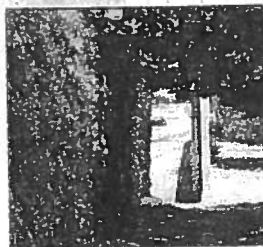
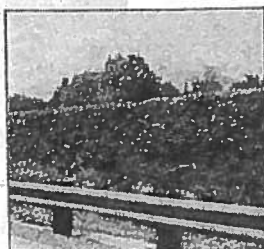


**MTA Retrofit Soundwall Program**  
*Working to Help Communities!*

**HAVE YOU HEARD  
ABOUT  
SOUNDWALLS?**



This is general information only.  
For specific information regarding your  
community, please visit the MTA Retrofit  
Soundwall Website at:  
[http://www.mta.net/trans\\_planning/CPD/Soundwalls/](http://www.mta.net/trans_planning/CPD/Soundwalls/)  
or call the  
MTA Retrofit Soundwall Program  
Hotline at 1-800-570-7773.



**Los Angeles County  
Metropolitan Transportation Authority**  
One Gateway Plaza  
Los Angeles, CA 90012-2952



**LOS ANGELES COUNTY  
METROPOLITAN  
TRANSPORTATION  
AUTHORITY**

### **What are soundwalls?**

Simply put, soundwalls are noise barriers constructed of a solid material. They are normally built between the freeway and residential property to reduce traffic noise.

### **Who is responsible for building and maintaining soundwalls?**

Traditionally, Caltrans has been the agency responsible for both construction and maintenance of soundwall projects in California. Due to the increasing backlog of projects, legislation has been passed to transfer the responsibility of building retrofit soundwalls to the local transportation agency. In Los Angeles County, MTA has inherited a long list of soundwall projects that need to be completed, totaling nearly \$1 billion. Soundwalls are still required to be built and approved using Caltrans specifications and will be maintained by Caltrans.

### **When are soundwalls considered for a community?**

Soundwalls are considered under the following circumstances:

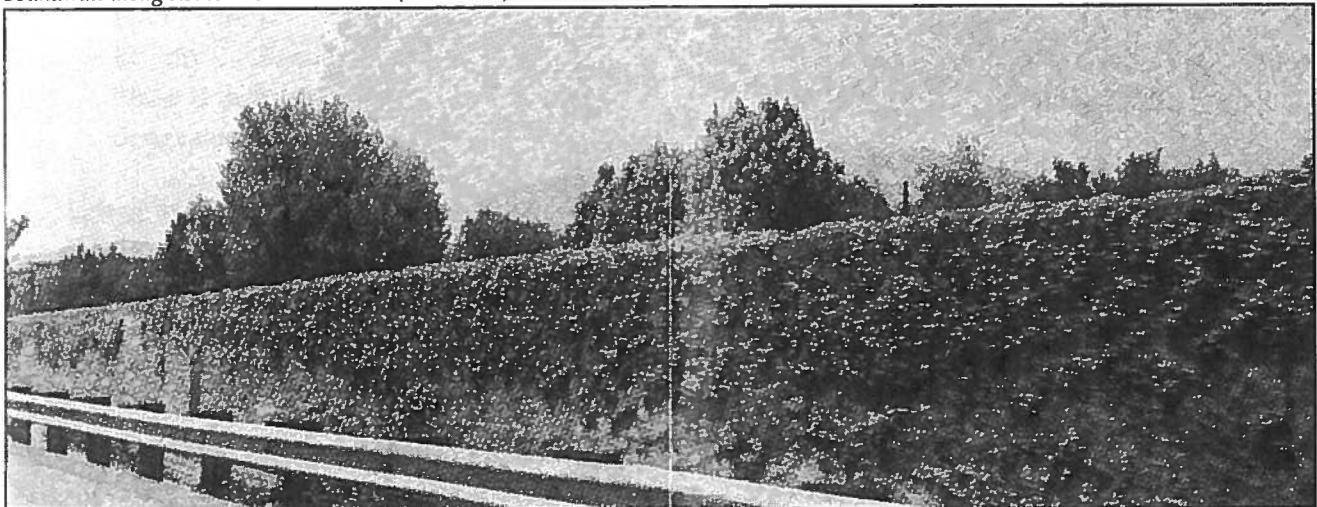
- Type I - As part of new highway construction or major reconstruction
- Retrofit - Along existing freeways when noise levels exceed 67 decibels
- Private Soundwalls - Developers of property located adjacent to an existing freeway are responsible for mitigation of sound using privately funded soundwalls

