

## EE538: Quiet Communities Paper

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### **Introduction**

In Arthur Schopenhauer's work *The World as Will and Representation*, he places music on a pedestal above all other art forms due to its ability to extend beyond the metaphor. Music has an intimate connection with the human experience, we can close our eyes to not look at painting, but there is no escaping music – it is experienced as the *will* itself. This alludes to the intimate dynamic between sound and life. Noise can be defined as, “any sound that is undesired or interferes with one's hearing of something.” Noise pollution has a core of the second wave of environmentalism and included in protests during the first Earth Day in 1970. Noise is known to cause or contribute to “hearing damage, cardiovascular disease, metabolic disease, and psychological disorders.” Given these harmful consequences of noise, noise was declared as a public health hazard in 1968 and further legislation was passed to protect the American people from noise. Four years later in 1972 the Noise Control Act was passed; this act created the Office of Noise Abatement and Control (ONAC) which was created to research, regulate, educate, and enforce noise pollution. ONAC existed for only ten years until it was defunded in 1981 under the Reagan administration under questionable grounds. This has had devastating impacts on the American population. From a lack of research to understand the dangers of noise, inadequate warnings on consumer products, and lack of enforcement mechanism when dealing with noise pollution – the American people are at a severe loss when it comes to dealing with noise pollution.

### **Quiet Communities**

This fall, I assisted Quiet Communities — a non-profit group that “promotes quiet as a valuable natural resource and works to reduce harmful noise and related pollution.” They are a collection of scientific, medical, and legal professionals that are forming a united front to battle noise pollution in a nation where the federal government has seemingly forgotten about the issue. I assist them by conducting interviews with sufferers of noise pollution. From issues pertaining to gunshots overheard from schools, battles with coal mining companies, to leaf blowers, issues of noise pollution take on different shapes and sizes; however, there is one trend that runs them all – a lack of mechanism to deal with noise.

### **Cranston, Rhode Island**

School bells, morning alarms, and cheering from the crowd at the sideline of a sporting event: these are sounds typically associated with schools, not the piercing vibrations of gunfire. Two years ago, a couple moved to Cranston, Rhode Island, a small, charming city in Rhode Island. The couple moved during the winter, unbeknownst to them the rest of the year would be accompanied by the constant sound of gunfire.

The outdoor gun range operated by the Cranston Police department has existed since 1954 – predating the main development of the town. The gun range stands less than half a mile from both Cranston H.S West and Western Hills Middle School; the students of which are exposed to the noises of a war zone during class, and aside from a few determined advocates,

nothing is being done.



Image from Fang's presentation showing proximity of the police firing range to Western Hills Middle School and Cranston West High School.  
Credit: Martha DiMeo

*Image 1: Image from Fang's presentation showing proximity of the police firing range to Western Hills Middle School and Cranston West High School. Credit: Martha DiMeo*

Heidi Lavigne and Tamás Kolos-Lakatos are part of these determined local few who are concerned about the future of their daughter's development and wellbeing in the Cranston school system. As Arline Bronzaft research has demonstrated, exposure to noise has a negative impact on children's academic performance. The children of Cranston, Rhode Island are not only subject to consistent firing conducted by the Cranston Police during their school days. Many residents of Cranston, having grown up around the noise, have gotten desensitized to the noise as it has become normal for them. Just listen to the principal of Cranston High School West, John Fontaine, who told a local new outlet, "In my 12 years of working here I have never had a student, or a parent or staff member complain to me about it, ever. If a student was having a mental health crisis because of the gun range, I would be concerned about it, but I have never had a student come to me with a mental health concern because of the gun range." Similar

sentiments are echoed by the principal of Western Hills Middle School, Tim Vesey, “no students have approached me or my team with major concerns about it. On very few occasions students have asked about the gun range shooting and I reassured them that it is the Cranston Police, the good guys and girls, practicing. That always seems to have put them at ease.” These two accounts provide a good snapshot for how many residents of Cranston view the gun range: as just part of life. It should be noted that there are major issues with the view that it is the ‘good guys and girls practicing’. If there was ever an instance of gun violence at the school, it would be indistinguishable from a regular day at the high school. Furthermore, there is a vast collection of video evidence demonstrating this issues as seen below:

[Cranston Shooting.mov](#)

