

How the Federal Railroad Administration and Utahns can work together to keep our communities safer

On September 30, 2024, Utah city government officials received a letter from the Federal Railroad Administration (FRA) with an unanticipated mandate: within the next 7 days, all trains (both passenger and freight) must begin sounding their horns day and night at 46 train crossings spanning Provo to Ogden, the entire length of the FrontRunner rail system.

The “quiet zone” established 12 years earlier had been abruptly suspended. The FRA acted in “the best interest of public safety” while cities scramble to finish refreshing faded road paint, extending center medians from ~95 to 100 feet in length, and updating signage at some of the 46 crossings in response to an April 15-16, 2024 inspection.

Despite good intent, one has to wonder if blaring train horns throughout the night and thereby disrupting the sleep of hundreds, maybe thousands of Utahns is truly in “the best interest of public safety.” [Train horn volume ranges from 96-110 decibels which is similar to maximum volume on headphones while listening to a rock song]

What evidence exists to shed light on the public safety implications of hundreds, maybe thousands of residents losing 1-3 hours of sleep per night? [Which is expected to continue for weeks if not months before the quiet zones are restored]

To start, it's worth noting that through August 2024 (the most recent date data is available for) there have thankfully been [0 fatalities at train-crossings](#) along the Provo-Ogden quiet zones (in September 2024 there was 1 tragic train crossing fatality near the Utah/Idaho border in a rural area at a crossing that did not have lights or a cross arm. The crossing was not part of a quiet zone). Residents should continue to encourage their cities to promptly complete all needed updates to achieve full compliance with FRA safety standards. Cities also need to do a much better job in the future of maintaining rail-crossings to ensure lapses are not found during inspections.

Over the same period, our state has seen [3 fatalities](#) from drowsy driving related car accidents (this number does not include an Oct 10, 2024 [drowsy driving related fatality](#) recently reported by KSL).

These facts make the research by the [AAA Foundation for Traffic Safety](#) all the more worrisome:

There is a significantly elevated [car] crash risk for:

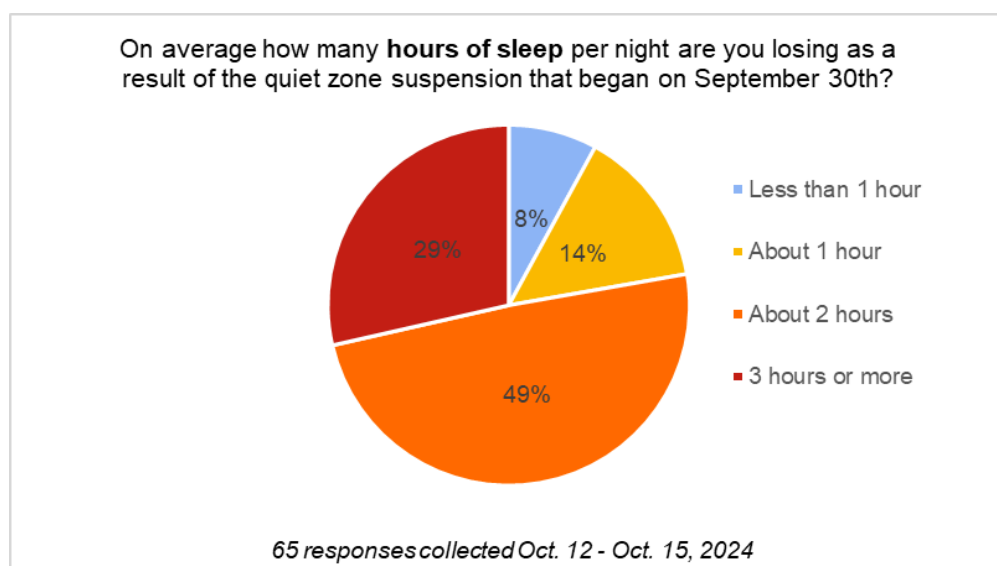
- *Drivers who slept for less than 7 hours in the past 24 hours*
- *Drivers who slept for 1 or more hours less than they usually sleep (independent of how much they usually sleep)*

Compared to drivers who reported that they had slept at least their usual amount in the past 24 hours, drivers who reported they had slept:

- 1-2 hours less than usual had 1.3 times the crash rate
- 2-3 hours less than usual had 3.0 times the crash rate

Other research has found that “Moderate sleep deprivation produces impairments in cognitive and motor performance equivalent to legally prescribed levels of alcohol intoxication” (see study [here](#); also cited in [USNews.com](#) story [here](#))

A [survey](#) launched on October 12, 2024 is beginning to shed light on the fact that many residents living near train crossings in Provo thru Ogden are in fact losing 1-3 or more hours of sleep per night so the estimates of increased crash rate should be seriously considered.



Of course this is just a small sampling of the likely hundreds, perhaps thousands of newly sleep deprived drivers on our roads, this research along with the relative number of train-crossing and car crash fatalities strongly suggests public safety risk is higher now than before the FRA's decision to suspend the quiet zones.

This alone should cause us to reflect on whether public safety is really being served with the FRA's decision. However, increased car crash risk is just the beginning of the public health and safety risks the train horns are now contributing to.