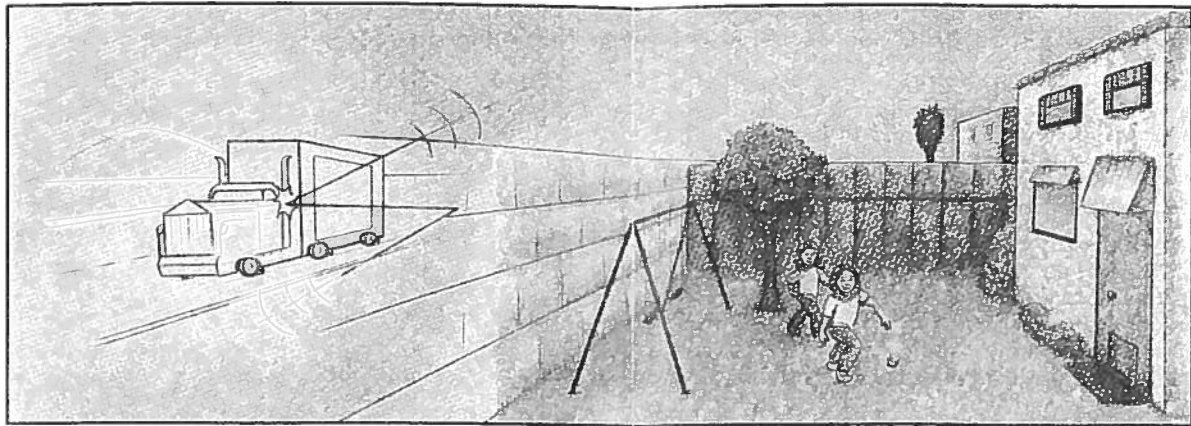
### **What are the criteria for approving a soundwall?**

Soundwalls are only warranted in a community if they are able to meet the following criteria:

- Residential property developed prior to construction of the freeway or prior to implementation of a freeway capacity-enhancing project
- Hourly noise levels at the location exceed the 67 decibel (Leq) threshold
- Proposed soundwall results in a minimum 5 decibel noise reduction

*Soundwall along Route 210 in Pasadena (westbound)*





*Illustration of sound originating from moving vehicle, being deflected away from residence by soundwall.*

### **How does sound travel?**

Sound waves are able to bend around objects and transmit through solid materials. Therefore, it is impossible to completely eliminate the noise generated by freeway traffic. In addition, even when traffic volumes are the same, there are many other factors that affect noise levels including: changes in terrain, curves in the freeway and changes in elevation between, above and below ground.

### **How does a soundwall work?**

As illustrated in the figure above, soundwalls reduce the level of freeway noise that enters a community by either absorbing the sound, reflecting it back across the highway, or forcing it to take a longer path over and around the barrier. To protect a community, a soundwall must be tall enough and long enough to block the view of a highway.

### **Retrofit Soundwall Projects Background**

On May 3, 1989, the California Transportation Commission (CTC) adopted a statewide priority list for the construction of retrofit soundwalls.

Known as the "May 1989 Retrofit Soundwall List," funding was diverted at that time, away from soundwalls and in large part, to the State's Regional Bridge Seismic Retrofit Program.

