



PARKING STUDY GUIDELINE

Development Applications

Development Engineering Department

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1 INTRODUCTION

1.1 General

A Parking Study provides valuable information and analyses for the City of Vaughan and others in the review of development and redevelopment applications. The Parking Study Guidelines ('Guideline') outline the process, requirements and structure of a Parking Study provided with development applications for the City's review.

1.2 Purpose

Parking is a vital component of a development and plays a critical role in facilitating and encouraging certain methods of travel. Providing the appropriate amount of parking for a development avoids the inefficient use of land, contributes to good urban design, and ensure viability of development. The City recognizes that not all development is the same, and site-specific approaches to parking may be necessary. The purpose of a Parking Study is to:

- To justify any deviation between the parking supply and parking requirement (number and size of parking spaces) of the applicable Zoning By-law.
- To ensure the parking requirements are adequate for each phase of development and the ultimate development scenario.
- To identify alternative strategies to meet the parking requirements for a development (i.e., shared parking opportunities, payment-in-lieu, off-site parking agreements, etc.) if required. Alternative strategies, to the City's satisfaction, are to be considered only after other options have been exhausted.

The purpose of this Guideline is to specify minimum scope of work expectations, ensure a consistent approach in the preparation of a Parking Study submitted to the City in support of a development application, as well as to improve the efficiency of the review of the development approval process.

1.3 City of Vaughan Transportation Goals & Objectives

The City of Vaughan is a rapidly growing and intensifying municipality, with a diverse population and employment base. As the City continues to grow and intensify, the strategic planning and design of development and redevelopment shapes the City's communities and how people travel, and the City's long-term sustainability.

The City is committed to ensuring growth is sustainable, as well as ensuring that the natural environment is protected and preserved, communities are vibrant, and that the population is healthy. Complementarily, the City is also committed to improving the quality of life and experience for residents through facilitating growth that follows urban design principles and connects with the City's natural and cultural heritage. Parking provided as part of development can play a significant role in supporting the City's direction. Parking not only occupies physical space and influences site arrangement, but parking also influences how people choose to travel. Providing the appropriate amount of parking is therefore important as to ensure site design is sensitive to the City's direction and to encourage sustainable travel behaviours.

The key objectives and goals surrounding transportation planning in the City include:

- Long-term sustainability
- The integration of land use and transportation
- Minimize impacts of transportation improvements on the natural environment
- Reduce dependence on the automobile, through minimizing the growth in travel demand and through providing a greater menu of travel choices

1.4 Needs & Justification for Parking Study Guidelines

The City of Vaughan is experiencing significant growth. The number of parking studies submitted for consideration to the City has increased. To streamline the development approval process, the City has prepared these Guidelines to establish a consistent template for the preparation of Parking Studies submitted to the City for review. Compliance with these guidelines will reduce the time necessary for consultation, review and the need for further revisions or submissions.

1.5 Applicability

It is important to recognize this Guideline is relevant at the time of publishing and will be updated as necessary to reflect current policy, best practice and accepted standards. The proponent or consultant should contact the City to identify any major modifications to the Guideline as of the date of publishing. For additional information or clarification of any of the material contained in the Guideline, please contact the Development Engineering Department at the City of Vaughan:

City of Vaughan Development Engineering Department

2141 Major Mackenzie Drive

Vaughan, ON, L6A 1T1

Telephone: (905) 832-8525

Fax: (905) 832-6145

DevelopmentEngineering@vaughan.ca

2 GENERAL REQUIREMENTS

This Guideline provides a general template for the preparation of a Parking Study in the City of Vaughan. The City recognizes that certain aspects of the Guideline and assumptions may not apply to certain locations or developments. Parking studies should be completed using good engineering and planning judgement.

A Parking Study is based on establishing a minimum parking rate(s) for a land use(s) and supplemented by available local survey data or experience. A Parking Study must recognize the general principle that the parking demand generated by a development or re-development should be accommodated by on-site parking or acceptable alternative strategies to satisfy demand.

