

Cumulative Development Traffic Model for MTP Update

Date:	October 27, 2021
Department, GM:	Engineering and Operations, Jeff Moi
Project Manager:	Geoffrey Keyworth
Staff Lead:	Geoffrey Keyworth
Project Origin:	<input checked="" type="checkbox"/> Council Motion #RC21/278 <input type="checkbox"/> Staff Initiated <input type="checkbox"/> Other:
Priority Area:	<input type="checkbox"/> Exceptional Service <input type="checkbox"/> Environmental Leadership <input type="checkbox"/> Healthy City <input type="checkbox"/> Economic Prosperity <input checked="" type="checkbox"/> Community Evolution
Strategic Alignment	Objective & Action 5.1: Ensure future community growth is carefully considered and strategically managed consistent with the targets approved in our Official Community Plan.
Proposed Priority	<input checked="" type="checkbox"/> Priority Level 1 <input type="checkbox"/> Priority Level 2 <input type="checkbox"/> Priority Level 3

Project Description

Create a computer model to better understand the effects on Port Moody traffic of potential land developments within the City. The model will consider various growth scenarios, and enable creation of metrics / targets for key roadways crossing the City Centre.

Relevant Background

On May 4, 2021, Council passed multiple motions regarding growth principles, including the following motion:

RC21/278

Development decisions will minimize big traffic impacts. Direct staff to develop a model and assumptions for projection of cumulative traffic impacts under various growth scenarios. Also, recommend maximum cumulative traffic congestion/average trip time targets during peak am and pm rush hour periods on key roadways crossing our city centre.

Staff recommended in an August 5, 2021 report that the ongoing update to the Port Moody Master Transportation Plan (MTP) could be expanded to include this project, noting further:

An update to the Port Moody Master Transportation Plan (MTP) is under way; development of a model for projecting cumulative traffic impacts can be added for a budget of up to \$75,000 with no impact on the project timeline.

Development of such a model may have technical and practical limitations and may not be

fully in alignment with current or future MTP directions; staff do not recommend changing the project scope at this time as the approved project scope includes a modelling and monitoring strategy, along with relevant specifications and guidelines; the current project will inform direction for further technical projects and relevant directions.

The above recommendation to not change the project scope was due to the MTP Update being in active procurement at the time of staff's recommendation. Staff have recently selected the consultant to undertake the MTP Update, and the project kick-off meeting will be scheduled as soon as possible.

Project Objectives

- To enable a better understanding of the implications of potential land use development, and transportation policies, programs, and infrastructure, on traffic within Port Moody.

Scope

In Scope	<ul style="list-style-type: none"> - Expand MTP Update project scope to incorporate model development - Research into transportation model development, with a focus on macroscopic and mesoscopic levels of detail - Review of TransLink Regional Transportation Model and extraction of meaningful parameters - Purchase of software required to operate and update the model for new approved developments - Recommendation on the staff time required for training and model maintenance to update and evaluate future development scenarios - Obtaining background data as required, including development traffic estimates, traffic operation assumptions, trip distributions, etc. - Coding of model, potentially including macro development, road geometries, input of traffic signal timing plans - Coding into model of three growth scenarios - Evaluation of model findings on implications for strategic directions in overall MTP Update - Incorporation of model findings into overall MTP Update reporting
Out of Scope	<ul style="list-style-type: none"> - Public engagement beyond what is already incorporated in MTP Update scope - Development of a microscopic traffic simulation model - Assessment of strategic policies, programs, or infrastructure implemented outside the City of Port Moody, such as regional travel pricing or high-speed rail

Work Plan Overview	
Project start date: 2021 Q4	Project end date: 2023 Q2
Kick-off meeting with selected consultant for the MTP Update will initiate the process of refining this project description to ensure successful delivery without delaying the overall MTP Update.	2021 Q4
Development of model	2021 Q4 – 2022 Q2
Testing of various model scenarios consistent with draft OCP for implications on MTP Update strategic actions	2022 Q2 – 2022 Q4
Incorporation of model findings with overall MTP Update final reporting.	2023 Q2

Budget	
Budget Source: TBD	
Expansion of MTP Update consultant scope to undertake model development	\$50,000
Purchase of model software	\$10,000
30% contingency allowance	\$15,000
Ongoing modelling (optional)	Staffing levels to be determined
<input checked="" type="checkbox"/> Request Referral to Finance Committee	\$75,000

Decision Notes		
Date	Meeting	Decision