



City of Port Moody

Report/Recommendation to Council

Date: December 16, 2020
Submitted by: General Manager of Engineering and Operations
Subject: Moray Street Traffic Concerns and Proposed Traffic Calming Initiative Approach

Purpose

To seek approval from Council on a suggested approach for traffic calming initiatives, provide a summary of traffic concerns being received from Moray Street residents, and seek direction on starting a Moray Street traffic calming initiative.

Recommended Resolution(s)

THAT requests for Traffic Calming Initiatives be reviewed, prioritized, and initiated as outlined in the report dated December 16, 2020, from the General Manager of Engineering and Operations regarding Moray Street Traffic Concerns and Proposed Traffic Calming Initiative Approach;

AND THAT a traffic calming study and concept design with public consultation be completed for Moray Street;

AND THAT a speed reader board or speed feedback lights be temporarily installed in the southbound direction on Moray Street in the interim;

AND THAT the budget requirement of up to \$30,000 for the Moray Street traffic calming initiative and up to \$3,000 for installation of speed feedback lights be referred to the Finance Committee for identification of a funding source.

Background

The City has an existing Neighbourhood Traffic Calming Policy (11-5460-02), included as **Attachment 1**, which outlines screening and procedures for traffic calming projects. A superficial update to the policy was completed in 2017 to replace references to the Transportation Committee (as the Committee was not active at that time) and to reflect a new policy regarding speed humps added in the Master Transportation Plan (MTP).

The 2017 Master Transportation Plan includes an action to update this policy, but staff priorities and resources have not allowed for significant progress on the update.

In the interim, City staff and Councillors continue to receive traffic calming requests. At the November 18, 2020 Transportation Committee meeting, staff proposed an approach to traffic prioritizing and completing traffic calming initiatives. The Committee passed the following resolution:

TC20/032

THAT requests for Traffic Calming Initiatives be reviewed, prioritized, and initiated as outlined in the memorandum from the General Manager of Engineering and Operations dated October 28, 2020, as amended with follow-up monitoring.

A summary of the approach for traffic calming initiatives is included in the body of the report below. At the same meeting, the Transportation Committee also passed motions at the same meeting related to the first priority traffic calming initiative to be completed under this approach:

TC20/031

THAT the Transportation Committee recommend a traffic calming study and concept design with public consultation be completed for Moray Street;

AND THAT staff consider other temporary traffic calming measures on a pilot basis where feasible;

AND THAT a speed reader board or speed feedback lights be temporarily installed in the southbound direction on Moray Street in the interim.

This report seeks Council approval of the Transportation Committee supported approach to traffic calming initiatives and initiation of a traffic calming initiative for Moray Street.

Discussion

Proposed Traffic Calming Initiative Approach:

In the 2000's and early 2010's, many traffic calming initiatives were completed under the City's existing Neighbourhood Traffic Calming Policy (11-5460-02), included as **Attachment 1**, which outlines screening and procedures for traffic calming projects.

In 2017, the City adopted a Master Transportation Plan (MTP), which outlined the need to update the City's Neighbourhood Traffic Calming policy and also provided a prioritized set of transportation directions and projects. Staff have been implementing MTP projects, which have included traffic calming features in some key locations such as Gatensbury Road. However, outside of the MTP prioritized projects, City staff and Councillors continue to receive traffic calming requests. These requests can vary in severity and impact, and there is not an adopted method in place to prioritize them. Further, staff and Committee time resources, and City budget availability limit the City's ability to address all traffic calming requests within a short time horizon.

In the absence of an updated Neighbourhood Traffic Calming Policy, the following interim approach is proposed:

- traffic calming requests to be initially reviewed and responded to by the City's staff level Traffic Review and Coordination Group (TRAC), consisting of Port Moody Police Department (PMPD) and Engineering staff, to consider any safety and operational issues, and if enforcement or rotating deployable devices will satisfy the issue;
- staff and Transportation Committee to take on one traffic calming initiative at a time, estimating an average of one initiative per year;
- traffic calming initiative candidates to be prioritized by the Transportation Committee, including consideration of preliminary screening criteria in the traffic calming policy; traffic calming initiative candidates that do not meet the minimum preliminary screening criteria should not be considered;
- up to date traffic data and road/neighbourhood conditions to be considered prior to starting each initiative; and
- for typical (most) initiatives, follow the process below:
 - o retain a consultant with traffic calming and safety expertise to prepare the traffic calming plan;
 - o not establish a Neighbourhood Advisory Committee (NAC), instead solicit neighbourhood feedback through broader and more direct consultation such as neighbourhood surveys and public open houses; and
 - o instead of directly measuring community-at-large support (approval survey requiring 2/3 support), implement traffic calming plan as a pilot using temporary or low cost materials for a minimum of one year before assessing for permanent installation.

