# **Noise Analysis Process Overview**

- » The Traffic Noise Model (TNM) is used to measure existing sound levels, use TNM to develop existing noise model and predict future sound levels.
- » The impacted receptors are:
- A receptor with a predicted future traffic sound level which approaches or exceeds the WisDOT Noise Level Criteria (NLC) for Considering Barriers for different land use categories. NLC is divided into land use categories that include residential ares, serene/quiet lands, parks, schools, hotels, offices, etc.
- When predicted future traffic sound levels exceed existing levels by 15 dB or more.
- » In order for abatement to be provided it must be feasible, reasonable and likely to be incorporated.

### Reasonable:

Total cost of the noise barrier may not exceed \$50,000 per benefited receptor. To be considered benefitted, a receptor must receive a minimum of eight (8) dB noise reduction. In addition, a minimum of one (1) receptor or common use area must achieve the department's noise reduction design goal of nine (9) dB.

## Feasible:

A minimum of one impacted receptor or common use area must achieve a five (5) dB noise reduction. In addition, abatement that is feasible must be constructible, compatible with the project purpose & need, meet design criteria and guidance and not result in other impacts that would offset noise reduction benefits.

- » Should a proposed noise barrier be considered reasonable & feasible, a vote would occur after the study and during final design. A barrier must receive a vote of support from a simple majority of all votes cast by the benefited receptors to be constructed.
- » Proposed noise barrier locations will be presented at the I-39/90/94 study public hearing in summer of 2024.

#### **NOISE BARRIER**







