

Appendix 3 - Traffic Noise Analysis and Mitigation Process

Answer to *“When are noise reports and/or recommendations final?”*

The traffic noise analysis and mitigation process from the preparation of a noise report to the final noise wall design (or decision not to build) can be confusing. The following provides clarification to project teams and outlines a recommended “standard” process, but acknowledges that variations to this process are likely because of the differences among projects.

Environmental Review: NEPA/SEPA Discipline Report

1. The noise analyst models project elements affecting noise that include traffic, topography, and the location of noise sensitive receivers. If impacts are revealing through modeling, then mitigation is evaluated.
2. Mitigation is compared to the feasibility (sound level reductions, constructability) and reasonableness (barrier size/cost, public input, noise reduction design goal). If mitigation is feasible and reasonable, the report recommends the noise barrier in a statement of likelihood. Changes to the project during final design may change the determination of whether or not a noise barrier is feasible and reasonable or the final design of the abatement itself.
3. The environmental document shall identify locations where noise impacts are predicted to occur, where noise abatement is feasible and reasonable, and locations with impacts that have no feasible and reasonable noise abatement alternative.
4. The traffic noise discipline report can be finalized. However, if any new noise sensitive receivers are approved for building permits before the Date of Public Knowledge, the report must be re-opened.

Note: Design Phase and Public Involvement steps (below) may be incorporated into the report before it is finalized or these changes can be included in project file at the Project Office’s discretion.

Design Phase (if noise wall recommended)

5. The project team reviews the recommended noise wall height and alignment to determine if there are conflicts with noise wall construction, such as utility location or steep slopes that were not caught during the discipline report review.
6. If conflicts exist, additional design details and potential for increased construction costs (beyond “standard” noise wall) are provided to the noise analyst by the project team. Additional costs are those that occur only because of the noise wall.
7. If the updated noise wall costs are still less than the allowable costs per WSDOT Noise Policy, a new barrier height or alignment may be recommended. If the new barrier costs

exceed the allowable costs, the previous recommendation may be rescinded by the Air, Noise and Energy Program.

8. The results of changes to project or noise wall design are documented in a memo for the project file or included in the discipline report at the discretion of the Engineering Project Office.
9. Pursuant to 23 CFR 772.13(h), the FHWA will not approve project plans and specifications unless feasible and reasonable noise abatement measures are incorporated into the plans and specifications to reduce the noise impact on existing activities, developed lands, or undeveloped lands for which development is permitted.

Public Involvement

The noise wall discussion may be introduced to the public before the Design Phase, but any community polling (optional) should happen after the final design is established so that people understand the location and height of the proposed wall before the polling is conducted.

10. Any changes to the noise wall design as a result of public involvement should be documented and added to the project file or discipline report at the discretion of the Engineering Project Office.

Final Determination

11. If the recommendation to build/ not build a noise wall changes during the Design Phase or after Public Involvement, a memo approved by the Project Office, that clarifies the new decision will be sent from Air, Noise, Energy Program Manager to FHWA Division Office.