Brooklin Study

Secondary Plan and Transportation Master Plan

Background Report: 2014 Retail/Commercial Space Needs Analysis

January 2015

prepared by

Realty Research Group Ltd.

for the Town of Whitby

Real Estate Consultants
* Appraisals/Valuations
* Development Studies
* Feasibility Studies
* Investment Studies
* Market Studies

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December 31, 2014

Mr. Robert B. Short
Commissioner of Planning
The Corporation of the Town of Whitby
575 Rossland Road East
Whitby, Ontario L1N 2M8

Re: **2014 Retail/Commercial Space Needs Analysis**
Whitby & Brooklin Community
Our File: #2013-1051

Dear Mr. Short:

Realty Research Group Ltd. was retained as part of the Sorensen Gravely Lowes Planning Associates Inc. consulting team, to undertake a Retail/Commercial Space Needs Analysis in conjunction with the work being undertaken for the Secondary Plan Study for the Brooklin community.

Our report includes:

- a Retail/Commercial space 'needs' analysis for the Town of Whitby
- a Retail/Commercial space 'needs' analysis for the Brooklin community in the context of the Town of Whitby

We believe that the objectives of the assignment have been met and appreciated the opportunity to be of service.

Respectfully Submitted,

Realty Research Group Ltd.

R.J. (Bob) Zavislake, B. Comm., M. Sc.
President

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Executive Summary

1. Background

The Town of Whitby is undertaking a comprehensive study, called the Brooklin Study, to prepare a Secondary Plan and Transportation Master Plan to enable the Town to guide and manage growth in the Brooklin area. The purpose of the Secondary Plan is to determine the land use designations for the urban expansion areas north and west of Brooklin, the industrial lands adjacent to the future Highway 407 and the lands in the vicinity of the Conlin Road/Anderson Street intersection, as well as to update the existing Brooklin Community Secondary Plan. Stage 1 involves the preparation of a number of background studies to inform the secondary plan and potential land uses.

This report, *2014 Retail/Commercial Space Needs Analysis*, is one of the background studies prepared as part of Stage 1 of the Brooklin Study.

Realty Research Group Ltd. was retained to prepare this report which provides a retail/commercial "space needs" analysis and projections for the Town of Whitby and Brooklin community.

2. Objective of the Assignment

The objective of the Realty Research Group Ltd. assignment was:

- to review, analyze, forecast and recommend the retail/commercial space requirements that will be necessary to satisfy the existing and future population and demand needs in the Brooklin community.
- to ensure that it (the Town) provides convenient and accessible goods and services for its residents.

3. Scope of Work

The scope of work for the assignment ranged from data collection and analysis of the space and expenditure environment in Whitby to the forecast of future retail/commercial space needs for the Town and the Brooklin community.

It should be understood that the assignment was largely based on the 2006 Retail/Commercial Inventory and sales capture data from the *2006 Retail Market Analysis Update* written by Realty Research Group Ltd. for the Town of Whitby in December 2006.

4. Overview of Population Growth in Whitby and Brooklin

In the time period between 2006 and 2013, there has been considerable growth in Whitby, but even more so in the Brooklin community.

Refer to Table 3.1.2
POPULATION GROWTH IN WHITBY AND BROOKLIN (2006 TO 2013)

	2006	2009	2010	2011	2013
Whitby Population	**117,875**	**125,070**	**126,425**	**125,755**	**129,975**
Whitby Increase Per Period		7,195	1,355	n.a.	4,220
% Change in Whitby (to 2013 = 10.3%)		6.1%	1.1%	n.a.	3.4%
Brooklin Population	**14,700**	**17,000***	**17,451**	**18,070**	**19,950**
Brooklin Increase Per Period		2,300	451	619	1,880
% Change in Brooklin (to 2013 = 35.7%)		15.6%	2.7%	3.5%	10.4%
Brooklin % Share Whitby Growth		32.0%	33.3%	n.a.	44.5%

Source: Whitby population data obtained from Regional Municipality of Durham, with 2013 rounded for year-end. Brooklin data provided by the Town of Whitby, with 2009 rounded.

