



City of Toronto

**REVIEW OF THE CITY OF TORONTO ZONING BY-LAW  
PARKING STANDARDS FOR PLACES OF WORSHIP**

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FINAL REPORT

APRIL 2009



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## 1. INTRODUCTION

The City of Toronto Zoning By-law Project will create a single zoning by-law for the entire City, replacing the existing 41 zoning by-laws. The work program for the New Zoning Project has been broken into manageable tasks, one of which is the review of parking standards for places of worship. This work builds on previous parking review of studies of commercial and residential uses prepared as part of the Zoning By-law project, following similar approaches regarding the urban structure of the proposed standards and the use of both minimum and maximum parking requirements.

Places of worship provide valuable services to communities, but bring with them a number of planning issues. In some cases, these may include high periodic parking demand, which may overflow onto nearby streets, large land requirements, and land use zoning concerns when such facilities try to locate in industrial areas. In addition, local planning policies can have more regional impacts. For example, a recent study found that fast-growing churches, frustrated with the slow pace of municipal planning, often end up locating in more rural areas, contributing to suburban sprawl<sup>1</sup>.

Existing parking standards for places of worship are highly varied across the former municipalities. New parking standards are required to harmonize these standards and make them applicable to new trends in places of worship. These trends include larger facilities with more secondary (e.g., banquet hall) and auxiliary uses (e.g. daycare) and worship spaces without fixed seating. Proposed place of worship parking standards are developed under the philosophy that such standards should:

- Be applicable to all places of worship;
- Balance the large parking demands for such facilities while encouraging the development of new facilities;
- Encourage efficient use of parking and land; and
- Encourage transit use and other non-auto forms of transportation.

Parking standards are determined through a number of steps including a review of trends in place of worship development, a review of existing parking standards, analysis of parking survey data, as well as a 'first principles' assessment of place of worship parking demand.

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<sup>1</sup> Agrawal, Sandeep. 2008. New Ethnic Places of Worship and Planning Challenges, Plan Canada. (forthcoming)

## 2. BACKGROUND

### 2.1 Previous Studies

A number of key studies regarding place of worship parking standards were consulted in development of the proposed standards and are referred to throughout the report. These include:

- Review of the City of Toronto Zoning By-law Parking Standards for Office, Retail and Restaurant Uses – March 2007, IBI Group
- O'Connor/Bermondsey Business Area Study and Interim Control By-law – Final Report, Submitted to Planning and Growth Management Committee March 25, 2008
- Mayor's Task Force on Place of Worship, North York, 1987
- City of North York Places of Worship in Industrial Zones, Official Plan Amendment and Zoning By-law Amendment, 1994
- Zoning By-Law Amendments, Parking Regulations – Commercial and Related Uses, Scarborough, 1986-1988
- Places of Worship Study, Town of Markham, Background Issues and Options Report, 2002 and Future Policy Directions Report, 2003, Macaulay Shiomi Howson Ltd.

### 2.2 Place of Worship Development Trends

Over the past 15 to 20 years, there have been some key trends in the development of places of worship in Toronto, which have important implications for parking requirements:

- The types of places of worship being established represent a wider variety of faith groups. New places of worship for religious denominations such as Evangelical Christian, Muslim, Buddhist, Hindu, and Sikh may have different activity patterns and parking demands than Roman Catholic or Protestant churches, which have been the traditional basis of place of worship parking requirements.
- The average size of these facilities is increasing and there has been the emergence of mega-churches, or very large facilities that serve a larger, more regional population and combine a variety of uses (e.g., worship spaces, schools, homes for the elderly, daycares, banquet halls, etc.).
- More places of worship are locating in employment lands and industrial areas.

These trends are explored below. Trends in the number and size of places of worship are assessed based on place of worship sites from the 2005 Toronto Employment Survey (TES), which includes data on 1,260 sites across the City. Using the Municipal Property Assessment Corporation (MPAC) database, gross floor area (GFA) was extracted for 760 of these sites. This match rate (60%) is typical based on previous experience matching sites from the TES with MPAC GFA.

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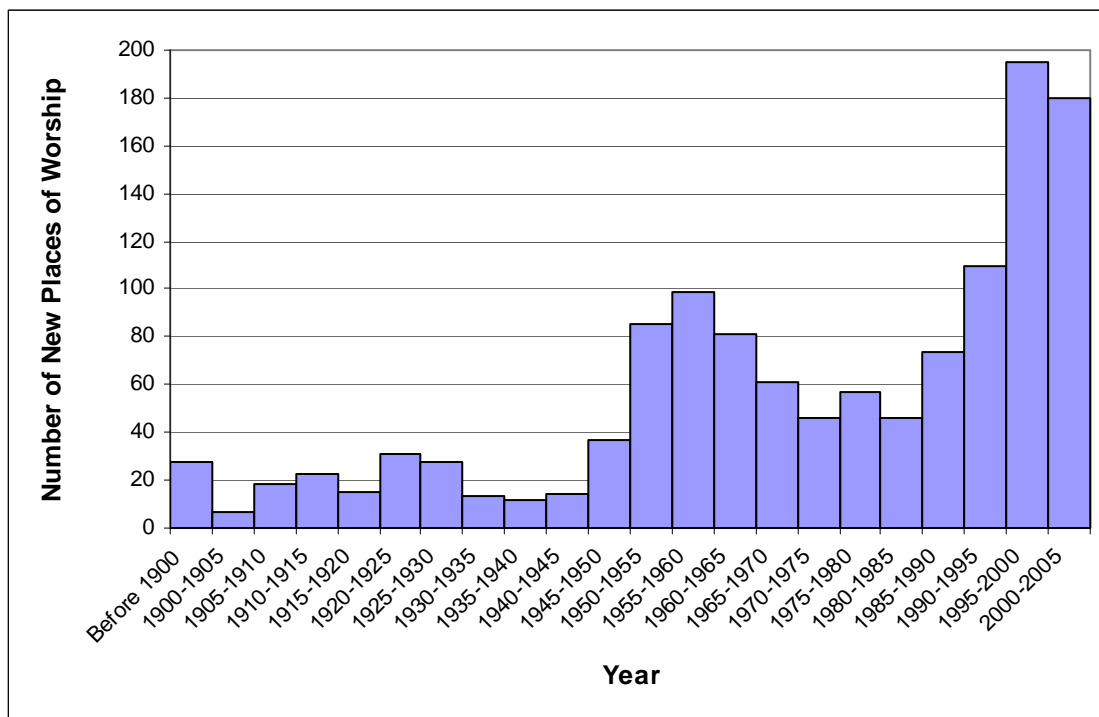
2.2.1 NUMBER AND TYPE OF NEW PLACES OF WORSHIP

The development of new places of worship typically follows four stages:

- Meetings in the homes of individual members;
- Use of rented or temporary facilities, which may include commercial or industrial space, or shared space with another place of worship;
- Construction of a place of worship; and,
- Expansion of the place of worship or establishment of a new worship group<sup>2</sup>.

According to the 2005 Toronto Employment Survey (TES) there were 1,260 “official” places of worship operating in Toronto in 2005. Almost a third of these facilities were established between 1995 and 2005 (Exhibit 2-1), indicating a strong demand for new places of worship. Note that according to the TES, new places of worship include both the occupation of a new building or the purchase/lease of an existing building or unit.

**Exhibit 2-1: Year of Establishment for Places of Worship Operating in 2005**



Source: 2005 Toronto Employment Survey, 1260 sites

Note: These numbers should be interpreted carefully, since this graph only shows places of worship that were in operation in 2005.

Exhibit 2-1 shows that there was a peak in the construction of places of worship in the postwar period as well as between 1995 and 2005. This increase in the establishment of places of worship

<sup>2</sup> Macaulay Shiomi Howson Ltd., Town of Markham Places of Worship Study, Background Issues & Options Report, 2002.

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in recent years likely corresponds with large population increases in a number of religious denominations in Canada including Muslim, Christian (including Evangelical, Born-again, and Apostolic), Hindu, Sikh, and Buddhist. Exhibit 2-2 shows the growth in religious denominations in Canada between 1991 and 2001 based on census data. Updated parking standards must consider the design and use of places of worship for these growing faith groups, which is further discussed in Section 2.3.

**Exhibit 2-2: Breakdown of Religious Denominations in Canada (1991 & 2001)**

Religious Denomination	1991		2001		Percentage change 1991-2001
	Number	%	Number	%	
Roman Catholic	12,203,625	45.6%	12,793,125	43.7%	4.8%
Protestant	9,427,675	35.3%	8,654,845	29.5%	-8.2%
Christian Orthodox	387,395	1.4%	479,620	1.6%	23.8%
Christian <sup>1</sup>	353,040	1.3%	780,450	2.7%	121.1%
Muslim	253,265	0.9%	579,640	2.0%	128.9%
Jewish	318,185	1.2%	329,995	1.1%	3.7%
Buddhist	163,415	0.6%	300,345	1.0%	83.8%
Hindu	157,015	0.6%	297,200	1.0%	89.3%
Sikh	147,440	0.6%	278,415	1.0%	88.8%
Non-religious	3,333,245	12.5%	4,796,325	16.4%	43.9%
Total	26,744,300	100%	29,289,960	100%	9.5%

1. Includes persons who report "Christian", as well as those who report "Apostolic", "Born-again Christian" and "Evangelical".

