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PLANNING AND PROGRAMMING COMMITTEE  
SEPTEMBER 19, 2007

SUBJECT: POST 1989 RETROFIT SOUNDWALL PROGRAM ONGOING  
IMPLEMENTATION AND ADMINISTRATIVE POLICY  
CHANGES

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATIONS

- A. Delegate to the Chief Executive Officer the authority to make technical changes to the Soundwall Implementation Policy; and  
  
Requires a 3/4 vote
- B. Cancel Final Design for Soundwall Phase I, Priority 2, Package 9, and add 0.1 mile to Phase I, Priority 2, Package 11.

ISSUE

In January 2000, the Metro Board adopted the Soundwall Implementation Policy to deliver the May, 1989 Retrofit Soundwall Projects and established procedures to implement the Post 1989 Soundwall Projects. Metro and Caltrans representatives have been working together to move the program forward.

As part of their responsibilities, Caltrans qualifies areas for soundwalls based on the Metro Soundwall Implementation Policy and California Streets and Highways Code Section 215.5. Caltrans calculates cost effectiveness using the California Construction Cost Index which is adjusted annually. When Metro adopted the Soundwall Implementation Policy in 2000, the cost effectiveness index was \$40,000 per residential unit. Over time, this index has changed with the 2006 figure being \$77,000 per residential unit. In order to keep the Soundwall Policy current, it is recommended that the Board delegate to the Chief Executive Officer the authority to adjust the cost effectiveness factor in accordance with the California Construction Cost index on an annual basis.

At the February 22, 2007 meeting, the Metro Board prioritized and packaged the soundwalls in Phase I, Priority 2 and authorized entering into funding agreements with Caltrans for the design of Packages 8, 9 and 10.

Package 9 consists of three soundwall projects on Route 405 with an estimated final design cost of \$380,000. The three projects are:

1. From Route 101 to South Burbank Boulevard, Northbound (approximate length 1 mile)
2. From North Stagg Street to South Stagg Street, Southbound (approximate length 0.1 mile)
3. From Redondo Beach Boulevard to 166<sup>th</sup> Street, Northbound (approximate length 0.3 mile)

Prior to beginning final design, Caltrans surveyed the locations of the three soundwall projects and discovered that Projects No. 1 and No. 3 have already been constructed under Caltrans May 1989 Retrofit Soundwall Program and High Occupancy Vehicle (HOV) Program. Further, in discussions with Caltrans representatives, it has been determined that it is not economically cost-effective to design and construct Project No. 2 as a stand alone project as it is only an estimated 0.1 mile in length. Project No. 2 can be added to Package 11 on the same freeway when funding becomes available to design and construct this package. According to current projections, funding for the design and construction of Package 11 will not be available until after 2012.

### POLICY IMPLICATIONS

According to the adopted Soundwall Implementation Policy, any changes or exceptions to the policy requires a three-fourths majority by the Metro Board. The recommendation to delegate and authorize the Chief Executive Officer to perform technical changes to the Soundwall Implementation Policy requires a three-fourth majority. Delegating minor technical changes to the Chief Executive Officer will allow the Soundwall Program to move forward based on current criteria.

Regarding Package 9, because the Board approved the final design of this Package, its termination requires Metro Board authorization prior to cancellation.

### OPTIONS CONSIDERED

The Metro Board could elect not to approve the delegation and authorization of the Chief Executive Officer to perform technical changes to the Soundwall Implementation Policy. This option is not recommended. This authorization will allow the Soundwall Program to be implemented based on current criteria and would not materially change the existing adopted policy.

The Metro Board could continue the final design of Phase I, Priority 2, Package 9 with the remaining soundwall. This option is not recommended because it is not economically cost-effective. A better option would be to place the project in Package 11 with other soundwalls in the same geographical proximity.

## FINANCIAL IMPACT

The cancellation of final design for Package 9 will result in savings of \$380,000 in Proposition C 25% funds. The savings can be used to fund other soundwall projects or other transportation projects that qualify for Proposition C 25% funds.

## BACKGROUND

Prior to 1998, Caltrans was responsible for the Soundwall Program. With the passage of Senate Bill 45, the responsibility for delivering the Soundwall Program was transferred to Metro with no corresponding funding source. Metro inherited a backlog of soundwall projects totaling nearly \$2 billion.

To assist with delivering the program, in April 2000, the Metro Board adopted the Soundwall Implementation Policy. This policy provides guidance in delivering the program and was based on the State approved criteria at the time of adoption.

