

7. The City of Vaughan’s Trade Area

An evaluation of the retail market in Vaughan requires an understanding of the demand and supply factors which influence the need for new retail and service facilities. Essential to this evaluation is the delineation of the trade or market area served by the City and the determination of population and per capita income levels in that trade area.

7.1 Trade Area Defined

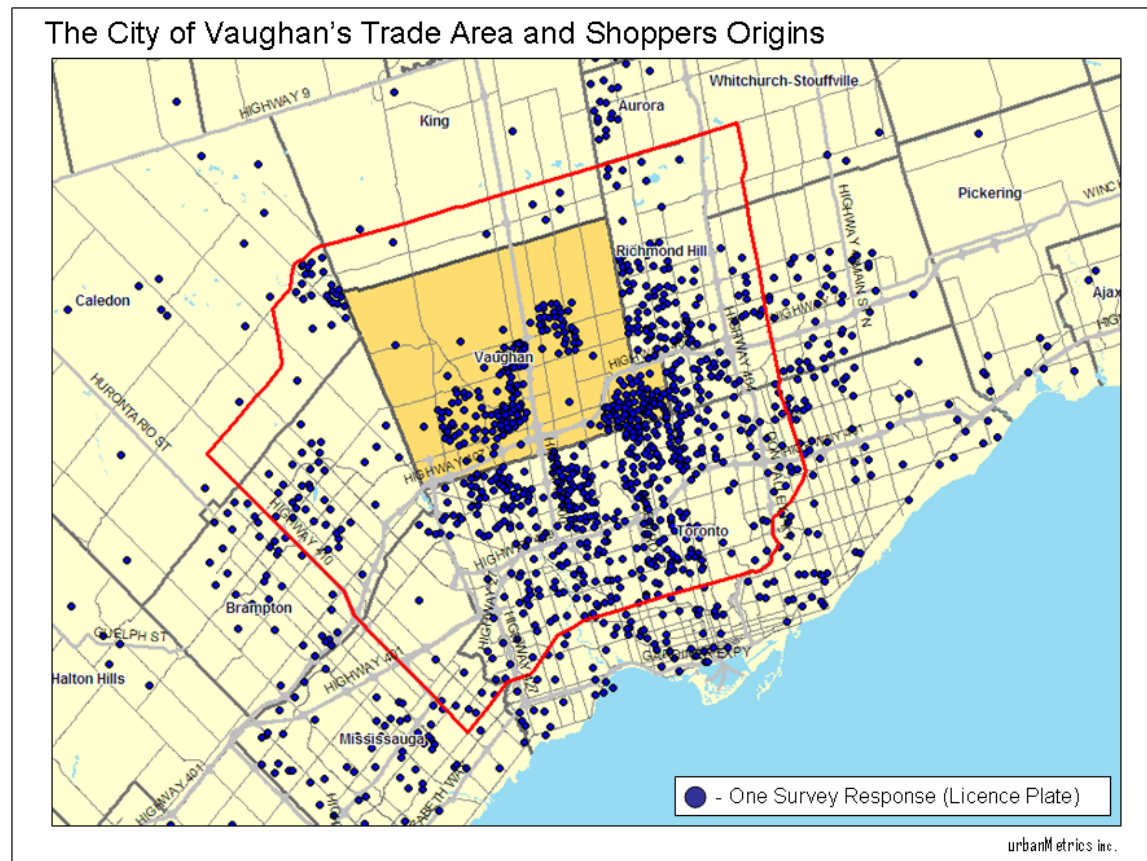
A trade area typically represents the geographic area from which a retail development or retail area would normally expect to derive the majority of its sales volume. The physical size of a trade area typically varies due to outside factors such as the local road network, natural physical barriers (e.g., rivers, bridges, etc.) and the proximity of competing shopping destinations. These influences can all serve to limit and otherwise define the geographic drawing power of a retail area. Furthermore, retail gravity, or the number and concentration of stores at a shopping node or venue, can define the attractiveness of a retail destination. An area where many retail alternatives and stores are concentrated enhances the consumer drawing power and increases the distance consumers are willing to travel to shop there.

