CITY OF NANAIMO
THE HARBOUR CITY

Information Report

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SUBJECT **TRAFFIC CALMING IN NANAIMO**

OVERVIEW

Purpose of Report:

To provide Council information on the process to consider traffic calming, how it is applied within Nanaimo, and advise on future policy changes having positive impacts on the City's road network.

BACKGROUND

The City of Nanaimo strives to have a safe, efficient, and healthy transportation system that provides its residents with a variety of desirable mobility options. There are different ways that communities have tried to achieve this, with some having greater success than others. No matter which approach is taken, every growing City will need to employ traffic calming at some point in time. As traffic increases, it is human nature to try and find a "better" or faster way to get from Point A to Point B. This report is being provided to share insight into how Staff approach traffic calming issues as they arise.

DISCUSSION

Within a transportation system, there are two primary categories of road: Major and Minor. Major roads are intended to move people and goods over greater distances, whereas Minor roads are intended to provide access to business or residences, or provide connectivity within a neighbourhood. In a neighbourhood, it is most desirable for short trips to be made by walking or biking. For the most part, traffic calming focuses on the Minor or Neighbourhood Road System, however, the effectiveness of the Major road system has a direct impact on when, where, and how traffic calming may be needed.

Typically, the most successful transportation systems, the ones that are able to stave off traffic calming the longest, are ones that have an efficient Major Road Network, smaller road scale (more pedestrian centric than car), and have a high degree of redundancy. In the Nanaimo Transportation Master Plan (NTMP), this is referred to as a Traditional System, Figure 1. This often looks like a grid network and is most typical of cities that developed before the automobile boom. The main benefits of this system are that vehicle demand is distributed over more roads and that the neighbourhoods are more walkable and bike able, which reduces overall vehicle trips. The small, human scale of the street also discourages speeding.

Figure 1

Cities that developed during or following the automobile boom, often have a road system that is referred to as a Conventional System, Figure 2. These systems have limited alternative routing and the road design often favours automobiles with wide lanes, which does little to discourage speed. The lack of connectivity makes walking or biking undesirable which further reinforces the reliance on an automobile, even for the shortest trips, all of which contributes negatively to the function of the system.

Figure 2

As a result of amalgamation, Nanaimo has a variety of network styles. The Downtown and the University neighbourhoods have a relatively Traditional style, whereas neighbourhoods like Uplands and Departure Bay have a more Conventional style. It is interesting to note that the majority of traffic calming projects within Nanaimo have taken place in neighbourhoods with Conventional networks, such as, Ross Road, Kenwill Drive, Oliver Road and Opal Road.

The first formal traffic calming project in Nanaimo took place in the 1990's and was in the neighbourhood bound by Hammond Bay Road, Turner Road, Rutherford Road and Rutherford Creek/Kenwill Drive. After extensive data collection and public consultation, the City installed a speed hump on Kenwill Drive and a Traffic Circle on Kenwill Drive and Butcher Road. There have not been concerns raised in this neighbourhood since.

Following this project, the City, in partnership with ICBC, commissioned a consulting firm to prepare the "City of Nanaimo Neighbourhood Traffic Calming Guidelines" – Attachment A. This

document was prepared using the best practices and principles of the day, which included key points such as:

- protecting neighbourhoods from unnecessary traffic or preserving livability,
- minimizing delay to motorists, and only making the incremental changes necessary to affect the desired outcome.

It is clear that over-regulating or creating an overly restrictive traffic calming plan is not desirable and should be avoided whenever possible. In addition to the technical guidance, this document also provides strategies for public consultation and communication. In this regard, the most critical decision point becomes whether a project is to be considered a "local" or "area wide" traffic calming project. An example of each would be Opal Road vs. Ross Road respectively.

Since its creation, the City has used this document to guide traffic calming requests received by residents. The majority of these reviews end once data has been collected because Staff typically find that the data does not support the need for calming. Residents sometimes feel a situation is unacceptable because they perceive speeds and volumes are too high. However, often this is exactly the growth that was envisioned for the road, and the road itself was planned and designed to accommodate that level of traffic.

For those locations that are identified as having excess volume, Staff explore opportunities to make changes to the Major Road Network to encourage motorists to stay on those roads, instead of short cutting through a Local or Neighbourhood road. If speed is identified as the issue, then collaboration with the RCMP on an enforcement campaign is the preferred approach. It is important to note that signage alone has little or no impact on driver behavior when it comes to speed; *ref. Departure Bay Road Speed Reduction Pilot Project.*

If these efforts are unsuccessful, then it becomes necessary to take a more aggressive approach, such as, vertical (speed hump) or horizontal (traffic circle) deflection. This is when Staff engage with the public and road users, such as Emergency Services, Public Works, or Transit. When working through this phase of the review, there have been instances where the City received qualified support for a plan, with the condition that it be trialed first. This was the case on Ross Road. This is a step that has not been used regularly, but proved successful and Staff will include it when possible in the future. Once a traffic calming plan has progressed through the consultation phase, Staff bring a report to Council to advise of the work that has been done, and what the next recommended actions are, as they typically include changes to the road network. With approval from Council, the changes are implemented and the situation goes into a follow-up review period.

As with any changes to a transportation system, it is always important to have a follow up review once things have established a new state of equilibrium; this usually takes at least a year. This review is to ensure that the intended outcome has been realized without negative side effects. It is worth noting that the perception of success of a traffic calming plan may vary depending on who you ask. Drivers who now feel that they are being forced to slow down or take a longer route to get to their destination, will likely be unhappy with the change. However, the residents or other members of the community may feel that the enhanced safety or livability that the change has generated, is a welcomed success. Balancing these two priorities is always a challenge and as noted above, it is preferable to make changes to enhance the Major Road Network, before introducing restrictions or barriers to the Minor Road Network. Unfortunately,

improvements to the Major Road Network are often far more costly than the traffic calming features, and are therefore, much harder to justify.

CONCLUSION

The current City of Nanaimo Neighbourhood Traffic Calming Guidelines have worked well as a reactive process for addressing resident concerns in existing neighbourhoods. As technology and societal priorities evolve and change, the guidelines will also evolve. The best approach to managing traffic in an urban environment is through well planned land use and road network design. Through the NTMP, and updates to the Official Community Plan and Manual of Engineering Standards and Specifications, the City is taking steps to ensure that we are continuing to meet or exceed these current best practices. At the forefront is the goal to ensure that new development and construction provides all of the necessary elements of a successful mobility system for our community.

SUMMARY POINTS

- The most effective way to create a safe, efficient, and healthy transportation system is through effective land use planning.
- Most vehicle-based transportation systems will need to consider traffic calming at some point.
- The current process for dealing with traffic calming in existing neighbourhoods has proven to be effective.
- Current and future Policy documents will serve to ensure that Nanaimo's Transportation system grows and develops in a healthy manner, with minimal need for traffic calming retrofits.

ATTACHMENTS

Attachment A – City of Nanaimo Neighbourhood Traffic Calming Guidelines

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