Noise Barrier

Fact Sheet

What is a noise barrier?

Noise barriers absorb traffic and construction noise to help minimize disturbance to those that live and work near high-traffic areas.

What will the noise barriers look like?

The appearance of the barriers has not yet been determined. Information about the color and finish will be shared as soon as they have been determined.

How are sound levels determined for noise barrier placement?

Noise barriers are placed in areas where noise could exceed acceptable sound levels established by state and federal noise policy. Current and future sound levels are determined through a computer noise model that factor in roadway traffic, terrain/ground features, noise-sensitive areas, such as homes, parks, etc., and/or any other feature that could influence noise.

Are renters allowed to participate in voting for noise abatement?

Yes. All individuals, owners, and renters who would benefit from a proposed noise barrier get to participate in the voting.

How do you determine who would benefit from a noise barrier?

Georgia DOT measures potential noise impacts to residences, businesses, and other properties adjacent to the interstate. Residences and businesses that would realize a noise reduction of a least five decibels are referred to as "benefited receptors" and given the opportunity to vote either in favor or against the installation of noise barriers through a balloting process administered by Georgia DOT.

Common Sound Levels Common Outdoor Noise Levels **Common Indoor** Sound Levels Sound Levels dB (A) 110 Rock Band 100 Inside Subway Train B-747 Takeoff at 2 mi. Gas Lawn Mower at 3 ft. Diesel Truck at 150 ft. 90 DC-9 Takeoff at 2 mi. Food Blender at 3 ft. 80 Noisy Urban Daytime Garbage Disposal at 3 ft. Shouting at 3 ft. 70 Vacuum Cleaner at 10 ft. B-757 Takeoff at 2 mi. Four Lane Road at 50 ft. Commercial Area Normal 60 Speech **50** Large Business Office Quiet Urban Daytime Dishwasher Next Room Small theater, Large Quiet Urban Daytime 40 Conference Room Quiet Suburban Nighttime Library ==== **30** Bedroom at Night Concert Hall (Background) Quiet Rural Nighttime 20 Broadcast and Recording Studio

Source:

Draft EIS/EIR LAX Proposed Master Plan Improvements, Los Angeles, CA, U.S. Department of Transportation, FAA, January 2001.



Threshold of Hearing

What is considered a noise impact?

Noise impacts occur when sound levels approach or exceed the federal Noise Abatement Criteria (NAC) for each land use category. Sound levels are measured in decibels, and in Georgia, noise is "approaching" NAC when it comes within one decibel below the criteria. The NAC for an outdoor area of frequent human use at a residential home is 67 decibels, meaning 66 decibels or higher is considered an impact. The NAC for an outdoor area of frequent human use at a business (such as a pool) is 72 decibels, meaning 71 decibels or higher is considered an impact. An impact also occurs if the proposed project increases sound levels by 15 decibels.

In what cases would you not construct a noise barrier in an affected area?

Every situation is different. Some common reasons why a barrier is not proposed include:

- The inability to physically construct or maintain a barrier
- The barrier's inability to reduce sound for those impacted
- A barrier that does not meet Georgia DOT's reasonability requirements of minimum noise level reduction of 7 decibels, the total cost exceeds the \$55,000 average allowance per benefited receptor, using \$25 per square foot cost for the barrier, and outreach with property owners and residents (the current voting process).

Are noise barriers guaranteed?

They are not. In some cases, as final design and utility information is obtained, it is discovered that there are design and/or utility conflicts which result in Georgia DOT not being able to physically construct a noise barrier. In addition, votes are held to determine if benefited residents want the barrier. A barrier will not be constructed if a majority of those that would benefit from the barrier do not desire it.

How far from the road are levels studied, and how were those limits determined?

There is no set distance. Homes and other noise -sensitive areas are studied until the noise model no longer identifies noise impacts. Once all potential noise impacts are identified, no further modeling or studies occur.

At what point in the project would noise barriers be constructed?

The Project is in the early stages of development and a construction schedule has not yet been set. Once the Project is under construction, Georgia DOT encourages progressing the construction in such a way that priority is placed on constructing noise barriers as early as practical.

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