Source: Statistics Canada, *Religions in Canada, Overview: Canada still Predominantly Roman Catholic and Protestant, 2001*

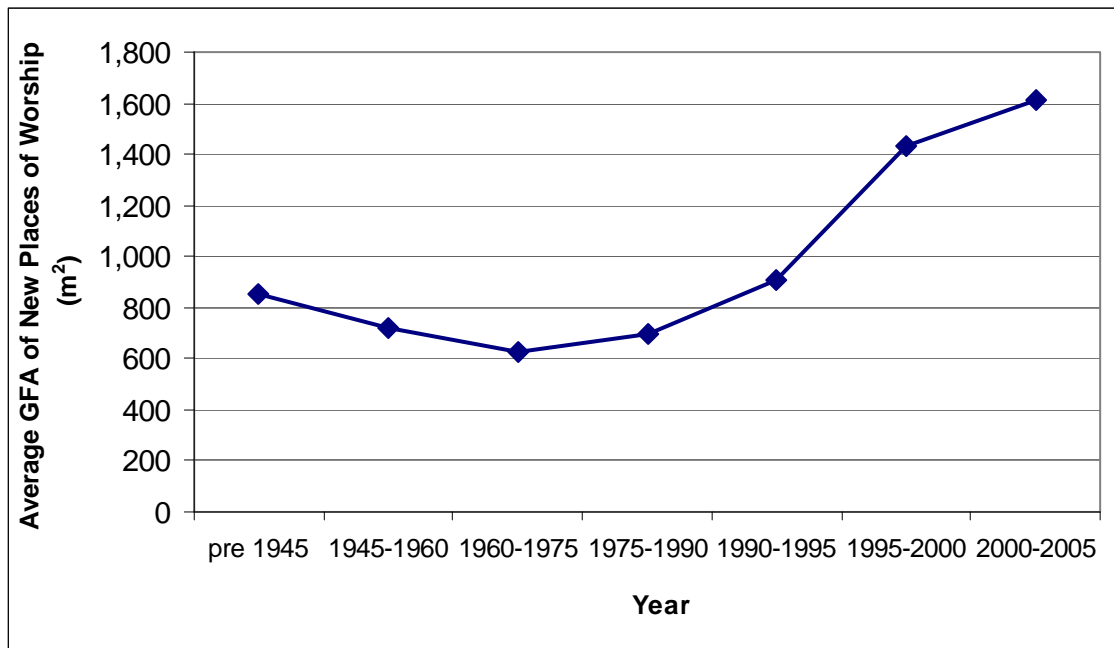
2.2.2 FACILITY SIZE & USES

Exhibit 2-3 shows how the average size of new places of worship has changed over time. There is clearly a trend towards larger facilities. **The average size of new places of worship established between 2000 and 2005 was more than double the average size of places of worship established between 1975 and 1990.** Exhibit 2-4 shows the breakdown of existing places of worship by GFA and year of establishment. While the majority of new facilities (~70%) are still less than 1,500 m<sup>2</sup>, large places of worship (i.e., greater than 2,500 m<sup>2</sup>) are growing at the fastest rate. In addition, the construction of “mega churches” is documented and is seen as an emerging trend. Between 1995 and 2005, 17 facilities larger than 5,000 m<sup>2</sup> were established compared to only five facilities in all the years previous<sup>3</sup>.

<sup>3</sup> This only includes facilities that were still in operation in 2005.

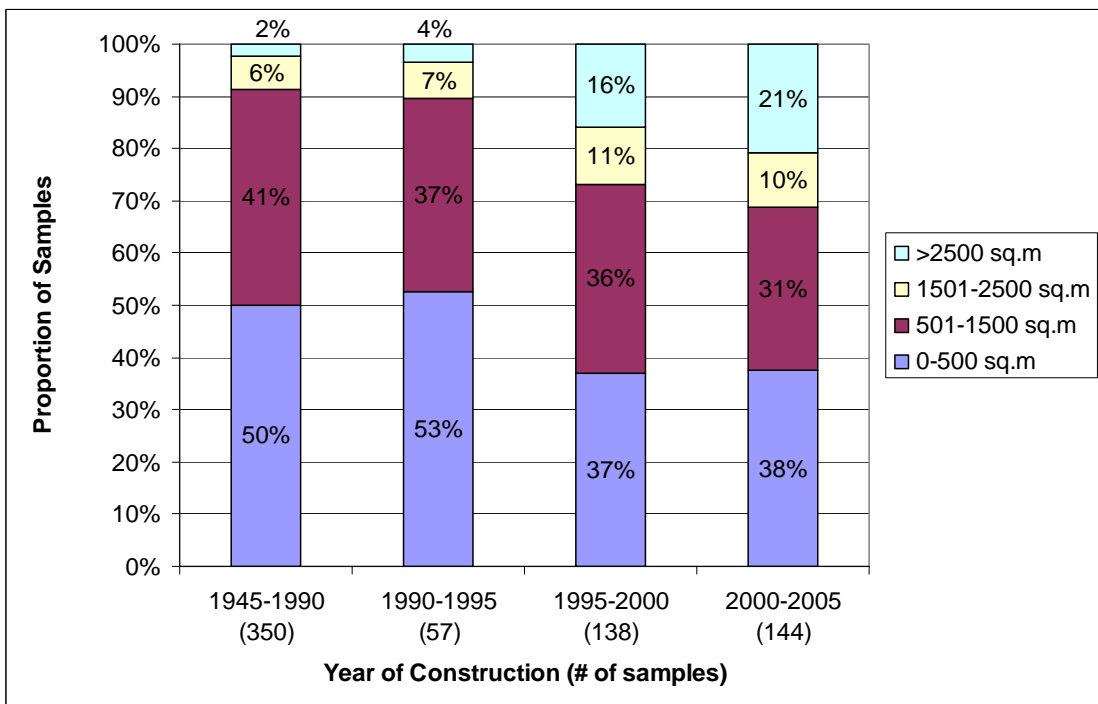
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**Exhibit 2-3: Average Size of Existing Places of Worship by Year of Establishment**



Source: 2005 Toronto Employment Survey, MPAC database, 760 sites

**Exhibit 2-4: Distribution of Existing Places of Worship by Size and Year of Establishment**



Source: 2005 Toronto Employment Survey, MPAC database

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## Implications of Larger Places of Worship

These trends have important implications for place of worship parking requirements. First, the trend towards larger facilities is part of a larger trend towards places of worship that serve a more regional congregation<sup>4</sup>. Larger facilities provide more services and attract a more regional congregation<sup>5</sup>. As worshippers travel farther to their place of worship, they are more likely to drive, which increases the parking demand. This is particularly the case for “mega-churches”. For example, the 5,900 m<sup>2</sup>, 3,000-seat Kingdom Covenant Centre proposed in Etobicoke, is expected to draw congregants from all over the Greater Toronto Area as well as some from as far as Niagara Region and Windsor<sup>6</sup>.

To discourage regional places of worship, the City of North York Zoning By-law limits places of worship to a maximum size of 2,787 m<sup>2</sup> (30,000 ft<sup>2</sup>). This threshold is based on a study, conducted as part of the North York Official Plan Institutional Policy Study, which showed that most of the existing places of worship at the time were smaller than 2,300 m<sup>2</sup>. In addition, it was determined as part of the 1994 Places of Worship in Industrial Areas study<sup>7</sup> that larger facilities would be more regional places of worship, which in addition to creating high parking demand at peak worship times, typically contain non-worship uses (e.g., schools, daycares, recreational facilities) that generate traffic and parking during times of peak industrial traffic.

Building on this point, a place of worship study conducted in the Town of Markham found that places of worship larger than 1,000 m<sup>2</sup> GFA were more likely to have a secondary use. Out of the 29 places of worship surveyed over 1000 m<sup>2</sup>, 10 (34%) had day care or a private school and 12 (41%) had indoor recreational facilities. These non-worship uses indicate that places of worship are important to communities; however, they also likely generate parking demand during worship and non-worship hours that may need to be considered in the parking requirements.

## 2.2.3 LOCATION

According to a recent paper on places of worship in the GTA, a large number of places of worship have obtained rezoning to move into industrial areas. It is also reported that 22% of Toronto's places of worship are located in industrial areas<sup>8</sup>. Exhibit 2-5 superimposes the location of new places of worship on the Official Plan Urban Structure Map. Based on this exhibit, it appears that about half of new places of worship were located in Employment Districts between 1995 and 2005. This was likely to take advantage of cheaper land and buildings, fewer chances for noise or parking complaints, and potential for shared parking, particularly on the weekends. There are a number of

<sup>4</sup> Agrawal, Sandeep. 2008. *New Ethnic Places of Worship and Planning Challenges*, Plan Canada.

<sup>5</sup> Note, however, that there are exceptions in the relationship between facility size and the “regionality” of a congregation's population. Regionality may reflect a variety of factors unique to a particular faith group. A small facility does not always imply a local congregation, particularly for small religious denominations that may be spread out across an urban area, nor does a large facility always imply a regional congregation if the religious group it serves is concentrated in the nearby areas. This is particularly the case for Jewish Orthodox Synagogues where most of the congregants do not drive on the Sabbath, the peak worship day, and thus choose to live within walking distance of the synagogue.

<sup>6</sup> IBI Group, *Kingdom Covenant Traffic and Parking Analyses*, prepared for Kingdom Covenant International, 2005.

<sup>7</sup> City of North York Places of Worship in Industrial Zones, Official Plan Amendment and Zoning By-law Amendment, 1994.

