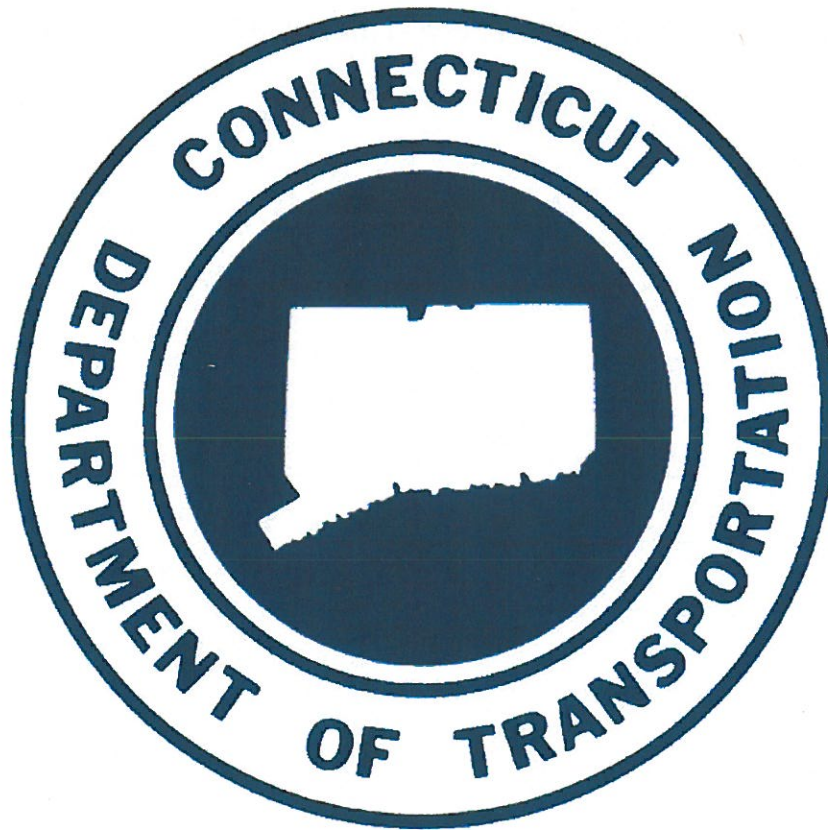


**CONNECTICUT DEPARTMENT OF TRANSPORTATION
HIGHWAY TRAFFIC NOISE ABATEMENT
POLICY FOR PROJECTS FUNDED BY THE FEDERAL HIGHWAY
ADMINISTRATION**



May 2017

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5-10-2017

Date of Approval

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DEFINITIONS.....	1
INTRODUCTION	4
PURPOSE.....	4
APPLICABILITY	4
DATE OF PUBLIC KNOWLEDGE.....	4
TRAFFIC NOISE PREDICTION.....	5
ACOUSTICAL ANALYST QUALIFICATIONS	5
NOISE IMPACT DETERMINATION.....	5
TABLE 1 NOISE ABATEMENT CRITERIA.....	7
SUBSTANTIAL NOISE LEVEL INCREASE.....	8
ANALYSIS OF NOISE ABATEMENT MEASURES.....	8
FEASIBILITY	8
REASONABLENESS	8
REASONABLENESS DETERMINATION FOR NON-RESIDENTIAL LAND USE.....	9
ACCEPTABLE NOISE ABATEMENT MEASURES	11
THIRD PARTY PARTICIPATION	11
PUBLIC INVOLVEMENT	12
COORDINATION WITH LOCAL OFFICIALS	12
CONSTRUCTION NOISE.....	12
FEDERAL PARTICIPATION	13
REVIEW OF POLICY	13
APPENDIX A – POLICY ON TRAFFIC NOISE BARRIER WALLS (PRIVATELY FUNDED	14

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DEFINITIONS.

Activity Categories - Categories of land use and human activities, established by the Federal Highway Administration (FHWA), that are sensitive to noise in different ways. Each Activity Category has specific Noise Abatement Criterion. A discussion of the Activity Categories used in a highway traffic noise analysis is included in this policy and procedures document.

Benefited Receptor – All receptors, both impacted and non-impacted, that receive a noise level reduction of 5 dB(A) or more through construction of a noise abatement measure.

Cost Effectiveness Index (CEI) – An index used to determine barriers' reasonableness based on cost, average insertion loss, and the number of sensitive receptors protected.

