Noise Study Process

Federal regulations require the Pennsylvania Turnpike Commission (PA Turnpike)/New Jersey Turnpike Authority (NJTA) to conduct noise studies and consider the impacts of a highway improvement project on nearby residents. PA Turnpike/NJTA follow the process below to determine whether sound mitigation is warranted, feasible, and reasonable. The noise assessment is conducted in accordance with with 23 CFR 772 and PennDOT and NJDOT noise policies and procedures.

Monitor Existing Sound

The PA Turnpike/NJTA identify sensitive land uses and take field measurements at representative sites to document existing sound levels

Identify Project Sound Levels

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

What is the FHWA/PennDOT/NJDOT noise abatement criteria?
PennDOT/NJDOT defines a residential noise impact at 66 dB(A) or 10 dB(A) increase over existing sound levels

Consider Noise Reduction Measures

The PA Turnpike/NJTA evaluate noise reduction measures where consideration is warranted

PA Turnpike/NJTA will incorporate sound mitigation during final design that meets the warranted, feasible and reasonable criteria

Model Noise Change

Computer modeling of existing and future (2055) conditions to predict levels once roadway is built

PA Turnpike/NJTA analyze sound walls at locations warranting consideration using the following questions:

- Is a sound wall constructable?
- Would a sound wall reduce the noise enough to justify installation?
- How many properties would benefit from a sound wall? Is it reasonable?
- Did the benefited receptors vote in favor of the noise mitigation?

Note: This project is following PennDOT's and NJDOT's noise procedures and guidance approved by the FHWA.

Note: These displays are intended for the June 2026 Public Meeting Open House Series and are subject to change as the project progresses.