



TRANSPORTATION CABINET


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MEMORANDUM

TO: KYTC Prequalified Consultants; DEA Staff;
District Environmental Coordinators

FROM: David M. Waldner, P.E., Director 
Division of Environmental Analysis

DATE: November 22, 2013

SUBJECT: Noise Policy; Necessity to Meet
Noise Reduction Design Goal

It has recently come to light that in the analysis of noise abatement measures, there has been some misunderstanding of one of the reasonableness requirements, specifically the noise reduction design goal. On federal highway projects, which are defined as projects funded with federal-aid highway funds or requiring FHWA approval, federal regulations regarding noise impact analysis and abatement must be followed.

Federal regulatory requirements, found at 23 CFR 772 state:

Noise reduction design goals for highway traffic noise abatement measures. When noise abatement measure(s) are being considered, a highway agency shall achieve (*emphasis added*) a noise reduction design goal. The highway agency shall define, and receive FHWA approval for, the design goal of at least 7 dB(A) but not more than 10 dB(A), and shall define the number of benefitted receptors that must achieve (*emphasis added*) this design goal and explain the basis for this determination.

The regulation goes on to make it clear that this criterion, along with consideration of property owner's viewpoints, and cost effectiveness, must be satisfied in order for a mitigation measure to be considered reasonable. Only abatement measures that are considered feasible and reasonable are to be recommended for construction.

KYTC addresses this federal requirement in its Noise Analysis and Abatement Policy on page 12:

Noise Reduction Design Goal: KYTC's noise reduction design goal is 7 dB(A) for a minimum of 40% of all benefitted receptors. For the purpose of determining cost effectiveness of a proposed abatement measure, benefitted receptors are considered those that will receive a minimum 5 dB(A) noise reduction. Noise reduction estimates shall be



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solely based upon the results of the TNM. Receptors receiving less than a 5 dB(A) reduction in noise from a proposed abatement measure shall not be considered as benefitted receptor for the purpose of calculating cost effectiveness.

The Noise Reduction Design Goal is not simply a “goal” but a requirement that must be met as a part of the reasonableness determination on federal projects. A noise abatement measure that does not meet the noise reduction design goal (7dBA reduction for 40% of benefitted receptors) cannot be considered reasonable and cannot be recommended for construction on a federal project. When evaluating mitigation for state-funded projects, there is more flexibility in applying KYTC’s policy, since federal regulations need not be strictly followed.

Questions regarding the contents of this memo or the KYTC Noise Analysis and Abatement Policy can be directed to KYTC’s Traffic Noise Specialist, Daniel Burgin, at 502-782-5038.