Date of Public Knowledge - The date of approval of the Categorical Exclusion (CE), the Finding of No Significant Impact (FONSI), or the Record of Decision (ROD), as defined in 23 CFR part 771.

(dB(A)) A-Weighted Scale– An A-weighted decibel unit that is used to measure noise. It best corresponds to the frequency response of the human ear.

Decibels (dB) - The logarithmic unit of the ratio of sound pressure to a reference pressure squared, also expressed as a measure of relative acoustic energy. The unit for the measure of loudness.

Design Year - The future year used to estimate the probable traffic volume for which a highway is designed.

Existing Noise Levels - The worst noise hour resulting from the combination of natural and mechanical sources and human activity usually present in a particular area.

Feasibility - The combination of acoustical and engineering factors considered in the evaluation of a noise abatement measure. Feasibility generally deals with considering whether it is possible to provide noise abatement given the site constraints and whether the noise abatement provides a minimum reduction in noise levels.

Insertion Loss – The amount of noise reduction achieved by a noise abatement measure.

Leq - The equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period, with $Leq(h)$ being the hourly value of Leq .

Likelihood – The act or state of something being probable.

Multifamily Dwelling - A residential structure containing more than one residence. Each residence in a multifamily dwelling shall be counted as one receptor when determining impacted and benefited receptors.

Noise Abatement Measure - Any method implemented to reduce highway traffic noise levels, such as noise walls and earthen berms.

Noise Abatement Criteria (NAC) - Noise Abatement Criteria are the thresholds set by the FHWA which are used to determine if there is a traffic noise impact for different Activity Categories.

Noise Barrier - A physical obstruction that is constructed between the highway noise source and the noise sensitive receptor(s) that lowers the noise level, including stand-alone noise walls, noise berms (earth or other material), and combination berm/wall systems.

Noise Contour - A linear representation of equal noise levels, similar to elevation contour lines on a topographic map.

Noise Reduction Design Goal - The optimum desired dB(A) noise reduction determined from calculating the difference between future build noise levels with abatement, to future build noise levels without abatement. The noise reduction design goal shall be at least 7 dB(A).

Reasonableness - The combination of social, economic, and environmental factors considered in the evaluation of a noise abatement measure.

Receptor - A discrete or representative location of a noise sensitive area(s), for any of the FHWA land uses.

Residence - A dwelling unit. A single family residence or each dwelling unit in a multifamily dwelling.

Substantial Noise Increase - For highway project traffic noise impacts, an increase in noise levels of 15 decibels in the design year over the existing ambient noise level.

Traffic Noise Impacts - Design year build condition noise levels that approach or exceed the NAC listed in Table 1 for the future build condition; or design year build condition noise levels that create a substantial noise increase over existing noise levels.

Type I Project -

- 1) The construction of a highway on new location; or,
- 2) The physical alteration of an existing highway where there is either:
 - a. Substantial Horizontal Alteration. A project that reduces the distance between the traffic noise source and the closest receptor by half or more between the existing edge of travel lane of the nearest through lane condition to the future build nearest through lane condition edge of the travel lane; or,
 - b. Substantial Vertical Alteration. A project that removes shielding therefore exposes the line-of-sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor; or,
- 3) The addition of a full through-traffic lane(s). This includes the addition of a full through-traffic lane that functions as a High Occupancy Vehicle (HOV) lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,
- 4) The addition of an auxiliary lane (see #3), except for when the auxiliary lane is a turn lane; or,
- 5) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
- 6) Restriping existing pavement (see #3) for the purpose of adding a full through-traffic lane or an auxiliary lane; or,

- 7) The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.

Note: A toll plaza is a place on a road where there is a line of tollbooths, that require motorists to stop or substantially slow to pay a fare. The use of All Electronic Tolling (AET) does not involve toll plazas or tollbooths, and therefore, AET is not included in this category as motorists using AET travel at normal roadway speeds and do not stop or slow down to pay fares.

- 8) If a project is determined to be a Type I project under this definition then the entire project area as defined in the environmental document is a Type I project.

Type II Project - A Federal or Federal aid highway project for noise abatement on an existing highway. For a Type II project to be eligible for Federal-aid funding, the highway agency must develop and implement a Type II program in accordance with 23 CFR 772.7(e). The State of Connecticut Department of Transportation has a Type II Retrofit program.

