3.3.16 Noise

Introduction

The purpose of the Noise section is to identify, describe, and evaluate noise sources and potential land use conflicts related to environmental noise. Potential sources of ground-borne vibration and exposure to ground-borne vibration is sometimes also addressed in the Noise section. To determine the potential for significant noise impacts, the baseline noise conditions and surrounding existing sensitive land uses need to be characterized. Then, changes in noise levels or changes in noise exposure circumstances caused by the contemplated project need to be evaluated.

Common noise sources associated with campus development include: construction activities (e.g., heavy truck traffic, pile drivers, pumps and compressors); increased motor vehicle traffic; and other increased outdoor or nighttime activity.

Responsible Agencies

No specific Responsible Agencies would normally be involved in the CEQA process regarding the noise consequences of UC projects. Local communities commonly maintain a Noise Element within the community General Plan and a noise ordinance that regulates noise in the community. For informational purposes only, the following background references are provided:


- The State Department of Transportation provides guidance on assessing impacts due to transportation-related projects. (http://www.dot.ca.gov/hq/env/noise)

LRDP EIR

The Noise section of an LRDP EIR typically uses baseline noise measurements taken on and around the sites potentially affected by the LRDP. Future noise conditions are then estimated based on anticipated changes in land use, traffic, and surrounding activities. Construction activities associated with development projects commonly include similar sources of noise that can be analyzed and mitigated in the LRDP EIR, usually without further analysis at the project level. The Noise Element of the local community General Plan, or the community noise ordinance, can be consulted for guidance on locally acceptable noise levels. An acoustical engineer should be retained to prepare the Noise section of the LRDP EIR.

Project EIR

To the extent not analyzed in an LRDP EIR, the Noise section of a Project EIR should analyze the noise impacts that would be caused by the proposed project and determine whether they would result in perceptible or significant changes in noise conditions.
Standards of Significance

Would the project result in:

- Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?

- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing levels existing without the project?

- Exposure of people residing or working in the project area to excessive noise levels if the project is located within an area covered by an airport land use plan, or where such plan has not been adopted, within two miles or public airport or public use airport?

- Exposure of people residing or working in the project area to excessive noise levels if the project is located in the vicinity of a private airstrip?

- Exceedance of an applicable LRDP or program EIR standards of significance? This question enables the campus to define a campus specific threshold of significance.

Analytical Methods

- Complete a noise survey if one does not exist, to establish baseline conditions. The survey should identify locations of sensitive receptors and major noise sources (e.g., freeways, industrial areas, etc.), and the community land use compatibility guidelines for noise.

- Identify and map major noise sources and sensitive receptors (e.g., residences, areas used for quiet recreation) in the proposed project area.

- Identify relevant noise policies and regulations.

- Estimate noise associated with project construction activities. Determine the duration of construction and phases or periods most likely to be disruptive. Identify other nearby projects potentially undergoing simultaneous construction. Compare effects with land use compatibility standards and applicable noise standards.
• Identify noise sources related to project operation (e.g., new traffic, stationary equipment, or other loud activities), and estimate project-related contribution to the noise environment at sensitive receptors. Assign level of significance.

• For sensitive receptors that may be planned with the project, characterize compatibility with the existing and future noise environment.

• Identify potential cumulative impacts.

**Generally Feasible Mitigation Measures**

For construction-related noise effects:

• Schedule construction activities and route construction traffic to minimize disruption to area residences and existing operations surrounding the project site, as well as to campus users. Construction scheduling limitations should depend on the sensitivity of the affected receptors. For example, to protect residential land uses, night and weekend construction should be restricted; however, interior construction work at night or on weekends may be permissible if noise thresholds are not exceeded. To protect academic land uses that would be occupied primarily in the daytime, nighttime and weekend construction could be encouraged.

• Erect temporary wood noise barrier shields around the work area where jackhammers and other construction equipment are being used in the vicinity of sensitive receptors.

• Locate noise equipment away from sensitive receptors.

• Limit the hours of construction activities.

For noise effects related to new sources:

• Limit hours of operation of new noise sources to minimize disturbance of sensitive receptors.

• Design new noise sources to incorporate noise attenuation measures or features.

For noise effects related to land use compatibility:

• Design new campus residential facilities so that indoor noise levels will conform to Title 24, Part 2, of the California Code of Regulations.

• In projects where redesigning is not feasible, suggest mitigation measures that will reduce noise (e.g., reduce the intensity of the noise sources, provide double-paned windows, or provide barriers, fences, or berms between the noise source and receptors).
• Erect/construct a permanent noise barrier (i.e., a soundwall) to reduce noise impacts to sensitive receptors.