As you can hear in these two videos, Cranston residents are not suffering from quiet whispers of distant gunfire but rather are being bombarded with constant firing throughout the day. The sound of gunfire can exceed healthy limits, and although residents have gotten used to the noise, it does not mean that it is not impacting them. Heidi Lavigne and Tamás Kolos-Lakatos are not asking for radical change, they simply want to enjoy peace and quiet within their own homes. All tranquility of spending time outdoors is lost when it is accompanied by gunfire. There have been previous attempts of trying to move the shooting range, but neither of them amounted to anything. There was a bill to make it illegal to have a gun range within a mile of the school, but it died in the judiciary. Additionally, Robert Ferry said that he would either enclose the range or move it, yet nothing has been done. The Cranston police hold lots of political influence within their local politics and to be against the shooting range in Cranston is to be against the policy; however, this misrepresents the position. The police have popular support in the town since they keep communities safe — proponent of moving the shooting range want the

same thing. They want their children to not have to suffer the impacts of being exposed to noise pollution and want to make their community a more hospitable place. Regardless, local government and the community aside from a few motivated individuals remain unresponsive.

### **Manitou, Kentucky**

Long before there was ever a paved road, Jamie Lutz has lived on Wolf Hallow Road. It is where she grew up and where she lives now along with her daughter. Lutz has fond memories of growing up in Manitou, spending time outside with friends and family; her dwelling on Wolf Hallow Road is more than a house, it is truly a home. Embedded with a rich family history and too many stories to list; however, this peaceful sanctuary has lost its quiet. Ten years ago, Warrior Coal moved into the neighborhood. Immediately there were changes, the gravel road became paved, but the Lutz's quality of life remained unchanged. Over the years the road kept getting wider and more trash started to line the sides of the roads, but in January 2022 there was a massive shift.

There was an insistent noise that kept bothering Lutz. At first Jamie ignored the noise blaming the increased noise to her being more sensitized after the recent passing of her father, but the noise never got quieter, only louder, and continued to grow. After some detective work, and talking to other neighbors, Lutz was able to identify that the noise was coming from Warrior Coal. She called the company to try to get the situation resolved, but there was no help.

As the noise persisted, it began to have negative effects on her daughters' education. Prior to the constant noise, her daughter was excelling in school, but due to lack of sleep and lack of focus caused by Warrior Coal, she began to fall behind. Wanting to ensure the best for her daughter, Jamie began to get more involved in the issues, trying to make the issues better, but the noise just kept getting louder. After reaching out to a plethora of people, she was able to

determine that the noise was coming from a ventilation fan from a coal mine portal. As Warrior Coal continues to mine, the noise only gets louder.

Lutz has reached out to government officials, environmental organizations, and Warrior Coal, yet everyone claims that this issue is out of their jurisdiction – even the Mines Safety and Health Administration. She has tried to reach everyone she can think of. A number of officials have gone to her house, acknowledged the problem, and then done nothing. The mining company has accused her of trying to get the mine to be shut down, but she simply wants the noise to stop. Furthermore, if the noise is harmful to Lutz, it must be harmful for the workers in the mine; 90% of miners have developed hearing impairment by the age of 50.

In addition, the owner of Warrior Coal, Joe Craft, is worth around 1.5 billion dollars, and has immense influence on politics and courts within Kentucky. Also, many people in Manitou work in the mines and are afraid to speak up about the issue. At times, taking arms against one of the most powerful men in the state, seems like an impossible task, and many lose hope. Remarkably, Jamie Lutz has remained resilient and continues to fight for her right to peace and quiet. Warrior Coal has offered to buy her house at less than half of the appraisal value; however, Lutz has grown up in this house and does not want to leave. She wants to defend her neighborhood as everyone deserves a right to peace and quiet. Although her fight against noise pollution continues, she remains hopeful that she will be able to once again enjoy the peace and quiet her family has known for generations.

## **Atlanta, Georgia**

Peter Bahouth lives in Atlanta, Georgia, where his long-standing environmental advocacy is now focused on an unexpected and deeply personal battle: noise pollution from gas-powered

leaf blowers. As the former Executive Director of Greenpeace and the Ted Turner Foundation, Peter's life's work has been rooted in protecting the environment and addressing systemic problems. However, the incessant droning of leaf blowers near his home has brought him a challenge that feels both trivial and monumental.

