Re: Written Testimony: Impacts of Excessive Motor Vehicle Noise
To: VT House Committee on Transportation
From: Laura Hill-Eubanks, Northfield, VT
Date: May 4, 2026

Thank you for the opportunity to meet with the Committee.

I am a Vermont attorney with a master's degree in environmental law and policy. I got involved in the issue of excessive motor vehicle noise because I live on a rural state highway that was once fairly quiet; but over the years the road has gotten much noisier due to an increase in loud motorcycles, cars and trucks. It seems apparent that there isn't much of an effort being made by state officials to reduce or control that noise. I hope the following information will help clarify the issues and give you reason to help reduce the noise and its impacts—both health and economic.

According to the Federal Highway Administration, traffic noise is one of the most pervasive and dominant sources of noise today, in both urban and rural environments. The two main sources of loud motor vehicle noise are mufflers and exhaust systems that are modified to increase the noise from motorcycles, cars, and trucks; and the use of air brakes on heavy trucks that lack adequate mufflers for those brakes.

Loud noise is not just an annoyance. It has both health and economic impacts.

The Vermont Public Health Association warns that loud noise can have long-term impacts on human health and mental well-being[1]:

> *Exposure to high noise levels is associated with* ***elevated blood pressure, heart disease, hearing loss, sleep deprivation, ringing of the ears, headaches and chronic fatigue****. One study estimated that 104 million Americans have annual noise exposures above 70 dBA (equivalent to a continuous average exposure level of >70 dBA over 24 hours) in 2013; they were at risk of hearing loss, while "tens of millions more may be at risk of heart disease and other noise-related health effects."*[2] *. . .* ***Children and low-income and minority communities are especially vulnerable to noise pollution and its impacts.*** *Much of the adverse health effects of noise exposure are due to feelings of powerlessness to control the noise. Because individuals cannot control noise made by others, this is an issue in which government is needed to take action.*

The EPA has long recognized the impacts of noise pollution on health:

> *Noise pollution adversely affects the lives of millions of people. Studies have shown that there are direct links between noise and health. Problems related to noise include stress related illnesses, high blood pressure, speech interference, hearing loss, sleep disruption, and lost productivity. Noise Induced Hearing Loss (NIHL) is the most common and often discussed health effect, but research has shown that exposure to constant or high levels of noise can cause countless adverse health effects.*[3]

1 Vermont Public Health Association (VtPHA): statement on noise and health impacts: https://vtpha.org/wp-content/uploads/2025/01/Environmental-Noise-Pollution_2024.10.pdf

2 Hammer MS, Swinburn TK, Neitzel RL. 2014. Environmental noise pollution in the United States: developing an effective public health response. Environ Health Perspect 122:115–119; http://dx.doi.org/10.1289/ehp.1307272

3 EPA regulation of noise pollution, health effects, regulations: https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution

Road noise can also significantly impact quality of life, leading to economic impacts. Studies and surveys have shown that roadway noise pollution reduces property values;[4] and that noise is a major reason that homeowners wish to move out of their homes and neighborhoods.[5] This can ultimately lead to deterioration of a neighborhood area caused by neglect, lack of investment, or economic decline.[6] Excessive noise can also contribute to decreased job and academic performance.[7]

The Environmental Protection Agency (EPA) and the World Health Organization (WHO) consider a sound limit of up to 55 dBA to be acceptable for outdoor residential areas; and 40 dBA outside bedrooms to prevent health effects.[8] A sound level above 70 dBA can cause hearing loss.[9] The sound coming from excessively loud motorcycles, for example, can commonly reach 95 dBA to 110 dBA, and higher.[10]

The EPA currently regulates certain noise sources under the Clean Air Act.[11] Currently there are federal sound limits on sources the EPA considers to have the most impact on road noise. These include motorcycles and heavy trucks. The federal noise limit (measured at 50 feet) is 80 dBA for motorcycles manufactured after 1986;[12] and 80 dBA for heavy trucks (over 10,000 pounds) manufactured after 1988.[13] Keep in mind that these sound limits are not *quiet*, and may cause harm with chronic exposure[14]—but they are *reasonable*, and intended to prevent more serious impacts on members of the community.

In the case of motorcycles, the federal regulations further require that they include a label to confirm they meet the federal noise standard.[15] By requiring that motorcycles have the EPA label, motor vehicle inspectors can easily and efficiently determine whether a motorcycle complies with the legal noise limit, eliminating the need for determining whether the sound is "unreasonably" loud, or whether certain modifications have been made to the exhaust system to make it louder.

The time and expense for state inspection could actually be reduced using this technique of enforcement, and remove any bias in enforcement by the application of a clear legal standard. One thing I have heard from the many law enforcement officials I've spoken with, is that they need a clear "black & white" standard for noise enforcement to withstand any legal challenges, and to make enforcement easier. The EPA label requirement is such a standard.

