

NOISE BARRIERS

When is a Noise Study Needed?

A noise study is typically required when:

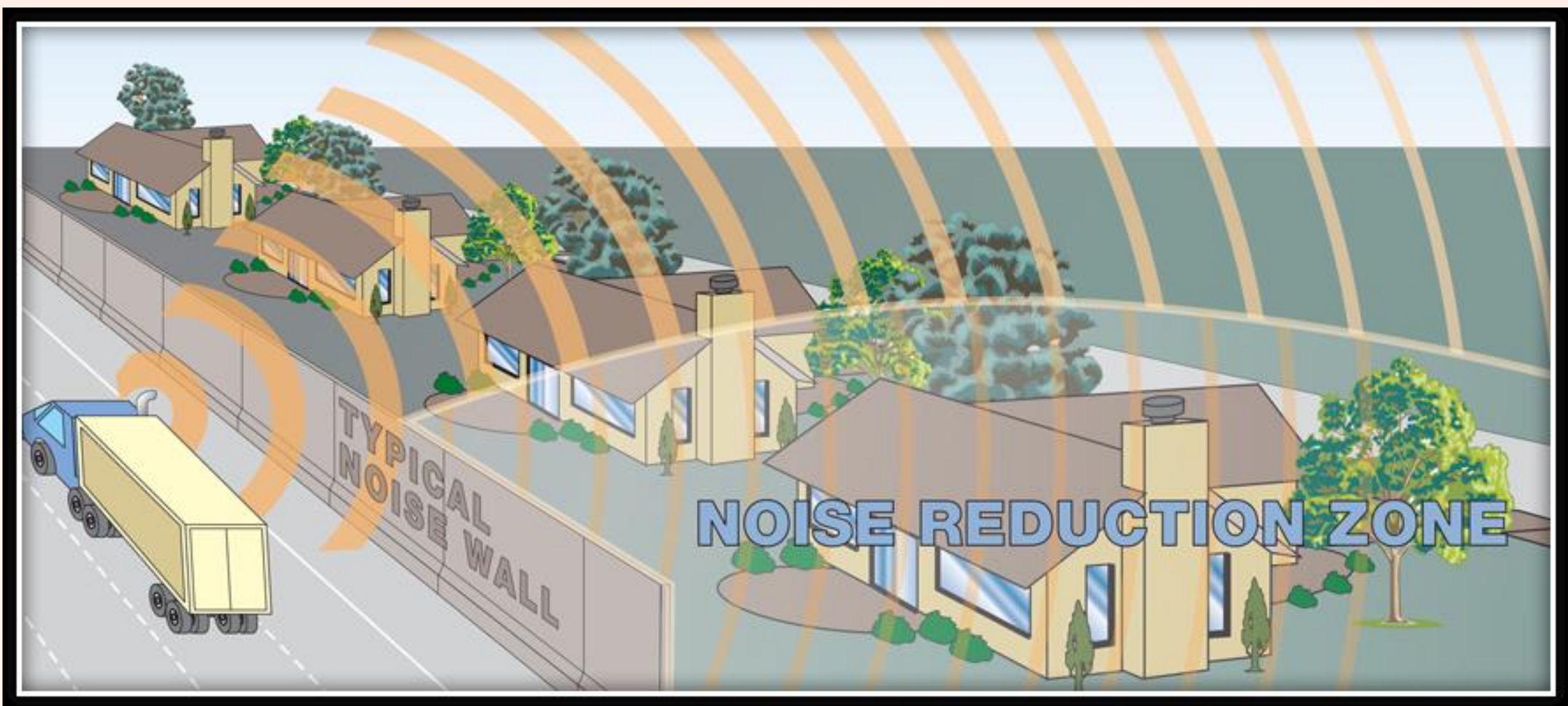
- A new highway alignment is built
- The number of through traffic lanes is increased

What Will a Noise Barrier Do?

- The goal is to reduce traffic noise by at least 5 decibels (dB)
- The amount of noise reduction depends on:
 - Distance of the property from the barrier
 - Distance of the noise source from the barrier
 - Length and height of a barrier
 - Elevation differences among the road, barrier and residences