<sup>8</sup> Agrawal, Sandeep. 2008. *New Ethnic Places of Worship and Planning Challenges*, Plan Canada. (forthcoming)

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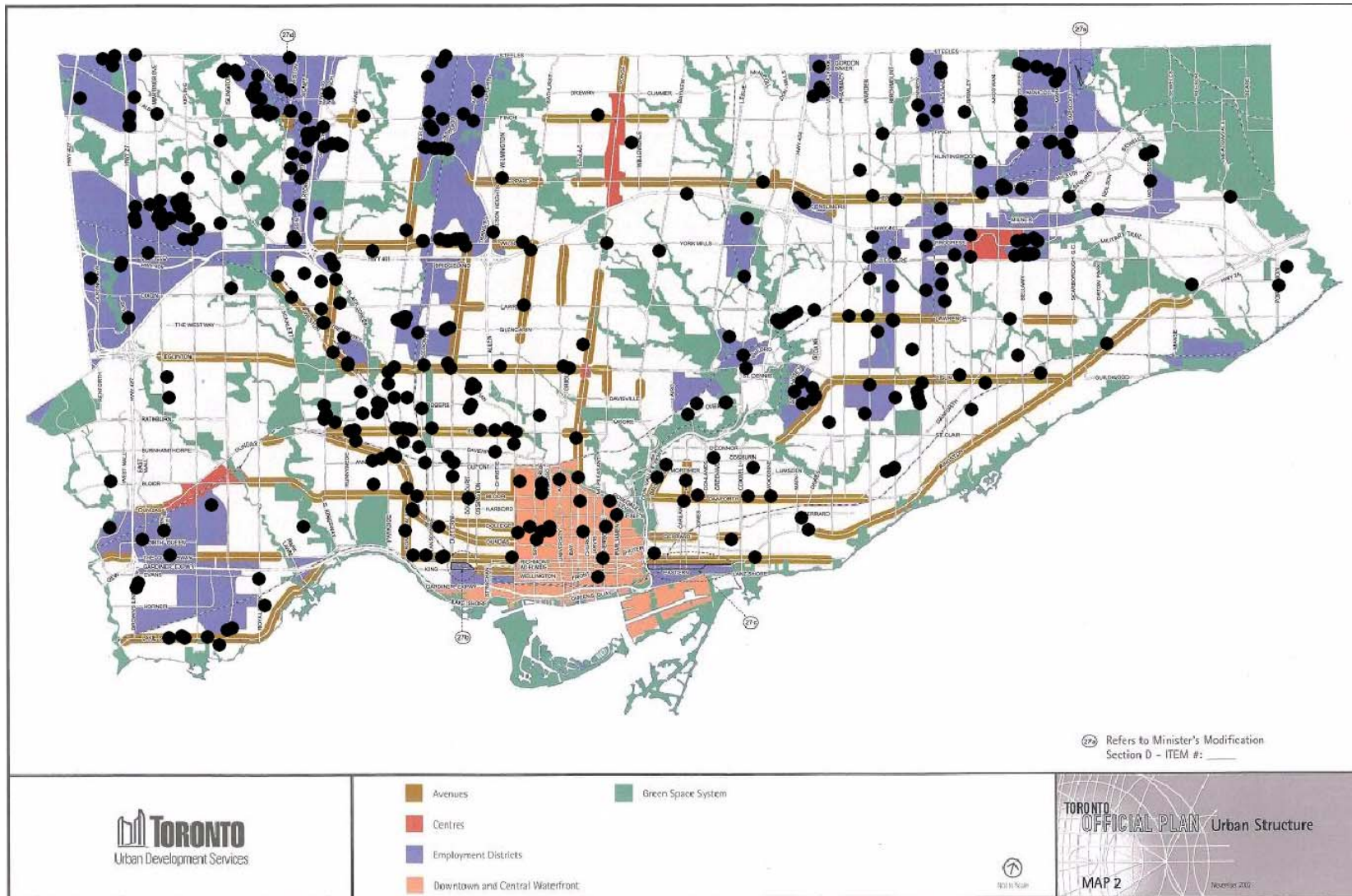
disadvantages to this locating practice, such as the loss of prime industrial land and potential restrictions on the types of industry allowable, particularly if the place of worship runs a daycare or nursery. These issues are discussed more fully in other studies, such as the O'Connor/Bermondsey Business Area Study<sup>9</sup>.

While planning appropriate locations for places of worship is not the role of the parking standards, there is no doubt that a site's location influences its access to transit as well as its walking and cycling conditions, which influence parking demand. Consistent with the proposed commercial parking standards, place of worship parking requirements should be sensitive to site location.

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<sup>9</sup> O'Connor/Bermondsey Business Area Study and Interim Control By-law – Final Report, Submitted to Planning and Growth Management Committee March 25, 2008, Ref #pg08002.

Exhibit 2-5: Location of New Places of Worship, 1995-2005



Source: 2005 Toronto Employment Survey. This map only considers facilities still operating in 2005

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## 2.3 Design and Use of Places of Worship

### 2.3.1 ORGANIZATION OF SPACE AND CAPACITY

Specifying parking standards for places of worship is complex because they often consist of multiple uses, which vary by faith group. Exhibit 2-6 provides a summary of the organization of space for six major faith groups.

**Exhibit 2-6: Summary of Organization of Space**

	Buddhism	Christianity	Hinduism	Islam	Sikhism	Judaism
Seating arrangements in worship halls	Mats/cushions	Pews or Chairs	On carpet (no seating)	On carpet (no seating)	On carpet (no seating)	Pews/Chairs
Religious & accessory features common to all religions	Worship hall, offices, meeting rooms, book/religious supply store					
Key common place of worship building features	- Religious personnel residence (common) -kitchen/dining area	- Religious personnel residence (some) -Chapel(some) -Nursery/child care facilities used during services - Kitchen(most)	-Religious personnel residence (common) -Kitchen/dining area	- Orientation of prayer hall to Makkah -Separate men's & women's prayer halls -Library -Ablution facilities	- Religious personnel residence (common) -Kitchen/dining area (langar) -Room for scriptures (sachkhand)	- Chapel (some) - Nursery/Child Care facilities used during service - kitchen
Special uses	Memorial hall/tower (urn storage)			Burial preparation room		- Ritual bath (some) - multi-purpose hall
Common auxiliary uses	-Multi-purpose hall -Retreat facilities	Multi-purpose hall	-Multi-purpose hall -Proposed senior's housing	Multi-purpose hall	Multi-purpose hall(s)	- Multipurpose hall
Special features	Restaurant, exhibition hall, proposed museum, indoor and outdoor recreation facilities, computer rooms					

Source: Hoernig, J. 2006. *Worship in the Suburbs: The Development Experience of Recent Immigrant Religious Communities*, University of Waterloo, PhD Thesis in Planning.

Most places of worship typically have secondary or auxiliary uses including religious personnel residence and other services. In addition, Buddhism, Hinduism, Islam and Sikhism do not use “seating” in their worship areas. This is important to note, since many existing place of worship parking standards are specified in terms of seats in the sanctuary (e.g., Downtown Toronto and Etobicoke).

Whether parking standards are specified in terms of seats or GFA or another measurement basis, the goal is typically to use some measure that relates to the person capacity of the place of worship or the worship space. However, determining the capacity of a place of worship is complicated due to:

- The flexibility in total seating in the main worship area;
- The flexibility in the area used to accommodate the seating; and
- Differences among worship groups as to where men, women, and children worship<sup>10</sup>.

<sup>10</sup> Macaulay Shiomi Howson Ltd., Town of Markham Places of Worship Study, Background Issues & Options Report, 2002.

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All these factors make the calculation of seating or person capacity subjective. Ease of application is often why a GFA based standard is preferred, even if it is less directly reflective of actual capacity. However, a simple example below illustrates the shortcomings of a GFA-based approach.

The Ontario Building Code defines a similar way to measure capacity or “assembly occupancy”, as “the occupancy or the use of a building, or part thereof, by a gathering of persons for civic, political, travel, religious, social, educational, recreational or like purposes, or for the consumption of food or drink”. Assembly occupancy is determined as:

1. The number of fixed seats, plus
2. 0.75 m<sup>2</sup> per person for space with non-fixed seats or stages for theatrical performances, plus
3. 0.4 m<sup>2</sup> per person for standing space, plus
4. 1.85 m<sup>2</sup> per person for classrooms and lounges.

Actual building statistics from the St. George Church in North York illustrates the difference between the GFA approach and the occupancy approach. The St. George Church has a fixed seating capacity of 375 within a 442m<sup>2</sup> sanctuary. Therefore, under the building code, for the sanctuary space, the capacity would simply be 375 persons. However, if this worship space was converted into a Hindu Temple with no fixed seating, the assembly occupancy of the sanctuary spaces would be 590 (i.e. 442 m<sup>2</sup>/0.75 m<sup>2</sup> per person). A purely GFA-based parking requirement would not be sensitive to this change despite the 57% increase in occupancy. On the other hand, should a parking standard be sensitive to relatively minor structural changes to the interior of a building, such as the removal of fixed seating?

Further complicating the capacity calculation is the difference between regular capacity and capacity required for special services. Based on a survey of 47 places of worship, a study in the Town of Markham found that 50% of congregations sometimes accommodate additional persons through the addition of non-fixed seating, standing room, use of additional space in the building besides the main worship area, or through additional services. This raises the question of whether the parking standard for places of worship should be based on solely the worship space or consider additional spaces in the building, which may be sometimes used by worshippers.

While many places of worship generate a high parking demand several times of year, based on the objectives of the parking standards to balance the need for land- and cost-efficient development and avoid regular oversupply of parking, it is proposed that the parking standards be based on regular capacity/occupancy rather than infrequent peaks.

#### Worship Space vs. Secondary and Auxiliary Uses

The discussion above deals with the challenges of determining the capacity of the worship space, assuming that the worship space is the peak parking demand generator. However, this is not necessarily the case. Some places of worship contain large banquet facilities, for example, that may generate higher parking demands than the worship service. For example, the 1987 Mayor’s Task Force on Places of Worship in the former City of North York found little correlation between size of the facility and the size of the main worship space. They found that the proportion of the main worship area to the total area varied from 16% to 40%. This resulted in the recommendation that the parking standard should consider other areas in addition to the worship area that also generate parking demand.

