Noise Plan

Gardena General Plan 2006

Authority

California Government Code Section 65302(f) requires that all General Plans include a Noise Element to address noise problems in the community. State law also requires that current and future noise level contours be developed for the following sources:

- Highways and freeways.
- Primary arterials and major local streets.
- Passenger and freight on-line railroad operations and ground rapid transit systems.
- Commercial, general aviation, heliport, military airport operations, aircraft over-flights, jet engine tests stands and all other ground facilities and maintenance functions related to airport operation.
- Local industrial plants, including, but not limited to, railroad classification yards.
- Other stationary ground noise sources identified by local agencies as contributing to the community noise environment.

Purpose

The Noise Plan of this General Plan is the basis for achieving and maintaining environmental noise control. The Plan establishes goals, policies, and programs so that residents in the City will be protected from excessive noise. The Noise Plan will serve as a basis for achieving land use compatibility with respect to noise through the long-range planning and project review processes.

Relationship to Other Plans and Programs

California Noise Insulation Standards

Title 24, Part 2 of the California Code of Regulations establishes standards for interior room noise attributable to outside noise sources. The regulations specify that acoustical studies must be prepared whenever a residential building or structure is proposed to be located near an existing or adopted freeway route, expressway, parkway, major street, thoroughfare, rail line, rapid transit line, or industrial noise source, and where such noise source or sources create an exterior CNEL or 60 dB or greater. Such acoustical analysis must demonstrate that the residence has been designed to limit intruding noise to an interior CNEL of at least 45 dB.

Gardena's Noise Environment

Noise Evaluation and Measurement

Noise is defined as unwanted or excessive sound. Noise can interfere with communication, work, rest, recreation and sleep. Noise is also increasingly recognized as an environmental pollutant that can produce physiological and psychological damage. Sources of noise in an urban setting include motor vehicles, manufacturing, and human activities. The effect of noise on individuals varies with the duration of the noise, its intensity and frequency, and the tolerance level of those exposed. The A-weighted sound pressure level – identified as dB(A) – is the scale of measurement that is most useful in community noise measurement. This sound level is measured in decibels to provide a scale with the range and characteristics most consistent with that of peoples' sensitivity to sounds.

The A-weighted sound level of traffic and other long-term noise-producing activities within and around a community varies considerably with time. Measurements of this varying noise level are accomplished by recording values of the dB-A level during representative periods within a specified portion of the day.

Sound levels which exceed 85 dB(A), when experienced for long durations during each working day, may result in severe temporary or even permanent hearing loss. State and federal safety and health regulations currently protect workers at levels of exposure that exceed 90 dB(A) for each 8-hour workday.

It is recognized that a given level of noise may be more or less tolerable depending on the duration of exposure experienced by an individual. There are numerous measures of noise exposure that consider not only the A-level variation of noise but also the duration of the disturbance. The State Department of Aeronautics and the California Commission on Housing and Community Development have adopted the community noise equivalent level (CNEL). This measure weights the average noise levels for the evening hours (7:00 p.m. to 10:00 p.m.), increasing them by 5 dB, and weights the late evening and morning hour noise levels (10:00 p.m. to 7:00 a.m.) by 10 dB. The daytime noise levels are combined with these weighted levels and are averaged to obtain a CNEL value.

Figure N-1 indicates the CNEL considered acceptable for various land use categories. In general, exterior noise exposures at residential locations should not exceed a CNEL of 65 dB. Figures N-2 and N-3 illustrate the existing and future noise contours within the City.

Baseline and 2025 Noise Environment

The most significant noise-producing activity within the City of Gardena involves the transportation elements: arterials, and train movements on the Union Pacific rail line. In addition, numerous fixed sources of noise exist within portions of the City.

Traffic Noise from Major and Secondary Arterials

The CNEL values at noise-sensitive locations, if any, directly adjacent to the arterials identified in Table N-1 exceed 65 dB. The noise exposure at these areas is considered excessive.

Land Use Category	CNEL, dB 55	60	65	70	75	80
Residential - Single family, multifamily, duplex	A	A	B	C	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, Amphitheaters, Meeting Halls	B	B	C	C			
Sports Arenas, Outdoor Spectator Sports, 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

Legend

A — NORMALLY ACCEPTABLE
Specified land use is satisfactory based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

