

December 17, 2025

Dear Councillors,

I understand the issue of 30 km/hr on Arlington St south of Portage is coming before you. This is an experiential update on these issues since my October submission to Public Works.

In conversations with Transit, I have given feedback that the majority of buses continue to travel well above their order of 30 km/hr. I have come to understand that the GPS system for the buses has been out of order- they are unable to gather any data as to bus speed. This means there is no other feedback loop except citizen complaints to evidence that this is happening and they have no independent evidence through which to monitor or introduce any consequences for drivers. They have told me even if they did, because it is an order, rather than the law, their own powers are fairly limited. **What will have persuasion and teeth is the law** and I hope when you reconvene in February, that you **support 30 km/hr on Arlington south of Portage**.

In conversation with City Manager Tony, he has said an overlay/resurfacing will help us for 1-2 years, but he can see from the poor conditions of the road joints that **the real problem causing vibrations in and the shaking of our homes is underneath the road**; that the true fix is a total reconstruction.

Research supports: because vibrations are multifactorial, shaking homes often require multiple remedial measures to be meaningful in their effect. Factors recognized to influence vibration level and frequency include: “condition of the road, vehicle weight and suspension type, speed, soil type, season, distance from the road and type of building” (Hunaidi, 2000 p.2) and that these factors have a complex interrelationship and sometimes, *compounding* effect. For example, Hunaidi shows that a transit bus and truck of same weight travelling 25 km/hr on rough road induce same vibrational levels, but at 50 km/hr, the bus was *twice* that of the truck. Traffic generates both ground-based and airborne vibrations, the latter of which causes rattling and are worse when buildings are closer to the road, as they are on south Arlington. Effective remediations include: reducing heavy vehicles, reducing speed limits, and regular road maintenance. As echoed by Tony, Hunaidi clearly states overlays are a short-term measure only; that defects in the original road will reappear. If you are not changing the 28 route, then the only evidence-backed solutions that remain are lowering speed along with a commitment to regular

overlays (if not a reconstruction). This feels *particularly important* because I see a change coming to extend bus service into the early morning hours, and I don't know how any of us will sleep.

One option perhaps not yet tabled *is changing the 28 route*. It could be that the southbound buses turn left onto Portage from Arlington and go by way of multilane Maryland (right lane could be made a priority bus lane, as on Portage). It fits perhaps with a common sense philosophy that **big traffic belongs on big streets**.

Whatever you decide, what I most want is for my house to feel liveable again. It is in your power to make it so, and I most sincerely hope you do.

Sincerely, Nicola Brown

Research study reference:

Hunaidi, O. (2000). Traffic vibrations in buildings. Construction technology update No. 39 in NRC Publications Archive.

[For context, Dr. Hunaidi is a senior research officer with the Urban Infrastructure Rehabilitation Program of the National Research Council's Institute for Research in Construction.]