Type III Project - A Federal or Federal aid highway project that does not meet the classifications of a Type I or Type II project. Type III projects do not require a noise analysis.

Worst Noise Hour - A period of 60 minutes within a 24-day in which the highest magnitude hourly equivalent sound level occurs. The worst traffic noise hour typically occurs when traffic is flowing freely at a high volume relative to the peak traffic hour volume, with a high percentage of trucks.

INTRODUCTION

This document contains the Connecticut Department of Transportation (CTDOT) policy on highway traffic noise and construction noise and describes the implementation of the requirements of the Federal Highway Administration (FHWA) Noise Standard at 23 Code of Federal Regulations (CFR) Part 772 (23 CFR 772) as they relate to federal-aid highway construction projects in Connecticut.

PURPOSE

To provide procedures for noise studies and noise abatement measures to help protect the public health, welfare, and livability, to supply noise abatement criteria, and to provide information to local officials pursuant to Title 23, United States Code (U.S.C.). This policy describes CTDOT's program to implement 23 CFR 772, Connecticut Environmental Policy Act, traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials. Where FHWA has given flexibility in implementing the standard, this policy describes the approach used to implement the federal requirements and to analyze traffic noise impacts and propose noise abatement measures, where feasible and reasonable.

APPLICABILITY

This policy applies to all Type I federal or federal-aid highway projects in the State of Connecticut. This policy shall be applied uniformly and consistently to all Type I federal-aid construction projects throughout the state.

The highway traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials in 23 CFR 772 and this policy constitute the noise standards mandated by 23 U.S.C. 109(i). All highway projects which are developed in conformance with this policy shall be deemed to be in accordance with the FHWA noise standards.

DATE OF PUBLIC KNOWLEDGE

The Date of Public Knowledge is the approval date of the final environmental document, e.g., Categorical Exclusion (CE), Finding of No Significant Impact (FONSI) or Record of Decision (ROD). After the Date of Public Knowledge, the federal and state governments are no longer responsible for providing noise abatement measures for new development within the noise impact area of the proposed highway project. The responsibility of providing noise abatement measures will fall upon the local governments and private landowners to ensure that noise-compatible designs are used for permitted development.

This policy applies only to developed land and to undeveloped land for which development is permitted before the final environmental document for the project is accepted. The date for determining when undeveloped land is permitted for development is the approval date of the building permit. In cases in which a building permit is not issued, "permitted" shall be considered as the date at which the developer has obtained regulatory approvals necessary to develop the land within a reasonable period of time and has reached a point where plans can no longer be practically changed

TRAFFIC NOISE PREDICTION

All traffic noise analyses performed by or for CTDOT must utilize the most current version of the FHWA Traffic Noise Model (TNM) or any other model determined by the FHWA to be consistent with the methodology of the TNM model, pursuant to 23 CFR 772.9.

Average pavement type shall be used in the FHWA TNM for future noise level prediction.

Noise contours may be used for project alternative screening or for land use planning, but shall not be used for determining highway traffic noise impacts. The traffic noise contours will be provided to the first elected officials upon request.

Traffic characteristics for the design year build hourly traffic volumes and design speed conditions will be used in predicting noise levels and assessing noise impacts.

Projects that are submitted for review prior to the design approval on or after the acceptance of this policy shall be reviewed under the criteria of this policy; however, the original date of public knowledge shall remain unchanged.

ACOUSTICAL ANALYST QUALIFICATIONS

Any individual or company responsible for the assessment of traffic noise impacts, traffic noise abatement, or review and approval of final noise reports shall at a minimum have a working knowledge of this policy and 23 CFR 772, understand and be able to execute the relevant parts of the latest FHWA reports and guidance, and have completed the NHI Course: "142051 Highway Traffic Noise or equivalent as determined by the CTDOT Water and Noise Compliance Unit. The individual or company must have a working knowledge of the most recent approved FHWA noise model.

NOISE IMPACT DETERMINATION

Highway traffic noise analyses should include noise from all sources. The reasonableness of providing highway traffic noise abatement for identified impacts should include consideration of the ability to abate the noise from all sources, not just highway traffic noise.

Traffic noise abatement for CTDOT highway projects is warranted and must be considered when traffic noise impacts are created by either of the following conditions:

- a) The predicted worst hour Leq(h) traffic noise levels for the Design Year build conditions approach (within 1 dB(A)) or exceed the NAC contained in 23 CFR 772 and in Table 1 of this policy, or
- b) The predicted traffic noise levels for the design year build conditions substantially exceed existing noise levels by 15 dB(A).

