

TERMS OF REFERENCE

Parking Utilization Studies for Site Specific Applications

Planning and
Building Department



Why are parking provisions important?

The City of Mississauga parking policies are outlined in Section 8.4 of the Mississauga Official Plan. Parking is an essential part of the overall transportation and land development system, and a means to help realize other community development objectives, such as land use efficiency, good urban design, economic vitality. The availability and cost of parking can influence travel behaviours and choice of transportation modes.

An oversupply of parking is costly for business, visually unattractive, and may negatively impact urban design and streetscape. Conversely, an undersupply of spaces may compromise access and circulation, and create spillover problems for adjacent uses. It is, therefore, important for the supply of parking to strike a balance between oversupply and undersupply.

When is a Parking Utilization Study required?

The City requires the submission of a Parking Utilization Study to justify parking reductions of generally more than 10% from current Zoning By-law standards.

When the parking reduction is relatively minor (generally less than 10% of the By-law standards) a Letter of Justification based on the nature of the operation and its land use circumstances may be acceptable.

A Parking Utilization Study or a Letter of Justification is usually required as part of a rezoning or a Committee of Adjustment application.

The majority of site specific Parking Utilization Studies are undertaken for an existing building where an increase in floor area of a particular use or the introduction of a new use is being proposed. In these types of situations, an assessment of the existing reoccurring peak parking demand and demand ratio, and an analysis of additional parking spaces required by the proposal, can be done with reasonable accuracy and confidence.

In unbuilt situations, where the type of tenants and the characteristics of the tenants are unknown, the general rule is to require parking at Zoning By-law standards.

Who should prepare the Parking Utilization Study?

The Parking Utilization Study should be undertaken by a qualified consultant with experience in conducting this type of study.

What are the components of a Parking Utilization Study?

Although each Parking Utilization Study may be different in terms of layout and components, the outline listed below provides general information that should be included in all studies.

1. Introduction/Background

This section should include details regarding the application such as application type (rezoning or Committee of Adjustment), proposed use, site history, a brief explanation of why the study was undertaken, and any other relevant information.

2. Site Description and Zoning By-law Requirements

The following should be included in this section:

- location of site including municipal address, general location, and surrounding uses;
- property description;
- access to the site and to surrounding uses;
- * **zoning of the site;**
- * **parking required according to the general provisions of the Zoning By-law or special sections that include parking standards;**
- * **total number of legal parking spaces on-site** (note: this should be referenced from an approved site plan and should be provided with the Parking Utilization Study);
- tenant listing – unit number, tenant/business name (and identify those that are vacant or unoccupied), Gross Floor Area (GFA) m², and hours of operation;
- for vacant units, identify future tenants and/or proposed uses;
- for residential developments, the number of vacant units, unit type (1-bedroom, 2-bedroom, etc.), tenure (rental, condominium, etc.), and the number of parking spaces for the residents and visitors should be provided;
- availability of public transit to the subject site; and
- previous Committee of Adjustment applications that affect parking on the site.

*** The applicant must confirm the information with the Zoning Section.**

3. Survey Methodology

This section should describe how the survey was carried out, including the days and times the survey was completed, the intervals established to collect the observed parking demand and the weather conditions at the time of the survey. Assumptions made during surveying should be outlined in this section and any other extenuating circumstances that may affect the survey results (e.g. hours of operation). Information regarding the timing and type of survey undertaken, and parking survey results should be included.

4. Parking Survey Results

The data and results of the parking survey should be presented in spreadsheet format in an appendix. The spreadsheet should contain the following information by each time interval:

- days of the survey;
- total on-site parking spaces (parking supply);
- total occupied GFA in square metres;
- observed parking - separating out legal, illegal, off-site, and total parking. In addition, for residential applications, visitor and resident parking should be separated;
- percentage of the total parking capacity; and
- observed parking demand ratio per 100 m² (1,076.4 sq.ft.) of occupied GFA for each observation period. For example, if 67 cars were observed on site at 10:00 a.m. for a building with an occupied space of 1,800 m² (19,375.7 sq. ft.) GFA, the parking demand ratio will be 3.7 cars per 100 m² (3.4 spaces per 1,000 sq. ft.) GFA ($67/1,800 \times 100 = 3.7$).

A summary of the survey results should note the observed peak parking demand, the time that this occurred, and the duration of the peak. This table should be created based on the survey method used and the information collected.