The above is generally consistent with the current Neighbourhood Traffic Calming Policy with the exception of varying the means of measuring community-at-large support. The intention of these changes is to help streamline the traffic calming process while still including adequate amounts of neighbourhood consultation.

Note that most traffic related capital projects, including active transportation improvements and new road construction or reconstruction associated with development, are designed to include traffic calming and traffic safety enhancing features whenever possible. Such projects would not be subject to the above-described process.

For reference, a summary of locations where current traffic calming requests are being received along with preliminary scores are available is included in **Attachment 2**. Some of these locations have already been subjects of traffic calming initiatives – this has been noted in the table.

Moray Street Traffic Concerns:

Through 2020, City Council members and staff received repeated concerns from residents regarding speeding and traffic safety on Moray Street.

At the June 24, 2020 meeting of the Traffic Review and Coordination Group (TRAC), consisting of PMPD and Engineering staff members, these concerns were reviewed and TRAC installed a portable speed reader board sign, a deployable radar activated flashing speed feedback lights on a speed limit sign, and increased traffic enforcement as resources allowed.

Based on continued resident concerns after the actions taken by TRAC, and with feedback from the Transportation Committee, a new pavement marking plan was installed as part of some previously planned pavement rehabilitation work on Moray completed in September 2020.

Traffic speed data was collected before and after completion of the repaving work using manual radar speed monitoring with the following results:

Table 1: 85th Percentile Speed Data Comparison

Data Collection Date	Road Configuration	85th Percentile Speed Northbound	85th Percentile Speed Southbound
August 13, 2020 (overcast, dry)	Original, no Speed Feedback Lights	53.0 km/hr	52.1 km/hr
August 4, 2020 (clear, dry)	Original, with Speed Feedback Lights	50.4 km/hr	50.6 km/hr
November 10, 2020 (rain)	Repaved, with new Road Markings, Speed Feedback Lights	44.3 km/hr	50.3 km/hr

For traffic safety and road design, the 85th percentile (or “Operating Speed”) is typically used as a measurement for speed limit compliance on roads. Some observations on the data are below:

- The speed feedback lights appear to have helped reduce the 85th percentile speed of the roadway. Data suggests this effect could be by up to 2.6 km/hr. However, because the southbound speeds were also measured approximately 1.5km/hr lower and are not affected by the northbound facing speed feedback lights, further monitoring would be required to confirm the effect.
- The change to the road markings, combined with the speed feedback lights, appear to have made a significant difference in 85th percentile speed on the roadway in the northbound direction. On November 10, 2020, the 85th percentile speed in the downhill direction was more than 8km/hr (16%) lower. A smaller change of about 1.8km/hr (3.5%) was noted in the northbound direction after road marking changes (where there is no speed feedback lights).
- November 10 had periods of rain and wet or damp roads which may have affected the operating speeds of vehicles. Further data collection is recommended to verify the extent of vehicle speed changes on Moray Street.

Average and maximum speeds for each of the data collection dates are also summarized below for consideration:

Table 2: Average and Maximum Speed Data Comparison

Data Collection Date	Average Speed Northbound	Maximum Speed Northbound	Average Speed Southbound	Maximum Speed Southbound
August 13, 2020 (overcast, dry)	46.9 km/hr	70 km/hr	44.0 km/hr	74 km/hr
August 4, 2020 (clear, dry)	44.4 km/hr	73 km/hr	42.4 km/hr	69 km/hr
November 10, 2020 (rain)	39.0 km/hr	60 km/hr	44.1 km/hr	64 km/hr

Similar to the 85th percentile speeds, this appears to show a fairly significant decrease in average speed in the northbound direction (almost 7km/hr, or 17%) and lower recorded maximum speeds since the speed feedback lights and road reconfiguration have been installed.

As a point of comparison, on Noons Creek Drive, where physical horizontal traffic calming measures (curb bulges, medians) were implemented and data collected, we measured reductions in 85th percentile speeds in the order of magnitude of up to 2-3km/hr. The results on Moray have exceeded staff expectations.

