

Noise Restrictions for Motor Vehicles

By: Shaun McGann, Associate Analyst
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Issue

Provide information on the maximum allowable decibel levels and other noise-related restrictions for motor vehicles under state law.

This report updates OLR Report [2009-R-0205](#).

Summary

By state regulation, motor vehicles weighing less than 10,000 pounds (i.e., most passenger cars) that were manufactured on and after January 1, 1979, cannot exceed noise levels of 81 decibels when travelling more than 35 mph on a paved street or highway. However, the maximum permissible noise level varies based generally on the vehicle's weight and manufacture date, the highway speed limit, and the road surface on which the vehicle travels. State law requires the Department of Motor Vehicle (DMV) to update these regulations and submit them for review by October 1, 2024. Decibel restrictions generally do not apply to (1) sounds generated by a warning device, such as a horn or siren; (2) emergency vehicles responding to emergency calls; (3) snow plows in operation; or (4) certain auxiliary equipment operated when a motor vehicle is stopped or at a low speed (e.g., cranes, asphalt spreaders, and trash compactors) ([Conn. Agencies Regs., § 14-80a-3a](#)).

Related Report

See OLR Report [2022-R-0098](#) for information on laws related to noise levels on state roads and possibilities for noise abatement.

Recently enacted legislation also allows municipalities to (1) authorize the use of noise cameras to enforce vehicle noise violations, under certain conditions, and (2) impose increased penalties on violators of ordinances regulating the use of external speakers attached to a vehicle. Additionally,



existing law requires DMV to create, and report on, a pilot program at selected emission inspection stations to test different options for inspecting the maximum decibel level produced by a motor vehicle during an emission inspection. The department is also required to submit to the General Assembly a plan to implement a statewide decibel level testing program at official emissions inspections.

Motor Vehicle Noise-Related Laws

State law requires the DMV commissioner, with the Department of Energy and Environmental Protection commissioner's advice, to adopt regulations establishing (1) maximum permissible decibel levels for motor vehicles that do not exceed those set in federal law and (2) the procedure for testing maximum decibel levels.

Legislation enacted in 2022 and 2023 ([PA 22-44](#), § 18, and [PA 23-135](#), § 36) require the DMV commissioner to amend these regulations based on industry standards and new technology and submit them to the Regulation Review Committee by October 1, 2024.

The law prohibits anyone from (1) operating a vehicle (or allowing their vehicle to be operated) above the maximum decibel level set in these regulations and (2) selling new vehicles that produce a maximum decibel level exceeding the maximum permissible level ([CGS § 14-80a](#)). A violation of these provisions is an infraction.

Municipal Noise Cameras and Regulation of External Speakers

Under a law enacted in 2024, municipalities may authorize the use of noise cameras (photo noise violation monitoring devices) to enforce vehicle noise violations. To do so, a municipality must adopt an ordinance that (1) establishes a municipal violation for causing a vehicle to make a sound of 80 decibels or louder, except for sounds made by the vehicle's horn; (2) authorizes the use of cameras to enforce the ordinance; and (3) meets the law's other specified requirements. Municipalities operating noise cameras must issue a written warning for a first violation, a \$100 fine for a second violation, and a \$250 fine for subsequent violations. They must also adhere to the law's provisions on camera operation, image review and citation issuance, hearings and available defenses, privacy, and data retention ([PA 24-151](#), §§ 132-136).

Relatedly, a 2022 law authorized municipalities to impose higher penalties on violators of ordinances regulating the use of external speakers attached to a vehicle. These ordinances may (1) impose a penalty of up to \$1,000 for first violations, \$1,500 for second violations, and up to \$2,000 for third or subsequent violations and (2) generally provide for seizing and forfeiting the

speakers to the municipality in accordance with certain requirements and exceptions ([CGS § 7-149c](#)).

Measuring Decibel Levels

As discussed above, the law authorizes the DMV commissioner to establish a procedure for checking maximum noise levels of vehicles. This procedure determines acceptable decibel levels for a vehicle depending on certain factors (e.g., the vehicle’s weight and manufacture date, the highway speed limit, and the road surface on which the vehicle travels).

