions.

Policy 1.1

Use the noise/land use compatibility standards presented in Table NE-1 as a guide for future planning and development decisions.

Policy 1.2

Require noise-reduction techniques in site planning, architectural design, and construction where noise reduction is necessary. Provide noise control measures such as berms, walls, and sound attenuating construction in areas of new construction.

Policy 1.3

Promote acceptable noise levels near schools, hospitals, convalescent homes, and other noise-sensitive areas.

Table NE-1
Noise/Land Use Compatibility Matrix

Land Use Categories	Community Noise Equivalent Level CNEL						
	55	60	65	70	75	80	85
Residential - Single Family, Multi-family, duplex	A	A	B	B	C		
Residential - Mobile homes	A	A	B	C	C		
Transient Lodging - Motels, Hotels	A	A	B	B	C	C	
Schools, Libraries, Churches, Hospitals, Nursing Homes	A	A	B	C	C		
Auditoriums, Concert Halls, Amphitheater, Meeting Halls	B	B	C	C			
Sports Arenas, Outdoor Spectator Sport, Amusement Parks	A	A	A	B	B		
Playgrounds, Neighborhood Parks	A	A	A	B	C		
Golf Courses, Riding Stables, Cemeteries	A	A	A	A	B	C	C
Office and Professional Buildings	A	A	A	B	B	C	
Commercial Retail, Banks, Restaurants, Theaters	A	A	A	A	B	B	C
Industrial, Manufacturing, Utilities, Wholesale, Service Stations	A	A	A	A	B	B	B
Agriculture	A	A	A	A	A	A	A

Zone A - Clearly Compatible - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Zone B - Conditionally Acceptable - New construction or development should be undertaken only after detailed analysis of the noise reduction requirement is made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Zone C - Normally Incompatible - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

Shaded areas indicate new construction or development should generally not be undertaken.

Policy 1.4 Establish targeted limits of noise for various land uses throughout the community.

Goal 2.0 **Minimize noise spillover from commercial and industrial uses into nearby residential neighborhoods.**

Policy 2.1 Enforce the 65db(A) State standard for exterior noise levels for all commercial uses.

Policy 2.2 Require that automobile and truck access to commercial properties located adjacent to residential parcels be located at the maximum practical distance from the residential parcel.

Policy 2.3 Require that landscaped buffers be created between a commercial or mixed-use structure and an adjoining residential parcel.

Goal 3.0 **Minimize the noise impacts associated with the development of residential units above ground-floor commercial uses in mixed-use developments.**

Policy 3.1 Require that commercial uses developed as part of a mixed-use project with residential uses not be noise intensive.

Policy 3.2 Require that mixed-use structures be designed to prevent transfer of noise and vibration from the commercial to the residential use.

Policy 3.3 Orient mixed-use residential units away from major noise sources.

Policy 3.4 Locate balconies and windows of residential units in mixed-use projects away from the primary street and other major noise sources.

Transportation Noise

In areas where transportation noise represents a threat to the public health and welfare, the City will reduce noise hazards to safe levels. In those areas where transportation noise degrades the environment, but not to an extent that it threatens public health and welfare, the City will reduce environmental degradation as much as feasible within the limits imposed by conflicting objectives.

Goal 4.0 **Reduce noise impacts from transportation noise sources.**

Policy 4.1 Require construction of acoustically effective and aesthetically pleasing barriers to shield noise-sensitive uses from excessive noise where necessary or where feasible.

Policy 4.2 Enforce City, State, and federal noise standards, especially those for mufflers and modified exhaust systems.

Policy 4.3 Reduce transportation noise through proper design and coordination of routing.

Policy 4.4 Reduce Metrolink train noise through coordination of scheduling with responsible rail authorities.

Policy 4.5 Work cooperatively with Metrolink operators to identify areas of excessive train noise, and develop a mitigation program to achieve noise reduction.

Non-Transportation Noise

Localized sources of noise in the community can disrupt neighborhoods when such is excessive, continuous, or of an unusual frequency.

Goal 5.0 Develop measures to control excessive noise citywide.

Policy 5.1 Adopt and implement a comprehensive City Noise Ordinance to regulate hours of operation and control excessive noise from landscape maintenance equipment, construction activity, and machinery.

Policy 5.2 Minimize noise spillover from commercial and industrial uses into nearby residential neighborhoods.

Sources of Noise

The City's primary goal with regard to noise is to reduce the impact from all noise sources on sensitive land uses. Noise-sensitive receptors include, but are not limited to, residential neighborhoods, schools, hospitals, convalescent homes, long-term medical or mental care facilities, and any other land use area deemed noise-sensitive by City decision makers.

