



PICTURE OUR ENVIRONMENT



ELEMENT 12

NOISE

This Element identifies and evaluates noise problems in the community from sources like highways, arterial streets, rail operations, aviation, and industrial plants.

INTRODUCTION

Noise is a normal part of everyday life and can indicate a healthy community and strong local economy. However, excessive noise is defined as noise that is disruptive, intrusive, or incompatible with existing land uses. Excessive noise could potentially result in psychological or physiological effects for people, especially in noise-sensitive areas and at certain times of day, such as places where people sleep, study, or listen, and associated activities, such as resting, recreating, studying, and communicating. Vibration sources within the city are also commonly associated with sources of noise. The Noise Element sets goals and policies that ensure that noise and vibration from these sources do not create an unacceptable noise and vibration environment.

What We are Trying to Achieve

- A peaceful noise environment within city neighborhoods, where feasible.
- Minimal vibration impacts to structures, people, and vibration-sensitive equipment compared to present day level.



Street festival in Culver City

DEFINITIONS

The Noise Element uses the following terms throughout.

CNEL (Community Noise Equivalent Level). dBA (a-weighted decibels).

CNEL (COMMUNITY NOISE EQUIVALENT LEVEL)

A weighted average of noise level over time used to compare the noisiness of neighborhoods noise contours of the roadway segments evaluated.

dBA (A-WEIGHTED DECIBELS)

An expression of the relative loudness of sounds in air as perceived by the human ear



New construction near Culver City

KEY ISSUES AND OPPORTUNITIES

Noise from various sources affects Culver City's residents, workers, and visitors. Noise results from mobile sources, such as transit and vehicles. In addition, noise results from stationary sources, including residential and nonresidential land uses, construction and maintenance activities, late-night entertainment, and machinery sources.



Ivy Station construction

In accordance with California Government Code Section 65302(f), a community noise measurement survey was conducted in October 2019, which took short-term measurements at 26 locations during the day between 9:00AM to 5:00PM over 15-minute intervals and long-term measurements at six locations over a 24-hour period. The measurement locations are shown in Figure 44. Three locations for short-term measurements and three locations of long-

term measurements showed ambient noise level increases of 10 dBA or more. These sites were associated with areas that previously showed ambient noise levels in the upper 40s and low-to-mid 50s dBA, with increases to the mid-60s dBA. This is typical of urban areas with commercial activities and vehicle traffic. The increase in noise levels is likely attributed to an increase in traffic volumes associated with overall increases in jobs and population in Culver City and the surrounding

cities. There has also been an increase in aircraft overflight to and from the Los Angeles International Airport (LAX).

Mobile Sources

Motor vehicle traffic on freeways and major and minor arterial roads are considerable noise sources within the city, as shown in Figure 45, which shows the 60, 65, and 70 dBA Community Noise Equivalent Level (CNEL). Three major freeways border Culver City. The Marina (SR-90) Freeway is in the southwest area of the city, the San Diego (I-405) Freeway runs through the western half of the city, and the Santa Monica (I-10) Freeway runs adjacent to the northern City limits and is the busiest freeway in the state. Metro's E Line passes through the city in an east-west orientation in the northern portion of the city. The E Line's Culver City Station is located just east of the intersection of Venice Boulevard and South Robertson Boulevard.

As the city continues to grow, mobile source noise levels have the potential to increase. Economic and population growth within the city is expected to continue and may generate increased ambient noise levels from transportation-related noise sources. Having a robust, active public transit and multimodal transportation system that is safe for walking and biking can reduce reliance on automobiles through increased connectivity to housing, schools, job centers, and commercial services. This system can reduce the amount of motor vehicles traveling through the city and associated noise from traffic.

In addition to ground mobile sources, aircraft overflights to and from LAX have increased since 1995, along with associated increases in aircraft noise. Although Culver City is not within the aircraft noise exposure area or 65 dBA CNEL noise contour of LAX or within the Airport Land Use Plan area, the city is in the flight path for landings at LAX. This means planes coming from the north or west cross over the city, flying further east before descending into LAX.

