Guidelines for the Submission of a Mini Transportation Study

For Site Development Applications in the City of North Vancouver

Transportation Division,
City of North Vancouver Planning Department

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This document was updated on <<date>> by CNV Planning staff and applies to the proposed development at: <<address>>.

Guidelines for the Submission of a MINI Transportation Study – Site Specific Requirements from City Staff

Above and beyond the guidelines contained within this document, City of North Vancouver staff may have requirements or exemptions for individual developments, as transportation conditions are unique from site-to -site. This page generally provides (where applicable) staff requirements related to a specific development proposal.

Development Name and Address: <<address>>
Date: <<date>>
CNV Planning (Transportation) Staff Contact: <<Name, email address>>

Staff requirements regarding preparation of Transportation Study for this development proposal:

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This terms of reference is a sample only. A specific terms of reference for each development is produced by staff as part of our pre-application review.

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1.0 INTRODUCTION

The City of North Vancouver requires that the transportation implications of new developments be assessed and documented. Such studies are necessary for City staff to ascertain how proposed developments could affect transportation and mobility in the development's area of influence. The City therefore requires that each development submission be accompanied by a transportation study that is proportionate in scope to the development's magnitude. With staff guidance, developers are advised what type of transportation study is required to accompany their development submission, and are provided with a set of guidelines to follow. The various types of transportation studies are described in the following section.

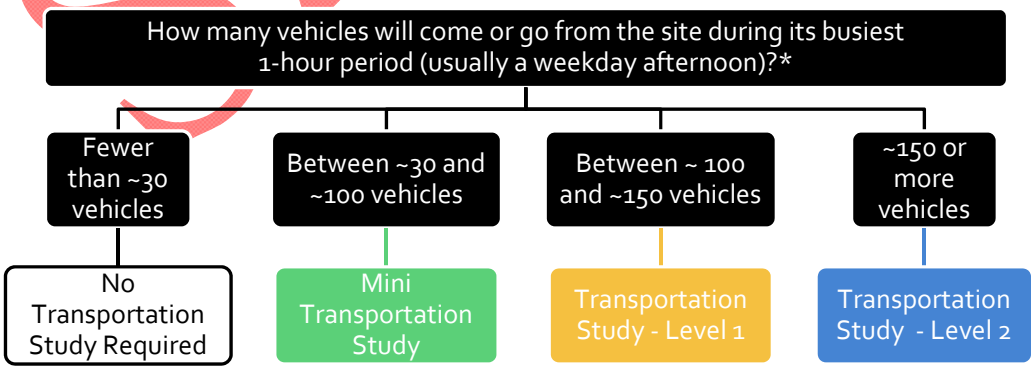
This document contains the City's guidelines for preparation of a **Mini Transportation Study**. The City of North Vancouver Engineering Department generally adheres to Institute of Transportation Engineering recommended practice. Occasionally there are elements of a site that are unique, or for which there are multiple methods for analysis; in these cases it is recommended to confirm technical assumptions with City staff prior to proceeding with analysis work.

1.1 What Type of Transportation Study is Required?

Development proposals are associated with a change in travel patterns in the vicinity of the site. This change is generally measured in terms of how many cars, pedestrians or bicycles will travel to or from the site, during the site's busiest hour. Usually, the weekday late afternoon period is when City streets have the most vehicular traffic.

In general, if a development is expected to add fewer than 30 vehicle trips to or from the site in the afternoon peak hour period, the City does not require a transportation study to accompany the development submission. When staff estimates that site traffic will exceed this threshold, it is necessary to submit either:

- a "Mini Transportation Study" for developments that could add between 30 and 99 vehicle trips during the PM peak hour;
- a "Transportation Study – Level 1" for developments that could add between 100 and 149 peak hour vehicle trips; or
- "Transportation Study – Level 2" for any development that has the potential to add 150 or more PM peak hour vehicle trips.



**Note: PM peak hour trips are estimated by staff, accounting for the size of development and land use type*

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Above and beyond the thresholds outlined above, other circumstances may trigger the need for a specific scope of transportation study. In these situations, City staff will advise the development applicant what the circumstances are and what specific issues need to be incorporated into the scope of their transportation study. Two examples of such scenarios include:

- When the location of a development site is adjacent to a roadway or intersection with known safety or capacity deficiencies; or
- When the road adjacent to the development site has unique traffic or geometric conditions that may affect the ability of the road system to accommodate the proposed development.

2.0 MINI TRANSPORTATION STUDY STRUCTURE

The following sections describe the standard contents of a mini transportation Study.

2.1 Study Area

For a mini transportation study, the study area generally includes the **site access points, plus adjacent street(s) and sidewalk(s).** Planning staff will determine whether additional intersections or road segments within 200 meters of the site are necessary to include in the study area, based on known safety or operational issues that may be adversely impacted by the development proposal.