2.1 Parking Study Threshold

A Parking Study completed using this Guideline will be required in the following situations:

1. A parking reduction equal to or greater than 10% of the minimum parking requirements set out in the City's comprehensive Zoning By-law (the 'By-law') is proposed
2. A parking reduction beyond the recommended minimum parking rates of the City's Draft Parking Standards (*IBI, 2010*)¹ is proposed

The City reserves the right to request the completion of a Parking Study under special circumstances, despite the thresholds outline above. The consultant or applicant are encouraged to contact the City to discuss the particular nature of the proposal and to determine the requirements for a Parking Study.

If the above conditions apply, a Parking Study is required for the following types of development applications:

- Site Development Application
- Zoning By-law Amendment Application where a parking deficiency is proposed
- Committee of Adjustment Application (Minor Variance or Consent applications)

A Parking Study is typically not required for an Official Plan Amendment ('OPA') application, however, if the OPA is significant in nature, and expected to include a parking deficiency a Parking Study may be requested. The consultant should engage City Staff to confirm whether a Parking Study will be required. The requirement for a Parking Study in support of an OPA application may also be identified at the Pre-Application Consultation ('PAC') meeting.

When a parking reduction is proposed but does not require a Parking Study based on the above criteria, a Letter of Justification should be provided, or a brief discussion within a Transportation Impact Study ('TIS') / Transportation Mobility Plan. The content of the brief discussion or Letter of Justification is outlined in **Section 3.6**.

¹ Review of Parking Standards Contained Within the City of Vaughan's Comprehensive Zoning By-law: March 2010 by IBI Group [https://www.vaughan.ca/projects/policy_planning_projects/city_wide_parking_standards_review/General%20Documents/FINAL%20DRAFT%20TTR_2010-04-15%20Web%20Version%20\(2\).pdf](https://www.vaughan.ca/projects/policy_planning_projects/city_wide_parking_standards_review/General%20Documents/FINAL%20DRAFT%20TTR_2010-04-15%20Web%20Version%20(2).pdf)

The Zoning By-law minimum parking requirement(s) should be confirmed with the Building Standards Department.

2.2 Qualifications for Preparing the Study

A Parking study must be prepared by a qualified Transportation Consultant and include sufficient details to inform decisions regarding the provision of an appropriate supply of parking for a development.

3 PARKING STUDY STRUCTURE

A Parking Study can be completed as a standalone document or included as a chapter within a Transportation Impact Study ('TIS'). A Parking Study should include, but not be limited to, the following components:

3.1 Development Proposal Overview

This section should include:

1. Type of development application
2. Breakdown of existing and all proposed land uses (including the Gross Floor Area ('GFA') related to each use)
3. Reason for the study

3.2 Site Description & Parking Review

The following information should be included:

1. Municipal address(es), general location and surrounding land uses
2. Property description:
 - a. Total building size and building locations, Gross Floor Area (GFA) in m²
 - b. Land use summary (*by GFA*) for each land use, unit type and total number of units for each unit type for residential development
 - c. Tenant information, number of occupied units, current vacancy by unit type (*if applicable*)
 - d. Date of occupancy and approximate hours of operation (*if applicable*)
 - e. Planned phasing of the development (*if applicable*)
3. Parking description:
 - a. On-site parking supply, or proposed parking supply
 - b. Off-site parking agreements (with registered agreement provided for review), if applicable
 - c. Proposed modification to existing parking (*if applicable*)
 - d. Available on-street parking in the area, and the applicable on-street parking by-law regulations (e.g. parking only permitted from 8 AM to 8 PM) (*if applicable*)
 - e. Off-site public parking in the area (*if applicable*)
4. All access driveways to the site and to surrounding uses
5. Surrounding multi-modal transportation infrastructure
6. Current and proposed Zoning, as applicable
7. Previous amendments to the minimum parking requirement(s) in the City's comprehensive Zoning By-law (either through a Zoning By-law Amendment or/and Minor Variance application)
8. Zoning By-law Parking standard – combine this with 6? Current Zoning and By-law parking requirement(s)

9. Draft Parking Standards Review (*IBI, 2010*) recommended parking standard

The Zoning By-law standards(s) should be confirmed with the Building Standards Department.