For the City of Vaughan, competitive retail centres that exist in Toronto, Richmond Hill, and Markham will continue to influence the scope of retail opportunities in Vaughan. These existing shopping opportunities and other retail centres planned in these and other surrounding communities will continue to define and limit the trade area for the City of Vaughan.

To estimate the extent of Vaughan’s Trade Area we relied on licence plate surveys conducted at selected Vaughan shopping areas, our understanding of the inventory of space in Vaughan and the major retail opportunities in neighbouring municipalities. The detailed results of these surveys have been provided in Appendix A. The licence plate surveys were conducted over two weekends, the first in March of 2009 and the second in April. The results of these licence plate survey results and trade area for the City of Vaughan are shown on Figure 7.1.

Although licence plate surveys provide a general indication of customer origins, they can have some limitations. For example, they do not capture pedestrians or persons travelling by means such as public transit. Although our methodology attempts to exclude shopping centre employees and trades people working at a shopping centre, invariably some non-shoppers may have been included in the sample. In addition, some corporate leased vehicles or rental cars may be registered to the company and not the person driving the vehicle. Finally, the licence plate data obtained by the Ministry of Transportation for vehicles registered to rural addresses only provides the location of a nearby post office box and not the dissemination area of the home location.

Figure 7.1



The summary results from the licence plate survey are shown in Figure 7.2. The inflow from outside of Vaughan is significant. More than 60% of licence plates surveyed were from outside of the City of Vaughan. As might be expected the Village Cores had a more focused local draw and the two Super Regional Nodes, the 400/7 Power Centre Node and Vaughan Mills Mall drew heavily from outside of the city. These results indicate an above average inflow of shoppers suggesting the existence of a retail export function, largely the result of the Super Regional drawing power of its centres.

Effectively, Vaughan serves as a retail centre for a much broader region. It is also important to recognize that when the trend towards big box stores and power centre occurred, The City of Toronto was largely built out. Compared to suburban municipalities, Toronto has far fewer big box retail facilities relative to its population. As a result, the scale of the power node at Highway 7 and the 400 in Vaughan reflects its accessibility to the Toronto market. This is clearly shown in the results of the licence plate survey.

The City of Vaughan is recognized as the “Primary Zone” of the Trade Area, from which the vast majority of expenditures at City retail facilities will be derived. We have also recognized the expenditures expected to be derived from the surrounding area. For this reason, three secondary zones have been delineated:

- **South Zone** – This zone comprises the City of Toronto west of the Don River Valley and North of Eglinton Avenue. The lack of power centre uses and proximity to Vaughan have attracted a large number of residents of this zone to Vaughan retail facilities. The extension of the Spadina and later the Yonge Subway will enhance the accessibility of this zone to Vaughan.
- **Northeast Zone** – This zone comprises Richmond Hill and southern King Township. Richmond Hill is situated in close proximity to eastern Vaughan, which is easily accessible via Major Mackenzie Drive, Rutherford Road, Highway 7 and Highway 407. The accessibility provided by Highway 7 and 407 make the current and future retail facilities in the Vaughan Metropolitan Centre very attractive to Richmond Hill Residents.
- **West Zone** – This zone comprises eastern Brampton and Mississauga and southern Caledon. This zone is less influenced by commercial development in Vaughan, owing to the existence of major regional retail facilities in Brampton and Mississauga, including Square One, Bramalea City Centre, Heartland Power Centre, Trinity Common and others. The Caledon Community of Bolton has historic ties to the Kleinburg-Nashville area and the general lack of retail facilities in this small community has made Vaughan an attractive retail destination for residents of southeast Caledon.