Sleep fragmentation and disturbances have been studied extensively by many researchers and have been associated with:

- Weakened immune systems which increase susceptibility to common viral illnesses (which can and do lead to death in some cases) (see [Sleep, Noise and Health Review](#))
- Increased risk for suicidal ideation and suicide attempt, anxiety, and depression (see [Meta-analysis of sleep disturbance and suicidal thoughts and behaviors](#) and [The](#)

[relationship between sleep disturbance and depression, anxiety, and functioning in college students](#))

- Workplace cognitive failures leading to injuries (see [Sleep problems and work injuries: A systematic review and meta-analysis](#))
- Increases in aggression which can lead to interpersonal violence (i.e., intimate partner violence, child abuse) (see [Observational and experimental studies on sleep duration and aggression: A systematic review and meta-analysis](#))

Beyond the research, actual reports of lived experience from local residents are starting to emerge:

"I woke up this morning with a splitting headache. This never happens to me. This comes after 7 nights of continuous sleep disruption from the train horns. When this first started happening and I was awoken by the train horns the only place I could think to go to block out the noise and get some sleep was into my cold storage area in the basement. I set up an air mattress and laid down a bunch of blankets. After laying down and just before closing my eyes I had the thought of the furnace in the same room with me and then wondered about possible carbon monoxide poisoning. My grandfather died in his 40s in his sleep due to carbon monoxide poisoning so this is likely the reason I had this thought and it sent a shot of fear through me. I quickly researched if this was a risk from a furnace and learned that indeed it was so I quickly left my makeshift bed and returned to my bedroom and tried, yet failed (because of the train horns) to get back to sleep that night. I am relieved I thought of researching this before going to sleep. I cringe to think what might have happened to me, my wife and 3 young children had I slept there and suffered carbon monoxide poisoning or worse. Since then no combination of ear plugs, sound machines, or sound blankets over the windows have been enough to block the train horns from severely disrupting my sleep."

"Our daughter is at risk for seizures due to a neurological condition she was born with. Sleep disruption is one of the triggers for seizures/tics. Overall we are all losing sleep and struggling to meet our daily tasks. It has been very hard for all of us. I feel it has caused a lot of anxiety for each of us as well. We are not sure how much longer we can tolerate loss of sleep over these train horns."

"Drowsy at work due to lack of sleep [which] is very unsafe around heavy machinery. Kids are having mood issues due to lack of sleep."

"I worry about how the horns are affecting my hearing & sleep. I am about 30 ft from the tracks. My ears have a dull ring now & are sensitive to every horn passed by. Please stop! I'm sure my dogs are having a hard time as well."

"It's hard to measure the cumulative impact of missing additional sleep every night, given that with the busy nature of my family, I am not already getting enough sleep. I find that I am shorter tempered during the day and not in top decision-making form. I worry about poor decisions leading to greater safety concerns (car accident, for example)."

“Our children are waking more frequently during the night, impacting their ability to focus and engage at school.”

“The train horns are waking up my baby and toddler. My wife wants to sell the house and move. She is having stress and anxiety.”

There are likely dozens of similarly dangerous or life threatening circumstances playing out in homes, workplaces, and on roads all along the rail route from Provo to Ogden as families try to figure out how to cope with the sleep loss imposed by the quiet zone suspension.

Given all of this, it's no less reasonable to think that one of our impacted neighbors could be injured or die from any of the above, precipitated by sleep loss from the train horns, than for someone to be injured or killed in a train-crossing accident. In fact, the data and research presented here make it abundantly clear that in the true interest of Utah's public safety the FRA should immediately:

- Conditionally reinstate a “partial quiet zone” from the hours of 10pm-7am for 60 days while cities complete upgrades to relevant rail-crossings
- Provide a reasonable notice period in writing (e.g. 60 days) prior to any future suspensions
- Factor the broader public health and safety impacts into decisions regarding suspension of quiet zones

I and hundreds of other Utahns formally [petition](#) the FRA to do so without delay. At the same time we will continue to encourage our city officials to upgrade all rail-crossings to the latest safety standards as soon as possible.

In that spirit we should be honest about the fact that this never should have happened. Due to slow remediation progress by the cities the FRA obviously felt they were justified in resorting to this action to speed things up and ensure compliance. Well it worked and we've all learned an important lesson.

The Utah legislature should explore investing UTA with primary responsibility for coordination across cities to maintain the quiet zones for the entire UTA rail system since the fates of FrontRunner, TRAX, and the quiet zones are inextricably connected. Local city officials are not properly equipped to manage the complexities of Federal Railroad Regulations in a fragmented manner nor do they have the necessary influence with other critical stakeholders such as Union Pacific who issues permits to complete some of the needed work. UTA and Union Pacific should ensure permits needed for compliance work jump to the front of the queue and always remain on a fast track for approvals.

Let's all get to work building a better, safer future where this never needs to happen again.

Resources

- **Document** your sleep loss experience in the brief survey below
- **Learn** more about the situation
 - Op-Ed: [How the Federal Railroad Administration and Utahns can work together to keep our communities safer](#)
 - [KSL News Article Covering the Petition](#)
 - [Research brief on public safety impacts from sleep loss](#)
 - [FAQ](#)
 - How did we get here? (coming soon)
 - How safe are our rail crossings? (coming soon)
 - How we can ensure this never happens again (coming soon)
- **Email** decision makers and stakeholders your concerns directly (coming soon)
- **Email** utahquietzones@gmail.com if you have information, ideas, or resources to help fix this faster and/or to help ensure it never happens again
- **Share** this petition with affected friends and family