3.3 Surveying

The Consultant should confirm survey locations, dates and times, number of survey iterations, number of proxy sites, duration of the survey(s), locations and the type of survey(s) to be conducted with the City prior to conducting a parking survey(s). The following information and method should be included and summarized.

3.3.1 Surveying Methodology

Describe the survey methodology, including the proxy sites selected, days, times, intervals, weather condition, assumptions made and any special circumstances that may affect the survey results:

1. Survey Locations – Existing site (if applicable) and/or proxy sites that are comparable to the proposed development.
2. Proxy Site – An appropriate proxy site or sites should be selected and reviewed with the City prior to a conducting survey(s). Typically, a minimum of two (2) proxy sites are required. This section of the Parking Study should summarize:
 - a) Address of the proxy site(s)
 - b) Land uses (including GFA for each land use on the property)
 - c) Vacancy (number of unoccupied units, or amount of unoccupied GFA)
 - d) Characteristics (including transportation context, i.e., access, surrounding land uses or neighbourhood characteristics, walkability, public transit access, etc.)
 - e) Comparability between the proxy site and the proposed site (why they will generate similar parking demand)
3. Timing – This section summarizes the timing of the survey(s). A parking survey(s) should not be undertaken during holidays, or all days of the week leading up to or following holidays and should occur during the season or time of year appropriate to the development. The survey timing as summarized below should be reviewed by Staff. The following should be summarized:
 - a) Date of the parking survey(s) (typically at least two [2] days of data collection are required and should be confirmed with Staff. For uses that generate significant weekday and weekend demand [i.e. commercial uses, residential visitor, etc.], a minimum of two [2] days of surveys should be conducted for each weekday or weekend day)
 - b) Survey timing (appropriate time periods should, at a minimum, be chosen to cover typical operating hours and peak demand, and the hours leading up to and following operating hours, or peak demand. For specific sites and in specific contexts, survey timing may need to be adjusted appropriately. A survey(s) should be conducted with frequency no less than 30-minute intervals [i.e., 15- and 30-minute intervals are acceptable] and the peak parking demand should not be observed within the first or last intervals).

4. Survey Area – If on-site parking is at capacity, is charged, or in determining visitor parking demand, off-site parking in the area should be surveyed. Typically, surveys should capture off-site parking in the area including on-street parking and off-site public parking within a 300m radius.
5. Survey Type – In most instances, typical parking demand surveys counting the number of vehicles on-site for each interval will suffice. In most instances, the following survey type is anticipated:
 - a) Parking demand by parking space / area (for certain sites or applications, it may be pertinent to understand parking demand by area of the site or for specific parking spaces [i.e., large sites or sites with multiple types of parking spaces/uses])

However, depending on the nature of the development, a more detailed parking survey(s) may be necessary and should be selected accordingly and verified with Staff:

- b) Parking turnover survey (*for certain sites or applications, understanding parking turnover may be important to understand if the proposed supply is appropriate. This is commonly the case for very high turnover uses, or for understanding illegal parking activity*)
- c) Parking trace survey (*for certain sites or applications, understanding who the users of the parking spaces or areas are may be beneficial. This may apply for sites with multiple uses, multiple tenants or patrons, on-street parking activity, illegal parking activity, etc.*)

3.3.2 Surveying Results & Analysis

The results of the parking surveys should be summarized in the report with the detailed or raw survey data included in an appendix. The summary should include the following information:

- Day(s) of the survey
- Total on-site parking supply (*both actual [i.e., accounting for snow storage, obstructions, etc.] and total*) including all types such as accessible, reserved, visitor, resident, etc.)
- Observed parking demand (*legal, illegal, on-street, off-site, visitor, resident, etc.*)
- Observed peak parking demand (*the time peak occurs, and the duration of the peak*)
- Peak utilization rate (*percentage of parking demand over the total parking capacity*)
- Peak parking demand ratio (*per unit, per 100 m² of occupied GFA, per employee, etc. for each observation period*)
- Adjusted peak parking demand, utilization rate, and demand ratio (*adjustments must be made based on the vacancy of the proxy site or subject site, and for seasonal variation, if applicable. For uses subject to seasonal variation [i.e., shopping centres, retail, hotel, etc.], peak parking demand should be adjusted based on best-practices such as the ITE Parking Generation Manual or Shared Parking Second Edition from the Urban Land Institute and verified or reviewed by City Staff*)
- Future projected parking demand (*project future parking demand by applying the peak adjusted parking demand rate to the development as proposed*)