5. Population Forecasts for Whitby and Brooklin (2013 to 2031)

Population forecasts for Whitby in 2011, 2013, 2031 and for Brooklin in 2011, 2013, 2031 and 2044 ("ultimate build-out" year) were provided by the firm Hemson Consulting Ltd. The estimates for the intervening years were made by Realty Research Group Ltd. based on averages and divided into 5-year intervals.

By 2031, the population of Whitby and Brooklin is forecast to increase as follows:

- Increase in Whitby (2013 to 2031) is 62,925 residents
- Increase in Brooklin (2013 to 2031) is 36,220 residents

Refer to Table 3.3.1
WHITBY POPULATION FORECAST (2013 TO 2031)

	2013	2016	2021	2026	2031
TOWN OF WHITBY	129,975	140,462	157,938	175,414	192,900
Total increase 2013 to 2031 is 62,925 people or an average of 3,496 people per year.					
Average Population Increase Per Period		10,487	17,476	17,476	17,480

Refer to Table 3.3.2
BROOKLIN POPULATION FORECAST (2013 TO 2031)

	2013	2016	2021	2026	2031
BROOKLIN COMMUNITY (Estimated Population)	19,950	25,987	36,048	46,109	56,170
Total Increase 2013 to 2031 is 36,220 people or an average of 2,012 people per year.					
Average Population Increase Per Period		6,036	10,061	10,061	10,061

6. ‘Ultimate Build-Out' Growth Potential in Brooklin by 2044

Hemson Consulting Ltd. has indicated that Brooklin may achieve its ‘ultimate build-out' population by the year 2044.

The population for Brooklin at “build-out” in 2044 is estimated to be 80,670.

7. Existing Retail/Commercial Space Inventory in Whitby and Brooklin

The existing inventory of retail/commercial space in Whitby, which includes Brooklin, was compiled from three primary sources:

(1) *2006 Retail Market Analysis Update*;

(2) building permit data provided by the Town; and

(3) inventory data for Brooklin provided by Malone Given Parsons Ltd.

This existing inventory of retail/commercial space is summarized as follows:

- Town of Whitby (as a whole) - nearly 6,200,000 sq.ft. - an increase of roughly 500,000 sq.ft. since 2006.
- Brooklin community - nearly 403,000 sq.ft. - an increase of roughly 275,000 sq.ft. since 2006.

Refer to Table 4.3.1 (Abbreviated Totals Only)
SUMMARY OF RETAIL/COMMERCIAL USES IN WHITBY BY TYPE (2013)

	Type of Use	**Sq.Ft.**	**Sq.M.**
1	Department Store Merchandise (DSTM) or Non-Food Store Retail Space (NFSR)	2,283,823	212167
2	Total Food Stores	624,375	58004
3 to 8	Total Various Retail/Commercial/Services	1,533,611	142472
9	Total Office Type Uses	883,180	82047
10	Total Auto Related Type Uses	510,234	47401
	TOTAL OCCUPIED RETAIL/COMMERCIAL USES	**5,835,223**	**542093**
	Vacant Space (Estimate Only)	**337,786**	**31380**
	TOTAL ALL RETAIL/COMMERCIAL USES	**6,173,009**	**573473**

Source: Realty Research Group Ltd.

Refer to Table 5.1.1
EXISTING RETAIL/COMMERCIAL SPACE IN BROOKLIN BY AREA (2013)

Map 6.1 Ref. #	IDENTIFIED INVENTORY SUB-AREAS	Floor Area Sq.Ft.	Total Sq.Ft.	Floor Area Sq.M.	Total Sq.M.
5	TOTAL BROOKLIN CA	256,285		23809	
5A	TOTAL Along Winchester East/West & Carnwith	87,054		8087	
5B	TOTAL RURAL BROOKLIN WHITBY	59,563		5533	
5	**OVERALL TOTAL BROOKLIN**		**402,902**		**37430**

Source: Brooklin Retail/Commercial Inventory undertaken by Malone Given Parsons Ltd. in Sept 2013 and updated by Realty Research Group Ltd. in May 2014.

