

Staff Report for Decision

DATE OF MEETING JUNE 12, 2024

AUTHORED BY BARBARA THOMAS, ASSISTANT MANAGER, TRANSPORTATION

SUBJECT 30 km/h Speed Limits Near Elementary Schools

OVERVIEW

Purpose of Report

To provide the Public Safety Committee with discussion about the application of speed zones city-wide and to provide options for reduced speed limits near elementary schools and other higher risk locations.

Recommendation

That the Public Safety Committee recommend that Council consider adding a project in 2025 to undertake a city-wide speed zone study to review how and where speed zones below 50 km/h are applied; taking into account adjacent land use near schools and urban centres where pedestrians are expected to congregate as part of the 2025 – 2029 Financial Plan deliberations.

BACKGROUND

Staff presented a School Zone Policy Update to the Governance and Priorities Committee at the 2024-FEB-12 meeting. The intent of the updated policy was to align with the Motor Vehicle Act enforceability provisions. The subsequent consent item formed part of the agenda at Council's regular meeting on 2024-FEB-26. After discussion on the topic, Council passed the following motions:

"That Council direct Staff to present options at a Governance and Priorities Committee meeting to make enforceable 30 km/h speed limit signs in high-risk pedestrian areas such as near schools; and,

That the topic of 30 km/h speed limit signs in high-risk pedestrian areas be referred to the Public Safety Committee for input."

This report addresses the second motion and brings forward discussion about the application of speed zones city-wide for the Public Safety Committee's feedback.



DISCUSSION

Introduction

When residents raise concerns about pedestrian safety, often the root cause is speeding. There is a prevalent culture of excessive speeds within the City. For context, in 2023 Staff received 128 (21% of 616) complaints regarding speeding on City roads. Staff received 96 (16%) complaints about pedestrian safety on top of the 128 about speeding. Summing them, about 36% of complaints relate to pedestrian safety and speeding. Managing speeds is a constant challenge. Road safety research shows it requires a concerted, network-wide approach to be successful.

Speed Limits Within the City

The City of Nanaimo operates within a blanket 50 km/h speed limit meaning that every road within the City has a default speed limit of 50 km/h as per the Provincial Motor Vehicle Act. The blanket speed limit can be modified through a bylaw changing the overall speed limit. It can also be modified through posted signage which only applies to the specific section of road where the signs are posted. Modifications happen on steep hills, sharp corners, near schools, playgrounds, and in other locations where deemed necessary by technical review.

30 km/h Speed Limits in High-Risk Pedestrian Areas

One of the most sensitive items related to speeding and pedestrian safety is traffic operation near schools. The City's ongoing programs target pedestrian safety near schools. These include: the Active School Travel Plan (AST) (carried out in partnership with School District 68), the annual Pedestrian Unallocated Fund report to Council, the Small Improvements Program, and transportation improvements within the Capital Plan. Pedestrian infrastructure and speed limit adjustments are routinely considered when carrying out these programs.

The current School Zone Policy (Attachment A) does not meet best practices for speed management near elementary schools and school zones have not been established consistently throughout Nanaimo. Best practices are outlined in documents prepared by the Transportation Association of Canada (TAC), the US Federal Highways Administration (FHWA), and the Institute of Transportation Engineers (ITE).

As well, the School Zone Policy does not speak to the limitations set out in Section 147(1) of the Motor Vehicle Act (MVA). The MVA describes where school zones may be implemented, and this description affects how school zones are enforced. Through discussions with the Nanaimo Traffic Safety Committee (NTSC) and RCMP, it was understood that continuing to operate school zones, as currently signed, would not align with the intent of the legislation. This makes enforcement difficult and drivers are less likely to comply with the posted speed.

If a reduced speed limit is desired in the vicinity of a school, there are two options: school zones meeting the MVA, and regulatory speed limits. When 30 km/h school zones are consistent with the MVA, the 30 km/h speed limit applies from 8 am to 5 pm on school days. This permits



drivers to proceed at the 50 km/h speed outside of school hours. This information can be conveyed with clarity to the driving public and the laws can be enforced effectively.

Where a school zone may not be enforceable, such as on a road near but not adjacent to a school, another option is a 30 km/h regulatory speed limit. A regulatory speed limit is in force 24 hours a day, seven days a week. It is possible to augment a school-related speed limit with "children present" warning signs. However, research indicates a sign is only new to drivers for approximately three months and after that it becomes less noticeable.