Continued concerns have been received from Moray Street residents following the road marking changes. Concerns have been received via email and were also outlined by a group of residents at an on-site meeting on October 16, 2020. A document was provided by the residents, included as **Attachment 3**, with a summary of key issues below:

- concerns with the design of the road reconfiguration including relocation of the downhill (northbound) lane adjacent to the sidewalk;
- request for a speed reader board for the uphill (southbound) direction;
- suggestion that large commercial trucks are using the street;
- concerns with lower levels of street lighting;
- the speed feedback lights frequently are losing battery power and malfunctioning;
- request for a crosswalk at Moray/Pinda, and more physical traffic calming measure;
- request for increased traffic enforcement;
- request for an independent traffic study; and
- request for improvements at the Moray/St. Johns and James/St. Johns intersections.

Improvements are in design/quotation stages for the Moray Street and St. Johns Street intersection to make some traffic signal and lighting improvements in 2021. A traffic signal is identified in the Master Transportation Plan at James Street and St. Johns Street to be completed in coordination with future development.

Currently, there are no approved plans or budgets to undertake studies or for further changes to Moray Street. Operational budgets may allow for speed reader boards to be deployed on Moray Street on a temporary basis and for enforcement as priorities allow. As discussed above, the City should take a prioritized approach to traffic calming initiatives and as outlined in **Attachment 2**. Moray Street scores high on this list due to high traffic volumes and its lower speed limit of 30km/hr. In the interim, it is also recommended that a speed feedback light be installed in the southbound direction – staff will collect further monitoring data and confirm whether this improves the southbound traffic calming effect of the road modifications to date.

The Transportation Committee also passed a motion for staff to consider other temporary traffic calming measures on a pilot basis – at this time, other than a set of speed feedback lights, staff do not recommend proceeding with other changes to Moray Street until a traffic calming study and recommendations are completed.

Should Council direct staff to proceed with a traffic calming study and concept design for Moray Street, the following key scope items will be included:

- development of a traffic calming plan, which may include physical or visual traffic calming features;
- review of existing street lighting levels and recommendations;
- review of pedestrian crossing locations and current and future potential to warrant installation of formal crosswalk installations;
- coordination with neighbouring municipalities and businesses as needed; and
- neighbourhood consultation.

Note that the recommended resolutions are for development of a traffic calming design only. With the exception of the addition of a set of speed feedback lights, no installation of traffic calming measures would be approved or budgeted based on the above-recommended motions.

Other Option(s)

THAT the report December 16, 2020, from the General Manager of Engineering and Operations regarding Moray Street Traffic Concerns and Proposed Traffic Calming Initiative Approach be received for information.

Financial Implications

A traffic calming study and concept design for Moray Street is anticipated to cost up to \$30,000 utilizing an appropriately qualified consultant. Purchase and installation of a set of speed feedback lights is estimated at up to \$3,000.

Communications and Civic Engagement Initiatives

A neighbourhood consultation plan will be developed as part of the Moray Street traffic calming study and concept design project.

Council Strategic Plan Objectives

This initiative supports the 2019-2022 Council Strategic Plan by supporting the strategic priorities of Exceptional Service and Healthy City.

Attachment(s)

1. Corporate Policy – 11-5460-02 – Port Moody Neighbourhood Traffic Calming.
2. Summary of current Traffic Calming Initiative Requests and Candidates – November 10, 2020.
3. Summary of Concerns from Moray Street Residents.

Report Author

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Report Approval Details

Document Title:	Moray Street Traffic Concerns and Proposed Traffic Calming Initiative Approach.docx
Attachments:	- Attachment 1 - Corporate Policy – 11-5460-02 – Port Moody Neighbourhood Traffic Calming.pdf - Attachment 2 - Traffic Calming Candidate Locations and Process.pdf - Attachment 3 - Moray Street Resident Concerns.pdf
Final Approval Date:	Jan 18, 2021

This report and all of its attachments were approved and signed as outlined below:

Dorothy Shermer, Corporate Officer - Jan 14, 2021 - 3:53 PM

Rosemary Lodge, Manager of Communications and Engagement - Jan 15, 2021 - 4:07 PM

Paul Rockwood, General Manager of Finance and Technology - Jan 17, 2021 - 1:17 PM

Tim Savoie, City Manager - Jan 18, 2021 - 11:46 AM