On July 19, 2019, the City requested permission from the United States



Trucks are a mobile source of noise

Court of Appeals for the Ninth Circuit to intervene in the lawsuit brought in June 2019 by the City of Los Angeles. Through this, the City challenged the Federal Aviation Administration (FAA)'s changes to three flight paths for arriving aircraft at LAX. The FAA's changes may cause more aircraft to fly over Culver City and surrounding communities with resulting noise and air quality impacts. The FAA did not perform an environmental review for the new arrival routes. On August 22, 2019, the City was granted permission to intervene. On July 8, 2021, after oral argument and briefing by the parties, the Ninth Circuit ruled in favor of Los Angeles and Culver City and ordered the FAA to conduct the appropriate environmental review of the amended flight paths. In early 2023, the Cities of Culver City and Los Angeles filed motions to enforce the Judgment since FAA has not circulated any environmental documents for public review over 18 months after the court judgment in the cities' favor. On March 9, 2023, the Ninth Circuit issued an Order of Enforcement, and the FAA subsequently filed a schedule for completion of its environmental review and has initiated consultation with affected communi-

ties required by the National Historic Preservation Act and the Endangered Species Act.

Culver City is not within the aircraft noise exposure area or 65 dBA CNEL noise contour of Santa Monica Airport or within the Airport Land Use Plan area.