In 1997, Senate Bill 45 was passed to allow local transportation agencies to build retrofit soundwalls. At the time, Los Angeles County still had 40 unfinished soundwall projects from the original list. Subsequently, the CTC acted to fund the remaining Retrofit Projects using the 2000 State Transportation Improvement Program (STIP). Using these STIP funds with local proposition funds, MTA is coordinating with Caltrans for the systematic design and construction of these remaining projects.

Since the decision by the CTC to fund the remaining retrofit soundwall projects from the May 1989 list, MTA and Caltrans have developed a Post-1989 Retrofit Soundwall Project List containing soundwall projects identified after May, 1989. This new list includes freeway segments found eligible for soundwalls based on field tests conducted by Caltrans at the request of residents and local agencies.

## **How will MTA deliver the Post-1989 Retrofit Soundwall Projects?**

On January 27, 2000, MTA's Board adopted the Los Angeles County Soundwall Implementation Policy. Given the substantial cost to implement these retrofit soundwalls, this policy document incorporated a phase-in strategy to ensure a fair and rational implementation process. Towards that end, existing state criteria were augmented to include dividing the projects into two phases:

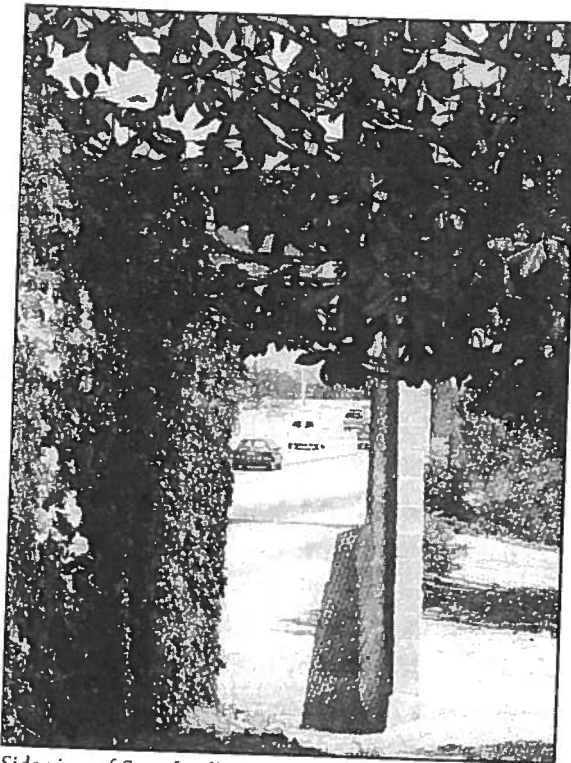
- Phase I - Includes those projects on freeway segments where High Occupancy Vehicle (HOV) or carpool lanes were built without warranted soundwalls
- Phase II - Contains qualified soundwall segments on freeways without carpool lanes

Phase I has been further segmented into three priority phases:

- Priority 1 - Soundwall segments that have had soundwalls constructed on only one side of the freeway
- Priority 2 - All remaining soundwalls from Phase I
- Priority 3 - Soundwalls misplaced in Phase II that should have been designated in Phase I

## **What is the current status of the MTA Retrofit Soundwall Program?**

On August 23, 2001, the MTA Board awarded the first consultant contract for preliminary engineering services to produce Noise Barrier Scope Summary Reports, including environmental and right-of-way



*Side view of Soundwall along Route 210 in Pasadena*

assessments. Preliminary engineering (approximately nine months) must be completed prior to final design (approximately one year to 18 months) and construction of the Phase I/ Priority 1 projects. MTA has committed to the delivery of these projects by 2005.

## **How do I find out if there is a Soundwall Project in my area?**

The MTA Soundwall Program website (see back cover for address) details the Post-1989 Retrofit Soundwall List projects, including maps of the Phase I projects. The website also provides a link to the Caltrans website, [www.dot.ca.gov/dist07](http://www.dot.ca.gov/dist07), which provides information on the original May 1989 Retrofit Soundwall List projects.