Primary consideration shall be given to exterior areas where frequent human use occurs in the determination of traffic noise impacts.

A traffic noise analysis shall be completed for each project alternative under detailed study and for each Activity Category as defined in Table 1 that are present in the study area

For Activity Category D land uses with no defined outside areas of frequent human use, the building interior noise levels will be used to determine impact as defined under the Building Noise Reduction Factors (BNRF).

BUILDING NOISE REDUCTION FACTORS: BUILDING NOISE REDUCTION FACTORS

Building Type	Window Condition	Noise Reduction Due to Exterior of the Structure
All	Open	10 dB
Light Frame	Ordinary Sash (closed)	20 dB
	Storm Windows	25 dB
Masonry	Single Glazed	25 dB
	Double Glazed	35 dB

*The windows shall be considered open unless there is firm knowledge that the windows are in fact kept closed almost every day of the year.

FHWA publication FHWA-DP-45-1R, Sound Procedures for Measuring Highway Noise: Final Report provides procedures to measure building noise reductions.

When analyzing special types of area noise sources such as service plazas, park and ride lots, toll plazas, and weigh stations where idling and stop-and-go operations occur, guidance from National Cooperative Highway Research Program (NCHRP) Report 791 will be used for best modeling practices. Consultation with CTDOT is required prior to conducting any noise analyses related to these area sources.

TABLE 1 NOISE ABATEMENT CRITERIA

Hourly Equivalent A-Weighted Sound Level (decibels (dB(A)))

Activity Category	Activity Criteria ¹ Leq(h) ²	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ³	67	Exterior	Residential
C ³	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section4(f) sites, schools, television studios, trails, and trail crossings
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E ³	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F
F	--	--	Agriculture, airports, bus yards, emergency services, industrial, logging maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	--	--	Undeveloped lands that are not permitted

¹ The Leq(h) Activity Criteria values are for impact determination only, and are not design standards for noise abatement measures.

² The equivalent steady-state sound level which in a stated period of time contains the same acoustic energy as the time-varying sound level during the same time period, with Leq(h) being the hourly value of Leq.

³ Includes undeveloped lands permitted for this activity category.

SUBSTANTIAL NOISE LEVEL INCREASE

CTDOT uses a 15 dB(A) increase over the existing ambient noise level as the substantial increase criteria.

ANALYSIS OF NOISE ABATEMENT MEASURES

When traffic noise impacts are identified, noise abatement measures shall be considered and evaluated for feasibility and reasonableness. **All of the following conditions must be met in order for noise abatement to be justified and incorporated into project design, as applicable.** Failure to achieve any single element of feasibility or reasonableness will result in the noise abatement measure being deemed not feasible and/or reasonable, whichever applies.

FEASIBILITY

The combinations of acoustical and engineering factors considered in the evaluation of a noise abatement measure are:

- (a) A feasible noise abatement measure provides a noise reduction of 5 dB(A) for a minimum two-thirds of the impacted receptors.
- (b) Engineering feasibility of the noise abatement measure(s) shall consider adverse impacts created by or upon property access, drainage, topography, utilities, safety, and maintenance requirements.

REASONABLENESS

The combination of social, economic, and environmental factors are considered in the evaluation of a noise abatement measure. Reasonableness implies that good judgment and common sense has been applied in arriving at a decision. The following criteria will be used to determine the reasonableness of a barrier.

- (a) Any receptor that receives a minimum noise level reduction of 5 dB(A) due to noise abatement measures shall be considered a benefited receptor.
- (b) A noise reduction design goal of at least 7 dB(A) must be met for a minimum of two-thirds of the benefited receptors.
- (c) Viewpoints of the benefited property owners and residents shall be solicited. For the abatement measure to be considered, two-thirds of the returned solicited viewpoints must be in favor of the abatement measure(s).
- (d) CTDOT shall use \$55,000 per benefited receptor as reasonable cost expenditure for a traffic noise abatement measures. The cost of the traffic noise abatement measure will be determined to be cost effective if the abatement measure will have a Cost Effective Index (CEI) that is less or equal to the value of the \$55,000 per benefited receptor. The cost of the traffic noise barrier wall will be based on \$60 per square foot for the traffic noise barrier wall. The costs for an earthen berm abatement measure will be determined on the unit costs for the materials used.

