BY EMAIL

February 20, 2025

To: Senator Rich Westman, Chairman, Senate Transportation Committee (rawestman@gmail.com)
Committee Staff Assistant (mcannella@leg.state.vt.us)

Re: Endorsement of VT S.66

To Whom it May Concern:

My name is Jamie Banks. I am the founder and president of Quiet Communities Inc. (Concord, MA), a national nonprofit organization focused on reducing harmful noise and related pollution. I am a health and environmental scientist and chair the Noise and Health Committee of the American Public Health Association. I am joined in this letter by Mary Tatigian, a registered nurse, founder of Quiet Florida, and Chair of our Quiet Streets program.

We are writing on behalf of our organization to endorse Vermont Senate bill S.66. Modified vehicle noise and jake braking are causing distressing communities around the country from Vermont to California. These vehicle sounds are loud and have strong low frequency components that enable the sound to travel over long distances and readily intrude into people's homes.

Vehicle noise, and especially modified vehicle noise, have strong low frequency components, enabling it to travel over long distances and readily penetrate walls and windows [Bengtsson 2003; Persson Waye 2001; Persson 1988]. Low frequency noise is notoriously difficult to mitigate [NAE 2010]. It causes distress at lower decibel levels than higher frequency noise and deprives people of the ability to enjoy their homes and sleep undisturbed. It is the type of noise that accounts for the majority of noise complaints.

The effects of chronic, noise on health and well-being are serious and can be life-threatening [Munzel 2024]. Chronic noise, even at low levels, is a major source of stress that contributes to: ischemic heart disease, heart attack, stroke, sleep disruption, diabetes and obesity, anxiety and depression, dementia and neurodegenerative diseases, and premature death [Munzel 2024; Hahad 2024; Meng 2022; Canturia 2021]. Noise initiates a physiological cascade involving the release of stress hormones, increases in risk factors like blood cholesterol and blood glucose, inflammation, and oxidative stress that ultimately damage the blood vessels and impair glucose metabolism [Munzel 2024]. There is evidence that repeated noise primes the blood vessels for more damage and there is no evidence that our bodies adapt to or develop tolerance to noise.

Low frequency noise [Alves 2020; Ascari 2015; Persson 2001; Berglund 1999; Broner 1985] and nighttime noise [Munzel 2020] are known to be especially harmful. Sleep is critical to health and well-being and ***is recognized as a human right by international courts*** [Tabor 2024]. Disruption and fragmentation of sleep diminish the ability to clear toxins from the brain, reduce the ability to consolidate memories, and increase risk factors associated with cardiovascular and metabolic diseases [Munzel 2020].

Groups that are most vulnerable to the effects of road traffic noise, include children, seniors, people with neurological conditions, and people with pre-existing cardiovascular disease [Howitt 2024; Van Kamp 2013].

Noise as a public health hazard was recognized in policy statements from the American Public Health Association in 2021 and the American Academy of Nursing in 2016. Increasingly, it is recognized by national print and broadcast media. For example, this article in the The New York Times: *Noise can take years off your life. Here's How (6/9/23)*.

We hope this letter will help Vermont's Senate Transportation Committee appreciate the impacts of loud road vehicle noise pollution. It is not simply an annoyance. It is a serious threat to physical and mental health and well-being. We urge you to enact the bill to protect the health of Vermont's residents.

Sincerely,

Jamie Banks, PhD, MSc
President

Mary Tatigian RN

Mary Tatigian, RN
Chair, Quiet Streets

References

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