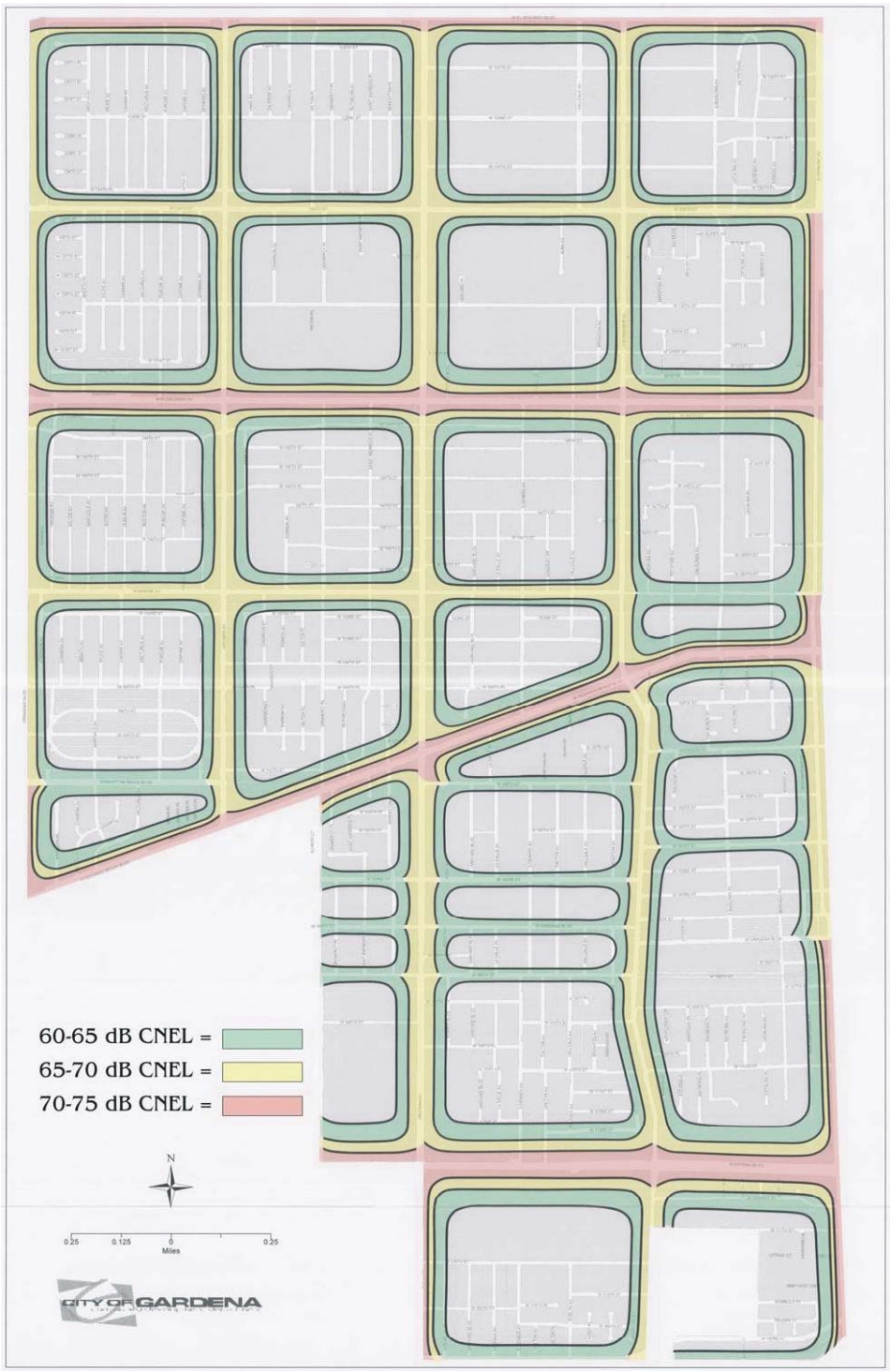
B — CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

C — NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If it 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: Taken in part from "Aircraft Noise Impact Planning Guidelines for Local Agencies," U.S. Dept. of Housing and Urban Development, TE/NA-472, November 1972.

