



I-95/SCUDDER FALLS BRIDGE IMPROVEMENT PROJECT

STATE NOISE CRITERIA COMPARISON

Noise Abatement Criteria for Residential Area	Pennsylvania DOT ¹	New Jersey DOT ²
Consideration of noise abatement is warranted if EITHER of the following criteria are met for $L_{eq}(h)$:		
<ul style="list-style-type: none"> Absolute Noise Level Approaches or Exceeds 	67 dBA	67 dBA
<ul style="list-style-type: none"> Increase Over Existing Noise Level Equals or Exceeds 	10 dBA	10 dBA
Some factors considered in evaluating the feasibility and reasonableness of noise barriers include:		
<ul style="list-style-type: none"> Range of Noise Reduction for Majority of Impacted Residences 	7 to 10 dBA	5 to 10 dBA
<ul style="list-style-type: none"> Reduce Noise Levels to 	Low 60 dBA range or existing levels if possible	
<ul style="list-style-type: none"> Minimum Noise Reduction for Barrier to be Considered Feasible 	5 dBA for majority of impacted receptors	5 dBA
<ul style="list-style-type: none"> Minimum Noise Reduction for a Barrier to be Considered Reasonable 	3 dBA for impacted receptors; 5 dBA for non-impacted receptors	5 dBA
<ul style="list-style-type: none"> Achieve Noise Reductions with Average Wall Height of Maximum Wall Heights of 		16 feet (4.88 meters) 18 feet (5.49 meters) ³
Some factors considered in evaluating cost-effectiveness of noise barriers include:		
<ul style="list-style-type: none"> Maximum Barrier Cost per Impacted Residential Dwelling Unit 	\$50,000	\$50,000 ⁴
<ul style="list-style-type: none"> Maximum Barrier Cost per Non-Impacted Residential Dwelling Unit 	\$50,000	\$25,000
<ul style="list-style-type: none"> Cost per Square Foot of Barrier Used in Calculations⁵ 	\$25	\$50

Notes: 1 - Pennsylvania Department of Transportation, Project Level Highway Traffic Noise Handbook, Publication No. 24, February 2, 2002.

2 - New Jersey Department of Transportation, Traffic Noise Management Policy and Noise Wall Design Guidelines, 2003.

3 - Wall heights of greater than 18 feet must be approved by the Director of Design Services

4 - \$55,000 for sites with absolute noise levels above 76 dBA or with a 20 dBA increase over existing noise level

5 - See State policies for items considered in cost