Through several parking surveys of places of worship, the former City of North York has collected useful data on parking demand at these facilities. Staff in the Planning and Transportation

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Departments of the former City of North York undertook a parking survey of places of worship across North York in June 1993. Parking accumulation in the vicinity of each place of worship was collected during the time of the peak weekly religious service.

2.3.2 PEAK WORSHIP TIMES

Peak times for worship and activity are also of interest when considering how parking demand and traffic generated by a place of worship affects the surrounding area. A summary of the peak hour times for worship and activity at places of worship is provided in Exhibit 2-7 for reference. From a parking perspective, the most challenging peak worship period to accommodate is Friday afternoon for Mosques. This peak corresponds with regular business hours, when there is typically less potential to make use of off-site parking, such as on-street spaces. Indeed many places of worship have little parking on-site and rely on availability of off-site parking either on-street or at nearby schools or commercial uses to accommodate worshippers. Such supplies of parking are typically more heavily occupied on Friday afternoon as compared to Saturday or Sunday.

**Exhibit 2-7: Summary of Peak Hour Times for Worship and Activity**

	Monday			Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday		
	M	A	E	M	A	E	M	A	E	M	A	E	M	A	E	M	A	E	M	A	E
Sikh	X		X	X		X	X		X	X		X	X		X	P	P	P	P	P	P
Buddhist (e.g. Theravada)			X			X			X			X			X			X		P	P
Hindu*	X		X	X		X	X		X	X		X	X		X	P	P	P	P	P	P
Muslim (e.g. Sunni)	X	X	X	X	X	X	X	X	X	X	X	X	X	P	X	X	X	X	X	X	X
Judaism	X		X	X		X	X		X	X		X	X		X	P	P	X	X	P	P
Christian (e.g. Protestant)						X			X			X			X			X	P	P	

M= morning, A=afternoon. E=evening, P=peak attendance period, X= typical activity pattern

\* Considerable variation occurs from week to week and from mandir to mandir, depending upon the deities venerated by the mandir. Both festival and puja schedules fluctuate considerably and many mandirs have activities throughout many weeks of the year.

Source: Hoernig, J. 2006. Worship in the Suburbs: The Development Experience of Recent Immigrant Religious Communities, University of Waterloo, PhD Thesis in Planning, p133.

### 3. EXISTING PARKING STANDARDS

This section overviews existing parking requirements for places of worship. Exhibit 3-1 summarizes parking requirements for places of worship in the former municipalities of Toronto. As shown, the parking requirements vary significantly between each former municipality both in terms of amount of parking required and how the standard is specified. The former City of Toronto’s requirement is based on capacity. Requirements in Downtown Toronto and Etobicoke are based on seats, and requirements in North York, Scarborough, East York and York are based on gross floor area. Downtown Toronto is the only area to specify a maximum standard.

Since it is the most unique, North York’s standard bears further discussion. The North York standard attempts to differentiate whether worship or auxiliary uses are the key determinant of parking demand. As discussed earlier, some places of worship provide a range of accessory uses that may create more parking demand than the worship space or substantially add to the worship use parking demand. The North York standard is based upon the results of the 1987 Places of Worship Study. The rate of 21.3 spaces per 100 square metres worship area is equivalent to one parking space for every five seats<sup>11</sup>, while the 4.8 spaces per 100 square metres GFA is an approximate average of the parking requirements for recreational, banquet hall, office and private club uses contained within the North York Zoning By-Laws<sup>12</sup>.

**Exhibit 3-1: Comparison of Toronto Places of Worship Parking Standards**

Use Category	City of Toronto	City of Toronto Downtown	East York	Etobicoke	North York	Scarborough	York
Place of Worship	1 per 40 persons capacity <sup>(1)</sup>	3 per 40 seats (min) <sup>(2)</sup>  1 per 5 seats (max)	13.3 per 100 m <sup>2</sup> GFA	1 per 5 persons capacity of the main assembly area <sup>(3)</sup>	greater of 21.3 per 100 m <sup>2</sup> worship area or 4.8 per 100 m <sup>2</sup> GFA	7.7 per 100 m <sup>2</sup> GFA	10.5 per 100 m <sup>2</sup> GFA
Accessory Meeting Room/Hall							5.88 per 100 m <sup>2</sup> GFA <sup>(4)</sup>

Note: Space requirements are per 100m<sup>2</sup> gross floor area unless otherwise stated.  
 (1) 1 space per 40 persons of normal capacity attendance in a R1 or R1S district. There are no requirements if the place of worship is located in other residential or commercial districts.  
 (2) The requirement can be met by a parking facility on the lot or within 300m of the lot.  
 (3) Where a banquet hall, bingo hall, church hall, or other accessory use, on the same site, can accommodate more people than the main assembly area, the parking requirements for such uses shall apply instead.  
 (4) Meeting room/hall accessory to and on the same lot as a place of worship but excluding rooms primarily devoted to religious instruction for children.

For the purpose of comparison, these standards are applied to St. George’s Church in North York (Exhibit 3-2). The parking standards in each former municipality require different amounts of parking, ranging from 10 stalls in the City of Toronto to 322 stalls in East York. In this example, the worship area only accounts for approximately one fifth of the total floor area. As a result, the standards that are specified by worship space seats or capacity require the least amount of parking, while the standards based on GFA of the entire building require the most of amount of parking. The inconsistency among the standards speaks to differences in approaches regarding how the parking standard should be specified.

<sup>11</sup> This assumes each seat requires approximately 0.95 m<sup>2</sup> of worship area.

<sup>12</sup> O’Connor/Bermondsey Business Areas Study and Interim Control By-Law – Final Report, Staff Report, Ref# pg080022, Planning and Growth Management, City of Toronto, March 25, 2008.

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**Exhibit 3-2: Example of Parking Standards Applied to St. George’s Church**

Requirement	Required Parking Stalls at St. George’s Church (GFA = 2,415m <sup>2</sup> , Worship Area = 442m <sup>2</sup> , Sanctuary Seating Capacity = 375)						
	City of Toronto	City of Toronto Downtown	East York	Etobicoke	North York	Scarborough	York
Minimum Requirement	10	29	322 <sup>(1)</sup>	75	114	186	255
Maximum Requirement	-	75	-	-	-	-	-

(1) This is based on the Place of Assembly parking standard

A summary of place of worship parking requirements in major cities across Ontario is provided in Exhibit 3-3. As shown, parking requirements across Ontario are not uniform and vary widely both in magnitude as well as how they are specified. The main approaches involve specifying requirements based on the number of seats, worship space floor area, gross floor area, or person capacity. Others are based on the higher of two calculations. The advantages and disadvantages of each approach are compared in Exhibit 3-4.

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**Exhibit 3-3: Place of Worship Parking Requirements for Ontario Jurisdictions**

<b>Per Seat Rate</b>	
Downtown Toronto	1 per 13.3 seats (min)    1 per 5 seats (max)
Etobicoke	1 per 5 seats
Ajax	1 per 5 seats
<b>Per Seat OR GFA</b>	(higher of)
Markham	1 per 6 seats    5.7 per 100m <sup>2</sup> GFA
Cobourg	1 per 6 seats    11.1 per 100m <sup>2</sup> GFA
Guelph	1 per 5 seats    10 per 100m <sup>2</sup> GFA
Stouffville	1 per 5 seats    10 per 100m <sup>2</sup> GFA
Richmond Hill	1 per 2.4 seats    6.4 per 100m <sup>2</sup> GFA
<b>Worship Area OR GFA</b>	(higher of)
North York	21.3 per 100m <sup>2</sup> worship area    4.8 per 100m <sup>2</sup> GFA
<b>GFA Rate</b>	
Scarborough	7.7 per 100m <sup>2</sup> GFA
East York	13.3 per 100m <sup>2</sup> GFA
York	10.5 per 100m <sup>2</sup> GFA
Waterloo	8 per 100m <sup>2</sup> GFA
Burlington	6 per 100m <sup>2</sup> GFA
Milton	16.7 per 100m <sup>2</sup> GFA
Vaughan	11 per 100m <sup>2</sup> GFA
<b>Per Seat or Worship Area</b>	(higher of)
Oshawa	1 per 6 seats    16.7 per 100m <sup>2</sup> of worship area
Mississauga	1 per 4.5 seats    27.1 spaces per 100m <sup>2</sup> of worship area
Brampton	1 per 4 seats    11.9 per 100m <sup>2</sup> of worship area
<b>Person Capacity</b>	
Toronto (former city)	1 per 40 persons
Brantford	1 per 5 persons
Hamilton	1 per 6 persons
Pickering	1 per 4 persons

Source: Macaulay Shiomi Howson Ltd., Town of Markham Places of Worship Study, Background Issues & Options Report, 2002.