Figure 7.2

Where do Shoppers in Vaughan Come From? (Licence Plate Survey Results, City of Vaughan, 2009)

Origin of Vehicle	Percent of Vehicles Surveyed by Shopping Locations and Vehicle Origin						Total
	Kleinburg Village Core	Woodbridge Village Core	The Promenade	HWY 400 and 7 Power Centre	Vaughan Mills Mall		
Vaughan Residents	44%	62%	39%	32%	33%		39%
Other Trade Area Residents	29%	22%	43%	36%	32%		34%
Residents from Outside of the Trade Area	27%	16%	17%	33%	35%		27%
Total	100%	100%	100%	100%	100%		100%

Source: urbanMetrics inc., 2009

For the purposes of our analysis, recognizing the limitations of licence plate surveys, and the size, scale and drawing power of the centres surveyed, urbanMetrics estimates the annual average Non Food Store Retail (NFSR) inflow sales from outside the Trade Area at 20%. This accounts for more local drawing power of lower order retail space within Vaughan. As a result of the local nature of food store shopping patterns the inflow rate for food store retail (“FSR”) is based on Vaughan’s municipal boundaries not

the City's Trade Area boundaries. The inflow is estimated at 20% from outside of Vaughan, with most flowing from within the Trade Area.

7.2 Trade Area Population

In order to project the future retail market demand in Vaughan to 2031, it is necessary to estimate the future population in the City and the defined Trade Area. Population change, in addition to income and expenditure levels, is a major factor influencing the level of retail sales and space warranted in an area.

Forecast population levels for each Trade Area zone are urbanMetrics estimates based on Statistics Canada Census data, population projections obtained from the various municipalities in the Trade Area, and the population forecasts in Schedule 3 of the Ministry of Energy and Infrastructure (formerly the Ministry of Public Infrastructure Renewal), *Places to Grow, Growth Plan for the Greater Golden Horseshoe*, 2006.

Figure 7.3



Based on the population projections within the Trade Area zones (see Figure 7.4), the population of the Trade Area is expected to increase from 2,269,000 persons in 2009 to 2,771,000 persons in 2031. This represents a growth of just over 600,000 residents. As indicated in Figure 7.4 below, the majority of this growth is anticipated to occur in the City of Vaughan and South Zone of the Trade Area, the former representing 28% of forecast growth and the latter 35%.

Figure 7.4
TRADE AREA POPULATION (1)

	Base Year						
	2006	2009	2011	2016	2021	2026	2031
Vaughan							
Population	248,807	276,062	294,232	329,082	360,589	389,663	418,826
Average Annual Increase		9,085	9,085	6,970	6,302	5,815	5,833
Average Annual Growth		3.7%	3.3%	2.4%	1.9%	1.6%	1.5%
North East Zone							
Population	264,179	284,579	298,179	327,654	351,440	367,691	376,066
Average Annual Increase		6,800	6,800	5,895	4,757	3,250	1,675
Average Annual Growth		2.6%	2.4%	2.0%	1.5%	0.9%	0.5%
West Zone							
Population	316,912	345,618	364,755	386,153	405,145	425,710	436,595
Average Annual Increase		9,569	9,569	4,280	3,798	4,113	2,177
Average Annual Growth		3.0%	2.8%	1.2%	1.0%	1.0%	0.5%
South Zone							
Population	1,337,500	1,363,000	1,380,000	1,422,500	1,465,000	1,502,500	1,540,000
Average Annual Increase		8,500	8,500	8,500	8,500	7,500	7,500
Average Annual Growth		0.6%	0.6%	0.6%	0.6%	0.5%	0.5%
TOTAL TRADE AREA							
Population	2,167,398	2,269,259	2,337,166	2,465,388	2,582,175	2,685,564	2,771,487
Average Annual Increase		33,954	33,954	25,645	23,357	20,678	17,185
Average Annual Growth		1.6%	1.5%	1.1%	0.9%	0.8%	0.6%

(1) Population forecasts include undercount

SOURCES: urbanMetrics inc., 2009;

York Region Population Forecasts by Traffic Zone, 2008;

Ministry of Environment and Infrastructure, The Growth Plan for the GGH, Schedule 3, 2006;