5. Analysis

The 95th percentile may be calculated by sorting the observed demand ratios (observed demand per 100 m² GFA) from highest to lowest. The same number of observations from each day surveyed must be included in the sorting exercise to ensure the analysis is not biased towards one day. If observations are dropped, the lowest ratios should be excluded from the sorting exercise.

If the most conservative position is desired, the peak observed demand can be used. In mixed use situations, the By-law standard should be applied to any vacant GFA and proposed infill use unless the applicant is trying to justify a reduced parking standard for the proposed infill use.

If surveys were not undertaken during the peak business season, the data may need to be factored to represent high month (or peak) demand. As a guideline, the City has prepared a table based on information from the document titled "Shared Parking" Second Edition, Urban Land Institute, and illustrates various uses and representative monthly variations as percentage of peak month (see Appendix A).

Depending on proposed use and size of operation, the study may need to address an appropriate level of service for parking supply. In general, the transportation industry recognizes a good level of service for parking supply represented by an 85% occupancy level in the peak hours.

This section may also include other information that would help justify the requested reduction in parking, such as other municipalities' parking standards, parking standards from published literature, unique characteristics of the use, and City policies.

6. Transportation Demand Management (TDM)

Section 8.5 of the Mississauga Official Plan contains policies pertaining to Transportation Demand Management. TDM includes infrastructure or programs that promote transit use and active transportation, and reduce vehicle dependency by encouraging people to take fewer and shorter vehicle trips. Mississauga encourages the use of TDM, however, it should be recognized that the City is evolving and that the use of TDM should to be appropriate for Mississauga and reflect the situational specific characteristics of the proposed development. Where TDM measures are recommended, and there is uncertainty as to market acceptance or a lack of direct comparable examples, it may be appropriate to use conservative estimates as to the impact on parking requirements. Reduction of parking standards as a result of TDM measures should be based upon empirical analysis and research. Where applicable, TDM measures can be considered when justifying reduced parking proposals. TDM measures are not a substitute for undertaking a parking survey that quantifies parking demand.

Where TDM measures are proposed, the applicant should identify how the measures are supported by complementary land use planning, good urban design and transit improvements. For example, if a future transit improvement, such as the Hurontario Light Rail, is used as justification for reduced standards, the development must be designed to be transit supportive (e.g. parking located in the rear of the buildings, main entrance facing the transit corridor, no parking between the corridor and main door of the building).

When preparing the TDM justification, the consultant should have dialogue with the City's TDM Coordinator and make references to best practices of other municipalities and existing literature. The following can be considered as part of TDM justification:

- the availability of and proximity to transportation modes other than the automobile, particularly within 500 metres of a major transit station;
- the patterns of land use and character of development in the vicinity;
- incorporation of supportive infrastructure, for example, secure bicycle parking, car-share spaces/vehicles, transit information kiosk within the building;
- incorporation of supportive programs, for example, discounted transit passes, pay for parking or the separation of parking costs from building occupancy or residential unit prices (unbundling); and
- any additional TDM measures that justify a reduction in the parking requirements.

With program type TDM measures the consultant must provide the method of implementation and recommendations on securing the proposed TDM measure. Recommendations should specify the appropriate tool and stage in the development

How are parking surveys conducted?

process (e.g. include conditions and/or warning clauses in agreements of purchase and sale, the condominium agreement, or development agreement etc.). Further, the consultant must provide an acknowledgement by the applicant that they are prepared to implement the TDM measure.

It is important to recognize that the rationale for reduced parking standards may already be fully or partially captured from the parking survey. For example, a survey of parking at the subject site would already capture existing transit and land uses in the area and any further reduction should be discussed as it relates to future changes.

7. Conclusions/Recommendations

This section should summarize the parking requirements of the Zoning By-law, the findings of the Parking Utilization Study, the recommended parking standard for the use/site, the parking standard or variance requested by the associated rezoning or Committee of Adjustment application and, if applicable, the number of spaces to be provided through the Payment-in-lieu (PIL) of Parking Program.

The consultant should confirm survey dates and times with the City's Planning and Building Department prior to conducting parking surveys. The duration of the surveys and the type of survey to be conducted must be considered in advanced.

1. Timing of Survey

In general, surveying should occur two to three days per week for two consecutive weeks. Surveying should not take place over the holidays.