Freeways

Two freeways pass through the City. The San Bernardino (I-10) runs in an east-west direction in the City's southern portion and is generally at grade with adjacent areas. Many residential developments flank the freeway. Historically, Caltrans has not prioritized installation of effective sound walls along the I-10 through Baldwin Park. The San Gabriel River Freeway (I-605) runs in a northeast-southwest direction, through the southwestern portion of the City. Development along this freeway is largely non-residential.

Roadways

Traffic noise on surface streets is a significant source of noise within the community. Major roadways carrying substantial traffic volumes include Ramona Boulevard, Olive Street, Los Angeles Street, Badillo Street, Baldwin Park Boulevard, Frazier Street, Puente Avenue, Merced Avenue, Pacific Avenue, and Maine Avenue. Noise levels along roadways are determined by a number of traffic characteristics. Most important is the average daily traffic (ADT) load.

Additional factors include the percentage of trucks, vehicle speed, the time distribution of this traffic, and gradient of the roadway. In general, the land uses along the major roadways are commercial and industrial. However, there are some single-family, multi-family and public facility areas that are located along these roadways. Of primary concern are the heavy trucks that travel from I-10 along surface streets to the northern industrial parts of Baldwin Park.

Railroads

The Metrolink Commuter Rail line runs northeast/southwest through the City for approximately three miles. Within the City, adjacent to the right-of-way of the Metrolink Rail line tracks, are over 170 residences, 60 commercial and industrial buildings, and 4 schools. During the time of the noise field study in January 1996, 22 scheduled daily commuter train stopped at the Baldwin Park station.

The noise and vibration generated by Metrolink trains were measured as they passed through the City, and the results analyzed and compared to City codes and standards. Passing trains generated noise levels of up to 88.5 dBA at 100 feet. Passing train horn noise levels measured as high as 99.2 dBA at 100 feet. The 24-hour noise measurements completed at the residential location show the trains increase the ambient noise levels by up to 45 dB when the trains pass the homes. The impact, especially horn noise, was identified as intrusive to close proximity residents, although there are no prevailing standards for code compliance evaluations.

Stationary Sources

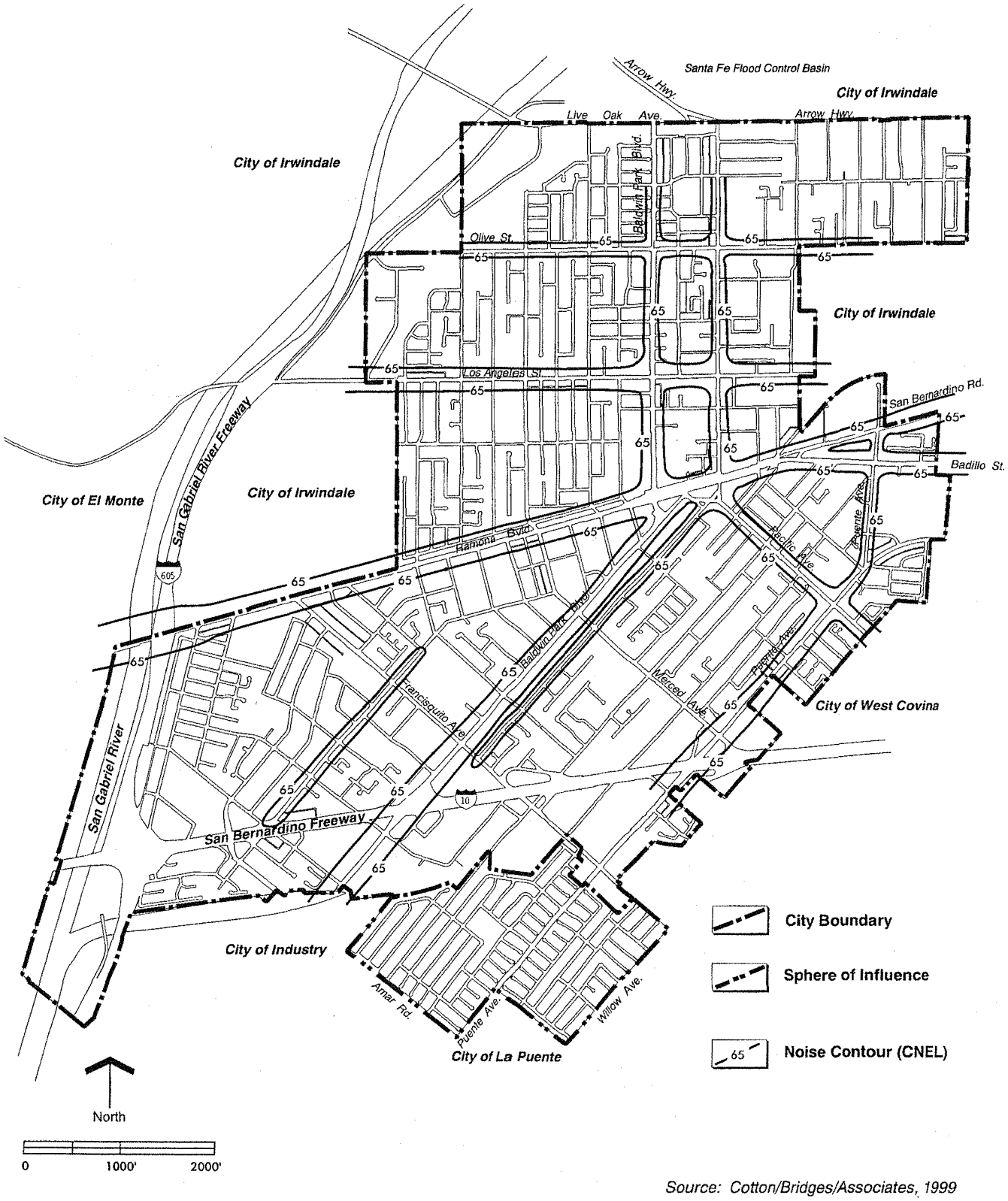
Major causes of noise due to stationary sources are the large commercial centers and industrial locations that are mostly located in the northern part of the City. The primary noise associated with the facilities is from automobile and truck traffic making deliveries. Additional noise sources include heavy equipment, air compressors, generators, and outdoor loudspeakers. In several cases, residences directly adjoin these operations.