Beyond school zones, there are other areas of the City that could be desirable to consider. The 2022 City Plan speaks to a connected Nanaimo and car-free travel, with priority on pedestrians and cyclists over the movement of personal vehicles. City Plan envisions densification of employment and residential land uses within urban centres. Urban centres could be deemed "high risk" when the future volumes of pedestrians and vehicles are considered. The downtown primary urban centre already has streets posted at 30 km/h. Other urban centres are covered by the 50 km/h zone.

Additionally, residential neighbourhoods could be considered "high risk". Staff regularly receive requests to reduce speed limits in residential neighbourhoods. People indicate they would like to occupy the streets safely without a vehicle; to play, walk their dogs, ride their bikes, and cross back and forth in comfort.

Schools, urban centres, and residential neighbourhoods are considered for 30 km/h zones on a site-by-site basis.

Traffic Calming

For each speeding complaint, Staff conduct an engineering review to determine how significant the speeding problem is and what steps should be taken. If traffic calming is warranted, reduction of travel speeds is typically accomplished by adding traffic calming features to the road. Traffic calming solutions are adapted to meet the needs of each neighbourhood. This takes substantial time, engineering, and financial resources. There are currently 24 locations waiting for data collection, 17 locations where speeds meet the threshold for traffic calming and additional review is needed, 1 location where Staff are actively working on creating traffic calming designs, and 1 location slated for construction. More information about traffic calming can be found on the City's website.

Vision Zero approach

Managing speeds location by location is unlikely to address a driving culture acclimatized to speed. Vision Zero is the internationally recognized traffic safety goal of achieving zero fatalities and serious injury collisions on a road network. It is a system-wide approach to community safety. Vision Zero was adopted as policy and is documented in City Plan Section C2.4 Safe Mobility (Vision Zero). The desired outcomes are:

- Elimination of traffic fatalities and serious injuries on the City street network; and,
- Safe, healthy, and equitable mobility for all persons within the City.



Vision Zero BC (<u>www.visionzerobc.ca</u>) offers a comparison of traditional road safety approaches and the Vision Zero Approach. Shown below is a table available on their public website:

Traditional Road Safety Approach	Vision Zero Approach
Prevent road accidents.	Eliminate serious injuries and road fatalities.
Injuries and deaths caused by road-related crashes are unavoidable by-products of the transportation system.	Serious injuries and deaths caused by road- related crashes can be prevented when evidence- based safety measures are in place.
Human error is the root cause of the road problems.	Poor road design and infrastructure causes problems.
Each road user is responsible for their own safety.	Road safety is a shared responsibility of those who design, build, and use the roads.
Making road safety improvements is expensive.	Making road safety improvements is costeffective.

Source: visionzerobc.ca/about

Speed management is a first step in a journey to Vision Zero. As identified in the table above, safety improves when **evidence-based** (emphasis added) safety measures are in place. Evidence includes public input, speed studies, vehicle volumes, road safety engineering analysis, and more.

Additional considerations

The number of complaints and the resources needed to address the complaints raises the question whether the City's blanket speed zone of 50 km/h is still appropriate for the community. In changing a blanket speed zone, the differences in land use and mobility needs are not considered. While this can have some benefit, it also has undesirable consequences. It can lead to additional frustration for the public and additional strain on the RCMP traffic enforcement resources. This in turn can generate more concerns for City Staff to address.

Research has shown drivers have difficulty adhering to artificially low speed limits when driving on roads designed and built to move vehicles quickly and efficiently. The City of Edmonton conducted a pilot project in 2010 where the City reduced speeds from 50 km/h to 40 km/h in six neighbourhoods. The City of Edmonton's Office of Traffic Safety conducted a <u>before and after study</u> which determined that drivers did not comply with the 40 km/h speed limits. They found a 7% (4 km/h) reduction in operating (85th percentile) speeds which meant the 85th percentile speed in the treated neighbourhoods was 53 km/h. They found changing the posted speed limit did not achieve the desired goal. Some communities have continued to opt for reduced blanket speed zones, ie. the District of Saanich who recently implemented 40 km/h.

Without actual changes to the road, many drivers see no need to reduce their speeds. Drivers often perceive reduced speed limits as a loss of road capacity and efficacy. A reduced speed limit then becomes a source of complaint and frustration in the driving community. Some drivers will obey an artificially low limit while others will disregard it. When this happens, more erratic driving behaviour can happen, and road safety can be compromised. An arbitrary speed limit



also becomes a pinch point for the RCMP. With finite staffing resources, the RCMP are not able to enforce speed limits in a way that generates better community-wide compliance.

