Decibels are an exponential measurement of sound rather than a linear measurement of sound. A sound level of fifty-eight (58) compares to normal conversational speech heard from a distance of three (3) feet. Sound levels of sixty-eight (68) to seventy (70) approximate the sound of a passing freight train heard from a distance of one hundred (100) feet.

Below please find a brief explanation of “noise.”

Noise creates annoyance through a combination of factors, both physical and psychological. In the physical realm, it includes:

- The level of the noise
- The frequency (pitch) of the sound
- The sound's duration
- its periodicity and predictability
- its tonal nature, and/or impulsive nature

All of this has to be compared to the background noise at the receiver (i.e., the noise that the receiver would experience in the absence of this intruding source). It is these physical factors that can be measured.

In the psychological realm, factors, which have an influence on an individual’s reaction to noise, include:

- The time of day that the noise occurs (relative to the receiver's wake/sleep cycle)
- The activities of the receiver (a receiver undertaking tasks which require concentration will be more disturbed by a given sound than one undertaking tasks that require little concentration)
- The relationship between the receiver and the noise producer (one might be significantly more tolerant to a noise if one worked for, or was good friends with the noise producer)
- A fear of the noise source (people with a fear of flying can be less tolerant to airport noise)
- A sense of inevitability to the noise (individuals will complain more vigorously about a noise source if they feel that their complaints will be effective, and less if they feel that the noise is inevitable regardless of how much they complain).

(Response to a *PlanLink* posting on 7/12/02 by **Robert T. Houseman** mailto:wolftwnplnr@metrocast.net Wolfeboro Town Planner)