Existing Noise Barrier along I-4



Advantages

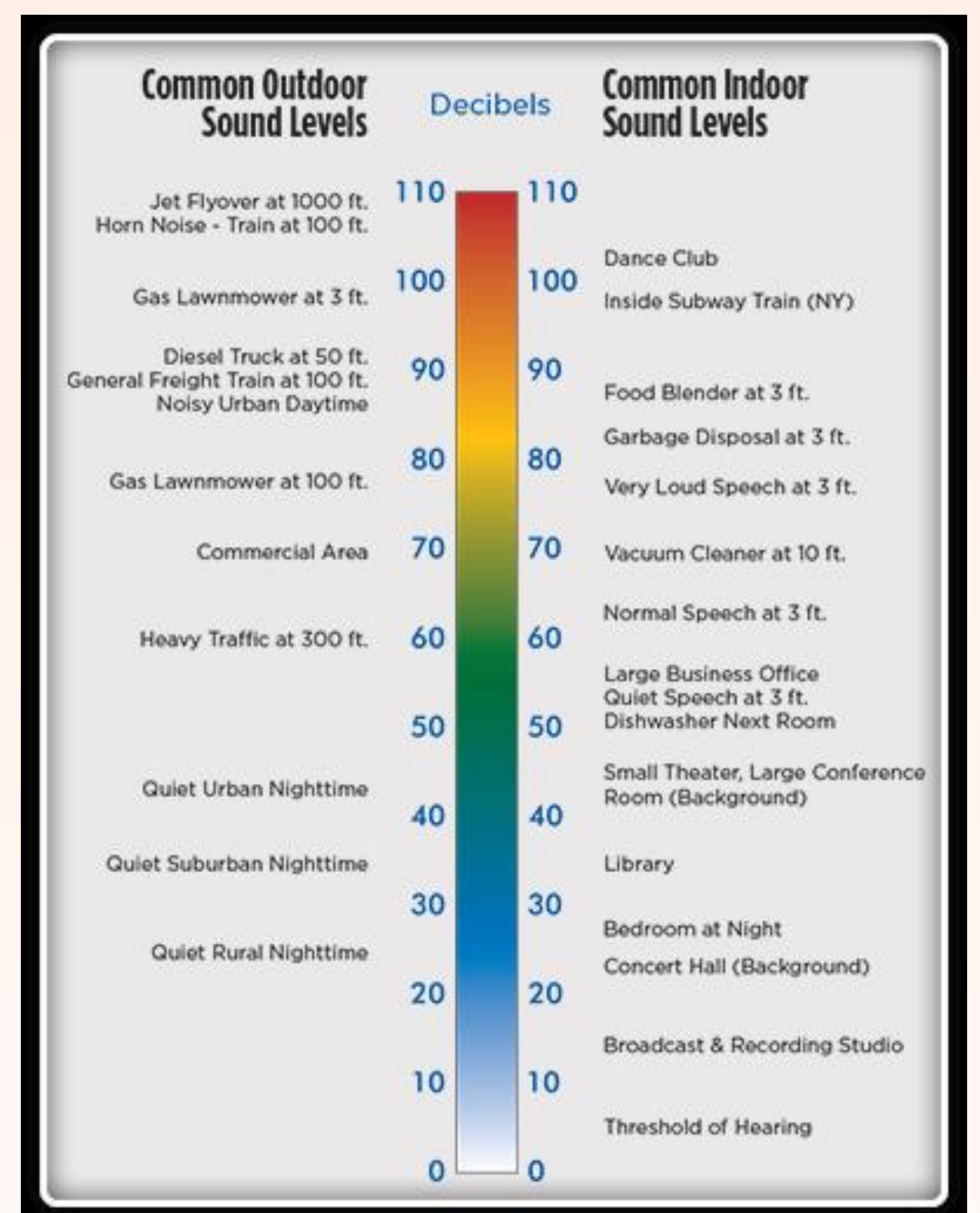
- Can provide an audible reduction in highway traffic noise to areas directly behind the barrier
- Can be designed to be aesthetically pleasing from both the highway and property owner sides of the barrier

Disadvantages

- Can block the view of commercial or landmark signs
- Can adversely affect existing ornamental vegetation in proximity to the barrier
- Trees within FDOT Right-of-Way may be removed in order to construct barriers
- Can create nighttime shadow areas
- Noise barriers can obstruct breezes and sunlight
- Noise barriers may attract graffiti
- Noise barriers may reduce, but not eliminate, traffic noise

Who Gets a Noise Barrier?

- Areas predicted to experience future noise levels of 66 dB are eligible for consideration
- FHWA and FDOT require noise barriers to be feasible and cost reasonable.
 - Feasible
 - Reduces traffic noise by at least 5 dB at two or more sites and by 7 dB at one site
 - Noise barrier can be constructed (based on safety factors, access, right-of-way, maintenance, drainage and utilities)
 - Cost Reasonable
 - Cost per site to build the noise barrier is \$42,000 or less
 - Reasonable
 - Consider the viewpoints of the benefitted site owners



Common Sound Levels