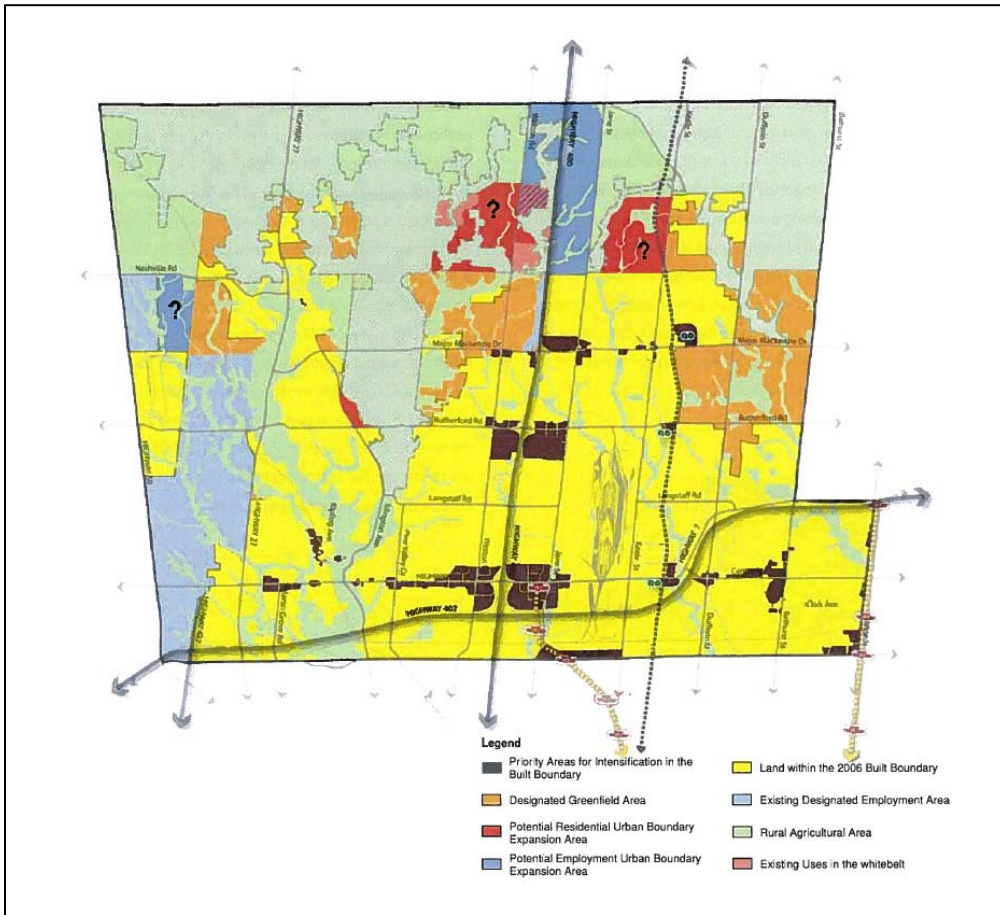
City of Mississauga, Growth Forecasts, Population Growth, 2006;

City of Brampton, Preliminary Population and Employment Forecast, 2008;

Town of Caledon Population and Employment Forecasts, 2006

Approximately 50% of the growth forecasted to take place in Vaughan is expected to occur in intensification areas. Figure 7.5 from the *Where and How to Grow: Directions on Future Growth in the City of Vaughan to 2031*, illustrates the areas identified as appropriate for intensification (dark purple). It is expected that the majority of the remaining growth will occur in designated Greenfield areas (shown in orange on Figure 7.5).

Figure 7.5



Source: Where and How to Grow: Directions on Future Growth in the City of Vaughan to 2031, June 2009

The major role that intensification is expected to play in terms of accommodating future growth in Vaughan will have a significant influence on how the commercial structure is planned. In addition to new greenfield retail development, significant emphasis will need to be placed on expanding the existing commercial infrastructure in areas targeted for residential intensification. This will be a substantial departure from how commercial development in Vaughan has taken place in the past. It will require a focus on redevelopment instead of new development, to meet demand for new commercial uses.

7.3 Trade Area Income Levels

Per capita income levels provide a reasonable basis for determining the retail expenditure levels of the trade area population. Based on Statistics Canada, 2006 Census data, which reports income levels for 2005, we have calculated the per capita income index for Vaughan and each of the three zones, as detailed in Figure 7.6.