2.2 Description of Development Proposal

The applicant's submission must provide a concise description of the development proposal for which the transportation study is accompanying. An introductory section within the transportation study must include the items listed below (these are required).

1-Title and address of project

2-Location of development and description of the local neighbourhood

3-A site plan with accesses and parking areas shown

4-A description of the purpose and nature of the project, with a description of the market area or area of influence (where appropriate)

5-Land use type and density – and details of re-zoning when relevant

6-Development phasing (if relevant) and expected opening day

7-Description of nearby developments that are recently re-zoned/close-to or under construction that will affect the same street network or portions of it

8-A study area boundary map, with the site, study intersections and other notable landmarks noted

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2.3 Required Report Elements

A mini transportation study submitted to the City must be structured in a logical order and reflect transportation planning and engineering best practices. **It is important to confirm data collection methods with City staff prior to proceeding with the required work.**

Unless otherwise indicated by City staff, the following report elements are required:

1) Describe the Development Proposal (see Section 2.2)

2) Describe the Existing (pre-Development) Site Conditions:

-Provide details about the existing site and the nearby transportation network in a qualitative and quantitative sense (land use, observed typical weekday traffic conditions such as congestion and queueing, pedestrian & cyclist network/activity, any unusual features of the site or surrounding transportation network, proximity to arterial roads, proximity to transit service). Unless specifically indicated on page 1, a capacity assessment is not required.

3) Describe the New Trips Generated by the Site:

-Once the development is complete, what would be the busiest time periods for traffic accessing this site?
-How much traffic will this site generate, during its busiest 1 hour period(s)? (This should be estimated based on accepted ITE methods) This estimate should include vehicles entering and leaving the site.
-In addition, the applicant should estimate how much potential pedestrian, cycling and transit use this site will generate, and comment on how these active mode users will be accommodated on the nearby road network.
-If the site is being re-zoned, subdivided or undergoing OCP change, how many trips will be generated by the proposed development compared to the maximum allowed by the original designation?

4) Describe the Site Access and On-Site Circulation:

-The City requires that all traffic interaction at the point where the development site joins the transportation network be reviewed. The purpose of this review is to ensure safe and efficient traffic operations will be maintained along the road network.
-Any onsite circulation routes should be described, along with any commercial vehicle (such as garbage) collection activities, and loading/unloading activities (for residential or commercial uses).
-The study must demonstrate turning paths for the largest vehicles that will access/exit the site through the use of turning templates.

5) Parking Review

A parking review should address the issue of parking proposed versus how much is required per the City's bylaw. The City promotes active modes of transportation in order to reduce dependency on cars for everyday trips. Given the relatively high density of the City and the availability of transit service, reducing the parking requirement (below the minimum bylaw requirement) for new developments generally results in fewer car trips. Therefore, the City occasionally endorses a reduction in parking spaces with new developments, in lieu of a commitment towards Transportation Demand Management (TDM) strategies. The developer should discuss with City staff whether the development site is a candidate for reduced parking.

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A parking occupancy survey should be completed:

- for both sides of the block the building front.
- For both sides of the next closest block that allows parking.
- at the following times:
  - Weekday – Daytime (9am to 11am or 2pm to 4pm)
  - Weekday - Overnight (9pm or later)
  - Sunday – Daytime (9am to 4pm)

A record should be made of the parking restrictions on both blocks.

6) Transportation Demand Management Review

Transportation Demand Management Strategies may be considered by developers to reduce car trips to the site.

Some possible TDM measures include:

- Car-sharing programs;
- Employer-initiated flexible work arrangements;
- On-site parking reduction;
- Pedestrian improvements that would encourage more walking trips;
- Bicycle improvements that encourage more bike trip, such as destination facilities;
- Transit pass programs;
- Transit signal priority measures; and
- Converting unassigned parking spaces into pay-parking.

7) Findings and Recommendations

Findings - Based on the analytic findings compiled within the TS, the consultant must highlight how the proposed development will impact the transportation system.

Recommendations - The TS should then recommend engineering measures, where required, that would mitigate any adverse impacts on the transportation system. Recommended mitigating measures should be investigated from a multimodal perspective, to ensure that the needs of active mode users are not compromised by efforts to improve vehicular operations and safety.

8) Other Required Elements

Since each development site has unique characteristics and will affect the transportation network differently, City staff identify additional study requirements on a site-to-site basis.

Additional requirements (including those specifically required per Page 1) may include:
-intersection or link traffic counts (all modes)
-signal warrant calculations
-collision analysis
-speed surveys
-parking surveys
-operational (level-of-service) analysis for vehicles and/or active transportation users
-queueing surveys
-geometric reviews using design constraints and vehicle turning templates
-sight visibility surveys

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