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**Exhibit 3-4: Options for Measurement Basis of Place of Worship Parking Standards**

Measurement Basis	Advantages	Disadvantages
Per Seat	<ul style="list-style-type: none"> <li>• Captures worship space capacity in facilities with only fixed seating</li> <li>• Easy to apply in facilities with fixed seating</li> </ul>	<ul style="list-style-type: none"> <li>• Cannot be applied where there is no fixed seating</li> <li>• Seating can change over time</li> <li>• Does not account for secondary/auxiliary uses</li> </ul>
Gross Floor Area	<ul style="list-style-type: none"> <li>• Most easy to apply to all places of worship with and without fixed seating</li> <li>• Accounts for all space, not just worship space</li> </ul>	<ul style="list-style-type: none"> <li>• Does not distinguish between varying uses in a facility</li> <li>• May lead to parking oversupply if assumes that all space in the facility is used simultaneously</li> </ul>
Floor Area of the Worship Space	<ul style="list-style-type: none"> <li>• Most easy to apply to all places of worship with and without fixed seating</li> <li>• Focuses on primary demand generating space</li> </ul>	<ul style="list-style-type: none"> <li>• Does not account for secondary/auxiliary uses</li> <li>• Person capacity of the worship space may vary across facilities with the same GFA (e.g. worship spaces without fixed seating generally have higher person capacity)</li> <li>• Size/capacity of the worship spaces can often be expanded with additional services, video links to the main worship area from another room, etc.</li> </ul>
Person Capacity	<ul style="list-style-type: none"> <li>• Ease of application depends on capacity definition. All required information for calculation may not be available at time of zoning approval.</li> <li>• Accounts for all space, not just worship space</li> </ul>	<ul style="list-style-type: none"> <li>• Does not distinguish between varying uses in a facility</li> <li>• May lead to parking oversupply if assumes that all space in the facility is used to maximum at once</li> <li>• Varies based on amount of fixed seating</li> </ul>
Person Capacity of the Worship Space	<ul style="list-style-type: none"> <li>• Ease of application depends on capacity definition. All required information for calculation may not be available at time of zoning approval.</li> <li>• Focuses on primary demand generating space</li> </ul>	<ul style="list-style-type: none"> <li>• Does not account for secondary/auxiliary uses</li> <li>• Size/capacity of the worship spaces can often be expanded with additional services, video links to the main worship area from another room, etc.</li> <li>• Varies based on amount of fixed seating</li> </ul>

The assessment in Exhibit 3-4 identifies several key points for designing a robust parking standard for places of worship:

- The standard should specifically account for the parking demand generated by the worship space, which is typically the main parking generator;
- The standard should be applicable to worship spaces with and without fixed seating;
- The ease of calculation of a GFA-based standard needs to be balanced against the better accuracy provided by a capacity-based standard; and,
- The parking standard should consider parking demand generated by secondary and auxiliary uses.

**Based on these points, the proposed Toronto place of worship parking standard will consist of two minimum requirements based on the floor area of the worship space: one for fixed seating and for spaces without fixed seating. Maximum parking standards will be specified where appropriate (e.g., Downtown and Centres). Parking required for auxiliary uses (e.g., day care) should be assessed separately. The final parking requirement for the place of worship should be the greater of the worship space and auxiliary space requirements.**

## 4. PARKING DEMAND

It is challenging to assess parking demand at places of worship at an aggregate level because it varies based on factors specific to the faith group, site, and individual congregation. Key issues to consider in assessing parking demand include:

- **Variations between faith groups:** Worship schedules, layouts of space, use of space (e.g. fixed seating vs. no seating) vary by faith and denomination
- **Trend towards larger facilities:** On average, places of worship are becoming bigger, serving more widely dispersed congregations and running activities on a daily basis
- **Non-worship uses:** Many places of worship contain non-worship uses (e.g. banquet halls, daycares) which generate parking demand at non-worship hours
- **Seasonal peaks:** High seasonal peak parking demands, which may have double to five times the attendees as regular services
- **Location:** Different parking and land use issues arise based on places of worship located in residential areas vs. employment areas
- **Shared parking:** There is often a high potential for shared parking with nearby schools or other uses (e.g. shopping malls)
- **Transportation Demand Management (TDM):** Transit service, shuttle services, cost of parking all influence parking demand

This section considers results from parking surveys conducted across the City and surrounding areas. However, given the wide variation in survey results, the primary analysis deals with a 'first principles' calculation of place of worship parking demand under varying conditions (e.g., attendance levels, auto mode split, etc.). This first principles analysis forms the basis for the proposed standards presented in the following section.

### 4.1 Results from Other Parking Surveys

#### 4.1.1 NORTH YORK PARKING SURVEY

Through several parking surveys of places of worship, the former City of North York has collected useful data on parking demand at these facilities. Staff in the Planning and Transportation Departments of the former City of North York undertook a parking survey of places of worship across North York in June 1993. The survey sites included a variety of churches and several synagogues. Parking accumulation in the vicinity of each place of worship was collected during the time of the peak weekly religious service.

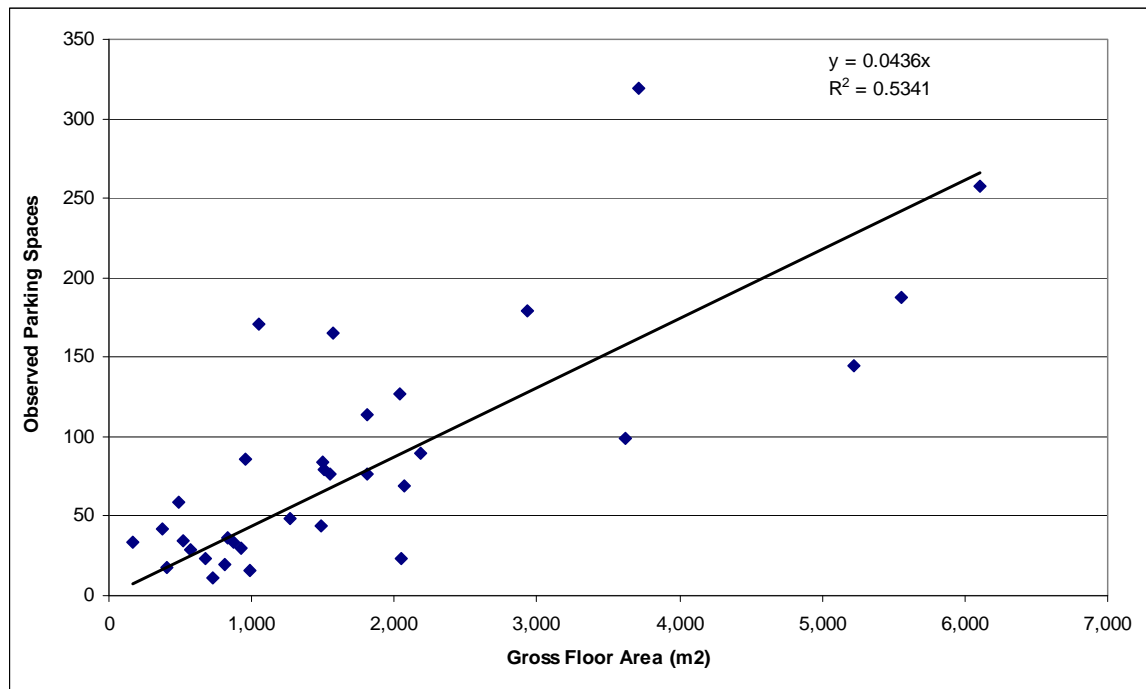
Results are presented in Exhibit 4-1 and Exhibit 4-2. As shown there was quite a range in observed peak parking demand ratios. The median parking demand was 4.4 spaces per 100 m<sup>2</sup> GFA, or about 1 space per five seats. The 85<sup>th</sup> percentile parking demand was 9.1 spaces per 100 m<sup>2</sup> GFA, or about 1 space per 2.9 seats. Data on worship space floor area was not provided, preventing an analysis of parking demand per square metre of worship area.

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**Exhibit 4-1: North York Parking Survey Summary Statistics**

	Parking Occupancy Ratio (Spaces/100m <sup>2</sup> GFA)	Seats per Occupied Parking Space
Range	(1.1 - 20.2)	(25 - 1.5)
Median	4.4	5.0
85th Percentile	9.1	2.9

**Exhibit 4-2: Parking Occupancy vs. Gross Floor Area, North York Survey**



Source: Places of Worship Parking Survey, North York, 1993

**4.1.2 BRAMPTON PARKING SURVEY**

The City of Brampton conducted a parking survey of 10 places of worship in 2000. This survey resulted in a recommended parking ratio of 1 spaces per four seats, which was based on the 85<sup>th</sup> percentile parking demand.

**4.1.3 PARKING STUDIES IN THE CITY OF TORONTO**

Parking studies for 13 places of worship across the City of Toronto were assembled and reviewed as part of this study (see Appendix A for a list of the studies). This list includes churches of a variety of denominations as well as several mosques ranging from 391 m<sup>2</sup> to 5,900 m<sup>2</sup> in size. As expected, parking demand varied widely across the facilities given varying attendance levels, auto

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mode splits and auto occupancies<sup>13</sup>. Results from these studies regarding auto mode split and auto occupancy are used to determine values needed for the first principles analysis below.

## 4.2 First Principles Calculation

The first principles calculation of parking demand at places of worship provides insight on the key factors influencing demand. As shown in the calculation below, parking demand at a place of worship depends on the capacity of the worship space, a factor to account for the fact that facilities are not always at 100 percent capacity and that some people may park off-site, the percent of people arriving by car, and the average number of passengers per vehicle.

Parking Demand	=	Person Capacity	X	Facility/Parking Occupancy Factor <sup>(1)</sup>	X	Auto Mode Split	/	Auto Occupancy
(spaces)		(people)		(%)		(%)		(passengers/vehicle)

<sup>(1)</sup> Factor to account for attendance levels as well as the potential for off-site parking

### 4.2.1 ESTIMATING KEY VARIABLES

Since person capacity will vary for each place of worship, removing this variable from the equation yields a calculation of parking demand per person capacity. By assuming a particular person density (persons/m<sup>2</sup>), a floor area based parking ratio (e.g. parking spaces/100 m<sup>2</sup>) can be determined. Estimates for each variable are discussed below.

#### Person Capacity

The person capacity of the worship area can be estimated as:

- Where there are fixed seats, by the number of fixed seats;
- Where there are benches, by 0.5 m bench space per person; and
- Where there are spaces with no fixed seats or benches, by 0.75 m<sup>2</sup> per person as used by the Ontario Building Code for space with non-fixed seats.