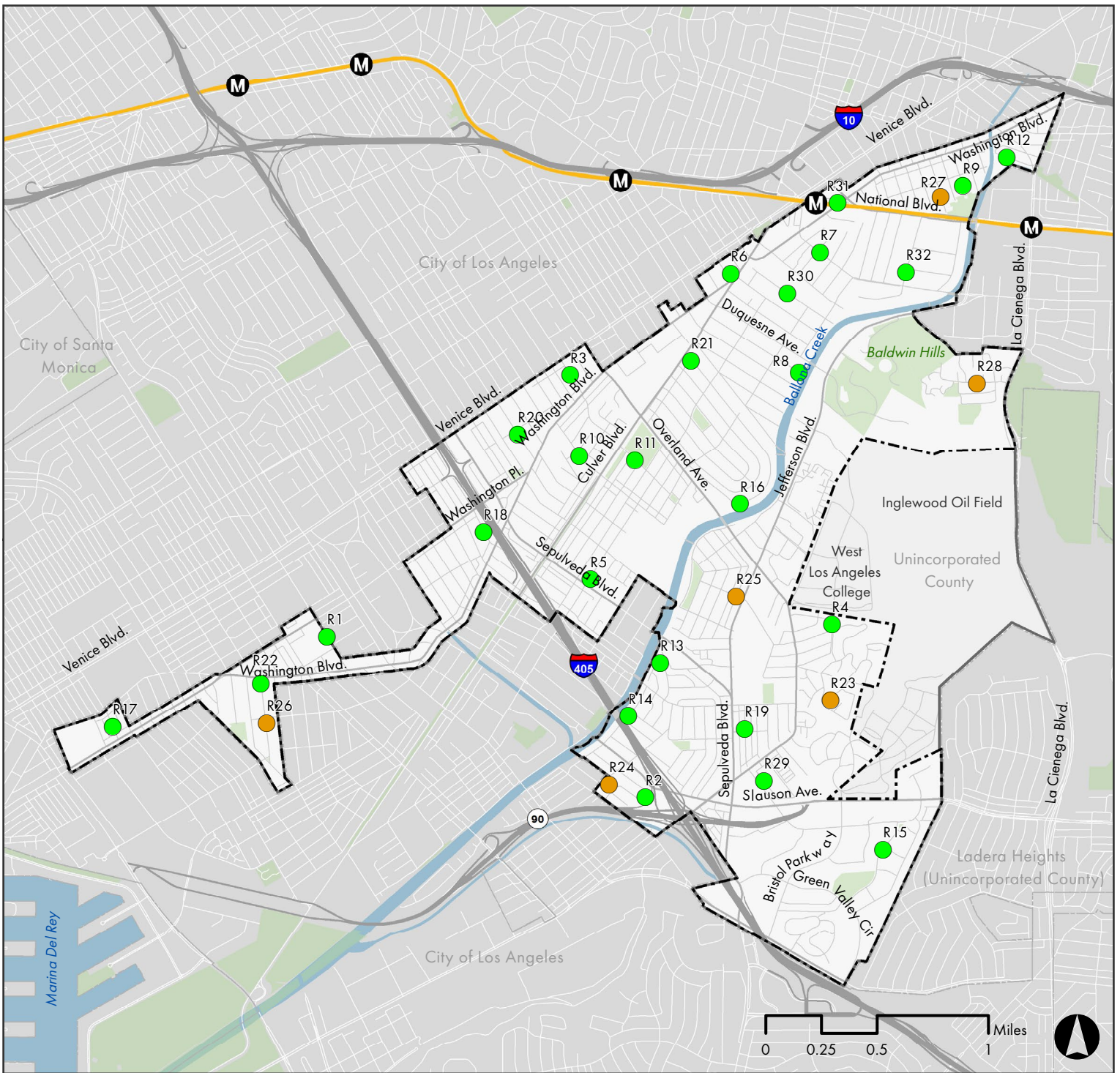


FIGURE 44

Noise Measurement Locations

Sources:
 City of Culver City (2024);
 County of Los Angeles (2021);
 ESA (2019); ESRI (2021).

- City Limits
- Sphere of Influence
- Metro Station
- E Line (Expo)
- Major Roads
- Local Roads
- Parks and Open Space
- Waterbody

- ### Noise Measurement Locations
- Short Term Measurement Locations
 - Long Term Measurement Locations