Rock quarries located on City boundaries to the north, east, and west are a source of intermittent noise within Baldwin Park.

Noise and Land Use Planning

Noise in the Planning Area is the cumulative effect of two general types of noise: transportation-related and non-transportation sources. Transportation noise refers to noise from automobile use, trucking, airport operations and rail operations. Non-transportation noise typically refers to noise from stationary sources such as commercial establishments, machinery, air conditioning systems, compressors and landscape maintenance equipment.

Regardless of the type of noise, the noise levels are highest near the source and decrease with distance. Noise is problematic when noise sensitive land uses are affected. Noise sensitive land uses, defined as activities that are interrupted by noise, include residences, schools, hospitals, religious meetings and recreation areas. Most noise impacts can be avoided when noise sources, sensitive land uses and information about the future noise environment are considered in land use planning and development decisions. The noise environment for the Planning Area can be described with noise contours based on the major noise sources. Noise contours define areas of equal noise exposure. Future noise contours have been estimated with information about existing and projected development and transportation activity under the 2020 General Plan, and are presented in Figure NE-1.



Source: Cotton/Bridges/Associates, 1999

BALDWIN PARK

Figure NE-1
Future Noise Contours

Noise Standards and Land Use Compatibility Guidelines

To ensure that noise producers do not adversely affect sensitive receptors, the City will use land use compatibility standards when making planning and development decisions. Table NE-2 summarizes City noise standards for various types of land uses. The standards represent the maximum allowable noise level and will be used to determine noise impacts. The noise standards act as City policy for acceptable noise levels for development.

The noise standards are the basis for the development of land use compatibility guidelines, which are presented in the noise/land use compatibility matrix earlier in this section (Table NE-1). If the ambient noise level falls within Zone A or Zone B, the project is considered compatible with the noise environment. Zone A implies that no mitigation will be needed. Zone B implies that minor soundproofing of the structure may be needed to meet the City noise standards. Developers will be required to demonstrate that the noise standards will be met prior to project approval.

If an ambient noise level falls within Zone C, substantial noise mitigation will be necessary to meet the noise standards. Mitigation may involve construction of noise barriers and substantial building sound insulation. However, projects in Zone C can be successfully mitigated.

Table NE-2
Interior and Exterior Noise Standards

Land Use	Noise Standards[1]	
	Interior[2,3]	Exterior
Residential - Single family, multifamily, duplex, mobile home	CNEL 45 dB	CNEL 65 dB[4]
Residential - Transient lodging, hotels, motels, nursing homes, hospitals	CNEL 45 dB	CNEL 65 dB[4]
Private offices, church sanctuaries, libraries, board rooms, conference rooms, theaters, auditoriums, concert halls, meeting halls, etc.	Leq(12) 45 dB(A)	-
Schools	Leq(12) 45 dB(A)	Leq(12) 67 dB(A)[5]
General offices, reception, clerical, etc.	Leq(12) 50 dB(A)	-
Bank, lobby, retail store, restaurant, typing pool, etc.	Leq(12) 55 dB(A)	-
Manufacturing, kitchen, warehousing, etc.	Leq(12) 65 dB(A)	
Parks, playgrounds	-	CNEL 65 dB[5]
Golf courses, outdoor spectator sports, amusement parks	-	CNEL 70 dB[5]