Leaf blowers, he argues, symbolize broader societal issues. They disrupt habitats for insects like ladybugs, contribute to air pollution and climate change, and are emblematic of the unnecessary pursuit of perfection in American lawns. "What did leaves ever do to us?" Peter often asks, half-joking. But his frustration is real. He is bombarded by the noise daily—often even in the summer, when there are few leaves to clear. The sound penetrates walls, windows, and his sense of sanctuary. "Our homes should be peaceful," Peter says, "not invaded by someone else's lawn care routine."

The fight is personal and deeply aggravating. Neighbors dismiss his concerns, telling him to wear headphones or move. To Peter, this response is both dismissive and unfair. "Why should I have to alter my life for someone else's noise?" he questions. The constant hum of leaf blowers feels like an assault on his principles and his peace of mind. "It's not a one-off like a chainsaw or a lawnmower," he explains. "It's week after week, year after year, with no benefit to anyone."

The psychological toll has been significant. Peter likens the experience to being trapped in a cell, the sound a maddening trigger that disrupts his daily life and sleep. Despite his extensive environmental advocacy experience, he is surprised at how deeply the noise affects him. His frustration has pushed him to take action, though it hasn't been easy.

After attempting to reason with neighbors, Peter turned to legal avenues. He hired a sound engineer and used professional-grade equipment to record the decibel levels of the leaf

blowers, which were often audible from 800 feet away. The recordings revealed how pervasive and disruptive the noise is, far exceeding healthy limits. Armed with data, Peter is pursuing a legal injunction—not for damages, but simply for the right to peace and quiet in his home.

This is uncharted legal territory. Leaf blower noise hasn't been challenged in court on these grounds before. Yet, Peter is undeterred. He sees the case as a broader fight for environmental and community standards. "It's not about revenge or compensation," he says. "It's about creating a healthier, quieter place to live."

Critics often belittle his efforts, calling him the "leaf blower guy" or accusing him of being overly sensitive. But Peter remains steadfast, framing his struggle as part of a larger push for accountability and neighborly respect. He points out that many communities have already banned gas-powered leaf blowers and that transitioning to quieter, electric alternatives is feasible.

For Peter, this battle is both deeply personal and undeniably systemic. "If we can't protect something as basic as peace in our own homes, what are we doing as a society?" he asks. While his fight continues, Peter's hope is that his case will not only bring him relief but inspire others to demand the same for their communities.

## **Mansfield, Ohio**

For Cathy Bishop, Mansfield, Ohio, was supposed to be a place of solace and roots, not sleepless nights and endless battles. The home she lives in today was built by her father, a place of memories where she raised her son and hoped to live out her years in peace. But since 2017, Cathy has been living in what she describes as a nightmare of unrelenting noise—an industrial



hum emanating from a nearby steel mill that invades her home and disrupts every corner of her life.

The steel mill, originally owned by AK Steel and later taken over by Cleveland-Cliffs, lies nearly two miles from Cathy's house. Despite the distance, the noise, a ceaseless hum and sporadic blare, penetrates her walls, keeping her awake and on edge. "It's like torture," Cathy says, describing the relentless 24/7 din that makes it impossible to sleep for days at a time. During the pandemic, when the mill temporarily shut down, Cathy experienced a brief reprieve—only to have the noise resume, louder and more invasive than ever.

Cathy has spent years chasing solutions, calling government officials, environmental agencies, and legal experts. Each call ends in frustration. Local authorities claim their hands are tied, passing her from one department to another. The steel mill's representatives deny any changes to their operations, despite the undeniable shift in noise levels since 2017. An attorney warned Cathy that filing an injunction against the mill could result in her owing millions if the mill lost revenue, effectively ending her legal recourse before it began.

What makes Cathy's fight particularly disheartening is the lack of community support. Once a tight-knit neighborhood where she sold tomatoes door-to-door, Loudonville has become a transient, fragmented town. Many residents are either desensitized to the noise or too afraid to speak up. For Cathy, who's now on a fixed income, moving is not an option. "I've invested so much in this home," she says. "It's not just a house—it's my history, my family's legacy."

