FDM 23-30-1 Type I Projects

July 28, 2011

A traffic noise impact occurs for a Type I project when the predicted equivalent sound levels at a receptor or common use area approach or exceed the Noise Level Criteria^a (NLC) For Considering Barriers for any Land Use Category listed in Table 2.1 applicable in the study area, or, when predicted future sound levels exceed existing levels by 15 dB or more. "Approach" is defined as 1 dBA less than the NLC for the applicable Land Use Category.

FDM 23-30-2 WisDOT Retrofit Projects

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A traffic noise impact occurs for a WisDOT Retrofit Project when the existing equivalent sound levels at a residential receptor equal or exceed the noise level criteria (NLC) for Land Use Category B of the Noise Level Criteria For Considering Barriers listed in Table 2.1. Mitigation for impacts can be considered exclusively through the process identified in the Wisconsin Noise Barrier Study Summary Report, May 29, 1990. Only state funds may be used for a WisDOT Retrofit Project. The department determines when there is funding available for the program. Only those locations currently identified in the Summary Report are eligible for funds when funding is available and no additional locations will be added to the program.

Table 2.1 Noise Level Criteria (NLC) for Considering Barriers

Land Use Category	Leq(h)¹ (dBA) (Evaluation Location)	Description of Land Use Category
А	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 ²	67 (Exterior)	Residential
C ²	67 (Exterior)	Active sports areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, recreation areas, schools, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D ³	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or non-profit institutional structures, radio studios, recording studios, schools, and television studios.
E ²	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F
F		Agricultural, 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 "Leq" means 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 period. For purposes of measuring or predicting noise levels, a receptor is assumed to be at ear height, located five feet above ground surface.

[&]quot;Leg(h)" means the hourly value of Leg.

² Includes undeveloped lands permitted for this activity category or publicly-owned recreation lands formally designated in a public agency's Master Plan.

³ Use of interior noise levels shall be limited to situations where a determination has been made that exterior abatement measures will not be feasible and reasonable and after exhausting all outdoor mitigation options.

Source: Wisconsin Administrative Code – Chapter Trans 405.

^a WisDOT has substituted the term "Noise Abatement Criteria" used in 23 CFR 772 with "Noise Level Criteria" throughout Chapter 23 and in supporting documents. Further, Table 1 in 23 CFR 772 is the Noise Abatement Criteria for various land uses. WisDOT has adopted the land use categories, impact levels and evaluation locations in 23 CFR 772, Table 1, but refers to this table as "Noise Level Criteria for Considering Barriers" in this Section. The word "Level" is used instead of "Abatement" because the department believes the use of the term "Noise Abatement Criteria" means that the noise impact levels indicated in the table require that abatement be provided. The term "Noise Level Criteria" accurately reflects the intent of the table which is to identify a sound level at which a noise impact occurs thus requiring a determination of whether or not abatement is feasible, reasonable and likely to be incorporated into the project.