Appropriate survey days and times will vary depending on the use; however, **reoccurring peak parking demand** should be captured in this timeframe. For example, appropriate survey periods for a restaurant use include, Thursday, Friday, and Saturday, during the lunch and dinner hours.

2. Type of Survey

The survey, regardless of the type, should **capture the total parking demand related to the use**. The survey type that is chosen for the study should be confirmed with the City's Planning and Building Department. The selected type of survey depends on the use and situation. The most common types of surveying situations are outlined below.

a. Freestanding Use, Mixed Use Plaza, Industrial Complex or Residential Visitor Parking

To determine observed parking demand of a freestanding use, mixed use plaza, industrial complex (or similar use) or residential visitor parking, the total parking demand should be recorded at the selected interval times, including legally and illegally parked vehicles (e.g., in the aisles/fire routes) and vehicles parked off-site (e.g., on-street or on neighbouring properties).

Vehicles parked illegally or off-site should be recorded separately. The total number of cars in each interval time is tabulated and related to the total occupied GFA to determine the observed demand ratio per 100 m² GFA (e.g., 4.6 spaces per 100 m² GFA (4.3 spaces per 1,000 sq. ft. GFA)).

In a situation where a new infill use is proposed in a mixed use plaza or industrial complex, a parking study justifying a reduced standard for the infill use may be considered. If the applicant is justifying a reduced parking standard for the new use, and this use exists elsewhere (preferably in Mississauga) in a similar context, a proxy site may be used. The study must outline the similarities between the proxy site and the proposed site and why they will generate a similar parking demand. The selection and justification of the survey site is the responsibility of the consultant.

b. One Use within a Plaza or Industrial Complex with a Shared Parking Arrangement or a Use in a Business Improvement Area (BIA)

To determine the observed parking demand of one use within a plaza or industrial complex with a shared parking situation, or a use in a BIA, patrons of the subject use should be interviewed to determine if they drove and where they parked.

Depending on the type of use, the duration the patron spent in the establishment may need to be determined by monitoring patrons entering and exiting the building. For example, surveying of a place of religious assembly during a regular service would not require a duration study, whereas a restaurant use would.

The statistics should be tabulated in intervals (e.g., every half hour). Although the location of patron parking is not the primary information to be collected, this may help in justifying a shared parking arrangement. The number of patrons that drove is tabulated for each interval time and the observed demand ratio per 100 m² (1,076.4 sq. ft.) GFA is calculated.

c. Patron Count and Vehicle Occupancy Rate

If, for some reason one of the two survey methods outlined above is not possible, (e.g., an owner will not give permission for interviews to take place), then a third method may be implemented.

The number of patrons visiting the subject business can be counted during peak times at established intervals. If possible, an actual car occupancy rate should be determined; otherwise, a reasonable vehicle occupancy rate can be assigned and must be justified in the study. From this information the number of cars generated can be determined.

Hence, the observed parking demand ratio can be calculated and related to the GFA of the establishment. This method should only be used in cases where the other two methods are not possible.

Are there any alternatives to undertaking a Parking Utilization Study?

d. Shared Parking Arrangements Between Two Sites

If a shared parking arrangement is proposed by two sites a Committee of Adjustment application and satisfactory Parking Agreement will be required and must be signed by the owner(s). In addition, a parking survey for the off-site parking may be required.

For rezoning applications if the arrangement is justified, appropriate clauses may be required in the zoning by-law for off-site parking.

e. Residential Resident Rate

For utilization studies undertaken to justify a reduced residential resident rate, the ideal data will be the result of vehicle ownership rates from proxy sites in a similar context.

Mississauga Official Plan, Section 8.4.4, states *“Mississauga may require or consider receiving a cash payment-in-lieu of all, or part, of the Zoning By-law requirements for parking...”*

The Payment-in-Lieu (PIL) of Parking Program allows the owner or tenant of a building to make an application to the City’s Planning and Building Department. If approved, the owner or tenant is exempt from providing and maintaining parking facilities in accordance with the Zoning By-law.

