

state college area CONNECTOR



Pennsylvania
Department of Transportation

www.PennDOT.pa.gov/SCAC

Federal regulations require PennDOT to conduct noise studies and consider the impacts of a highway improvement project on nearby residents. PennDOT follows the process below to determine the feasibility and reasonableness of sound mitigation where consideration is warranted. The noise assessment is conducted in accordance with FHWA 23 CFR 772 and PennDOT Publication #24

Monitor Existing Sound

PennDOT identifies sensitive land uses and takes field measurements at representative sites to document existing sound levels



Project sound measurements are used to document existing sound levels and validate the noise model

Identify Project Sound Levels

Existing and future noise levels are modeled within project corridor and identify areas that approach and/or exceed FHWA/PennDOT Noise Abatement Criteria



What is the FHWA/PennDOT noise abatement criteria?

PennDOT defines a residential noise impact at 66 dB(A) or 10 dB(A) increase over existing sound levels

Consider Noise Reduction Measures

PennDOT evaluates noise reduction measures where consideration is warranted

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PennDOT will incorporate sound mitigation during the **final design** that meets the warranted, feasible and reasonable criteria.



Model Noise Change

Computer modeling of existing and future (2050) conditions to predict levels once roadway is built

PennDOT analyzes sound walls at locations warranting consideration using the following questions:

- Would a sound wall reduce the noise enough to justify installation?
- Is a sound wall constructable?
- How many properties would benefit from a sound wall? Is it reasonable?
- Public acceptance of mitigation measure?