Figure 7.6

Per Capita Income Levels for Trade Area Residents Relative to the Province

	Per Capita Income	Index to Province
Vaughan Residents	33,338	108.5
North East Zone Residents	34,673	112.9
West Zone Residents	25,626	83.4
South Zone Residents	34,925	113.7
Province of Ontario	30,723	100.0

Source: urbanMetrics inc., 2009; Statistics Canada 2006 Census

7.4 Trade Area Expenditures

In order to determine the total volume of retail expenditures available within the Trade Area, it is necessary to estimate expenditures by major store type. Utilizing Statistics Canada *Retail Trade* data, we have estimated the per capita expenditures in Ontario for Food Store Retail (FSR) and Non Food Store Retail (NFSR) in accordance with the North American Industry Classification System (NAICS) (See Appendix A for a detailed listing). This data is utilized as the basis for the per capita expenditure estimates for the Trade Area.

7.4.1 Per Capita Non-Food Store Expenditures

In this section of the study, we have evaluated the future market potential available for non-food store retail (NFSR) facilities in the City of Vaughan. NFSR includes the following major trade groups or expenditure categories:

- Pharmacies and Personal Care Stores
- Clothing and Accessories Stores
- Furniture, Home Furnishings and Electronics Stores
- Building and Outdoor Home Supplies Stores
- General Merchandise (including department stores)
- Miscellaneous Retailers
- Automotive Parts and Tire Retailers

Based on Statistics Canada Retail Trade data, the annualized 2009 average per capita non-food store retail expenditure in Ontario has been estimated at \$5,340 (See Appendix D for details).

For Trade Area residents, the 2009 average per capita non-food store retail expenditure shown below in Figure 7.7 has been estimated based on the income relationship between the Province and the Trade Area, and an expenditure regression equation, which calculates an expenditure index based on income level.

The 2009 average per capita NFSR expenditure is expected to increase for all Trade Area residents at a rate of 1.5% per year on an uninflated basis during the study period. Therefore, future expenditure levels reflect the 2009 value of the Canadian dollar.

Figure 7.7**PER CAPITA NFSR EXPENDITURE POTENTIAL**

2009 Dollars		2009					
Province of Ontario							
Per Capita NFSR Expenditure		\$ 5,340 (1)					
2009 Dollars		2009	2011	2016	2021	2026	2031
Vaughan							
Income Index to Province		108.50					
NFSR Expenditure Index to Province		104.80					
Per Capita NFSR Expenditure		\$ 5,596	\$ 5,764	\$ 6,184	\$ 6,603	\$ 7,023	\$ 7,443
Population		276,062	294,232	329,082	360,589	389,663	418,826
TOTAL NFSR POTENTIAL (\$Millions)		\$ 1,544.8	\$ 1,696.0	\$ 2,035.0	\$ 2,381.0	\$ 2,736.6	\$ 3,117.3
North East Zone							
Income Index to Province		112.90					
NFSR Expenditure Index to Province		107.20					
Per Capita NFSR Expenditure		\$ 5,725	\$ 5,897	\$ 6,326	\$ 6,756	\$ 7,185	\$ 7,614
Population		284,579	298,179	327,654	351,440	367,691	376,066
TOTAL NFSR POTENTIAL (\$Millions)		\$ 1,629.2	\$ 1,758.4	\$ 2,072.7	\$ 2,374.3	\$ 2,641.9	\$ 2,863.4
West Zone							
Income Index to Province		83.40					
NFSR Expenditure Index to Province		90.70					
Per Capita NFSR Expenditure		\$ 4,844	\$ 4,989	\$ 5,353	\$ 5,716	\$ 6,079	\$ 6,443
Population		345,618	364,755	386,153	405,145	425,710	436,595
TOTAL NFSR POTENTIAL (\$Millions)		\$ 1,674.2	\$ 1,819.8	\$ 2,067.1	\$ 2,315.8	\$ 2,587.9	\$ 2,813.0
South Zone							
Income Index to Province		113.70					
NFSR Expenditure Index to Province		107.70					
Per Capita NFSR Expenditure		\$ 5,751	\$ 5,924	\$ 6,355	\$ 6,786	\$ 7,218	\$ 7,649
Population		1,363,000	1,380,000	1,422,500	1,465,000	1,502,500	1,540,000
TOTAL NFSR POTENTIAL (\$Millions)		\$ 7,838.6	\$ 8,175.1	\$ 9,040.0	\$ 9,941.5	\$ 10,845.0	\$ 11,779.5
TOTAL TRADE AREA							
TOTAL NFSR POTENTIAL (\$Millions)		\$ 12,686.8	\$ 13,449.3	\$ 15,214.8	\$ 17,012.6	\$ 18,811.4	\$ 20,573.2
<i>Cumulative Growth</i>			\$ 762.5	\$ 2,528.0	\$ 4,325.8	\$ 6,124.6	\$ 7,886.4

SOURCE: urbanMetrics inc., 2009

1) Based on Statistics Canada, Retail Trade.