Parameters:

- A = Length of traffic noise abatement wall
- B = Average height of the traffic noise abatement wall
- C = Cost per square foot of traffic noise abatement wall - \$60
- \$\$ = Cost of traffic noise barrier wall
- CEI = Cost effective index

Example #1 \$\$ = $A \times B \times C = 1,375 \times 15 \times \$60 = \$1,238,000$
Number of benefitted receptors = 27
CEI: $\$1,238,000 / 27 = \$45,852$ (**less than \$55,000, barrier is considered reasonable**)

Example #2 \$\$ = $A \times B \times C = 1,375 \times 15 \times \$60 = \$1,238,000$
Number of benefitted receptors = 13
CEI: $\$1,238,000 / 13 = \$95,231$ (**greater than \$55,000, barrier is not considered reasonable**)

REASONABLENESS DETERMINATION FOR NON-RESIDENTIAL LAND USE

CTDOT will use the following methodology to determine the reasonableness of noise abatement for Activity Category C land uses, Activity Category D facilities, and Activity Category E facilities.

CTDOT shall use a statewide value of \$170 per dB(A) insertion loss per person per hour to determine cost-effectiveness of noise abatement for Activity Category C land uses, Activity Category D facilities, and Activity Category E facilities.

Two hypothetical examples help provide an understanding of how the statewide value of \$170 is used to determine cost effectiveness of noise abatement for these Activity Categories. In Example #1, the Activity Category C land use is a school playground where noise abatement is being considered. Example #2 involves an Activity Category D facility, in this case, a light frame public meeting room with no exterior areas of activity.

Parameters

The unit measure that will be used is the cost per dB(A) insertion loss per person per hour (\$\$/dBIL/person/hour) where:

- A = Length of traffic noise abatement wall
- B = Average height of the traffic noise abatement wall
- C = Cost per square foot of traffic noise abatement wall - \$60
- \$\$ = Cost of traffic noise barrier wall
- dBIL = Average insertion loss of benefited receptors, in dB(A)
- Persons = Number of benefited receptors per day
- Hour = Average time per visit

Example #1

The following data are known for the school playground:

1. Average time per person using playground = 1 hour
2. Proposed height of noise barrier = 13 feet
3. Proposed length of noise barrier = 1,000 feet
4. Average insertion loss from the proposed noise barrier = 8 dB(A)
5. Number of benefited receptors per week = 300 people

For this example:

$$$$ = A \times B \times C = 1,000 \times 13 \times \$60 = \$780,000$$

$$\text{dBIL} = \text{Average insertion loss of benefited receptors} = 8 \text{ dB(A)}$$

$$\text{Persons} = \text{Number of benefited receptors} [300 \text{ persons per week divided by } 7 \text{ days per week}] = 43 \text{ persons}$$

$$\text{Hour} = 1 \text{ hour}$$

$$\text{The site-specific unit measure} = \$783,000 / 8 / 43 / 1 = \$2,267$$

Since the site-specific unit measure of \$2,267 is greater than the statewide unit measure of \$170 for Activity Category C land uses, **the proposed noise barrier for the school would not be considered cost effective.**

Example #2

In this example, the noise analysis indicates that the public meeting room has interior noise levels higher than the NAC of 52 dB(A). The public meeting room would, therefore, experience a noise impact. Noise insulation in the form of new storm windows is proposed as noise abatement. The insertion loss from the proposed noise insulation was determined to be 25 dB(A) as defined under the BNRF. The cost of the noise insulation was determined to be \$200,000.

From previous consultation with the municipality, (i.e., the property owners of public meeting room), it was found that the meeting room is used twice a week by approximately 100 attendees each time for 3 hours. The daily number of benefited receptors would therefore be 29. This number is derived by multiplying the number of

attendees (100) by the number of times the facility is used per week (2) and by dividing by the number of days in a week (7).

