

Noise

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Purpose

To protect the public health and welfare from traffic related noise pollution and to provide noise mitigation when applicable. This HPDP is only a broad overview of MnDOT's noise requirements. Additional noise subject guidance is posted and maintained on the official MnDOT noise website at <http://www.dot.state.mn.us/environment/noise/index.html>

Threshold Criteria

Federal

If the project is an FHWA undertaking (e.g., FHWA obligation authority (funding) or an FHWA approval action is required): Determine if this project meets any of the

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Type I definition criteria below. To assist with the Type I determination and further guidance, please contact the appropriate personnel listed above.

Type 1 Definition Criteria:

- (1) The construction of a highway on new location; or,
- (2) The physical alteration of an existing highway where there is either:
 - (i) Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
 - (ii) Substantial Vertical Alteration. A project that removes shielding, therefore exposing 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 (not including the addition or removal of vegetation) between the highway traffic noise source and the receptor; or,
- (3) Bridge replacement projects that satisfy item (2), above.
- (4) The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a HOV lane, contraflow lane, High-Occupancy Toll (HOT) lane, bus lane, or truck climbing lane; or,
- (5) The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane.
- (6) The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or,
- (7) Restriping existing pavement for the purpose of adding a through traffic lane or an auxiliary lane; or,
- (8) The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot or toll plaza.
- (9) If a project is determined to be a Type I project as defined above, then the entire project area as defined in the environmental document is a Type I project.

Transit only projects:

The determination of whether to use FHWA or FTA's noise analysis and procedures depends upon the specific circumstances of a project. The FHWA noise regulations under 23 CFR 72 applies to multimodal projects even though the term "multimodal" is not defined in the regulation. A proposed transit project that would share an existing highway right-of-way (ROW) is not necessarily a multimodal project under 23 CFR 772.7(a). A transit-only project that meets all three of the following criteria is not considered a multimodal project for purposes of 23 CFR 772:

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- 1.) Lead Agency: The Federal Transit Authority (FTA) is the lead agency in the National Environmental Policy Act (NEPA) process and FHWA is not a co-lead. The FHWA's limited participation is as a cooperating agency.
- 2.) Project Purpose: The main transportation purpose of the project, as stated in the purpose and need statement of the NEPA document, is transit-related and not highway-related.
- 3.) Funding: No Federal-aid highway funds are being used to fund the project.

Transit-only projects that meet all three criteria should use the FTA's Transit Noise and Vibration Impact Assessment Guidance Manual¹ procedures to evaluate noise impacts for the transit and highway elements of transit projects.

State

For state funded only projects (that are not FHWA undertakings), no noise analysis is required unless the project crosses mandatory Environmental Quality Board (EQB) thresholds for highway projects (MN Rule 4410.4300, subp.22) or if a voluntary EAW is being completed for a project on the trunk highway system.

Prepared Statements

If project **meets** the above threshold criteria, see current MnDOT Noise Requirements and Guidance at the following link: <http://www.dot.state.mn.us/environment/noise/policy/index.html>.

If project does not meet any of the federal threshold criteria, include the statement below.

Federal

"The referenced project meets the criteria for a Type III project established in 23 CFR 772. Therefore, the project requires no analysis for highway traffic noise impacts. Type III projects do not involve added capacity, construction of new through lanes or auxiliary lanes, substantial changes in the horizontal or vertical alignment of the roadway or exposure of noise sensitive land uses to a new or existing highway noise source. MnDOT acknowledges that a noise analysis is required if changes to the proposed project result in reclassification to a Type I project."

When a modeling analysis (e.g., TNM line of sight analysis) was conducted as part of determining Type I vs Type III designation, the results of that analysis should be included as an appendix to the environmental document.

If a state project does not cross any EQB thresholds, simply check the no significant impact box on a checklist type report.

[1 https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf)

Relationship to HPDP

Class I Actions (EIS)

DEIS

For all alternatives (assuming “prepared statement of no effect” does not apply), conduct impact analysis on each alternative (see MnDOT 2017 Noise Requirements Section 4.0). Describe future predicted noise levels relative to existing noise levels plus federal criteria and discuss impacts. Mitigation techniques in general should be discussed but not specifics. (A special Preliminary Noise Report may be appropriate.)

