

City of Port Moody Report/Recommendation to Council

Date: July 25, 2023

Submitted by: Transportation Committee

Subject: Recommendations Regarding Traffic Signal System and Barnet-loco-Dewdney

Trunk Intersections

Purpose

To present recommendations from the Transportation Committee's June 21, 2023, meeting for consideration.

Recommended Resolution(s)

THAT the report dated July 25, 2023, from the Transportation Committee regarding Recommendations Regarding Traffic Signal System and Barnet-loco-Dewdney Trunk Intersections be received for information.

Background

At the June 21, 2023, Transportation Committee meeting, motions were passed regarding the City's traffic signal system and potential for short-term improvements to the Barnet Highway/Dewdney Trunk Road and Barnet Highway/Ioco Road intersections:

TC23/009

THAT the Transportation Committee recommends the following:

THAT the City undertake traffic signal corridor coordination reviews and updates annually, including a review in 2023.

TC23/010

THAT the Transportation Committee endorses the following resolutions:

THAT staff be directed to undertake a traffic study of options on Barnet Highway between loco Road and Dewdney Trunk Road Traffic Study to review short-term improvements to improve safety and operational efficiency of the roadway;

AND THAT a project in the amount of \$35,000 be forwarded to the Finance Committee to determine a funding source.

This report presents the above recommendations for Council consideration. While the standard recommendation is to receive the report for information, should Council wish to action any of the above recommendations, direction to staff via one of the optional recommendations below is required.

Discussion

Both of these discussion items were included on the Transportation Committee's 2023 approved Work Plan. Staff comments related to each of the Committee motions are summarized below.

Staff Comments:

Traffic Signal Coordination Reviews and Updates

Staff provided an overview of the City's traffic signal system and technologies, and upcoming signal changes and improvements. Discussion ensued regarding traffic signal timing and coordination in some key locations in Port Moody.

The City last undertook a major (full corridor/multiple corridor) traffic signal coordination review and update in 2021. This work was completed in coordination with Council approved updates to extend pedestrian crossing times at many intersection to improve accessibility, and the addition of leading pedestrian intervals (LPI, or "Advanced Walk") at several key intersections.

Staff actively review intersection timing and make minor updates to respond to intersection level site observations and public feedback but more frequent corridor level reviews and updates could help improve traffic operations through the City as general traffic patterns shift over time.

loco Road, Barnet Highway, and Dewdney Trunk Road Intersections

In 2019, Council passed a motion directing staff to report back on potential improvements for three locations perceived to be causing traffic capacity for afternoon eastbound St. Johns Street traffic: Moray Street at St. Johns Street, Dewdney Trunk Road at Barnet Highway, and loco Road at Barnet Highway. Review of these locations was subsequently integrated into the ongoing St. Johns Street Redesign Phase 2 project. Phase 2 of the St. Johns Street Redesign Project will develop a long term plan for vehicle and active transportation facilities on St. Johns Street east of Moody Street including consideration of reallocating the existing underutilized westbound HOV lane.

Staff continue to receive complaints about northbound right turn traffic from Dewdney Trunk Road blocking traffic while attempting to merge into the eastbound left turn lane along Barnet Highway to access loco Road. In May 2023, the City's Traffic Review and Coordination Group (TRAC), consisting of Port Moody Police Department and engineering staff, reviewed the issue as it is causing ongoing operational and potential safety concerns. Follow up monitoring by staff confirmed the issue is frequent (On Tuesday, June 13, 2023, from 3pm-5pm, 75 vehicles from Dewdney Trunk Road, and 18 vehicles from other lanes on St. Johns Street were observed blocking Barnet Highway to merge into the subject left turn lane).

As such, staff recommend the issue should be addressed in the short term. TRAC developed a conceptual improvement plan which was then presented to Transportation Committee in June 2023.

The staff developed conceptual short-term improvement (included as **Attachment 1**) consisting of:

- Addition of delineators along the Barnet Highway/loco Road eastbound left turn lane to limit late access to the turning lane.
- Intersection configuration changes to require Dewdney Trunk Road traffic to use the northbound through/left turn lane to access the Barnet Highway/loco Road eastbound left turn lane.
- Potential conversion of the short second eastbound left turn lane at Barnet Highway/loco Road, which provides limited additional vehicle capacity, to a dedicated bus queue jumper lane.

As a next step, should Council support further work on this initiative, traffic modelling and further functional and detailed engineering design should be completed to prove out the feasibility of the improvements and identify estimated implementation costs.

Other Option(s)

- 1. THAT staff report back to Council on resources required for the City to undertake traffic signal corridor coordination reviews and updates annually, including a review in 2023.
- THAT staff be directed to undertake a traffic study of options on Barnet Highway between loco Road and Dewdney Trunk Road to review short-term improvements to improve safety and operational efficiency of the roadway;

AND THAT a project in the amount of \$35,000 be forwarded to the Finance Committee to determine a funding source.

Financial Implications

City staff are not currently resourced to complete annual signal coordination studies and if Council supports this increased level of service, staff will report back with approximate costs (currently estimated around \$20,000/year plus potential initial costs for program development) and/or propose changes in the annual operating/capital financial plans as appropriate.

A study and design for interim improvements to the Dewdney Trunk Road, Barnet Highway, and loco Road intersections is estimated to require a budget of up to \$35,000 including consultant and staff project management time.

Communications and Civic Engagement Initiatives

No public engagements are currently planned for these initiatives. If the loco Road, Barnet Highway, and Dewdney Trunk Road Intersection initiative proceeds, communications to directly affected stakeholders and general road users will be planned as part of development of the implementation plan.

Council Strategic Plan Objectives

These initiatives support the 2023-2026 Council Strategic Plan by helping to provide safe, efficient, and accessible transportation options.

Attachment(s)

1. Dewdney Barnet loco Intersections Interim Improvement Concept.

Report Author

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Report Approval Details

Document Title:	Recommendations Regarding Traffic Signal System and Barnet- loco-Dewdney Trunk Intersection.docx
Attachments:	- Attachment 1 - Dewdney Barnet loco Intersections Interim Improvement Concept.pdf
Final Approval Date:	Jul 14, 2023

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

Adam Shroff, Legislative Services Coordinator - Jul 13, 2023 - 4:51 PM

Jennifer Mills, Legislative Services Advisor - Jul 14, 2023 - 1:11 PM

Stephanie Lam, City Clerk and Manager of Legislative Services - Jul 14, 2023 - 1:18 PM

Angie Parnell, General Manager of Corporate Services - Jul 14, 2023 - 4:23 PM

Lindsay Todd, Manager of Communications and Engagement - Jul 14, 2023 - 4:40 PM

Paul Rockwood, General Manager of Finance and Technology - Jul 14, 2023 - 4:41 PM

Kate Zanon, General Manager of Community Development, for Tim Savoie, City Manager - Jul 14, 2023 - 5:51 PM