For the public meeting room,

\$\$ = \$200,000

dBIL = 25 dB(A)

Persons = 29 persons

Hour = 3 hour

The site-specific unit measure = $\$200,000/25/29/3 = \115

Since the site-specific unit measure of \$115 is less than the statewide unit measure \$170, **insulation of the public meeting room would be considered cost effective.**

OTHER CONSIDERATIONS

Prior to Categorical Exclusion (CE) approval or issuance of a Finding of No Significant Impact (FONSI) or Record of Decision (ROD), CTDOT shall identify in environmental documents:

- a) Noise abatement measures that are feasible and reasonable,
- b) Noise impacts for which no abatement appears to be feasible and reasonable;
- c) Locations where noise impacts will occur, where noise abatement is feasible and reasonable, and the locations that have no feasible and reasonable abatement.
- d) Whether it is "likely" or "unlikely" that noise abatement measures will be installed for each noise sensitive area identified. "Likely" does not mean a firm commitment. The final decision on the installation of the abatement measures shall be made upon completion of the project design, the public involvement process, concurrence with the CTDOT Policy, and FHWA approval.

ACCEPTABLE NOISE ABATEMENT MEASURES

The following noise abatement measures may be considered for incorporation into a project to reduce traffic noise impacts.

- (a) Construction of noise barriers, earthen berms or a combination of noise barriers and earthen berms.
- (b) Traffic management measures.
- (c) Alteration of horizontal and vertical alignments
- (d) Establishment of buffer zones.
- (e) Noise insulation of Activity Category D land use facilities listed in Table 1 of this policy.

THIRD PARTY PARTICIPATION

- (a) Third party funding of noise abatement measures cannot be used to make up the difference between the reasonable base quantity allowance and the actual quantity of noise abatement. Third party funding may only be used to pay for additional features

such as landscaping and aesthetic treatments for noise barriers that meet cost-effectiveness criteria.

- (b) Traditional highway construction resources pay for required noise abatement measures. Should the affected property owners and residents request that materials be used that are more costly than those proposed by CTDOT, the requesting entity must assume one hundred percent of the actual additional construction cost.
- (c) If the affected property owners and residents insist on the provision of a noise abatement measure deemed not reasonable by CTDOT, the abatement measure may be installed provided the affected property owners and residents meet all of the provisions of the CTDOT policy on privately funded noise barrier walls; POLICY NO. E&H.O.58, November 6, 2008 (Appendix A).
- (d) For (b) and (c) above, the settlement agreement shall be signed before third party noise abatement design begins and payment shall be made to CTDOT before project construction begins.

PUBLIC INVOLVEMENT

Public involvement with a community regarding traffic noise impacts and possible noise abatement shall occur at the start of the noise study process and continue throughout the development of the project. CTDOT will present information on the nature of highway traffic noise impacts and discuss the effectiveness of noise abatement measures in attenuating traffic noise and the types of noise abatement measures that may be considered during the public informational meetings. Public involvement is conducted and the concerns of the benefited property owners and residents are considered in the process for determining the likelihood of noise abatement measures. After the initial public informational meeting, a survey will be sent to the benefitted receptors within the project corridor.

COORDINATION WITH LOCAL OFFICIALS

CTDOT will provide noise compatible planning concepts to local government officials within whose jurisdiction a highway project is proposed as early in the project planning process as possible to protect future development from becoming incompatible with traffic noise levels. Specifically, environmental documents and design noise reports will contain information identifying areas that may be impacted by traffic noise and providing predicted noise level contour information indicating the estimation of future noise levels for developed and undeveloped lands or properties in the immediate vicinity of the project. If requested, CTDOT will assist local officials with coordination and distribution of this information to residents, property owners and developers. In order to help local officials and developers consider highway traffic noise in the vicinity of a proposed Type I project, the Department will work with the local elected officials to develop an understanding of noise compatible land principles and assist in incorporating these principles into their local zoning codes, plans and applicable ordinances as per the requirements of 23 CFR §772.17. The noise analysis will be made available during the public involvement process for the proposed project and discussed at the Design Public Hearing and Design Public Meetings.

CONSTRUCTION NOISE

To minimize the impacts of construction noise on the public, CTDOT shall:

- (a) Identify land uses or activities that may be affected by noise from construction of the project.
- (b) Determine the measures that are needed in the plans and specifications to minimize adverse construction noise impacts to the community. This determination shall consider the benefits achieved and the overall adverse social, economic, and environmental effects and costs of the abatement measures.
- (c) Consider construction techniques and scheduling to reduce construction noise impacts to nearby receptors and incorporate the needed abatement measures in the project plans and specifications.

The following section from the CTDOT Standard Specifications for Roads, Bridges and Incidental Construction Form 817) defines construction noise impact and abatement criteria:

1.10.05 – Construction Noise Pollution: The Contractor shall take measures to minimize the noise caused by its construction operations, including but not limited to noise generated by equipment used for drilling, pile-driving, blasting, excavation or hauling.