NOTES:

1. CNEL: Community Noise Equivalent Level.
   Leq(12): The A-weighted equivalent sound level averaged over a 12-hour period (usually the hours of operations).
2. Indoor standard with windows closed. Mechanical ventilation shall be provided per UBC requirements to provide a habitable environment.
3. Indoor environment excluding bathrooms, toilets, closets and corridors.
4. Outdoor environment limited to rear yard of single family homes, multifamily patios and balconies (with a depth of 6' or more) and common recreation areas.
5. Outdoor environment limited to playground areas, picnic areas, and other areas of frequent human use.

Source: Title 24, California Code of Regulations

Noise Impact Areas

The noise contours in Figure NE-1 will be used as a guide for land use and development decisions. The 60 dB CNEL defines Noise Impact Areas. When noise-sensitive land uses are proposed within the 60 dB CNEL or greater contour, an acoustical analysis must be prepared. For the project to be approved, the analysis must demonstrate that the project is designed to attenuate noise to meet the City noise standards, as defined in Table NE-2. If the project is not designed to meet the noise standards, mitigation measures can be recommended in the analysis. If the analysis demonstrates that the noise standards can be met with implementation of the mitigation measures, the project can be approved with the mitigation measures required as conditions of project approval.

Construction Standards

The provisions of the State Noise Insulation Standards (Title 24) will be enforced in the City. Title 24 specifies that combined indoor noise for multi-family living spaces shall not exceed 45 dB CNEL. This standard must be implemented when the outdoor noise level exceeds 60 dB CNEL. The noise contour map (Figure NE-1) can be used to determine when to implement the standards. Title 24 requires that the standard be applied to all new hotels, motels, apartment houses, and multi-family projects.

Transportation Noise

Noise from transportation activity is the primary component of the noise environment in Baldwin Park. Transportation noise creates concerns along the freeways that traverse the City, major arterial roadways, and Metrolink train noise. The most efficient and effective means of controlling noise from transportation systems is to reduce the noise at the source.

The City has little direct control over noise produced by transportation sources because State and federal noise regulations preempt local regulations. The State regulates motor vehicle noise. Because the City cannot control noise at the source, City noise programs focus on reducing the impact of transportation noise on the community. Cost effective strategies to control noise impacts are an essential component of this element.

The most effective method for mitigating transportation noise impacts on the community is by utilizing the site design review process and CEQA. During these stages of the development process, potential impacts from transportation noise will be required as needed to meet City noise standards. Site planning, landscaping, topography and the design and construction of noise barriers (walls, berms or combination of walls/berms) are the most common method of alleviating traffic and train noise impacts. Setbacks and buffers can also be used to achieve small noise reductions.

Noise attenuating barriers are commonly incorporated into projects and can be extremely effective in reducing noise levels. The effectiveness of the barrier depends on the relative height and materials of the barrier, the nosie source, the affected area, the horizontal distance between the source and the barrier, and the horizontal distance between the barrier and the affected area. Although noise barriers can be extremely effective, the aesthetic effect of barriers on neighborhoods should be considered.

Noise barriers should be included in the design of roadway, freeway, and rail improvements. The City will support efforts by Caltrans, rail authorities, and other transportation providers to provide acoustical protection for noise-sensitive development. In addition, the City will request that barriers are constructed as part of freeway, roadway, and rail improvement projects to mitigate significant noise impacts. In particular, I-10 and I-605 are prime candidates for barriers to protect the community from excessive transportation noise.

Noise Control at the Source

The California Vehicle Code contains noise regulations pertaining to the operation of all vehicles on public roads. These noise standards for cars, trucks and motorcycles will be enforced through coordination with the California Highway patrol and Los Angeles County Sheriff's Department. Truck and traffic noise will be minimized by periodically evaluating and continually enforcing established routes to avoid noise impacts on sensitive receptors. To reduce the production of rail noise, the City will encourage rail authorities to continue to use welded track in good repair.

Non-Transportation Noise

Sensitive receptors must also be protected from excessive noise generated by non-transportation sources such as commercial and industrial centers, restaurants and bars, religious institutions and civic centers or community park center activities. Noise generated by new development will be effectively controlled through the site design review process and CEQA.

When reviewing proposed non-residential projects, noise generation and potential impacts to surrounding development will be considered. Acoustical analyses will be required for projects that will generate noise potentially affecting sensitive receptors. Where significant impacts are identified, mitigation measures will be required.

In addition, all City departments must comply with State and federal OSHA noise standards. Any new equipment or vehicle purchased by the City will comply with local, State and federal noise standards.