

## NYC DEP Sound and Noise Module

### Glossary of Terms and Concepts

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**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.