A decibel (dB) is the basic measurement unit for sound and is measured on a logarithmic scale. An increase of 10 decibels approximates a perceived doubling of the sound level. State and federal motor vehicle regulations use the “dB(A)” scale of measurement, which is the scale that most closely approximates the sensitivity of the human ear.

Under DMV regulations, a motor vehicle’s noise level must generally be measured 50 feet from the vehicle’s centerline. If the test procedure provides for measuring the noise from other than 50 feet, the measuring devices must be calibrated in a way that creates an equivalency to measuring the sound at a distance of 50 feet ([Conn. Agencies Regs., §§ 14-80a-9a & 14-80a-10a](#)).

Under these regulations, vehicles are divided into categories by their gross vehicle weight rating (GVWR), as assigned by the manufacturer. This is the weight specified as the maximum fully loaded overall weight allowed for the vehicle. Vehicles may also be measured by their gross combination weight rating (GCWR). This is the sum of the GVWR of each vehicle or unit comprising a combination vehicle ([Conn. Agencies Regs., §§ 14-80-1a & 14-80a-4a](#)).

Sound level measurements may be made on either “soft” or “hard” test sites. A hard test site is a test site with ground cover of concrete, asphalt, packed dirt, gravel, or similar acoustically reflective material. A soft test site is covered with grass or other similarly absorptive material ([Conn. Agencies Regs., §§ 14-80-1a & 14-80a-8a](#)).

Maximum Noise Levels for Motor Vehicles

Table 1 outlines the maximum permissible noise level for a motor vehicle, which ranges from 72 to 92 decibels (dB(A)), depending on the vehicle’s weight, the highway speed limit, and the road surface on which the vehicle travels. Table 2 outlines maximum levels for stationary motor vehicles, which range from 72 to 88 dB(A), depending on the vehicle’s weight and the road surface ([Conn. Agencies Regs., § 14-80a-4a](#)). (Different levels apply to vehicles manufactured before 1979.)

Table 1: Maximum Permissible Sound Level by Vehicle Weight, on Highway*

Highway Operation Speed Limit	Soft Site		Hard Site	
	35 MPH or less	Above 35 MPH	35 MPH or less	Above 35 MPH
Vehicles weighing less than 10,000 lbs. (i.e., most passenger cars)	72 dB(A)	79 dB(A)	74 dB(A)	81 dB(A)
Vehicles 10,000 lbs. or more, excluding buses	86 dB(A)	90 dB(A)	88 dB(A)	92 dB(A)
Buses weighing 10,000 lbs. or more	83 dB(A)	88 dB(A)	86 dB(A)	90 dB(A)
Motorcycles	78 dB(A)	82 dB(A)	80 dB(A)	84 dB(A)

Table 2: Maximum Permissible Sound Level by Vehicle Weight, Stationary*

Stationary	Soft Site	Hard Site
Vehicles weighing less than 10,000 lbs. (i.e., most passenger cars)	72 dB(A)	74 dB(A)
Vehicles 10,000 lbs. or more, excluding buses	86 dB(A)	88 dB(A)
Buses weighing 10,000 lbs. or more	83 dB(A)	85 dB(A)
Motorcycles	78 dB(A)	80 dB(A)

*Note, the figures above generally apply only to vehicles manufactured on or after January 1, 1979. For vehicles manufactured before this date, see [Conn. Agencies Regs., § 14-80a-4a](#).

Decibel Level Testing Programs

From October 1, 2023, until October 1, 2024, a 2023 law requires DMV to establish a pilot program at five selected official emission inspection stations to test different methodologies for inspecting the maximum decibel level produced by a motor vehicle during an emission inspection, which may not exceed the levels established in statute and any adopted regulations (see above). The different methodologies used must reflect industry standards and advancements in technology. By January 1, 2025, DMV must submit a report to the Appropriations, Finance, Revenue and Bonding, and Transportation committees on the pilot’s implementation, the results of the different methodologies used, and recommendations for a statewide decibel level testing program ([PA 23-135](#), § 37).

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