The physical toll of the noise is undeniable: Cathy suffers from heart issues yet she claims, "the anxiety, the depression, the lack of sleep, that can break you down." She's had to take medications to manage the stress, though she resents the idea of needing drugs just to live in

her own home. Her son, once a frequent visitor, now avoids staying overnight, unable to tolerate the relentless noise.

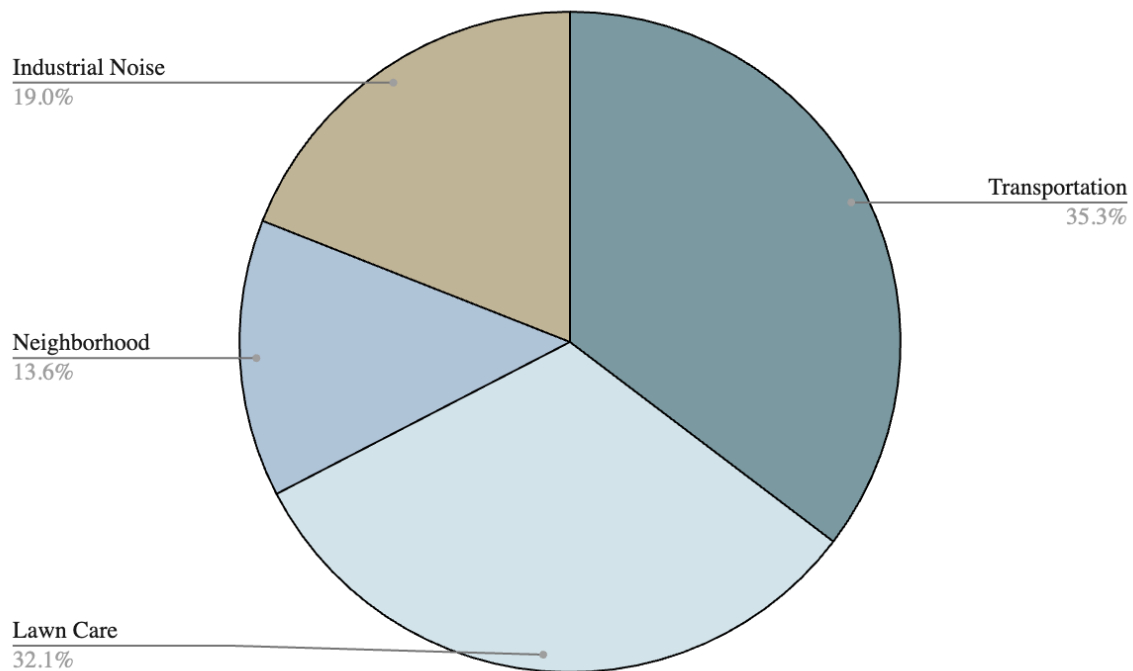
Despite the odds, Cathy remains determined to fight. She's documented the noise with recordings and compiled pages of evidence, hoping someone will take her case seriously. Yet, with local politicians prioritizing the mill's economic contributions over residents' well-being, Cathy's pleas often fall on deaf ears. "It's not just me," Cathy insists. "There are other families suffering, too, but they don't know how to speak up, or they think nothing can be done." For now, Cathy continues to hope that her voice, persistent and unwavering, will one day bring peace back to her home and neighborhood. "Everyone deserves the right to peace and quiet in their own home," she says. "Why should I have to fight this hard for something so basic?"

## **Data**

In addition to conducting interviews, I analyzed a dataset of noise complaints submitted to Quiet Communities. The organization uses Trello, a popular workplace management tool, to track complaints. However, due to system limitations, I could only export the data as a JSON file. Compounding the issue, the way the data was tagged made it challenging to develop a program to sort the complaints into categories automatically. After dedicating significant time to exploring potential solutions, I ultimately decided to sort the dataset manually.