The total NFSR potential of Trade Area residents over the study period has been calculated by multiplying the annualized average per capita NFSR expenditure by the current and projected population residing in the Trade Area. The per capita NFSR expenditure values follow the provincial distribution of the NFSR expenditures to create a weighted total.

In total, the non-food store retail potential available from Trade Area residents is estimated at \$12,686.8 million in 2009, increasing to \$20,573.2 million by 2031; a growth of \$7,886.4 million (expressed in 2009 dollars).

Again, it should be recognized that the expenditure potential indicated in Figure 7.7 is that which is available from Trade Area residents only, and represents the expenditure potential available to stores located both in the Trade Area and outside the Trade Area. The detailed analysis of potential to Vaughan stores including inflow is provided in Section 9 of this report.

7.4.2 Per Capita Food Store Retail (FSR) Expenditures

Food retailing is typically undertaken close to home, with much shorter shopping trips than for non-food shopping. As a result the trade areas for food stores are smaller. We have, therefore, assumed that the vast majority of spending at Vaughan supermarkets and other food stores will be derived from Vaughan residents. As a result, we have focused our analysis on the City of Vaughan rather than the entire Trade Area as was done with respect to the non-food retail analysis. Inflow from outside the City is still recognized, but at much lower levels than that assumed for non-food store sales. Based on Statistics Canada Retail Trade data, the annualized 2009 average per capita food store retail expenditure in Ontario has been estimated at \$2,185 (See Appendix A). Food store retail expenditures include those made in supermarkets, grocery stores, and convenience and specialty food stores. For Vaughan residents, the 2009 average per capita food store expenditure shown in the table below has been estimated based on the income relationship between the Province and Vaughan, and an expenditure regression equation, which calculates an expenditure index relative to income level.

The 2009 annualized average per capita FSR expenditures are expected to increase at a rate of 0.5% per year on an uninflated basis between 2009 and 2031. As discussed in the underlying assumptions of this report, future changes in expenditure patterns solely due to inflation have not been recognized. Therefore, future expenditure levels reflect the 2009 value of the Canadian dollar.

Figure 7.8

PER CAPITA FOOD STORE RETAIL (FSR) EXPENDITURE POTENTIAL

2009 Dollars		2009					
Province of Ontario							
Per Capita FSR Expenditure		\$ 2,185 (1)					
2009 Dollars	2009	2011	2016	2021	2026	2031	
Vaughan							
Income Index to Province	108.50						
FSR Expenditure Index to Province	100.90						
Per Capita FSR Expenditure	\$ 2,205	\$ 2,227	\$ 2,282	\$ 2,337	\$ 2,392	\$ 2,448	
Population	276,062	294,232	329,082	360,589	389,663	418,826	
TOTAL FSR POTENTIAL (\$Millions)	\$ 608.7	\$ 655.3	\$ 751.0	\$ 842.7	\$ 932.1	\$ 1,025.3	
<i>Cumulative Growth</i>		\$ 46.6	\$ 142.3	\$ 234.0	\$ 323.4	\$ 416.6	

SOURCE: urbanMetrics inc.

1) Based on Statistics Canada, Retail Trade.

By multiplying the annualized average per capita food store expenditure by the current and projected population residing in Vaughan, the total food store potential from City residents has been calculated over the study period.

In total, the food store potential available from Vaughan residents has been estimated at \$608.7 million in 2009. As shown in Figure 7.8, by 2031 this potential is expected to reach \$1,025.3 million; a growth of \$416.6 million over the twenty-two year period (expressed in 2009 dollars).