As discussed earlier, the proposed place of worship parking standard will consist of two minimum requirements based on the floor area of the worship space: one for worship spaces with fixed seating and one for spaces without fixed seating. While 0.75 m<sup>2</sup> per person can be used as the person density for space with non-fixed seats, a person density for spaces with fixed seating needs to be determined.

The North York standard of 21.3 spaces/100 m<sup>2</sup> worship area is stated in the 1987 By-law to be equivalent to 1 space per five seats, corresponding to assumed person density of 0.94 m<sup>2</sup> per seat. The density of fixed seating is shown for seven churches of various sizes and denominations in Exhibit 4-3, which shows an average of 1.1 m<sup>2</sup> of floor area in the worship space per seat. This value compares well with the person density assumed in the North York standard. While this value will vary somewhat between facilities given architectural differences, such as the layout of aisles and other non-seating areas, 1.1 m<sup>2</sup> of floor area per fixed seat is adopted as the fixed seating density for the purposes of developing a fixed seating parking standard.

<sup>13</sup> The parking demand ratio during the weekly peak service ranged from 1.9 to 16.9 parking spaces/100 m<sup>2</sup> GFA and 5.4 to 48.2 parking spaces/100 m<sup>2</sup> worship area.

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Some municipalities seeking to determine a parking standard based on the GFA of the entire building have attempted to determine typical values for seats per square metre of gross floor area. For example, a 1996 parking study conducted in the Town of Markham estimated a seating density of 1 seat per 3.25 m<sup>2</sup> GFA based on a survey of 20 places of worship. This approach is not recommended given the wide variation in gross floor area per seat, as shown in Exhibit 4-3. Even though the space per seat in the worship area is relatively consistent, the ratio between the size of the worship space and the entire facility varies widely between different places of worship. This suggests that a standard that specifically accounts for worship area space is appropriate.

**Exhibit 4-3: Fixed Seating Density for Selected Places of Worship**

Place of Worship	Gross Floor Area (m <sup>2</sup> )	Worship Space Floor Area (m <sup>2</sup> )	Seats in Main Worship Area	Worship Space Floor Area per Seat (m <sup>2</sup> /seat)	Gross Floor Area per Seat (m <sup>2</sup> /seat)
Merciful Redeemer Church, Mississauga	2,399	943	940	1.0	2.6
Saviour of the World Church, Mississauga	2,327	622	600	1.0	3.9
St.Thomas the Apostle Church, Waterdown	3,386	1,096	1,000	1.1	3.4
St.Padre Pio Church, Kleinburg	3,716	1,129	1,000	1.1	3.7
St.Joseph Church, Fergus	1,672	622	500	1.2	3.3
Richmond Hill Community Church, Richmond Hill	8,175	1,682	1,800	0.9	4.5
St. George's Church, Toronto	2,415	442	305	1.4	7.9
<b>Average</b>	<b>3,442</b>	<b>934</b>	<b>878</b>	<b>1.1</b>	<b>4.2</b>

Source: Young + Wright / IBI Group Architects

**Facility/Parking Occupancy Factor**

As discussed, while many places of worship generate a high parking demand several times of year, based on the objectives of the parking standards to balance the need for land- and cost-efficient development and avoid regular oversupply of parking, it is proposed that the parking standards be based on regular capacity/occupancy rather than infrequent peaks. While some places of worship are fully occupied on a regular basis, data from nearby municipalities shows that worship spaces are not typically at full capacity. For example, the 85<sup>th</sup> percentile demand based on surveys conducted in Brampton was estimated at 1 occupied parking space per four seats. This indicates that 85 percent of facilities had a peak parking demand of less than 1 parking space per 4 seats of worship, or that less than 62.5% of the theoretical maximum parking demand was reached (assuming 2.5 passengers per vehicle and 4 seats per space)<sup>14</sup>. A 1996 place of worship parking study in Markham also estimated a 62.5% attendance level. However, a more recent 2002 study determined this attendance level to be too low, finding typical attendance levels to be approximately 81%<sup>15</sup>.

Based on these results and the desire to be conservative the attendance level for the purposes of establishing a place of worship parking requirements is set at 80%. The assumption is that at a typical peak service, 80% of the capacity of the worship space will be occupied. This is expected to be higher than the regular attendance at most places of worship. As discussed later, this factor is also used to account for the potential for off-site parking.

<sup>14</sup> As reported in Macaulay Shiomi Howson Ltd., 2002, Town of Markham Places of Worship Study, Background Issues and Options Report  
<sup>15</sup> Ibid.

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Auto Mode Split

The proportion of attendees arriving by private vehicle depends on many factors, such as where attendees are coming from, quality of transit service to the site (including shuttle services provided by the institution), and whether there is convenient and free parking available. For example, a place of worship study in Markham determined that 89% of attendees typically arrive by car with an average of 2.5 passengers per vehicle. Places of worship in highly transit accessible areas, such as Downtown Toronto will typically have much lower rates of auto use; however, this is also highly dependent on the distribution of the congregation served, which may be based primarily in the downtown or spread out throughout Toronto and surrounding areas. In addition, for most religious denominations, peak weekly worship services are on the weekend, when there is typically reduced transit service.

Exhibit 4-4 shows surveyed auto mode split and auto occupancy for a range of places of worship across the City and surrounding areas. The range in auto mode split is very large from 22% at the Jami Mosque in East York, where the majority of the attendees walk from nearby, to 94% at the Mosque in the Scarborough Recreation Centre where the majority of the attendees drive without any passengers. The effect of auto mode split on parking demand is assessed further in Exhibit 4-4 and Exhibit 4-5 below.

**Exhibit 4-4: Fixed Seating Density**

Place of Worship	Location	Auto Mode split	Auto Occupancy
Seicho-No-Ie Church	East York	66%	1.9
Madina Mosque	Toronto	23%	1.7
Jami Mosque	East York	22%	1.9
Kingdom Covenant	Mississauga	93%	2.2
Holy Ghost Banner Church of God	North York	70%	2.9
Grace Restoration Ministries	North York	59%	2.3
Spring Garden Baptist Church	North York	84%	2.4
St. George's Church	North York	n/a	3.0
Scarborough Recreation Centre Mosque	Scarborough	94%	1.4

Source: 2006 Transportation Tomorrow Survey

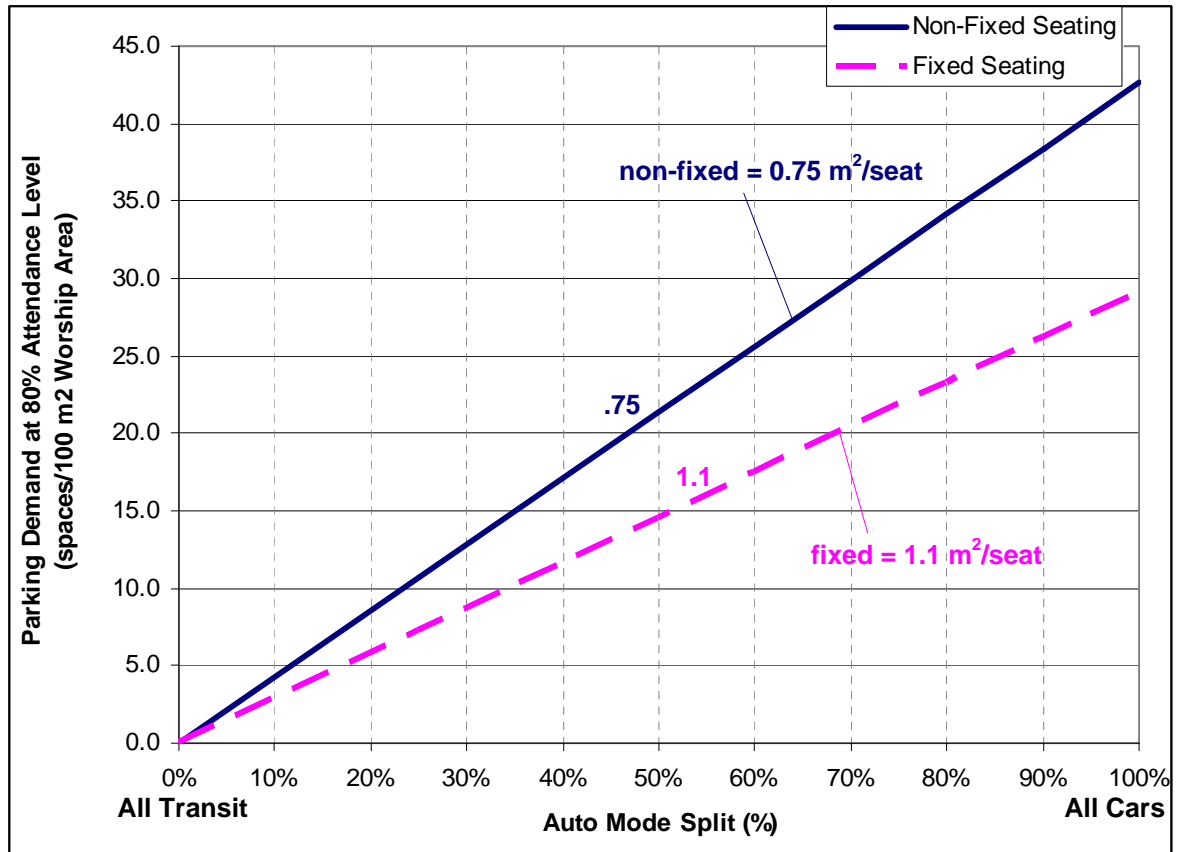
Auto Occupancy

Auto occupancy for trips to places of worship tends to be higher than for most other trips since families travel together. The number of passengers per vehicle typically ranges from 1.5 to 3. Most studies use the value of 2.5 passengers per vehicle, which is also adopted for first principles calculations in this study.