## NEXT STEPS

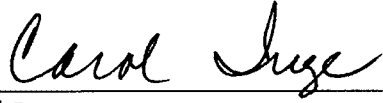
Upon Board approval, the authorization of the Metro Chief Executive Officer to perform administrative changes will become effective. In addition, an amendment to the Funding Agreement between Caltrans and Metro will be prepared and executed to reflect the reduction of \$380,000 in the final design cost for Soundwall Package 9.

## Attachments:

Attachment A-Soundwall Implementation Policy

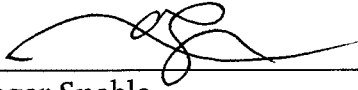
Attachment B-List of Soundwall Project under Phase I, Priority 2, Package 9

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**ATTACHMENT A**  
**SOUNDWALL IMPLEMENTATION POLICY**  
**(Revised September 27, 2007)**

At its regular meeting in August 1999 the California Transportation Commission acted to fund the May 1989 Soundwall Retrofit List off the top of the 2000 STIP Fund Estimate. Accordingly, MTA LACMTA staff has coordinated with Caltrans District 07 to ensure the systematic design and construction of these soundwalls pursuant to current State laws and regulations. Correspondingly, the MTA LACMTA establishes the following policy to ensure the expeditious delivery of the remaining critically needed soundwalls throughout Los Angeles County:

- I. MTA LACMTA Responsibilities:**
- A. MTA LACMTA shall seek funding from local, state and federal revenues and establish an appropriate level of funding in MTA's LACMTA's Long Range Plan for the construction of soundwall projects and continue said funding allocation until all of the soundwalls on the POST 1989 Soundwall Project List (including soundwalls that yet to be identified) are delivered.
- B. MTA LACMTA shall seek to deliver the soundwalls on the POST 1989 Soundwall Project List based on their Priority Index Number. To maximize cost effectiveness, it is envisioned that some May 1989 Retrofit Soundwalls and some of the Post 1989 Soundwall Projects will be consolidated via the extension of contiguous POST 1989 Soundwall Projects and project limits would be extended up to ½ mile to mitigate noise levels that exceed the 67 decibels. Such modifications to the POST 1989 Soundwall Project List will be based on technical engineering analysis. Other freeway segments that have been identified as requiring soundwalls after 1989, as well as the freeway segments requiring soundwalls that have yet to be identified, will also be prioritized by Priority Index Number. These new soundwalls will be implemented after the delivery of the May 1989 Soundwall Retrofit List and the current POST 1989 Soundwall Project List unless a local agency contributes funds to advance the project (see Local Agencies Responsibilities below).
- C. The ranking criteria adopted by the Board at its January 27, 2000 meeting will apply to the POST 1989 Soundwall Project List. This revised criteria includes the provisions currently contained in the Section 215.5 of the State of California Streets and Highways Code which is currently in force and modified by the following over-riding new criteria, Nos. 1 and 2:
1. *Highest consideration shall be given to freeway segments where High Occupancy Vehicles (HOV) lanes were constructed, but*

warranted soundwalls were not built as part of the HOV project (Phase I).

2. Within Phase I, the following defined extenuating circumstances will receive the highest priority in implementation in Phase I:
  - a) Priority will be given to those freeway segments where HOV lanes have been constructed and soundwalls were installed on one side of the freeway only. The construction of the soundwall on the opposite side of the freeway shall be given priority for construction provided; for example, residential areas or a school are located on the unmitigated side of the freeway.
  - b) Schools sites where noise mitigation was not provided.
3. Consideration shall be given to residential areas which were developed prior to the opening of a freeway.
4. Any capacity-enhancing project, such as HOV lanes, or adding mixed flow lanes which result in a significant and measurable increase in ambient noise levels above the 67 dBA threshold.
5. Cost effectiveness: Projects costing no more than ~~\$40,000~~ **\$77,000** per residential unit protected by the proposed soundwall are considered to be cost-effective. In calculating cost effectiveness, all living unites immediately adjacent to the freeway which will benefit by a 5 decibels or more reduction in noise levels are counted.
6. Significant benefit: The noise barrier must provide a minimum of 5 decibels ambient noise reduction.
7. A majority of the occupants in close proximity to the freeway resides there prior to the time the freeway route was adopted. The city or county requesting the soundwall must provide documentation on the percentage of original occupants still residing along the freeway.

Note: The existing criteria for school noise mitigation, wherein noise levels exceeding 52 dBA must be mitigated, is contained in section 215.5 of the State Streets and Highway Code currently in force will be applied under this policy.

- D. The POST 1989 Soundwall Project List will be prioritized and delivered in two phases in conformance with the revised ranking criteria adopted by the ~~MTA~~ LACMTA Board at its regular board meeting on January 27, 2000:
  - Phase I will contain all soundwall projects along freeway segments where HOV lanes were constructed without the warranted soundwalls.