Mississauga Official Plan and Evaluation-Part A of the Corporate Policies and Procedures (Policy No. 07-09-01) set out the criteria for evaluating PIL applications as follows:

- consistency with and/or advancement of environmental, design, transportation or economic development objectives and policies of Mississauga Official Plan;
- consistency with the objectives of a City Council endorsed parking strategy relevant to the subject location;
- whether the existing public parking supply in the surrounding area can accommodate the on-site parking deficiency. (The parking supply should be within a maximum 10 minute walk, not more than 500 m (1,640 ft.) and can be on or off-street);
- what site constraints prevent the provision of the required number of parking spaces; and
- the proposed use of the property, and whether there is any issue as to overdevelopment of the site.

Can a Parking Utilization Study be done in a payment-in-lieu (PIL) area?

The PIL Program is applicable in all areas of the City where municipal parking is provided either in off-street lots and/or on-street. The municipal parking should be available during the hours of operation for the proposed use(s). In areas where municipal parking is not available but is being planned, PIL may also be considered based on the criteria in Evaluation-Part B of the Corporate Policy and Procedure (Policy No. 07-09-01). For further information, please go to the following webpage: <http://www7.mississauga.ca/documents/Policies/07-09-01.pdf>.

Monies accepted through the PIL Program are placed in the respective PIL reserve accounts, and will be used for the acquisition, establishment, and/or maintenance of municipal parking facilities in the area from which funds were collected.

For further information regarding PIL fees, please see the Processing Fees and Charges By-law on the City's webpage.

What are the components of a Letter of Justification?

A satisfactory Parking Utilization Study may be used to justify a reduction in the number of spaces required by the Zoning By-law in an area where PIL is available. A Committee of Adjustment application is required to vary the Zoning By-law for this portion of required parking. For any parking deficiency over that recommended in the satisfactory study, an application must be made to City Council for PIL.

Existing municipal parking or on-street parking may not be used as justification for a reduced parking standard.

A Letter of Justification has similar components of a Parking Utilization Study, but does not require surveying and may be prepared by the applicant. A Letter of Justification should provide information about the application, operational details and unique features of the business, site description, general observations of the on-site parking or other information to help justify the requested reduction in parking, and a conclusion/recommendation.

Who can I contact from the City of Mississauga to verify survey methodology, or for further inquiries regarding Parking Utilization Studies?

It is recommended that Planning and Building staff be consulted prior to undertaking parking surveys. The following City staff are available for questions.

Tara Shukla, Researcher at (905) 615-3200 ext. 4066
Farad Wahab, Researcher at (905) 615-3200 ext. 8711
Brandon Williams, Researcher at (905) 615-3200 ext. 8753

***Who can I contact
for other general
inquiries (e.g.,
how to apply to
Committee of
Adjustment)?***

Within City limits, dial **3-1-1**

Outside City limits, dial **905-615-4311**

Note: *The information in this pamphlet is intended to serve as a guideline only. It is the responsibility of the consultant to determine and prepare any required additional material. Additional information may be requested by Planning and Building staff as necessary.*

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Appendix A: Representative Monthly Variations as a Percentage of Peak Month

	FINANCIAL INSTITUTION/ BANK	MOVIE THEATRE/ CINEMA	CONVENTION CENTRE/ CONFERENCE CENTRE	HEALTH CLUB	HOTEL
JANUARY	100	71	76	100	92
FEBRUARY	100	60	100	95	100
MARCH	100	68	91	86	100
APRIL	100	59	56	71	100
MAY	100	71	61	66	92
JUNE	100	83	51	66	92
JULY	95	92	46	66	100
AUGUST	95	76	76	71	100
SEPTEMBER	100	52	81	81	80
OCTOBER	100	63	86	86	80
NOVEMBER	100	78	100	86	80
DECEMBER	100	68	61	91	60
LATE DECEMBER	80	100		95	100

	MEDICAL OFFICE	NIGHTCLUB	OFFICE	RESIDENTIAL (Resident)	RESTAURANT	RETAIL
JANUARY	100	84	100	100	86	61
FEBRUARY	100	86	100	100	87	62
MARCH	100	98	100	100	96	67
APRIL	100	91	100	100	93	66
MAY	100	91	100	100	97	69
JUNE	100	92	100	100	96	70
JULY	95	94	95	100	98	67
AUGUST	95	96	95	100	99	71
SEPTEMBER	100	93	100	100	92	67
OCTOBER	100	98	100	100	97	69
NOVEMBER	100	96	100	100	94	76
DECEMBER	100	100	100	100	100	100
LATE DECEMBER	80	95	80	100	96	82