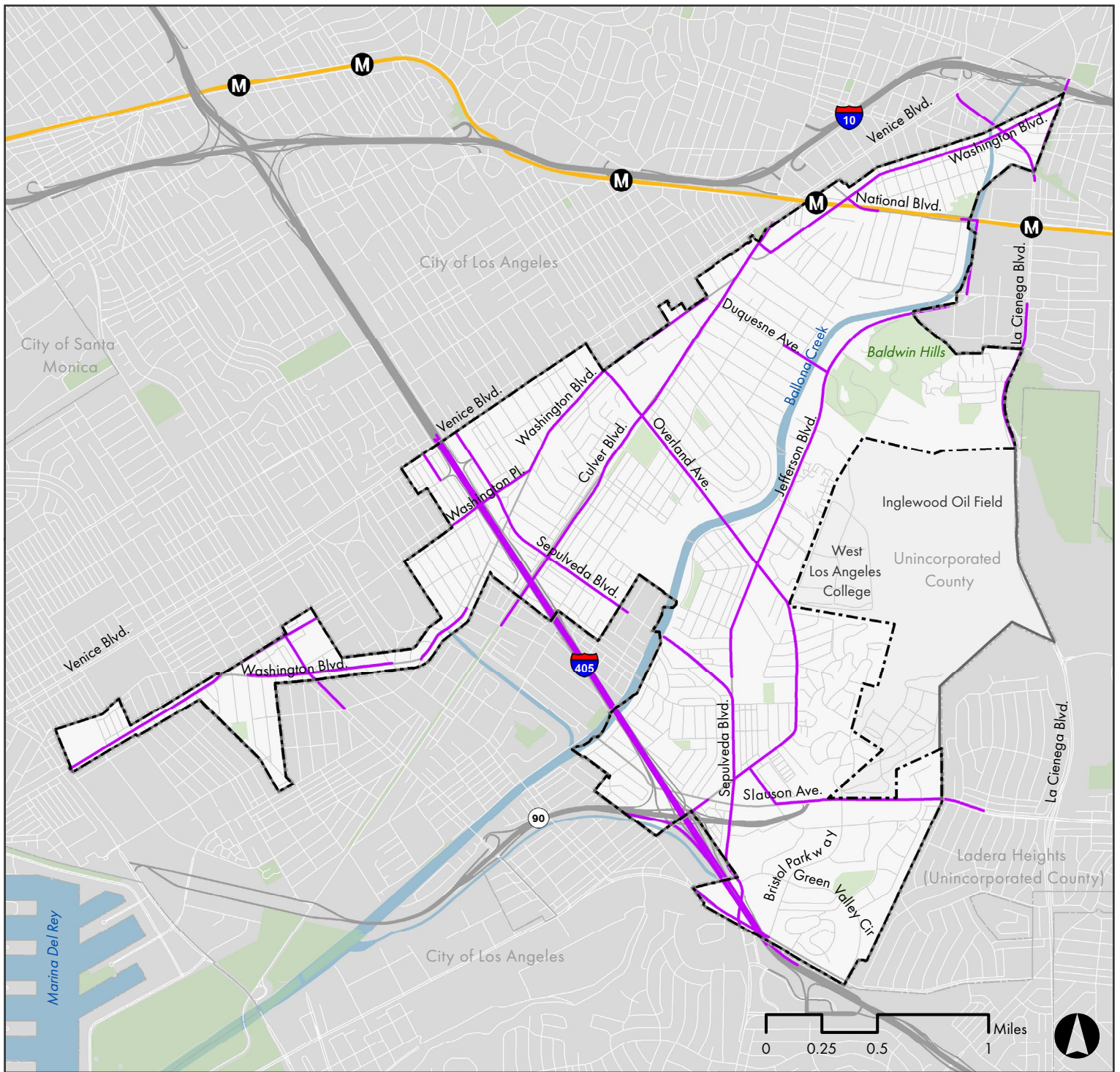


FIGURE 45

Major Noise Sources

Sources:
 City of Culver City (2024);
 County of Los Angeles (2021);
 Fehr & Peers (2020); ESRI (2021).

- City Limits
- Sphere of Influence
- Metro Station
- E Line (Expo)
- Major Roads
- Local Roads
- Parks and Open Space
- Waterbody
- Roadway Segments with Average Daily Traffic of 20,000 or more Vehicles

Stationary Sources

Noise that falls into the stationary source category typically includes activities associated with industrial and commercial uses, school operations and events, parks operations and events, outdoor entertainment, sporting events, loading/unloading associated with passenger and/or delivery vehicles, and construction and maintenance activities. Most of the city's industrial and warehouse uses are in the northeast portion of the city, with some located near the city's northern boundary and by I-405 where it meets the I-90 Marina Freeway. Schools and parks throughout the city generate noise from sports and outdoor activities. For example, noise is generated

from sports and outdoor events at West Los Angeles College, Veterans Memorial Park, various neighborhood parks, Culver City High School, and other public and private school playgrounds and outdoor activity areas. The primary sources of noise from venues supporting late night entertainment are people and their vehicles at late evening hours, including in parking lots, and from live or recorded music. Noise from late-night activity is increasing, especially within Downtown Culver City, in the Transit Oriented Development area, as well as in the West Washington area and the Arts District. The major sources of machinery noise in residential areas include heating, ven-

tilation and air conditioning (HVAC) systems, pool and spa pumps, power tools in garages, gardening tools, and gasoline-powered leaf blowers. Noise complaints can also result from neighborhood activity such as loud music, including musical instruments, parties, and other social events.

Economic and population growth may also generate noise from stationary sources. Late night activities, like live or recorded music from various establishments, particularly as Downtown Culver City, the Transit Oriented Development area, the West Washington area and the Arts District become more popular, are likely to increase ambient noise levels and increased traffic at late hours.

Construction and New Development

As Culver City's economy and population continue to grow, development projects will also increase accordingly. Construction-related noise in the vicinity of development sites will occur through the use of heavy equipment and trucks during demoli-

tion, grading, excavation, and other construction activities. Construction noise tends to fluctuate depending on the type of construction activity and the number and duration of equipment used. The City's Municipal Code includes noise restrictions and

exemptions for noise standards within the city as well as specific design and operational standards that must be incorporated into new projects to minimize noise from development and redevelopment project construction.