Figure N-1
Noise and Land Use Compatibility



Source: Wieland Associates, Inc. 2005

Figure N-2
Existing CNEL Contours

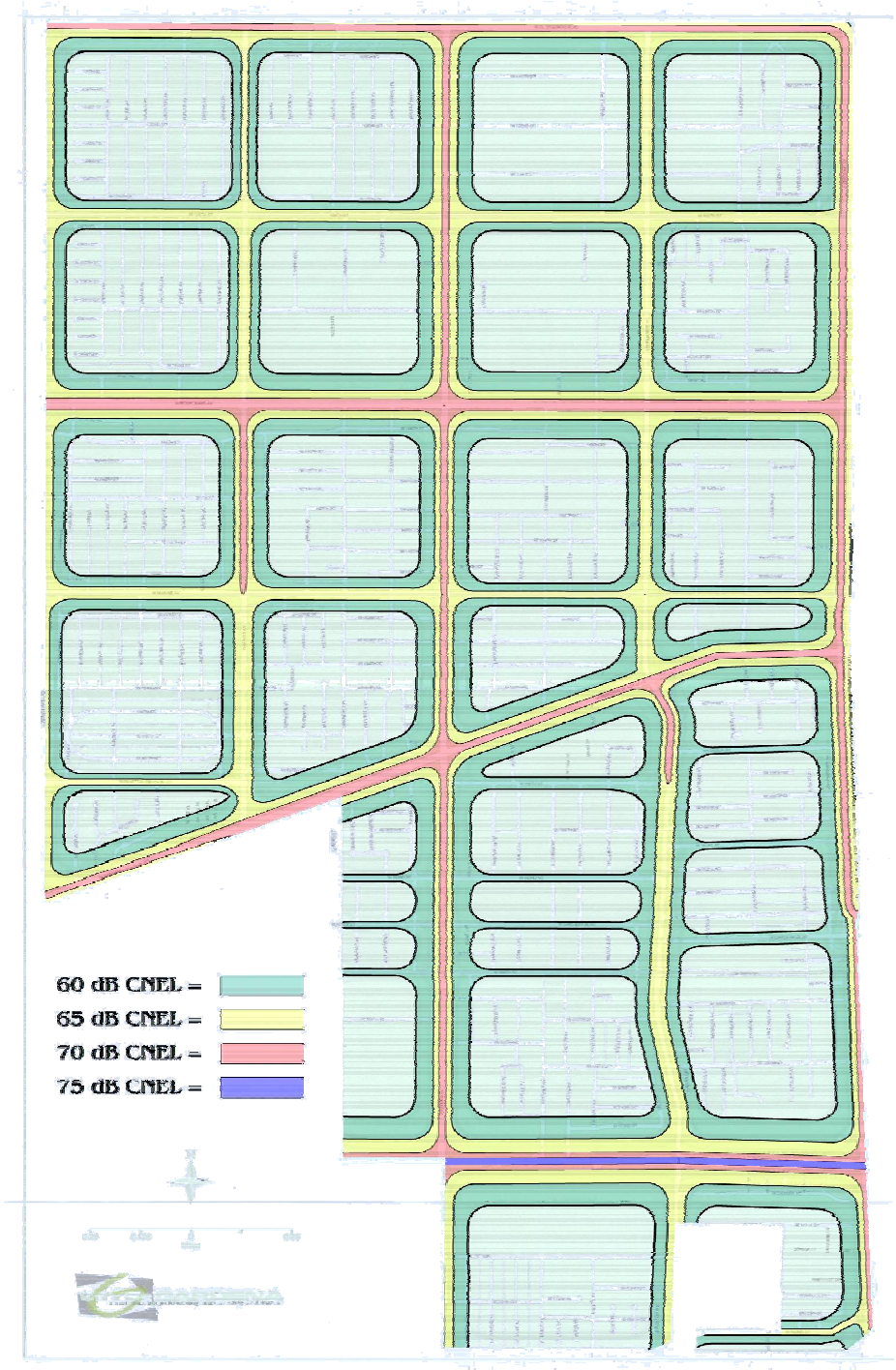


Figure N-3
Future CNEL Contour

Table N-1
Arterial Segments Generating a CNEL in Excess of 65 dB

Arterial	Segment	Time Frame
135th Street	Crenshaw Blvd. to Vermont Ave.	Existing and future
182nd Street	Normandie Ave. to Vermont Ave.	Existing and future
Artesia Blvd. (SR-91)	Western Ave. to Vermont Ave.	Existing and future
Crenshaw Blvd.	El Segundo Blvd. to Redondo Beach Blvd.	Existing and future
El Segundo Blvd.	Crenshaw Blvd. to Vermont Ave.	Existing and future
Manhattan Beach Blvd.	Crenshaw Blvd. to Van Ness Ave.	Future
Marine Ave.	Crenshaw Blvd. to Normandie Ave.	Existing and future
Normandie Ave.	El Segundo Blvd. to 182nd St.	Existing and future
Redondo Beach Blvd.	Crenshaw Blvd. to Vermont Ave.	Existing and future
Rosecrans Ave.	Crenshaw Blvd. to Vermont Ave.	Existing and future
Van Ness Ave.	El Segundo Blvd. to Redondo Beach Blvd.	Existing and future
Vermont Ave.	El Segundo Blvd. to 182nd St.	Existing and future
Western Ave.	El Segundo Blvd. to 182nd St.	Existing and future

Source: Wieland Associates, Inc.- Noise Element Technical Memorandum for the Gardena General Plan, November 2005.

Noise from Train Movement

Current operations on the UP rail line consist of two trains or less per day. There are no plans to increase this volume in the future. Because of this low level of activity, the impact of this noise source is considered insignificant. The primary source of annoyance is late night and early morning train passes, as well as train horn soundings at crossings.