8. Merchant Survey

Chapter 7 provides a summary of the key findings from the Merchant Survey. The detailed results from the Merchant Survey were provided to the Town in a separate document. The two most important questions and responses were:

What are your major concerns about doing business in Brooklin?

The most frequent responses from merchants were:

(1) No concerns or did not know, at 19%,
(2) Highway #407 construction, at 15%,
(3) Increasing competition, at 12%,
(4) Traffic congestion and lack of parking, each with 11%
(5) Construction and rent increasing, each with 10%.

What do you think the Town could do to assist retailing in Whitby?

The three major responses were:

(1) Nothing or did not know, at 31%,
(2) Support local business with free signage/advertising, at 20%
(3) Reduced taxes, at 15%.

9. Major Factors Affecting Retail/Commercial Growth in Brooklin

There are two projects underway that will significantly impact the future development potential of retail/commercial space in Brooklin:

- the first project, which will be beneficial, is the Highway #407 project now under construction in Pickering, Ajax, Whitby and Oshawa. When completed, Brooklin will benefit from much improved access to the area and greater exposure to a larger market. This will act to strengthen the opportunity for retail/commercial facilities in the community.

- the second project, which will most likely have a negative impact, is the future development of a major 1,300,000 sq.ft. shopping centre in Oshawa, just east of Brooklin, at the intersection of Winchester Road and Simcoe Street North.

10. Impact of e-Commerce on Traditional Retailing

A major issue, which is becoming increasingly important to 'traditional' retailing, is the increasing capture of sales through e-Commerce. The growth in this sector has been dramatic over the past few years and this trend is fully expected to continue. As it does, e-Commerce will likely reduce the future need for retail space.

11. Summary of Total Additional New Space 'Warranted' in Whitby by 2031

The OVERALL TOTAL WARRANTED NEW SPACE estimated for Whitby by the year 2031 increases from around 300,000 sq.ft. in 2014/2015 to some 4.3 million sq.ft. by 2031.

Refer to Table 10.6.1
SUMMARY OF TOTAL ADDITIONAL NEW SPACE 'WARRANTED' IN WHITBY BY 2031
FOR ALL 'CLASS TYPES' OF SPACE - DSTM/NFSR, FOOD/SUPERMARKET AND 'ALL OTHER'

WHITBY	2014	2016	2021	2026	2031
Population Estimate	**133,471**	**140,462**	**157,938**	**175,414**	**192,900**
1. ESTIMATE of WARRANTED ADDITIONAL New DSTM/NFSR Sq.Ft.	**239,000**	**454,000**	**1,017,000**	**1,618,000**	**2,257,000**
ADDITIONAL Sq.Ft. Per Capita DSTM/NFSR Space	1.8	3.2	6.4	9.2	11.7
2. ESTIMATE of WARRANTED ADDITIONAL New Food/Supermarket Sq.Ft.	**7,000**	**42,000**	**134,000**	**228,000**	**326,000**
ADDITIONAL Sq.Ft. Per Capita Food/Supermarket Space	0.05	0.30	0.85	1.30	1.69
3.ESTIMATE of WARRANTED ADDITIONAL new 'ALL OTHER' Retail/Commercial Sq.Ft.	**56,000**	**244,000**	**726,000**	**1,227,000**	**1,750,000**
ADDITIONAL Sq.Ft. Per Capita 'ALL OTHER' Space	0.42	1.74	4.60	6.99	9.07
OVERALL TOTAL WARRANTED ADDITIONAL NEW SPACE IN WHITBY	**302,000**	**740,000**	**1,877,000**	**3,073,000**	**4,309,000**
OVERALL TOTAL ADDITIONAL Sq.Ft. Per Capita	**2.26**	**5.27**	**11.88**	**17.52**	**22.46**
Rounded	**2.3**	**5.3**	**11.9**	**17.5**	**22.5**

Source: Realty Research Group Ltd.