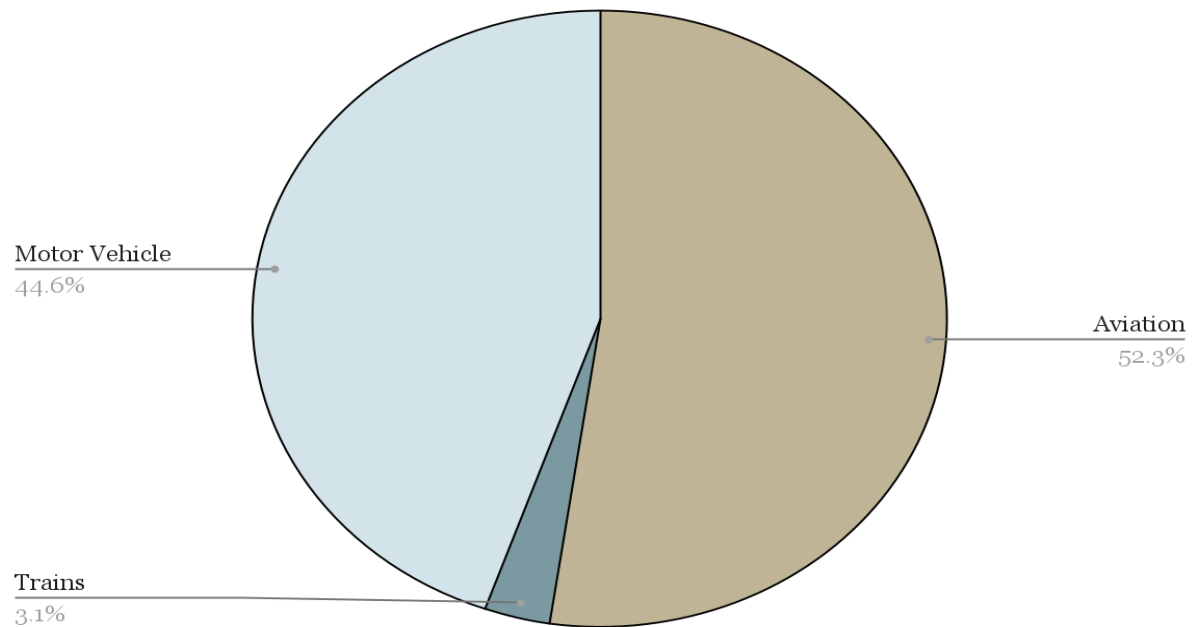
Of the 263 complaints in the dataset, 79 were administrative in nature, involving requests to be removed from email lists, follow-up inquiries, or questions about tax-deductible donations. The remaining 184 complaints addressed specific instances of noise pollution, which I categorized into four main groups: transportation (65 complaints), lawn care (59), neighborhood

noise (25), and industrial noise (35). This manual effort allowed me to understand the scope and nature of the issues Quiet Communities deals with.



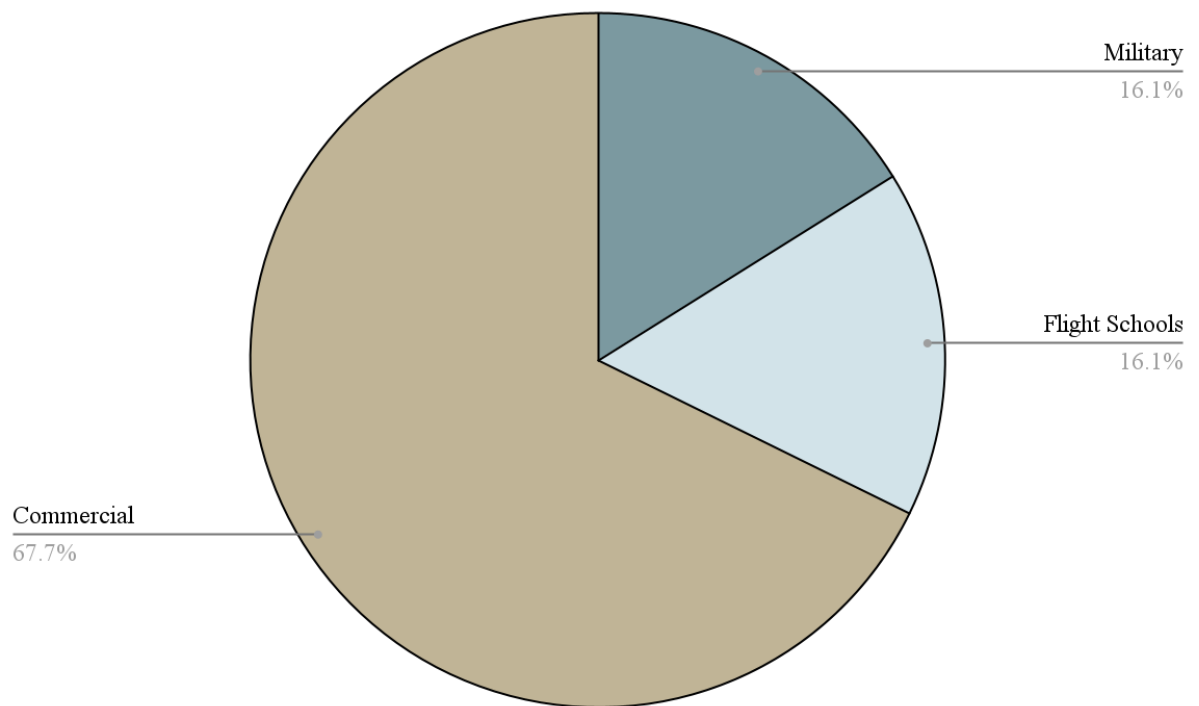
*Figure depicting the distribution of noise complaints across four main categories.*