Vibration Sources

Trains, buses on rough roads, and construction activity, like pile driving and large earthmoving equipment can generate ground-borne vibration. Compared to airborne noise, ground-borne vibration is not a common environmental problem. Ground-borne vibration diminishes more rapidly with increasing distance

from the source compared to noise propagating through air. It is unusual for vibration from sources like rubber-tired buses and trucks traveling over smooth, paved surfaces to be perceptible, even in locations close to major roads. Nonetheless, receptors that could be adversely affected by excessive ground-borne

vibration levels include structures (especially old masonry buildings), people (including residents, students, the elderly, and the sick), and vibration-sensitive equipment like high-resolution lithographic equipment, optical microscopes, and electron microscopes with vibration isolation systems.

Streamlining Opportunities

For noise control of stationary sources and enforcement purposes, the City needs to adopt a Noise Ordinance that sets limits, such as maximum decibel noise levels during certain time periods or time restrictions for certain activities or equipment use, for stationary noise sources within the city. The current Noise section of the Municipal

Code does not include allowable interior and exterior noise standards that can be used to evaluate acceptable noise levels at various land uses. Local and State guidelines that consider how compatible land uses are based on community noise exposure indicate several areas in the city where new construction or development with

noise-sensitive receptors should be either discouraged or designed with noise reduction features. The recommended criteria to assess the operational compatibility of proposed land uses with the noise environment are presented in Table 11.

The General Plan presents an opportunity to limit or minimize exposure to

unacceptable noise levels. For example, it can streamline noise mitigation efforts in the development process through either policies, ordinances, standard conditions of approval, or other mechanisms. Relatively small projects are often confronted with significant unavoidable short-term construction impacts due to noise standards that are not practical to achieve

or are inappropriate for temporary construction noise. For projects that would generate unacceptable noise levels, a Noise Ordinance should improve the efficiency of noise attenuation measures.

The City can prioritize noise control measures in the following order: (1) reduce noise transmissions at the

source; (2) reduce sound transmission along the noise’s path using barriers, changing landforms, dense planting, and building orientation and placement; and (3) reject noise at the reception point using noise-controlled building construction, hearing protection, or other means.

TABLE 11 Land Use and Noise Compatibility Matrix

| Land Uses | Noise Level Compatibility | | | | | | |
|---|---------------------------|-------|-------|-------|-------|-------|----------|
| | CNEL <55 | 55-60 | 60-65 | 65-70 | 70-75 | 75-80 | CNEL >80 |
| Single Family, Duplex, Multifamily, Mobile Home | A | A | B | B | C | D | D |
| Hotel, Motel, Transient Lodging | A | A | B | B | C | C | D |
| Commercial Retail, Bank, Restaurant, Movie Theatres | A | A | A | A | B | B | C |
| Office Building, Research and Development, Professional Offices, City Office Building | A | A | A | B | B | C | D |
| Amphitheater, Concert Hall, Auditorium, Meeting Hall | B | B | B | B | D | D | D |
| Children’s Amusement Park, Miniature Golf Course, Go-Cart Track, Equestrian Center, Sports Club | A | A | A | B | B | D | D |
| Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities | A | A | A | A | B | B | B |
| Hospital, Church, Library, School Classroom, Day Care | A | A | B | B | C | D | D |
| Parks | A | A | A | B | C | D | D |
| Golf Courses, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat | A | A | A | A | B | C | C |
| 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 – Compatible with Controls: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements are 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. Note that residential uses are prohibited with Airport CNEL greater than 65 dB.

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.

Zone D – Clearly Incompatible: New construction or development should generally not be undertaken.

Source: City of Culver City, 2023.

POLICY FRAMEWORK

Key: Goal attributes.