FEIS or Combine FEIS/ROD

Conduct mitigation analysis for the preferred alternative. The FEIS must include feasible and reasonable noise abatement measures (if any) which are likely to be incorporated into the project.

Class II Actions (Categorical Exclusions)

Non-programmatic Categorical Exclusion

The non-programmatic Categorical Exclusion needs to address noise from the standpoint of whether there is or is not a traffic noise impact as defined by 23 CFR 772. Describe future predicted noise levels relative to existing noise levels plus federal criteria and discuss impacts. Conduct mitigation analysis for the preferred alternative. The non-programmatic Categorical Exclusion must include noise abatement measures (if any) which are to be incorporated into the project.

Programmatic Categorical Exclusion

These projects are Type III projects because the MnDOT/FHWA Programmatic Categorical Exclusion Agreement does not allow Type I projects to be processed as a Programmatic Categorical Exclusion. A traffic noise analysis is not required for a Type III project. Simply using the prepared statement or checking the no significant impact box on a checklist type report should be adequate.

Class III Actions (EAs/EAWs)

The EA needs to address noise from the standpoint of whether there is or is not a traffic noise impact as defined by 23 CFR 772. The procedures of 23 CFR 772 need(s) to be followed. Describe future predicted noise levels relative to existing noise levels plus federal criteria and discuss impacts. Conduct mitigation analysis for the preferred alternative. The EA must include feasible and reasonable noise abatement measures (if any) which are to be incorporated into the project.

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Note: Consultation with FHWA, OES or the Local State Aid Office is required in all Classes of Actions.

Construction noise

Construction noise must be considered and discussed if sensitive receptors are near the project. Reference to applicable noise control specifications or local ordinance may be appropriate. See [2017 MnDOT Noise Requirements Section 6.0 Construction Noise](#) and [sample construction noise write-up for environmental documents, under construction impacts](#) for construction noise details.

Public Engagement

As part of the overall public engagement process which a project has, a community noise engagement process may be required. See the following link for more information regarding the process

http://www.dot.state.mn.us/environment/noise/pdf/Final%20Community%20Noise%20Engagement%20Process%208_13_18.pdf

Agencies Involved

The FHWA is typically the only agency involved. If the environmental process includes multiple federal agencies as co-leads or a cooperating agencies process, there might be multiple noise analyses. There are typically no direct outside agency approvals although noise may be an issue raised relative to other approvals (401 Certification, for example).

Guidance documents on the [MnDOT noise website](#) are considered formal guidance agreed upon by MnDOT, FHWA, and MPCA that are incorporated into this HPDP by reference.

Permits/Approvals

None.

Legal Basis

Description	Code
Minnesota Statute	M.S. 116.07 Subd. 3 & MEPA
United States Code	23 U.S.C. 109(h), (i) & NEPA
United States Code	42 U.S.C. 4331&4332 & 429 CFR 1.48(b)

Guidelines/Regulations

Creator (Agency/Author)	Subject of guideline/regulation	Date
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MnDOT	Noise Requirements for MnDOT and other Type I Federal-aid Projects	July 10, 2017
FHWA	23 CFR 772 Procedures for Abatement of Highway Traffic Noise & Construction Noise	2010
FHWA	Highway Traffic Noise: Analysis and Abatement Guidance	2011
FHWA	Discussion Paper " Appropriate Level of Highway Traffic Noise Analysis for CE, EA/FONSI, and EIS "	
FHWA	23 CFR 774.15 Section 4(f) Constructive Use Determinations	
FHWA	75 FR 39820 Final Rule Procedures for Abatement of Highway Traffic Noise and Construction Noise	July 13, 2010
FHWA	Insulation of Buildings Against Highway Noise	August 1, 1977
MPCA	Minn. Rules Ch. 7030 MPCA Noise Pollution Control Rules	
MPCA	Chapter 7000 MPCA Procedural Rules (Variances)	
AASHTO	Guide on Evaluation & Attenuation of Traffic Noise	1993