



Identify sensitive receptors, e.g. residential, commercial, hospitals, schools, etc.:

- Picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals that have an exterior decibel level of 67 or higher.

Measurements are taken in "frequent" human use areas:

- Residential: Typically in the backyard.
- Commercial Areas: Typically an exterior use area where people are for an extended period of time, 1 hour or more.
- Schools: Interior noise levels.

Predict using noise modeling software and the following project features:

- Future peak noisiest-hour traffic.
- Topographic features.

Traffic noise impacts are predicted to occur when:

- Predicted noise levels with the project exceed existing noise level by 12 dBA (Substantial).
- Predicted noise levels with project approach within 1 dBA, or exceed the Noise Abatement Criteria (NAC).

Noise abatement is considered/recommended:

- Caltrans Traffic Noise Protocol requires consideration of noise abatement measures when traffic noise impacts have been identified.
- Noise abatement is only considered where noise impacts are predicted and where frequent human use occurs and a lowered noise level would be of benefit.
- Determine the feasibility of noise abatement: Feasibility - minimum 5 dBA noise reduction at the impacted receivers.
- Determine reasonableness allowance - Reasonableness takes into consideration 5 factors: Absolute noise levels; increase in noise level; achievable noise reduction; date of highway construction vs. date of residential construction; total reasonableness allowance vs. project cost.

Noise Abatement Decision Report (NADR):

- Responsibility of Project Engineering to complete.
- Requires input from the Project Development Team.
- Draft of NADR recommendation to be incorporated into the Draft Environmental Document.

Regulations, Standards and Policies

- FHWA - Title 23, Part 772 of the Code of Federal Regulations (23 CFR 772)
- California Streets and Highways Code, Section 216
- Caltrans Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects (Protocol, August 2006)
- Technical Noise Supplement, August 2009
- Caltrans Project Development Procedures Manual, Chapter 30 - Highway Traffic Noise Abatement