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4 Roadway noise pollution reduces property values: https://www.urban.org/sites/default/files/2022-11/The%20Polluted%20Life%20Near%20the%20Highway.pdf

5 Noise a major reason people wish to move out of home or neighborhood: https://www.businessinsider.com/noise-pollution-effects-human-hearing-health-quality-of-life-2018-1

6 Blight or economic decline of neighborhoods due to road noise: https://www.noiseoff.org/publications/loud-motorcycles/urban-blight/

7 Vermont Public Health Association (VtPHA): statement on noise and health impacts: https://vtpha.org/wp-content/uploads/2025/01/Environmental-Noise-Pollution_2024.10.pdf

8 EPA Identifies Noise Levels Affecting Health and Welfare: https://www.epa.gov/archive/epa/aboutepa/epa-identifies-noise-levels-affecting-health-and-welfare.html; World Health Organization: Safe noise levels: https://www.who.int/europe/news-room/fact-sheets/item/noise

9 Sound level comparisons: https://hearinghealthfoundation.org/keeplistening/decibels

10 Harley-Davidson CA on loud motorcycles: https://www.quaidharleydavidsonlomalinda.com/blog/are-louder-motorcycles-safer-how-does-noise-impact-safety/

11 https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution

12 40 C.F.R. § 205.152

13 40 C.F.R. § 205.52

14 Sound level comparisons: https://hearinghealthfoundation.org/keeplistening/decibels

15 40 C.F.R. § 205.158

Some motorcycle enthusiasts claim that “loud pipes save lives”. But this is more myth than fact. Even sellers of Harley-Davidson bikes admit it isn’t really true. As they point out on their website, scientific research and studies show loud noise coming from motorcycles do not make the riders safer. Key points made by one H-D dealer included:

- *Noise direction: Most exhaust sound travels behind the motorcycle, limiting how well others hear it.*
- *Driver awareness: Modern car cabins block much of the outside noise.*
- *Effective safety tools: Bright gear, LED lights, and smart lane positioning help more than sound alone.*
- *Hearing impact: Extended noise over 85 decibels can lead to long-term hearing damage.*
- *Public backlash: Constant loud pipes may make drivers less patient or cooperative.*
- *Rider fatigue: Higher decibel levels can lead to headaches or stress on longer rides.*
- *Reduced focus: Excessive sound can drown out signals from other vehicles.*

Many studies show that rider safety depends more on awareness and visibility than on sound.[16]

States across the U.S. have used various methods of regulating and restricting noise from motor vehicles.[17] Some prohibit the modification of mufflers and exhaust systems that increase sound levels over that of the originally installed equipment. Several others have set maximum sound levels for motor vehicles, which may be based on the type of vehicle to which the limit applies (trucks, versus cars, versus motorcycles).[18] Motor vehicle noise laws may generally be enforced by one or a combination of methods: state inspection; traffic stops; and noise level measurement devices (including those that are automated and do not require traffic stops by law enforcement).

Those of us that advocate for the state of Vermont to take action to lower the noise from motor vehicles have heard from many Vermonters that are desperate for relief from the road noise. We heard from a mother whose infant son wakes up whenever a loud vehicle goes by their home; from a woman in tears as she explained that she finally got to purchase a house like she always wanted, but after moving in, realized the road through Barre that she lived on was unbearably noisy because loud motorcycles were constantly riding by; and from many residents who hear the sound of air brakes on heavy trucks rumble loudly through their village, daily and nightly.

Many of us have tried to get government officials or law enforcement to help, but have gotten nowhere. Some residents have even moved out of their homes to escape the noise. The adverse impacts are real and should be taken seriously. Our hope is that new laws will be enacted to reduce the noise from the loudest of motor vehicles and the impacts they are having on many Vermonters.

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16 Harley-Davidson on noise levels, safety, and impacts to the community: https://www.quaidharleydavidsonlomalinda.com/blog/are-louder-motorcycles-safer-how-does-noise-impact-safety/

17 Detailed noise laws by state (SEMA): https://legislature.vermont.gov/Documents/2026/Workgroups/Senate%20Transportation/Bills/S.66/Witness%20Documents/S.66~Karen%20Akins~Exhause%20Noise%20Laws%20by%20State~2-27-2025.pdf. also see Cummins: https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.cummins.com/sites/default/files/2024-01/noise-control-laws-info.pdf&ved=2ahUKEwjE2_2_h56UAxUwjokEHXoCFpkQFnoECBwQAQ&usg=AOvVaw3YvUakWKKbgZftoF703AHM

18 See list of various state exhaust law sound limits, for examples: https://drive.google.com/file/d/1e7GQgUXjkwa6AaB8moRZnNqfwBOHws3b/view?usp=drive_link

For more information:

1. **Vermont Public Health Association (VtPHA): statement on noise and health impacts:**

   https://vtpha.org/wp-content/uploads/2025/01/Environmental-Noise-Pollution_2024.10.pdf

2. **Health impacts of road noise (review paper):**
   https://www.tandfonline.com/doi/full/10.1080/01441647.2023.2206168#d1e361

3. **EPA regulation of noise pollution, health effects, regulations**:

   https://www.epa.gov/clean-air-act-overview/clean-air-act-title-iv-noise-pollution;
   https://www.epa.gov/archive/epa/aboutepa/epa-identifies-noise-levels-affecting-health-and-welfare.html

4. **World Health Organization: Safe noise levels:**

   https://www.who.int/europe/news-room/fact-sheets/item/noise

5. **Information on noise pollution sources, health impacts, history, and solutions:**
   https://www.noiseoff.org

6. **Testimony in Vermont Senate Transportation Committee on motor vehicle noise bill** (for general information on noise impacts)**:** https://www.youtube.com/watch?v=dGSyqznxqO4 :
   - Noise expert Les Blomberg, from Noise Pollution Clearinghouse: at 15:51 minutes
   - Peter Bingham, MD, Physician on noise impacts: at 36:06 minutes