4.2.2 PARKING DEMAND ESTIMATES

Exhibit 4-5 illustrates how the parking demand ratio increases with increasing auto mode split for both fixed and non-fixed seating conditions, assuming 80% attendance level and 2.5 passengers per vehicle. The parking demand ratio for non-fixed seating is 47% higher than for fixed seating given the greater number of people that can be accommodated in a worship space without fixed seating. Based on this graph the North York standard of 21.3 spaces/100 m<sup>2</sup> of worship area corresponds to less than 50% auto mode split for non-fixed seating and 70% auto mode split for fixed seating.

**Exhibit 4-5: First Principles Parking Demand Assessment at 80% Attendance Level**

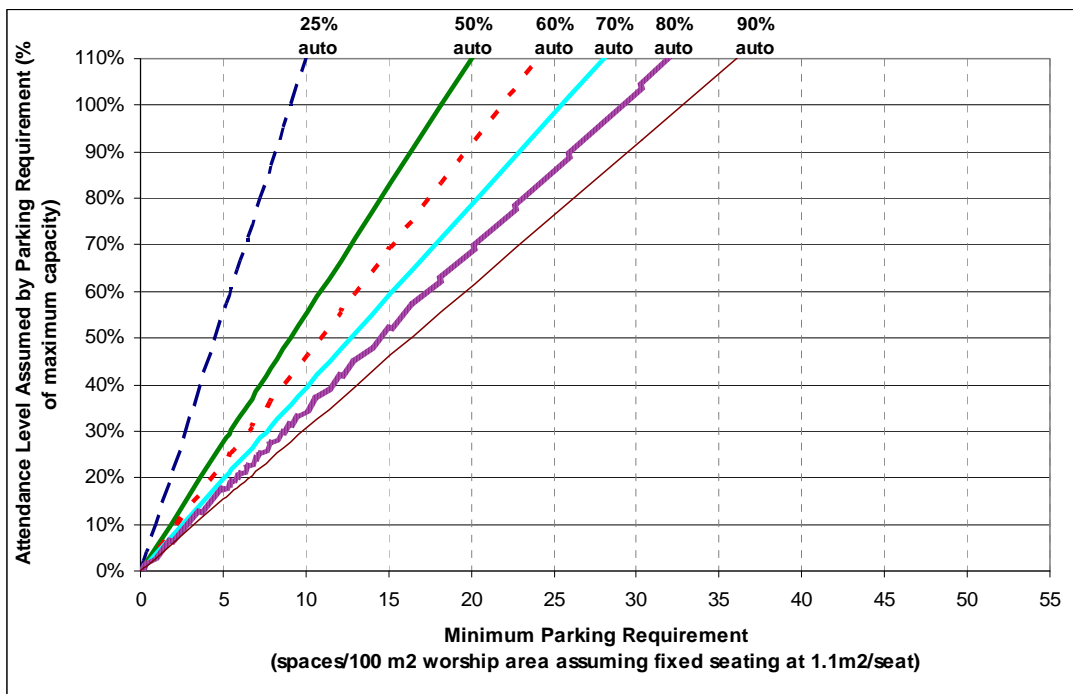


Note: Auto occupancy = 2.5 passengers/vehicle

The first principles approach can also be used to consider the parking demand associated with other attendance levels, to assess places of worship which have lower or higher attendance during a typical peak service or where it is assumed that a portion of parking for attendees can be met off-site. Exhibit 4-6 and Exhibit 4-7 illustrate how a parking requirement corresponds to a certain attendance level for varying auto mode splits, for fixed and non-fixed seating, respectively.

For example, in Downtown Toronto, it may be appropriate to assume that a significant proportion of peak parking demand can be met off-site, either on-street or at nearby shared lots. Assuming an auto mode split of 50%, a parking requirement of 10 spaces per 100 square metres worship area would meet parking demand for approximately 55% of maximum capacity. If a typical peak service has 80% attendance, then about a third  $(1-0.55/0.80)$  of the parking demand would have to find parking off-site. These issues will be considered further in the proposed parking standards, discussed in Section 5.

**Exhibit 4-6: First Principles Parking Demand Assessment, Fixed Seating**



Note: Auto occupancy = 2.5 passengers/vehicle

**Exhibit 4-7: First Principles Parking Demand Assessment, No Fixed Seating**



Note: Auto occupancy = 2.5 passengers/vehicle

## 5. PROPOSED PARKING STANDARDS

### 5.1 Geographic Categories

Similar to the proposed commercial parking standards, the place of worship parking standards will be structured according to the following four geographic categories outlined in Exhibit 5-1.

**Exhibit 5-1: Geographical Stratification of Proposed Parking Standards**

Urban Structure Category	Unique Minimum Parking Standards	Unique Maximum Parking Standards
Downtown and Central Waterfront	YES Central Waterfront standards subject to adjustment factors in Secondary Plan	YES Central Waterfront standards subject to adjustment factors in Secondary Plan
Centres (Scarborough, North York, Etobicoke and Yonge-Eglinton Centres)	YES Similar across all Centres	YES Similar across all Centres
Avenues	YES Similar across all Avenues	YES Similar across all Avenues
Rest of City	YES	NO No maximum standards

Given the high variability in observed parking demand, and to ensure consistency with policy objectives, the proposed place of worship parking standards are developed using a first principles analysis. The two key variables in determining an appropriate minimum and maximum standard for each geographic category include the auto mode split (including auto occupancy rate) and the facility/parking occupancy level (i.e., the occupancy level to which the parking lot will be sized). It is proposed that both of these variables will vary by geographic category based on the range of transportation choices available and the potential for other parking sources (e.g., on-street parking or off-street parking on a different site).

Compared to commuting behaviour, auto and ridesharing travel to places of worship is expected to be somewhat more common given that weekends typically have less traffic, lower parking costs, and less frequent transit service, particularly on Sundays. In addition, travel behaviour to individual places of worship is very site specific based on the demographics of the congregation, whether the congregation largely lives nearby or far away, parking cost and availability, transit and pedestrian connections to the site, and other transportation services that may be offered by the particular place of worship (e.g., shuttles to nearest subway station, ridematching services, etc.). For the parking studies reviewed, for example, observed auto mode split varied widely from 23% at Jami Mosque in East York to 94% at the Mosque operating in the Scarborough Recreation Centre.

To provide additional insight on the variation in auto travel to places of worship, Exhibit 5-2 presents the auto mode split by the existing parking standards across the City. This calculation assumes 2.5 occupants/vehicle, 1.1 m<sup>2</sup> worship area/person capacity (i.e., fixed seating), and a facility occupancy of 80%. For GFA based standards in East York, Scarborough and York, worship area is assumed to account for 30% of total GFA. The auto mode split implied by the existing standards varies from 8% in the former City of Toronto to 152% in the former municipality of East York. Clearly, there is a need to bring some consistency to the parking standards.

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**Exhibit 5-2: Auto Mode Split Implied by Existing Place of Worship Parking Standards**

Former Municipality	Existing Parking Standard		Implied Auto Mode Split	
City of Toronto	1 per 40 persons capacity <sup>(1)</sup>		8%	-
City of Toronto Downtown	-3 per 40 seats (min)	-1 per 5 seats (max)	23% (min)	63% (max)
East York	13.3 spaces/100m <sup>2</sup> GFA <sup>(2)</sup>		152%	-
Etobicoke	1 per 5 persons capacity of the main assembly area <sup>(3)</sup>		63%	-
North York	greater of 21.3 spaces/100m <sup>2</sup> worship area or 4.7 spaces/100m <sup>2</sup> GFA		73%	-
Scarborough	7.7 spaces/100m <sup>2</sup> GFA		88%	-
York	10.5 spaces/100m <sup>2</sup> GFA		121%	-

Note: Calculation assumes 2.5 occupants/vehicle, 1.1 m<sup>2</sup> worship area/person capacity, and facility occupancy of 80%. For GFA based standards, worship area is assumed to account for 30% of total GFA.

(1) 1 space per 40 persons of normal capacity attendance in a R1 or R1S district. There are no requirements if the place of worship is located in other residential or commercial districts.

(2) The requirement can be met by a parking facility on the lot or within 300m of the lot.

(3) Where a banquet hall, bingo hall, church hall, or other accessory use, on the same site, can accommodate more people than the main assembly area, the parking requirements for such uses shall apply instead.

## 5.2 Proposed Parking Standards for Places of Worship

For the purpose of developing parking standards for different urban geographies in the City, the following travel behaviour is assumed:

- Downtown and Central Waterfront, 50% auto mode split;
- Centres, 70% auto mode split;
- Avenues, 70% auto mode split; and
- Rest of City, 80% auto mode split.

2006 Transportation Tomorrow Survey data was used to estimate auto mode splits by analyzing home-based discretionary trips for Toronto’s 16 Survey Area Planning Districts. In addition, the facility/parking occupancy factor is reduced below 80% for the Downtown and Central Waterfront, Centres, and Avenues as discussed below.

Exhibit 5-3 presents the assumed auto mode split and facility/parking occupancy level and corresponding proposed minimum and maximum parking standards for each geographic category. Different parking standards are proposed for places of worship with and without fixed seating, reflecting the higher person capacity typical of worship spaces without fixed seating.