Transportation noise includes issues related to aviation, modified vehicles, traffic, and trains, each contributing significantly to the urban soundscape. Lawn care noise primarily focuses on gas-powered leaf blowers, though other equipment like mowers and trimmers also contribute to the problem, with gas-powered leaf blowers being the central concern. Neighborhood noise, as the term suggests, involves disturbances caused by neighbors, ranging from loud music to other disruptive activities. Lastly, industrial noise encompasses cases where factories, manufacturing plants, and other industrial operations generate loud sounds within or near residential areas, as well as noise from restaurants and bars that disrupt the surrounding community.



*Figure depict the breakdown of complaints within the transportation category.*

Aviation accounted for the majority of transportation-related complaints, with motor vehicles trailing closely behind. While most motor vehicle complaints stemmed from modified vehicles, aviation complaints were more varied in nature, reflecting a wider range of issues and sources.



*Figure depicting aviation complaints.*

The majority of aviation-related complaints focused on noise disturbances from commercial flights. The remaining complaints were divided between noise generated by military training exercises and flight schools, highlighting the diverse sources contributing to aviation noise issues.

The data also revealed several notable trends. Ten percent of all complaints were tied to modified vehicles, including altered mufflers, modified motorcycles, and performance kits added to cars. Additionally, 7% of complaints were related to defense activities, such as noise from gun ranges, military flights, and training exercises.

Beyond the specific data, a clear emotional thread emerged across the complaints: a profound sense of frustration and helplessness. Many individuals expressed uncertainty about

how to address the noise issues they faced, underscoring the lack of accessible solutions and resources for tackling noise pollution effectively.

## **Conclusion**

The erosion of noise pollution legislation has caused significant suffering for many, leaving individuals without effective recourse. With no comprehensive methods to address noise pollution, victims are left without justice, their challenges often overlooked or dismissed. The right to the quiet enjoyment of one's property—a fundamental aspect of well-being—is being violated, resulting in severe impacts on both physical and mental health.

Change is urgently needed, and in most cases, it is neither complex nor costly. Reinstating the Office of Noise Abatement and Control (ONAC) is a critical step to ensure that those suffering from noise pollution can receive the justice they deserve. A federal structure dedicated to managing noise pollution is essential; individuals should not have to rely on immense personal effort or advocacy from a few devoted people to protect their right to peace and quiet.

While awareness of the dangers of noise has grown, more research is needed to address the complexities of sound pollution. Current decibel (dB) ranking systems are overly simplistic, failing to account for the varied impacts of different types of noise. A violin, a gunshot, and a conversation may register similar decibel levels but have vastly different effects on individuals. Additionally, low-frequency sounds, which are often ignored in standard noise assessments, can have significant consequences on health and well-being.

Without ONAC, noise enforcement often falls to local police departments, a system that has proven ineffective. Police already face heavy workloads, and addressing noise pollution—an

environmental issue requiring specialized knowledge and equipment—falls outside their expertise. Treating noise as an environmental concern, with dedicated structures and resources, would allow for more effective enforcement and better outcomes for those affected.

The need for action is clear. A revitalized, federally supported framework can ensure that all people have the right to live in peace and quiet, free from the harms of unchecked noise pollution.