● Equity & Inclusion

● Innovation & Creativity

● Sustainability

● Compassion & Community

GOAL N-1

A peaceful community. A community with a peaceful noise environment that reduces or prohibits new sources of intrusive noise and effectively enforces noise standards.



N-1.1: Interior and exterior noise restrictions. Enforce the City's interior and exterior noise restrictions.

N-1.2: Land use decisions. Consistently apply noise standards and criteria in all land use decisions.

N-1.3: Noise evaluation. For proposed development in areas louder than 60 dBA CNEL, require noise evaluation for compliance with the State's 45 dBA CNEL interior noise levels standards.

N-1.4: Noise reduction measures. If new development does not meet the City's interior and exterior noise standards, require that noise reduction features are implemented in the development.

N-1.5: Insulation standards. Enforce building noise insulation standards through the building design and permit process.

N-1.6: Noise reduction strategies. Implement noise reduction strategies in new developments that would generate noise that could impact nearby sensitive land uses.

N-1.7: Noise regulation enforcement coordination. Ensure the Code Enforcement Division continues to coordinate with the Culver City Police Department on enforcing noise regulations set forth in the Culver City Municipal Code.

GOAL N-2

Adjacent uses. A City review and approval process for new development that ensures projects are compatible with adjacent land uses.



N-2.1: Noise compatibility. In the land use planning process, consider noise compatibility with existing and proposed land uses, along with the anticipated increase in development needed to accommodate growth.

N-2.2: Land Use and Noise Compatibility Matrix. Use the Land Use and Noise Compatibility Matrix to assess the compatibility of proposed land uses with the noise environment.

N-2.3: Noise analysis and implementation methods. As appropriate, require a noise analysis and implementation of methods to minimize noise for land uses that are not "clearly compatible" as indicated by the Land Use and Noise Compatibility Matrix.

N-2.4: Land use incompatibility. Evaluate and identify ways to avoid locating incompatible land uses adjacent to freeways, and noisy industrial or recreational activities in the land use planning and development/environmental review process.

GOAL N-3

Mobile sources of noise. A community that experiences minimal noise disturbance from transportation sources.



N-3.1: Roadway noise. Minimize noise impacts to noise-sensitive land uses from vehicles traveling on major and minor arterial roadways within the city.

N-3.2: Noise exposure from future planning. Coordinate land use and circulation plans to protect against noise exposure from future projects.

N-3.3: Coordination with regional transportation agencies for noise abatement measures. Coordinate with regional transportation agencies in the planning and development, maintenance, or redevelopment of existing and future transportation corridors, including mass transportation, to include noise abatement measures that comply with the City's standards.

N-3.4: Truck movements. Evaluate truck movements and routes within the city to provide effective separation from residential or other noise-sensitive land uses. Review the City's Municipal Code Traffic Regulations to ensure that designated truck routes do not negatively impact residential areas or other noise-sensitive land uses. Limit truck movements to those arterials designed to handle the traffic and those located further from the noise-sensitive areas.

N-3.5: Noise reduction technology. Mitigate City-controlled transportation-related noise sources through a program of technological improvements, like converting to electric vehicles.

N-3.6: Noise reduction measures from roadway projects. Consider noise reduction measures when designing roadway projects that may adversely affect sensitive land uses. Noise control measures may include increased vegetation, improving and maintaining roadway pavement, those related to site and building design features, and adding sound wall barriers.

N-3.7: Freeway noise impact coordination. Consult with the California Department of Transportation to minimize noise impacts from major free-

ways adjacent to residential or other sensitive land uses like SR-90, I-405, and I-10. Noise attenuation measures may include using alternative paving materials that can reduce traffic noise depending on roadway conditions and cost-efficiency, or constructing noise barriers, that break the "line of sight" between the noise source and potential receptors.

N-3.8: Noise from Metro transportation system. Minimize noise impacts from the Metro transportation system on residential and other sensitive land uses. For example, coordinate with Metro to install noise attenuation features if the system negatively affects residential and other sensitive land uses.