- Phase II will contain all other soundwalls including soundwalls identified prior to the adoption of this policy.
- E. For capacity enhancing projects (i.e., HOV or widening projects) which require a soundwall(s), MTA LACMTA shall program sufficient funds to such projects (when funds are available) so that the cost of the soundwall(s) is a part of the capacity enhancing project construction cost.
- F. Funding Program:
  1. The \$34.8 million currently identified in the RTAA for delivery of the May 1989 Soundwall List will be reserved for the delivery of the POST 1989 Soundwall Projects;
  2. The funding for the balance of the POST 1989 Soundwall Project List will be addressed as part of the MTA LACMTA Long Range Plan Update, 2000.
- G. The MTA LACMTA Board Adherence to this Policy – Any changes or exceptions to the policy shall be made by 75 percent majority – 10 votes to pass.

## **II. Caltrans Responsibilities:**

- A. Caltrans shall comply with federal and state requirements and guidelines regarding noise mitigation and highway soundwalls. Caltrans shall follow the Highway Design Manual (Topic 1104-Highway Traffic Noise Abatement). This includes the inventory of qualifying areas and the calculation of the Priority Index Numbers which shall be based on the current Caltrans policy and guidance contained in the Caltrans Traffic Noise Analysis Protocol (CaTNAP) and the Technical Noise Supplement (TeNS), and modified by the MTA LACMTA Board action above.
- B. Caltrans will review, cooperatively with the MTA LACMTA, the POST 1989 Soundwall Project List and “rebundle” the projects, consolidating contiguous soundwall segments pursuant to Section I.B (above) and will apply to revised ranking criteria adopted by the MTA LACMTA Board, to produce a more cost-effective and expeditious delivery of the POST 1989 Soundwall Projects.
- C. Caltrans agrees to work with MTA LACMTA staff to reduce the project development cost (currently amounts to 45 percent of the construction cost) to a level that is consistent with other state freeway infrastructure project development costs (i.e. 20 to 30%). These development costs include preparing plans, specifications and construction engineering. Furthermore, Caltrans and MTA LACMTA staffs will work to reconcile

and reduce the average of \$3.7 million cost per mile for the POST 1989 Soundwall Projects.

- D. Caltrans shall update the cost of soundwalls every two to five years.
- E. Caltrans shall absorb all costs associated with developing the Priority Index Numbers and the Noise Barrier Scope Study Reports (NBSSR).
- F. Caltrans shall include in their estimates for capacity enhancing projects (i.e., HOV or widening projects) the cost of any required soundwall(s).

**III. Local Agencies Responsibilities:**

- A. Exceptions shall be granted to local agencies wanting to accelerate the construction of soundwalls, if a local agency meets one of the following legislatively mandated criteria:
  - 1. Current state legislation allows local agencies to move soundwall projects to the top of the priority list by contributing a minimum of 33 percent (non-refundable to the local agency) of the soundwall project's design and construction cost. Local agencies shall follow the Streets and Highway Code 215.6. This policy will allow local agencies to contribute 33 percent towards a project on the POST 1989 Soundwall Project List in order to move its project up on the list. Note: This option will terminate if the enabling legislation (Section 215.5, Streets and highways Code) is repealed.
  - 2. A local agency may use its local funds to design and construct a soundwall. MTA LACMTA will reimburse the local jurisdiction (without interest) for the full cost of the design and construction of a project when that project comes up on the priority list for consideration.
- B. The design and construction cost of any modifications to the standard wall (i.e., special design features or aesthetic enhancements) which are requested by a local agency shall be paid for by the local agency.
- C. Allow local agencies trade Proposition A Local Return Funds for State or Federal Funds through the MTA LACMTA.



Attachment B  
Phase I, Priority 2  
Package 9

\$000

Rte	Postmile		Dist	Proj. Dist	General		Est. Construct Cost	Est. Design Cost	Est. Const Sup Cost	Total Cost	Pin Number	Average Pin Number	
	From	To			Location	Project Location							
						<b>PACKAGE 9</b>							
405	39.2	40.2	1.0	1.0	Los Angeles	No Route 101 / So Burbank Blvd: NB					10.688		
405	43.0	43.1	0.1	0.1	Los Angeles	No Stagg St / So Stagg St: SB					0.716		
405	16.9	17.2	0.3	0.3	Lawndale	Redondo Beach Blvd/166th St: NB					3.000		
				<b>1.4</b>		<b>Total Package 9</b>	<b>\$ 2,530</b>	<b>\$ 380</b>	<b>\$ 380</b>	<b>\$ 3,289</b>	<b>14,404</b>	<b>4,801</b>	