- Assessment of the proposed parking supply (*determine if the parking supply proposed is adequate to accommodate the projected demand*)

If the parking proposal involves shared parking or synergy between differing uses (as part of mixed-use developments), this information should be summarized accordingly. It may be the case that through proxy site surveys, parking supply and demand rates will need to be blended within the analysis based on the range of land uses. Calculating the parking demand rate must be factored or weighted taking into account the shared parking rates from Table A and Table B in Zoning By-law 1-88 Section 3.8. However, the blending of rates may also need to consider vacancy for each use, and seasonal variation by use. All calculations should be documented appropriately into the results and/or analysis section of the Parking Study.

3.4 Alternate Solutions

In the instance that the parking supply proposed may not satisfy the projected demand, or in other circumstances, alternative solutions to accommodating demand on-site can be explored as summarized below.

3.4.1 Shared Parking Agreements with Adjacent Properties

The City can accept shared parking agreements between adjacent landowners. In order to accept the shared parking opportunities with off-site properties, the shared parking agreement should be registered on title (with the City as a registered party) and reviewed by the City.

3.4.2 Transportation Demand Management (TDM) Plans

It is noted that TDM measures are not a substitute for undertaking parking surveys to quantify parking demand. In the Vaughan Official Plan 2010 (adopted by Council in September 2010), it is policy to require the preparation and implementation of TDM Plans to support sustainable transportation for certain developments. The City is a strong advocate of TDM and encouraging alternative methods of transportation and will consider TDM measures and initiatives towards proposed parking reductions. More detail on the preparation of the TDM Plan can be found in City's Transportation Impact Study ('TIS') Guideline, Vaughan Official Plan, and the York Region Mobility Plan Guidelines.

For development applications where the criteria of **Section 2.1** are met, a TDM Plan should be provided with the application to encourage a reduction in single-occupancy vehicle ('SOV') travel as greatly as possible.

The consultant must provide the method of implementation and recommendation on securing the proposed TDM measures. Further, the consultant must provide an acknowledgement by the applicant that they are prepared to implement the TDM measures. An estimate should be performed on the influence the TDM measures will have on reducing parking demand. This analysis shall be performed by the consultant and should follow sound engineering and planning best practices.

3.5 Conclusions & Recommendations

A summary of the key findings should be provided including a summary of:

- The proposed development
- The applicable Zoning By-law parking requirements

- The parking reduction proposed
- Parking survey methodology
- Parking survey findings
- Parking recommendations
- TDM measures

3.6 Letter of Justification or Parking Brief

In the instance a Parking Study is not required (reference **Section 2.1**), a Letter of Justification or a brief parking summary with a TIS or Transportation Mobility Plan will suffice. The general structure should follow as below:

1. Provide a brief summary of the site characteristics
2. Provide a summary of the proposed development
3. Outline the parking supply proposed versus the applicable requirement
4. Verify that the parking supply proposed satisfies the Draft Parking Standards Report (IBI, 2010), or that the reduction is less than 10% from the minimum requirements of Zoning By-Law 1-88
5. Outline TDM measures as proposed, if applicable
6. Conclude the letter or parking section

4 DOCUMENTATION & REPORTING

Five (5) hard copies and one (1) digital copy of the Parking Study and any subsequent amendments shall be provided to the Development Planning Department in support of a development application. Should changes to the original Parking Study be requested and these changes are deemed substantial by the City of Vaughan, an updated Parking Study will be requested to replace the original.

The Parking Study and all related information submitted to the City of Vaughan will be considered as public domain once submitted to the City.