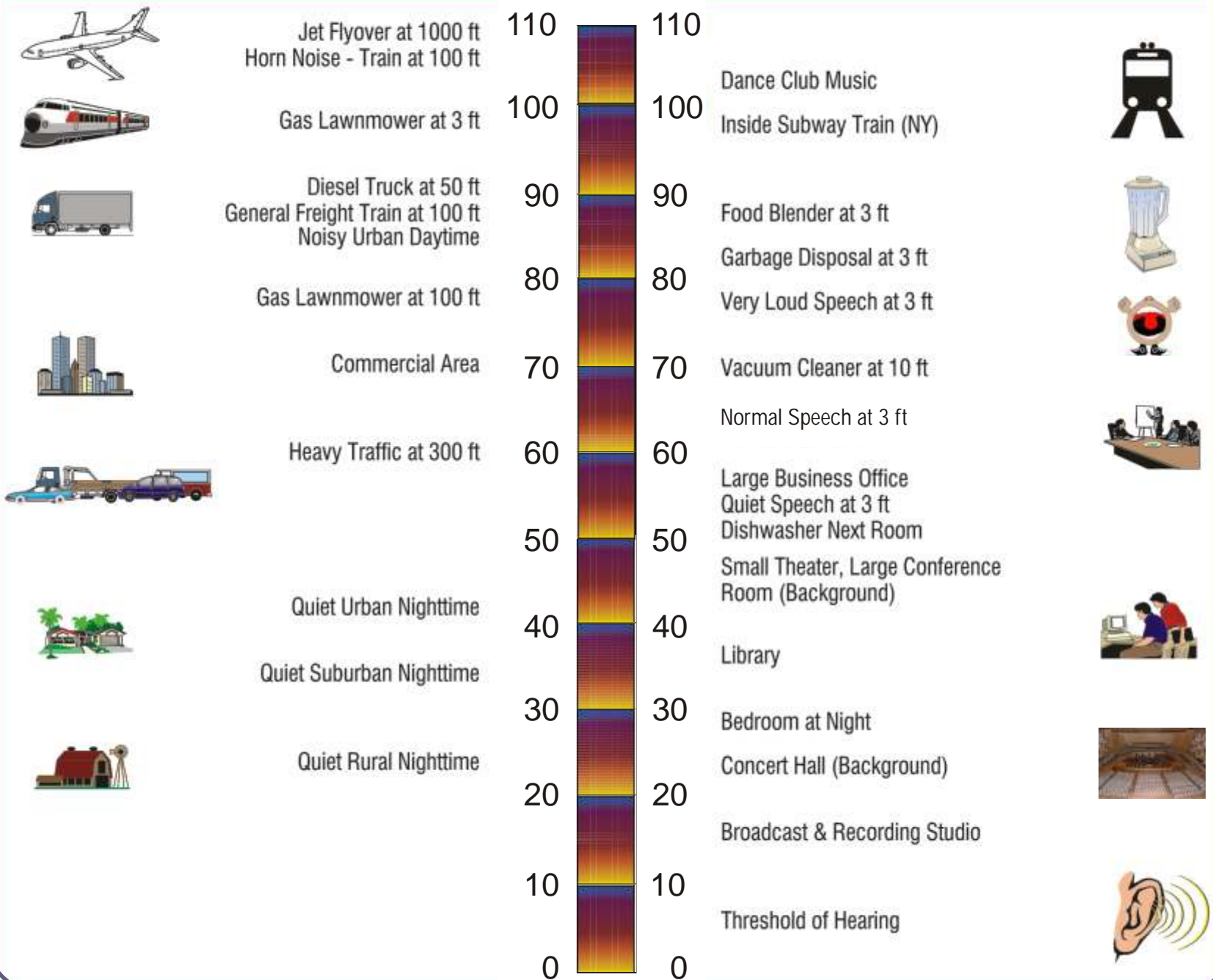


COMMON OUTDOOR SOUND LEVELS

dBA

COMMON OUTDOOR SOUND LEVELS



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TRAFFIC NOISE EVALUATION PROCESS

Traffic noise impact evaluations are performed using methodology approved by the Federal Highway Administration (FHWA). Roadway projects evaluated for traffic noise impacts include the following:

- Construction of a roadway on new location;
- Physical alteration of an existing roadway which significantly changes either horizontal or vertical alignment; or
- Physical alteration of an existing roadway that increases the number of through traffic lanes.

Key steps in the evaluation process include:

Step 1: Identification of Noise Sensitive Sites

Noise sensitive sites are defined as any property (owner occupied, rented or leased) where frequent human use occurs and where a lowered noise level would be of benefit. Typical noise sensitive sites include residences, schools, churches, and recreational areas.

Step 2: Determination of Traffic Noise Impacts

Future traffic noise levels that may be attributed to the proposed project are determined and compared to the FHWA noise abatement criteria. For this project, noise sensitive sites predicted to experience noise levels that reach or exceed 66 dBA (decibels), or experience an increase of 15 dBA greater than existing noise levels, require abatement consideration.

Step 3: Consideration of Noise Abatement Measures

In Florida, noise abatement, or reduction measures usually consist of noise barriers. Barriers can be made of numerous materials, but normally, a concrete wall is constructed on public right-of-way between the proposed roadway improvements and the noise sensitive sites.

An evaluation of these noise reduction measures addresses the feasibility and reasonableness of providing noise abatement. To be considered feasible, the abatement measure must provide at least a 5 dBA reduction to an affected noise sensitive site. Engineering constraints are also reviewed for fatal flaws that will not allow an abatement measure to be implemented.

The evaluation of reasonableness is guided by the Department's responsibility to use prudent judgement when considering the expenditure of public funds. After determining the amount of noise reduction and cost, criteria such as desires of the community and public officials, land use stability, antiquity, predicted noise level increases, aesthetics, and number of benefited sites, are used when evaluating reasonableness.

Step 4: Commitments to Abatement Measures

Upon completion of the noise impact evaluation, the methodology and results are documented in the project's Noise Study Report. If an abatement measure is determined to be potentially feasible and reasonable, the Department makes a commitment to further evaluate the measure during the Design Phase of the project.

Design Phase

During the Design Phase of a project, the detailed roadway plans are developed, right-of-way requirements are determined and the right-of-way acquisition process begins. When the roadway plans are approximately 60 percent complete, the engineering details are sufficient to allow for a detailed assessment of abatement measures determined to be potentially feasible and reasonable during the PD&E Phase. Following public coordination, all feasible and reasonable measures are then incorporated into the final design plans.

Construction Phase

Feasible and reasonable abatement measures would be included as part of the construction project.



Types of Noise Walls

TRAFFIC NOISE EVALUATION SCHEDULE

Traffic noise is addressed during three project phases; Project Development and Environment (PD&E), Design, and Construction. The following describes how noise is evaluated during each of these phases.

PD&E Phase

The noise evaluation process is initiated during the PD&E Phase and includes a preliminary analysis of the roadway alternatives developed for the project and presented at the Public Information Workshop. After the Public Information Workshop, a preferred Build Alternative is selected and a detailed noise analysis is performed on this alternative. This analysis includes an evaluation of noise abatement measures with results presented at the Public Hearing.

I-75 PD&E Study	
Noise Evaluation Schedule	
Noise Data Collection.....	Spring 2005
Noise Contours	Summer 2005
Public Information Workshop	August 15, 2005
Noise Analysis	Summer / Fall 2005
Public Hearing	Spring 2006
Location and Design Concept Acceptance	Summer 2006