

## October 2010

## Noise

## Impacts

Sensitive receptors, such as residences, schools, and parks, are considered impacted by noise when noise levels exceed Federal Highway Administration noise abatement criteria or when proposed projects cause a substantial (10 decibel or greater) increase in noise levels.

- Site-specific noise modeling and analysis will be conducted for each Tier 2 process
- Several communities in the Corridor are impacted by noise under existing conditions.
- Without noise mitigation, projected noise levels exceed noise abatement criteria in some areas of the Corridor under most or all alternatives.
- During construction, intermittent noise from diesel-powered equipment ranges from 80 to 95 decibels at a distance of 50 feet. Impact equipment such as rock drills and pile drivers generate louder noise levels







## **Mitigation Strategies**

At the Tier 1 decision, the lead agencies do not propose any specific mitigation strategies but will consider a full range of mitigation options in Tier 2 processes to reduce highway noise for impacted communities.

Mitigation options to be considered include:

- Noise barriers, such as walls or berms (generally most • practical)
- Concrete barriers
- Creation of noise buffer areas •
- Enforcing engine compression brake muffler use ۲
- Noise insulation of buildings ٠
- Pavement type (not considered effective noise mitigation • at this time)
- Active noise control •
- Cut and cover, tunnels .
- Adjusting vertical and horizontal alignments ٠

Construction noise impacts could be mitigated by limiting work to certain hours of the day when possible, requiring the use of well-maintained equipment, and other strategies.