Commercial/Industrial Noise

In general, commercial/industrial noise within the City is not considered excessive. However, where residential locations are adjacent to commercial/industrial operations, a significant impact may exist. This impact is primarily related to noise generated by loading dock operations, trucks entering and leaving the area, and mechanical equipment located both inside and outside the building(s). Measurements obtained at a residence in this community indicate maximum noise levels that range from 54 to 84 dB(A). The higher levels are considered significant.

Construction Activity

The impact of construction noise that occurs during the daytime is considered minimal for no more than two or three months of activity. However, late night and weekend disturbances caused by construction noise may create a significant impact when experienced at nearby residential locations.

Goals and Policies

N Goal 1 Use noise control measures to reduce the impact from transportation noise sources.

Policies

N 1.1: Minimize noise conflicts between land uses and the circulation network, and mitigate sound levels where necessary or feasible to ensure the peace and quiet of the community.

N 1.2: Reduce unnecessary traffic volumes in residential neighborhoods by limiting throughways and by facilitating the use of alternative routes around, rather than through, neighborhoods.

N 1.3: Promote the use of new technologies to minimize traffic noise, such as use of rubberized asphalt in road surface materials.

N 1.4: Promote the use of traffic calming measures where appropriate, such as narrow roadways and on street parking, in commercial and mixed-use districts.

N 1.5: Reduce noise impacts from vehicles, particularly in residential area through enforcement of speed limits on arterials and local roads.

N 1.6: Require compliance with State's Vehicle Code noise standards within the City.

N 1.7: Ensure the effective enforcement of City, State and Federal noise standards by all City Divisions.

N 1.8: Encourage walking, biking, carpooling, use of public transit and other alternative modes of transportation to minimize vehicular use and associated traffic noise.

N 1.9: Encourage, where feasible and reasonable, noise mitigation measures, such as noise barriers and realignments, in the design and construction of new roadway projects in Gardena.

N 1.10: Consider noise impacts to residential neighborhoods when designating truck routes and major circulation corridors.

N 1.11: Maintain bus routes that meet public transportation needs and minimize noise impacts in residential areas.

N 1.12: Encourage the Public Utilities Commission and Union Pacific to minimize the level of noise produced by train movements and horns within Gardena by reducing speeds, improving vehicle system technology and developing improved procedures for train engineer horn sounding.

N 1.13: Encourage Gardena citizen participation and City involvement on committees that would influence future aircraft and railroad operations in Los Angeles County.

N 1.14: Participate in the planning and impact assessment activities of the County Airport Land Use Commission and other regional or State agencies relative to any proposed expansion or change in flight patterns at the Hawthorne Municipal Airport or the Compton Airport.

N Goal 2 Incorporate noise considerations into land use planning decisions.

Policies

N 2.1: Promote noise regulations that establish acceptable noise standards for various land uses throughout Gardena.

N 2.2: Require noise/land use compatibility standards to guide future planning and development.

N 2.3: Promote compliance with the State's noise insulation standards in the conversion of existing apartments into condominiums wherever feasible.

N 2.4: Require mitigation of all significant noise impacts as a condition of project approval.

N 2.5: Require proposed projects to be reviewed for compatibility with nearby noise-sensitive land uses with the intent of reducing noise impacts.

N 2.6: Require new residential developments located in proximity to existing commercial/industrial operations to control residential interior noise levels as a condition of approval and minimize exposure of residents in the site design.

N 2.7: Require new commercial/industrial operations located in proximity to existing or proposed residential areas to incorporate noise mitigation into the project design.

N 2.8: Require that mixed-use structures and areas be designed to prevent transfer of noise and vibration from commercial areas to residential areas.

N 2.9: Encourage the creative use of site and building design techniques as a means to minimize noise impacts.

N 2.10: Promote replacement of significant noise sources with non-noise-generating land uses when plans for future use of areas are developed.

N 2.11: Require the County of Los Angeles, the City of Hawthorne, the City of Los Angeles, and the City of Torrance to minimize or avoid land use/noise conflicts prior to project approvals.

N Goal 3 Develop measures to control non-transportation noise impacts.

Policies

N 3.1: Require compliance with a quantitative noise ordinance based on the Model Noise Ordinance developed by the (now-defunct) State of California Office of Noise Control.

N 3.2: Require compliance with noise regulations. Review and update Gardena's policies and regulations affecting noise.

N 3.3: Require compliance with construction hours to minimize the impacts of construction noise on adjacent land.

N 3.4: Require new equipment and vehicles purchased by the City to comply with noise performance standards consistent with available noise reduction technology.

N 3.5: Require City departments to observe State and Federal occupational safety and health noise standards.