N-3.9: Aircraft noise. Minimize noise impacts from aircraft flyovers through ground based mitigation strategies such as enhanced building shell noise reduction to comply with interior noise standard of 45 dBA CNEL .

N-3.10: Coordination with the Los Angeles World Airports and Federal Aviation Administration. Monitor LAX development process for potential impacts on Culver City, including the expansion of terminals and gates that may be used to accommodate increased operations, and make recommendations for mitigation.

N-3.11: LAX/Community Noise Roundtable. Continue to participate in the LAX/Community Noise Roundtable.

N-3.12: Monitor changes to aircraft operations implemented by the Federal Aviation Administration. Continue to work with Los Angeles International Airport and the Federal Aviation Administration to ensure that all applicable mitigation, both operational and construction, is provided.

GOAL N-4

Construction noise. Minimized noise and vibration generated from construction activities.



N-4.1: Limit disturbance from new construction. Minimize construction noise and vibration impacts to reduce the disturbance from new development.

N-4.2: Construction hour enforcement. Enforce limits on construction hours as included in the City's Municipal Code.

N-4.3: Construction vibration analysis. Require analysis of construction vibration in accordance with established construction vibration guidelines.

N-4.4: Noise-sensitive construction techniques. Encourage using construction techniques that minimize noise and vibration levels.

GOAL N-5

Stationary sources of noise. Minimized noise generated from operational stationary sources, including industrial and commercial activity, entertainment, sporting and other outdoor events, maintenance activity, and machinery.



N-5.1: Event noise. Minimize noise impacts from major outdoor events at educational institutions, parks, and other locations within the city.

N-5.2: Machinery noise. Minimize noise impacts from machinery, including pool and spa pumps, power tools in garages, gardening tools, and gasoline-powered leaf blowers. Enforce restrictions included in the Noise Ordinance limiting noise generated from these sources. Require screening or other noise reducing methods in the Building Permit process.

IMPLEMENTATION ACTIONS

Key: Types of actions may include partnership, program, study, plan, physical improvements, and more.

Key: Timeframe icons for implementation actions table.

●
Short-term
1-5 Years

● ●
Medium-term
5-10 Years

● ● ●
Long-term
10+ Years

➡➡➡➡
Ongoing

| Implementation Action | Associated Goal(s) | Timeframe | Type of Action | Primary Responsibility | Secondary Responsibility |
|--|--------------------|-----------|-----------------------------------|--------------------------|--------------------------|
| <p>IA.N-1: Noise Ordinance. Adopt a comprehensive Noise Ordinance that aligns with the Noise Element's goals that includes the following:</p> <ul style="list-style-type: none"> The City's interior and exterior noise standards that are included in the City's General Plan Noise Element, where appropriate. Construction noise standards for construction activities impacting land uses sensitive to noise. Guidelines for evaluating vibration levels from construction activities impacting land uses sensitive to vibrations. | N-1 | ● | Ordinance / Code Amendment | Planning and Development | Public Works |
| <p>IA.N-2: Noise regulations evaluation. Regularly examine the City's Municipal Code Noise Regulations for effectiveness. Consider revising inappropriate standards or adding standards for new noise sources not covered. Evaluate the City's Municipal Code Noise Regulations to identify types of amplified sound that should require a permit from the City before using sound amplifying equipment.</p> | N-1 | ● ● | Study, Ordinance / Code Amendment | Planning and Development | Public Works |
| <p>IA.N-3: New standard conditions of approval for development projects. Develop new standard conditions of approval for development projects that address construction noise and specify means for achieving defined noise standards that reduce adverse effects on noise sensitive uses.</p> | N-4 | ● ● | Ordinance / Code Amendment | Planning and Development | Public Works |
| <p>IA.N-4: Event noise compliance. Establish temporary and special event noise standards, periodically monitor noise levels at major events to ensure compliance.</p> | N-5 | ● ● ● | Ordinance / Code Amendment | Planning and Development | Public Works |