

NYC DEP Sound and Noise Module

Glossary of Terms and Concepts

Absorption (*noun*) – When something (i.e., a curtain) takes in something else (i.e., sound waves).

Acoustics (*noun*) – The science of sound.

Ambient Sound (*noun*) – The background or surrounding sound in a particular location.

Amplify (*verb*) – To increase the volume of sound.

Amplitude (*noun*) – The volume of sound; the extent of vibratory movement or the height of a sound wave.

Attenuation (*noun*) – A measure of the energy loss of sound.

Audible (*adjective*) – The capability of being heard.

Anthropogenic (*adjective*) – The influence of humans on nature.

Barrier (*noun*) – Anything that interferes with communication or listening.

Bass Sounds (*noun*) – The lowest part of the musical range.

Beats (*noun*) – The alternating soft and loud sounds that occur when two sound waves of similar frequencies interfere with one another.

Berm (*noun*) – A raised barrier of land separating two areas; a noise mitigation strategy.

Civics (*noun*) – The study of the rights and duties of citizens.

Community (*noun*) – A group of living things that belong to one or more species, interact ecologically, and located in one place.

Dampen (*verb*) – To decrease the volume of sound.

Decibel (dB) (*noun*) – A unit for measuring the relative loudness of sounds.

Design (*verb*) – To arrange an environment or idea.

Diffusion (*noun*) – When sound hits an irregular surface and is broken up into smaller paths.

Doppler Effect (*noun*) – Causes the apparent shift in frequency for a sound wave produced by a moving source, such as the siren of an emergency vehicle.

Ear (*noun*) – The sense organ that detects sounds.

Echo (*noun*) – The repetition of a sound caused by reflection of sound waves.

Echolocation (*noun*) – Used by some species, such as bats, for locating distant or invisible objects by sound waves being reflected to the emitter from the objects.

Energy (*noun*) – The capacity for work.

Engineering (*noun*) – The application of math, science, and technology to solve problems.

Frequency (*noun*) – The rate of the vibration of sound traveling through air.

Geophone (*noun*) – a device that can record ground movement and vibrations and convert into a voltage.

Harmonica Index (*noun*) – A European measurement on a 0-10 scale rather than the decibel scale.

Hearing (*noun*) – Reception and perception of sound.

Hearing Impairment (*noun*) – A degree of hearing loss, temporary or permanent.

Hertz (*noun*) – A unit of frequency equal to one cycle per second.

Hydrophone (*noun*) – A microphone that can detect underwater sound waves.

Impact Noise (*noun*) – A short burst of sound.

Inner Ear (Cochlea) (noun) – A hollow tube, usually coiled, where sound waves are transformed into electrical impulses and sent to the brain.

Insulator (noun) – A material that absorbs sound.

Intensity (noun) – Amount of energy transmitted by sound (commonly associated with loudness).

Middle Ear (Ear Canal) (noun) – A tube running from the outer ear to the inner ear to transmit sound.

Mitigate (verb) – To lessen the effects of noise.

Noise (noun) – A sound that is loud, unpleasant, unexpected, or undesired.

Noise Abatement (noun) – The measures taken to reduce unacceptable sounds or vibrations.

Noise Code (noun) – A public policy or standard that addresses noise.

Noise Pollution (noun) – Annoying or harmful levels of noise.

Ordinance (noun) – A rule passed by the government.

Oscillation (noun) – The movement of a medium made of particles.

Outer Ear (Pinna) (noun) – The outer part of the ear that collects sound.

Pitch (noun) – The height or depth of a tone or sound, depending upon frequency.

Pollution (noun) – The introduction of harmful substances or products into the environment.

Public Health (noun) – The overall well-being of a population of people.

Quiet (noun, adjective) – Low noise or sound.

Reflection (noun) – A change in direction of a wave upon striking two materials.

Reverberation (noun) – A collection of reflected sounds.

Silence (noun) – Absence of any sound or noise.

Sonar (noun) – Short for *Sound Navigation and Ranging*, a system using underwater sound waves to detect and locate submerged objects or to measure distances.

Sound (noun) – Vibrations transmitted through air or another medium capable of being detected by the ear.

Sound Exposure (noun) – The level and duration of the presence of sound.

Sound Wave (noun) – Variations of pressure in a medium, such as air or water, in the shape of a wave.

Stakeholder (noun) – An individual or group involved or affected by a course of action.

Tone (noun) – A sound that has a regular frequency.

Transmission (noun) – When sound is transferred from one place to another.

Vibration (noun) – Rapid movement up and down or back and forth about a point of equilibrium.

Volume (noun) – The amplitude or loudness of a sound.

Wavelength (noun) – The distance between two identical positions in the cycle or wave.