All methods and devices employed to minimize noise shall be subject to the continuing approval of the Engineer. The maximum allowable level of noise at the residence or occupied building nearest to the Site shall be 90 decibels on the “A” weighted scale (dBA). The Contractor shall halt any Project operation that violates this standard at any time until the Contractor develops and implements a methodology that enables it to keep the noise from its Project operations within the 90-dBA limit.

Construction noise impacts and abatement measures shall be considered using the FHWA Construction Noise Handbook (August 2006). This handbook provides numerous mitigation techniques and insight as how to approach analysis of construction noise impacts.

FEDERAL PARTICIPATION

The costs of noise abatement measures may be included in federal-aid participating project costs with the federal share being the same as that for the system on which the project is located when:

- (a) Traffic noise impacts have been identified; and
- (b) Abatement measures have been determined to be feasible and reasonable pursuant to 23 CFR 772 and this policy.

REVIEW OF POLICY

This policy shall be reviewed to reanalyze the allowable cost for abatement by CTDOT at least every five (5) years.

**APPENDIX A – POLICY ON TRAFFIC NOISE BARRIER WALLS
(PRIVATELY FUNDED)**



CONNECTICUT DEPARTMENT OF TRANSPORTATION POLICY STATEMENT

POLICY NO. E&C - 47
April 8, 2011

SUBJECT: Traffic Noise Barrier Walls (Privately Funded)

It is the Department's general policy not to approve or permit the installation of privately funded traffic noise barrier walls within the right-of-way of any State highway in Connecticut.

Exceptions to the above stated general policy will not be granted under any circumstances for locations proposed along unlimited (i.e., non-controlled) access State highways in Connecticut.

Exceptions to the above stated general policy will be considered by the Department for proposed locations along limited (i.e., controlled) access State highways in Connecticut provided all of the following conditions are satisfied:

- The existing noise level at the location of the proposed privately funded traffic noise barrier walls has been demonstrated to approach or exceed the Federal Highway Administration (FHWA) Noise Abatement Criteria for outdoor residential land use as defined in 23 CFR 772;
- No projects are scheduled for construction by the Department within the limits of the proposed privately funded traffic noise barrier walls within five (5) years of the date of the request to the Department for approval of a Highway Encroachment Permit to install the privately funded traffic noise barrier walls;
- Privately funded traffic noise barrier walls proposed for construction within a State highway right-of-way must be determined to be reasonable and feasible and in the public interest in order to be recommended for approval by the Department;
- Privately funded traffic noise barrier walls must conform to all applicable Department design and construction standards and aesthetic considerations, and shall not impair the full use and safety of the highway, or otherwise interfere in any way with the free flow of traffic; and
- For locations along interstate highways, all proposed privately funded traffic noise barrier walls reviewed and recommended by the Department for approval are subject to final review and concurrence by FHWA pursuant to 23 CFR 1.23(c).

PROCESS

1. Applicant to apply for encroachment permit that would be reviewed by various Department disciplines.
2. FHWA approval to be obtained, if applicable.
3. Traffic noise analysis to be performed and submitted by the applicant to the Department for review and approval.
4. Traffic noise barrier wall construction to conform to Department standards.
5. Construction to be undertaken by applicant through the Department's encroachment permit process.
6. Applicant to provide evidence of notification to town officials for traffic noise barrier wall.

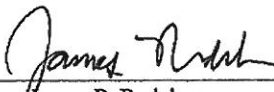
INSTALLATION COSTS

1. Applicant to be responsible for design, cost of application review, construction, and inspection.
2. Applicant to be responsible for any required guide rail necessary to protect errant vehicles from striking the traffic noise barrier wall.
3. Applicant to be responsible for restoration of any areas disturbed during construction.

OWNERSHIP AND MAINTENANCE

1. Upon acceptance of installation, the Department will own and be responsible for ordinary maintenance. Ordinary maintenance responsibility consists of minor repairs costing \$500 or less. The applicant will be required to assume extraordinary financial responsibility which would involve major structural repairs due to accidents, vandalism, or acts of nature and replacement due to normal wear.
2. Applicant will be required to enter into a signed agreement with the Department for maintenance of the traffic noise barrier wall.

(This Policy Statement abolishes Policy Statement No. E&H.O -58 dated November 6, 2008)



James P. Redeker
Acting Commissioner