Sound traffic engineering practise encourages making changes to the road infrastructure to support the desired driving speed. This is sometimes referred to as "self-explaining roads" where everything about the road, its width, curves, corners, presence or absence of medians, and so on, informs the driver what the correct speed should be. The City's standards for complete streets are part of ongoing efforts to build self-explaining roads, which in turn makes for a more livable community. Unfortunately, road reconstruction is a very long-term process.

By comparison, the installation of signs is inexpensive and quick to accomplish. The downside is that signs have limited if any effect on driving behaviours. Signs can fade into the background of the streetscape in a short period of time.

OPTIONS

Below are four options for the Public Safety Committee's consideration and input. These include: the recommended option of a city-wide review of speed limits; elementary school speed limits of 30 km/h using both school zones compliant with the MVA and regulatory speed limits in non-compliant locations; city-wide blanket 40 km/h speed limit; and, alternative guidance to Staff.

- 1. That the Public Safety Committee recommend that Council consider adding a project in 2025 to undertake a city-wide speed zone study to review how and where speed zones below 50 km/h are applied; taking into account adjacent land use near schools and urban centres where pedestrians are expected to congregate as part of the 2025 2029 Financial Plan deliberations.
 - The advantages of this option: It would lead to more uniform application of speed limits. It would also allow for public engagement. It could lead to better understanding within the public as to how and why speed limits are applied. It would assist the RCMP with enforceability.
 - The disadvantages of this option: This option is anticipated to take at least two years. Changes to school zones would be paused during the study period.
 - Financial Implications: The project is estimated to cost \$150,000 with a
 possibility of cost sharing with ICBC. The project would be included as a
 decision point for Council as part of the 2025 2029 Financial Plan deliberations.
- 2. That the Public Safety Committee recommend that Council direct Staff to continue work on elementary school speed limits, applying 30 km/h school zones where the Motor Vehicle Act requirements can be achieved, and applying 30 km/h regulatory speed limits where Motor Vehicle Act requirements cannot be achieved.
 - The advantages of this option: This can be implemented in a measured fashion taking time to consult with stakeholders. The speed limits in front of and near elementary schools would be consistent across the City and enforceable. The application of 30 km/h, both school zones and regulatory would appease public safety concerns for child students.



- The disadvantages of this option: Driver compliance on non-adjacent roads may not be very high. This could increase public frustration and create additional work for enforcement agencies. This process could be incorporated into regular City processes and could take several years.
- Financial Implications: None. The cost for this option would be incorporated into operational and maintenance budgets and would not affect the budgetary cycle.
- 3. That the Public Safety Committee recommend that Council consider adding a project in 2025 to undertake the process of changing Bylaw 5000 to apply a city-wide blanket 40km/h speed limit change as part of the 2025 2029 Financial Plan deliberations.
 - The advantages of this option: This would address public desires for reduced speed limits in the City. Public consultation could be carried out to address concerns and to help build support for the project. Specific road types like arterials could be excluded from the reduced speed limit.
 - The disadvantages of this option: This process would be anticipated to take
 approximately two years. Numerous speed limit signs would be required at entrances
 to the City and at major intersections. Drivers may not be willing to comply with the
 change so that operational speeds would not be reduced.
 - Financial Implications: The project is estimated to cost \$150,000 including fees for public consultation, bylaw revisions, and sign installations. The project will be included as a decision point for Council as part of the 2025 – 2029 Financial Plan deliberations.
- 4. That the Public Safety Committee provide alternate recommendation to Council.

SUMMARY POINTS

- Speeding and pedestrian safety are key concerns for Nanaimo citizens.
- Managing speeds is the first step to Vision Zero, the City Plan goal where the road network has zero serious injuries and fatalities.
- Staff are recommending a city-wide study to examine how and where speed limits lower than 50km/h are applied.

ATTACHMENTS:

Attachment A: Existing School Zone Policy Attachment B: PowerPoint Presentation



Submitted by:

Barbara Thomas
Assistant Manager, Transportation

Concurrence by:

Jamie Rose Manager, Transportation

Poul Rosen Director, Engineering

Wendy Fulla Director, Finance

Bill Sims General Manager, Engineering and Public Works

Laura Mercer General Manager, Corporate Services