Transportation Mobility Plan

(Last update: June 2025)

A Transportation Mobility Plan is an evaluation of the effects a proposed development is expected to have on the existing transportation system including on the road, transit service, cycling and walking networks. The study is intended to recommend mitigation measures to address travel demands generated by the development, if necessary.

Required by Legislation

The Ontario *Planning Act*.

Who should prepare this plan?

A Transportation Mobility Plan should be prepared by a qualified Transportation Professional, such as a Professional Engineers and Registered Professional Planners. The report must be dated and signed by the Professional.

Why do we need this plan?

A Transportation Mobility Plan is required to provide a basis for which to evaluate the accommodation of transportation modes:

- Provide staff with a basis on which to assess transportation implications of the proposed development on the surrounding area.
- Provide a basis on which to evaluate the appropriateness of the scale of the proposed development.
- Provide a basis on which to evaluate safe and efficient access and traffic flow.
- Provide recommendations for improvements to transportation infrastructure, service upgrades and mitigation measures to accommodate or reduce any negative impacts of a development.

How should this plan be prepared?

A Transportation Mobility Plan should be based on established transportation planning and traffic engineering principles. The Plan should also be supplemented by any available City data and experience, as well as reflect the relevant goals and policies in the City Official Plan.

As such, the Plan should reflect a multi-modal approach to transportation planning including cycling, walking, and transit use.

A Transportation Mobility Plan should at a minimum contain the following:

Introduction

- Address of the subject property
- General site location of the subject property and context map
- Project Name (if applicable)
- Applicant and owner's contact information
- Author name, title, qualifications, and company name
- Brief description of the proposed development, site plan, and site location.

Proposal Description and Context

- A description of the proposal, development stats (such as number of units, gross floor area, site area) type of development proposed, height, parking areas, vehicular access points, location of amenity areas, proposed phasing.
- A description of the existing on-site conditions as well as surrounding areas, roads, natural areas, buildings, parking areas.
- Concept/Site plan for the development including building location, parking, access, amenity areas, grading, natural features and any natural hazards, proposed streets.

Investigation/Evaluation

- Existing conditions, study area description, road network, traffic volumes, transit service, bicycle and pedestrian facilities, traffic intersection operations.
- Traffic volumes (turning movement counts) should be dated no more than 2 years from the time of study. If historical traffic volumes are to be considered, they must first be confirmed with the City.
- Peak hour factors should be based on surveyed traffic volumes. For new intersections (or wherever peak hour factors / 15-minute counts are not available), peak hour factors should be based on reasonable assumptions (i.e. assumed peak hour factor of 0.92 or adjacent intersections)
- Existing conditions model calibration(s) are required if volume-to-capacity ratio is greater than one under existing condition (e.g. Saturation flow survey, gap survey, lost time adjustment survey, etc.). Note that model calibrations should not be applied as a form of mitigation measure for future conditions.
- Information regarding all nearby municipal, regional, and provincial roadways that will be impacted including intersections and access points for adjacent developments.
- Study assumptions: horizon years and analysis periods, traffic data collections Synchro parameters, and development phasing should be clearly identified.
- Horizon years should be confirmed with the City and generally require a 5-year horizon (post-build out), as well as a 10-year horizon if the site generates a total of 1,000 two-way trips or more in a single peak hour.
- An evaluation of existing travel behaviours in the area, such as travel mode split, common origins/destinations, etc.

- Travel mode split should be based on existing surveyed data such as the most recent Transportation Tomorrow Survey (TTS). Projected travel mode splits will not be accepted without sufficient justification.
- Trip Generation Calculations (e.g. ITE trip rate, proxy site survey, etc.). Proxy sites should be similar in terms of land use, size, and surrounding neighbourhood characteristics (must be confirmed by the City prior to being accepted.
- Description of trip distribution and assignment (e.g. TTS for residential or commercial, marketing survey for specialty retails, or school catchment areas).
- Existing site trip removal should be conducted based on surveyed traffic counts, previous traffic studies, or estimated trip generation.
- Future background traffic conditions: planned road network improvements, background traffic growth, background development traffic, future background intersection operations.
- Background developments should be obtained by the City or in some cases other neighbouring municipalities.
- Future Total traffic conditions with development: Traffic control type warrant e.g. traffic signal or unsignalized control type like all-way stop control must be conducted at study intersections based on OTM guidelines.
- Future Total traffic conditions with development: Auxiliary left-turn and right-turn lane warrants must be conducted at the study intersections as per the Transportation Association of Canada (TAC) and MTO design supplement guidelines.
- Future total conditions with development: vehicular trip generation, trip distribution, future total traffic intersection operations, queuing analysis, sightline analysis, etc.
- Where applicable, assess various future condition scenarios, including considerations such as development phasing, transportation infrastructure phasing, or other relevant factors.
- Sightline analysis should include both vertical and horizontal sightlines (subject to an initial desktop review).
- Sightline analysis should be based on TAC with the appropriate sight distance measurements being applied. Intersection sight distance should be first considered for any driveways.

Impacts and Mitigation Measures

- For any operations analysis indicating volume-to-capacity ratios greater than 1.00, mitigation measures must be provided.
- For any queueing analysis indicating queueing beyond the existing available storage lengths (for any turn lanes) or for queueing spilling over to the upstream intersection, mitigation measures must be provided.
- Site traffic impacts of the proposed development on the surrounding road network.
- Mitigation measures to address transportation impacts of the proposed development.
- Any proposed geometric improvements should also be accompanied by a functional design.

Recommendations

- Summary and conclusions of the supporting studies and how they support the development and any special considerations or conditions that should be imposed.

- Any recommendations, or conditions that should form part of a decision on the matter.

Drawings and Supporting Information

- Concept plans
- Study area
- Survey data, growth calculations and other technical appendices (for example: Synchro outputs, etc.).

What else should we know?

A Pre-Submission Meeting with City Planning staff is encouraged prior to submitting a development application. The scope of the Study should be discussed with City staff and/or other agencies as part of the pre-submission process which would generally take place prior to the submission of a *Planning Act* application.

Additional Terms

To be identified by the City through the pre-submission process.

Study Submission Instructions

To be submitted in accordance with the City's requirements for Development Planning Applications.

What other resources are there?

Richmond Hill Development Application Resources

Richmond Hill Transportation Master Plan

York Region Transportation Mobility Plan Guidelines

York Region Transportation Master Plan

Ontario Professional Planners Institute (OPPI) – Hire an RPP

Professional Engineers of Ontario – Why employ a professional engineer?

About these Terms of Reference

These Terms of Reference were developed as a joint effort with participation by representatives from all York Region municipalities and the Region. The Terms of Reference are in widespread use across the Region, with local requirements added as prescribed by each municipality.

If determined that this study is applicable, the study terms may vary depending on the nature of the proposal.

Discussion and confirmation as to whether all criteria outlined within these Terms of Reference are appropriate for your development project, will also take place with you and in consultation with any relevant external agencies.

In addition to these Terms of Reference, municipal departments and/or external agencies may require analysis of specific technical components that should be addressed in the study. Confirmation of additional technical requirements, and a checklist identifying detailed standards to be met, in turn may be provided.

Notes:

If the proposed development is revised, the study/report shall reflect the revisions by an updated report or letter from the author indicating the changes and whether or not the recommendations and conclusions are the same. (Note: this is subject to the extent of the revisions).

A peer review may be required. The cost of the peer review will be borne by the applicant.

If the submitted study is incomplete, is authored by an unqualified individual or does not contain adequate analysis, the applications will be considered incomplete and returned to the applicant.