

Quieter Railways Means Safer Railways: The case for taking railway noise and vibration issues seriously and how this can be a vector for making Canada's railways safer and more efficient.

I am a citizen living next to the CN main line that runs through Pointe-Saint-Charles, Montreal. Since a derailment on that line beside my house in September 2011, I have been involved with Nous et les Trains / Trains and Us (NTU) a local citizens committee concerned with railway proximity issues. In 2014-15 the NTU filled a formal complaint against CN for excessive noise before the Canadian Transportation Agency CTA. For the past 2 years I have been directly involved in the Canadian Transportation Agency mediation process between the NTU and CN. This past June NTU signed a confidential agreement with CN in return the NTU has agreed to drop its formal complaint with the CTA. After this experience, it is my firm belief that no real improvement of the noise and vibration problems in Pointe-Saint-Charles is possible without changes in the law.

Noise and vibration issues associated with railway activities are presently not included as part of the Railway Safety Act. They should be, and these are the four main reasons why.

Reason 1: Safety

According to the existing Railway Safety Act RSA:

- **Safe railway operations, etc.**

(4) In determining, for the purposes of this Act, whether railway operations are safe railway operations, ..., regard shall be had not only to the safety of persons and property transported by railways but also to the safety of other persons and other property.

- **Threats and immediate threats**

(4.1) For the purposes of this Act, a threat is a hazard or condition that could reasonably be expected to develop into a situation in which a person could be injured or made to be ill or damage could be caused to the environment or property, and a threat is immediate if such a situation already exists.

The potential adverse health effects of exposure to high environmental noise levels are well documented and based on research evidence. Even those who argue against

strict noise limits for railways do so on the basis of economics, and not medical science. Using the above definitions of the Railway Safety Act (RSA), excessive noise and vibration issues, such as those documented by Nous et les Trains / Trains and Us (NTU) Pointe-Saint-Charles (Montreal), should be considered to constitute an immediate threat to safe railway operations.

Reason 2: Safety

At the Montreal Regional Roundtable of the Railway Safety Act Review on September 18th, 2017, Cynthia Lulham (Project Manager, FCM/RAC Proximity Initiative), stated in both the morning and afternoon sessions that noise and vibration issues are in a vast majority of cases the first indication we have of larger safety and proximity concerns.

Simply put, the relative severity of noise and vibration problems are a very good indicator of where a derailment or other accident would have the most disastrous impact. Noise and vibration issues are key to identifying the areas we need to focus on in order to make our railway network safer. Additionally, the measures needed to make a railway right of way less noisy are also measures that would make it safer. These measures include short-term solutions like reducing speed, medium-term solutions such as building sound and crash barriers, and improving nearby building insulation and fenestration, as well as the long-term solution of displacing high-volume freight rail right of ways away from densely populated urban areas to newer safer rail right of ways.

Moreover, due to the highly visible nature of the medium and long-term measures required to make the railways quieter, they ensure that if noise and vibration issues are taken seriously Canadians will not only have a quieter and safer rail network, but they will also see it to be so. Finally, by dealing with each problem area in a systematic way and working together with all the stakeholders (federal, municipal and provincial governments, local citizens, the rail companies), the entire rail network in Canada can be gradually improved and made safer for all Canadians

Reason 3: Fairness and Democracy

Noise and what is considered excessive noise has always been an important issue wherever people live together. Long before the medical scientific consensus about the potential harm associated with excessive noise levels, there were municipal bylaws and local ordinances. However, railway companies argue that since they are federally regulated they are not bound by either municipal or provincial noise and environmental laws.

The federal government currently offers no guidance as to safe and acceptable noise levels where railways are concerned. So, while as a citizen I have some legal protection from my neighbour's all night lawn mowing, or the noise from the terrace

of the bar downstairs, or even the airport down the street, I have absolutely no noise protection from the 24/7 operations on the nearby railway right of way. This is a clear instance of our country's "highest" level of government forcing the lowest level of protection on to its citizens. Because of this failure to regulate rail noise when all other levels of government have done so, the federal government makes all Canadians living near a rail right of way potential second-class citizens.

Reason 4: Economics

Including noise regulations in the rules that govern railway safety is clearly the right and fair thing to do. If well considered, focusing on noise and vibration issues could be used as a catalyst for making Canadian railways much safer in a very targeted and efficient manner. Nevertheless, despite the good reasons for including noise levels in railway regulations, railway companies are justifiably worried about the price tag. Lowering railway speed limits in high-risk areas, building sound and crash barriers or moving whole sections of track, all come at a cost. Who will pay? Is it really worth it?

So far, railway companies fearful that they will have to bear the full cost of new regulations have argued against them. Over the years in our committee's meetings with CN officials, we have often heard that it is CN policy NOT to build any sound barriers unless someone else is paying. They simply do not want to create a precedent. Under existing regulations rail companies refuse to deal seriously with noise and vibration problems. Solutions that could make the whole rail system safer are not discussed, let alone implemented for fear of the cost and of creating a precedent. The lack of regulation also means that even if the will and the money were available, getting approval for new rail right of ways would be nearly impossible. After all, anyone living near a new right of way would have to agree to having a completely unregulated level of noise and vibration risk as a new neighbour.

Without new regulations, we are stuck with our present rail configurations. All the while, rail volumes increase, trains get longer and heavier, and potentially more explosive, depending on the fluctuations in the price oil. With pressure increasing at one end and no measures being taken to address the downsides of these added pressures, we all know this is a recipe for disaster. Even without a tragic derailment, the constant deterioration of the environmental quality, and consequently health, of those Canadians living in proximity to rail right of ways is in itself a slower less headline-grabbing disaster.

In conclusion, including noise and vibration rules into the RSA would be a catalyst for new investments into the Canadian rail network. Investments that would be targeted to where they are needed most – to make the rail network quieter and safer precisely there where it is most at risk right now. Ultimately, a better more complete RSA would reassure all Canadians concerned about rail safety risks and

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could pave the way for improvements and expansion of the rail network to the benefit of all Canadians.

Thank You,

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