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**Exhibit 5-3: Base Assumptions and Proposed Parking Standards by Geographic Category**

Area	Assumptions for <u>Minimum</u> Standard		Assumptions for <u>Maximum</u> Standard		Proposed Parking Standard (spaces/100 m <sup>2</sup> GFA of Worship Area)			
	Auto Mode Split	Facility/Parking Occupancy Factor <sup>(1)</sup>	Auto Mode Split	Facility/Parking Occupancy Factor <sup>(1)</sup>	Permanent Seating		Variable Seating	
					Minimum	Maximum	Minimum	Maximum
Downtown and Central Waterfront	50%	50%	70%	70%	9.0	18.0	13.0	26.0
Centres	70%	60%	80%	80%	15.0	23.0	22.0	34.0
Avenues	70%	70%	90%	90%	18.0	29.0	26.0	43.0
Rest of City	80%	80%	-	-	23.0	-	34.0	-

Places of Worship > 2,800 m<sup>2</sup> (~30,000 ft<sup>2</sup> GFA)- Increase minimum and maximum standard (if applicable) by 10%

(1) Factor to account for attendance levels as well as the potential for off-site parking.

Exhibit 5-4 compares proposed city-wide minimum parking standards for places of worship with existing standards. Overall, the proposed standards will greatly simplify the existing parking zoning standards and increase the minimum standards in most cases.

**Exhibit 5-4: Comparison of Existing and Proposed City-Wide Minimum Parking Standards for Places of Worship**

Existing Zoning Parking By-Law	Per 100m <sup>2</sup> of GFA	Per 100 m <sup>2</sup> of Worship Area <sup>(1)</sup>	Per Seat <sup>(2)</sup>
<b>Minimum Parking Standards</b>			
City of Toronto	<i>0.7</i>	<i>2.3</i>	<b>1 per 40.0 seats</b>
City of Toronto (Downtown)	<i>2.0</i>	<i>6.8</i>	<b>1 per 13.3 seats</b>
East York	<b>13.3</b>	<i>44.3</i>	<i>1 per 2.1 seats</i>
Etobicoke	<i>5.5</i>	<i>18.2</i>	<b>1 per 5.0 seats</b>
North York	<i>6.4</i>	<i>21.3</i>	<i>1 per 4.3 seats</i>
Scarborough	<i>7.7</i>	<i>25.7</i>	<i>1 per 3.5 seats</i>
York	<b>10.5</b>	<i>35.0</i>	<i>1 per 2.6 seats</i>
<b>New City-Wide Zoning Parking By-Law</b>			
Proposed "Rest of City" Minimum Parking Standards			
Fixed Seating	<i>6.9</i>	<b>23.0</b>	<i>1 per 4.0 seats</i>
Non-fixed Seating	<i>10.2</i>	<b>34.0</b>	<i>1 per 2.7 person</i>

(1) The worship area is assumed to be 30% of the total GFA.

(2) A seat is assumed to occupy 1.10 m<sup>2</sup> of worship floor area.

Bold values represent the by-law standard. Italics represent the equivalent standard.

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The base minimum standard for the ‘Rest of City’ category is based on an auto mode split of 80% and design attendance level of 80%. As discussed, this corresponds to a typical weekly peak attendance. Auto mode splits are reduced for other ‘policy’ areas based on higher levels of transit service and walking and bicycling conditions typical of these areas. For the Downtown and Central Waterfront, Centres, and Avenues the facility/parking occupancy factor has been reduced below 80%. This has been done to reflect a much greater availability of collective public parking in these areas (e.g., on-street parking or off-street parking on a different site).

To account for the fact that large places of worship typically attract a more regional congregation who are more likely to drive, it is also proposed that the minimum and maximum parking standards be increased by 10% for facilities larger than 2,800 m<sup>2</sup> GFA (~30,000 ft<sup>2</sup> GFA). The City of North York has used 2,787 m<sup>2</sup> (30,000 ft<sup>2</sup>) as a threshold for regional places of worship<sup>16</sup>. Approximately 14% of places of worship established since 1990 are above this threshold.

5.2.1 EXAMPLE

As an example, treating the places of worship contained in Exhibit 4-3 as if they were located in the City of Toronto, applying the proposed “Rest of City” minimum parking standards would yield the parking requirements contained in Exhibit 5-5.

**Exhibit 5-5: Theoretical “Rest of City” Minimum Parking Requirements for Selected Places of Worship**

Place of Worship	Gross Floor Area (m <sup>2</sup> )	Worship Space Floor Area (m <sup>2</sup> )	Seats in Main Worship Area	“Rest of City” Minimum Parking Requirements <sup>(1)</sup>
				Per 100 m <sup>2</sup> of Worship Area
Merciful Redeemer Church, Mississauga	2,399	943	940	217
Saviour of the World Church, Mississauga	2,327	622	600	143
St.Thomas the Apostle Church, Waterdown	3,386	1,096	1,000	252
St.Padre Pio Church, Kleinburg	3,716	1,129	1,000	260
St.Joseph Church, Fergus	1,672	622	500	143
Richmond Hill Community Church, Richmond Hill	8,175	1,682	1,800	387
St. George's Church, Toronto	2,415	442	305	102
<b>Average</b>	<b>3,442</b>	<b>934</b>	<b>878</b>	<b>215</b>

Source: Data extracted from studies listed in Appendix A as well as information obtained by IBI Group from other facilities.

(1) All facilities assumed to have fixed seating.

<sup>16</sup> City of North York Places of Worship in Industrial Zones, Official Plan Amendment and Zoning By-law Amendment, 1994.

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### 5.2.2 WORSHIP AREA

The proposed parking standards are based on the floor area of the worship space. This may be difficult to define for some places of worship. A “worship area” should be defined as:

*The aggregate of those areas whether above or below established grade measured between the walls of the sanctuary, hall or meeting room(s) which a religious group, organization or denomination utilizes for the observance of its religious services, including any balcony or area which can be opened on a temporary basis to such a sanctuary, hall or meeting room(s) by the removal or opening of any walls or partitions and any choir or musicians’ area, but excluding any areas intended solely for the use of the worship group leader such as altar or pulpit areas. (Source: City of Mississauga)*

## 5.3 Summary and Other Considerations

The proposed minimum place of worship parking standards represent a key component of a robust parking regulation framework that balances a variety of transportation and community objectives. These parking standards offer reasonable parking supply ratios that will not hinder daily activities at existing places of worship while allowing for the development of new facilities. A robust standard should:

- Account for parking demand generated by primary worship space;
- Consider parking demand generated by secondary and auxiliary uses; and
- Be applicable to worship areas with and without fixed seating.

**As such, it is recommended that the minimum parking standard for the overall place of worship facility be determined as the greater of the parking required/limited by the worship space parking standard or the parking required/limited by the existing standards for auxiliary uses (i.e. schools, day-cares, etc.) in non-worship areas.**

Given the variability in parking demand generated by places of worship, there may be many site specific conditions that justify a reduction in the minimum parking requirement or even an increase in the maximum parking requirement. For example, there may locations where there are obvious opportunities for sharing parking with other nearby sites. Such arrangements should be encouraged, but reductions in the parking requirements must be justified through site specific studies and formalized agreements, where necessary. Requirements for off-site parking agreements are outlined in a previous report<sup>17</sup>.

Other measures that could also be considered as justification for parking requirement reductions include:

- Provisions for allowing tandem parking;
- Results of a parking study that shows a lower parking demand; and

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<sup>17</sup> City of Toronto. 2007. Review of the City of Toronto Zoning By-Law Parking Standards for Office, Retail and Restaurant Uses. Prepared by IBI Group.

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- Demonstrated commitment to implement TDM measures (e.g. shuttle buses and ride-matching), for large facilities in particular.

## APPENDIX A

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### LIST OF PARKING STUDIES REFERENCED

CITY OF TORONTO  
REVIEW OF THE CITY OF TORONTO ZONING BY-LAW PARKING STANDARDS FOR PLACES OF WORSHIP**List of Parking Studies****Deeper Life Christian Ministries**

Traffic Impact and Parking Study  
Marshall Macklin Monaghan Ltd., 1998.

**Grace Restoration International Ministries and Community Centre**

Parking Demand Study for Rezoning Application for 1736 Weston Road, Toronto.  
BA Group Transportation Consultants, 2007

**Holy Ghost Banner Church of God (12 Hafis Road)**

Parking and Traffic Impact Study  
Entra Consultants, 2006.

**Jami Mosque (56 Boustead Avenue)**

Islamic Foundation Mosque Study  
BA Group Transportation Consultants, 1987.

**Kingdom Covenant International**

Traffic and Parking Analyses  
IBI Group, 2005.

**Lisle Memorial Baptist Church (Relocating to 265 Eddystone Avenue)**

Parking Study  
Mark Engineering, 2007.

**Madina Mosque (1050 Danforth Avenue)**

Islamic Foundation Mosque Study  
BA Group Transportation Consultants, 1987.

**Mosque at Scarborough Recreation Centre (3600 Kingston Road)**

Islamic Foundation Mosque Study  
BA Group Transportation Consultants, 1987.

**Place of Blessing Church (The Prayer Palace)**

Parking Accumulation Analysis (only received in draft form)  
BA Group Transportation Consultants, 1988

**St. George's Church Redevelopment (5350 Yonge Street)**

Transportation Considerations  
BA Group Transportation Consultants, 2006.

**Sei-No-le Church (662 Victoria Park Avenue)**

Parking Study  
New Church at 662 Victoria Park Avenue  
BA Group Transportation Consultants, 1996

**Spring Garden Baptist Church (112 Spring Garden Avenue)**

Parking and Traffic Study  
Proposed Non Sanctuary Area Expansion of Spring Garden Baptist Church,  
BA Group Transportation Consultants, 2007

**Toronto City Church (20 Curity Avenue)**

Traffic Impact and Parking Study, Proposed Place of Worship  
Cole Engineering, 2007