12. Summary of Total Additional New Space 'Warranted' in Brooklin by 2031

The OVERALL TOTAL WARRANTED NEW SPACE estimated for the Brooklin community by the year 2031 increases from around 400,000 to 500,000 sq.ft. in the 2013/2014 period to just over 3.0 million sq.ft. by 2031.

Refer to Table 11.5.1
SUMMARY OF TOTAL ADDITIONAL NEW SPACE 'WARRANTED' IN BROOKLIN BY 2031
FOR ALL 'CLASS TYPES' OF SPACE - DSTM/NFSR, FOOD/SUPERMARKET AND 'ALL OTHER'

BROOKLIN	2014	2016	2021	2026	2031
Population Estimate	**21,962**	**25,987**	**36,048**	**46,109**	**56,170**
1. ESTIMATE of WARRANTED ADDITIONAL New DSTM/NFSR Sq.Ft.@ 100% Capture	**392,000**	**486,000**	**727,000**	**980,000**	**1,243,000**
ADDITIONAL Sq.Ft. Per Capita DSTM/NFSR Space	17.8	18.7	20.2	21.3	22.1
2. ESTIMATE of WARRANTED ADDITIONAL New Food/Supermarket Sq.Ft.	**49,000**	**66,000**	**108,000**	**153,000**	**199,000**
ADDITIONAL Sq.Ft. Per Capita Food/Supermarket Space	2.2	2.5	3.0	3.3	3.5
3.ESTIMATE of WARRANTED ADDITIONAL new 'ALL OTHER' Retail/Commercial Sq.Ft.	**31,000**	**97,000**	**260,000**	**260,000**	**615,000**
ADDITIONAL Sq.Ft. Per Capita 'ALL OTHER' Space	1.4	3.7	7.2	7.2	10.9
OVERALL TOTAL WARRANTED ADDITIONAL NEW SPACE IN BROOKLIN	**472,000**	**649,000**	**1,095,000**	**1,567,000**	**2,057,000**
OVERALL TOTAL ADDITIONAL Sq.Ft. Per Capita	**21.5**	**24.9**	**30.4**	**34.0**	**36.6**

Source: Realty Research Group Ltd.

13. Summary of Total Additional New Space 'Warranted' in Brooklin by 2044

Chapter 12 provides an analysis of Brooklin's retail/commercial space needs to the year 2044 - when the community is estimated to reach its ‘ultimate build-out' population.

- the population of Brooklin is estimated to be 80,670 residents by 2044.
- the additional space required increases from around 2.0 million sq.ft. by 2031 to a total of nearly 3.4 million sq.ft. by 2044 - equivalent to 41.6 sq.ft. per capita.

Refer to Table 12.5.1
SUMMARY OF TOTAL ADDITIONAL NEW SPACE 'WARRANTED' IN BROOKLIN BY 2044 FOR ALL 'CLASS TYPES' OF SPACE - DSTM/NFSR, FOOD/SUPERMARKET AND 'ALL OTHER'

BROOKLIN	2014	2031	2044
Population Estimate	**21,962**	**56,170**	**80,670**
1. ESTIMATE of WARRANTED ADDITIONAL New DSTM/NFSR Sq.Ft.	**392,000**	**1,243,000**	**1,937,000**
ADDITIONAL Sq.Ft. Per Capita DSTM/NFSR Space	17.8	22.1	24.0
2. ESTIMATE of WARRANTED ADDITIONAL New Food/Supermarket Sq.Ft.	**49,000**	**199,000**	**319,000**
ADDITIONAL Sq.Ft. Per Capita Food/Supermarket Space	2.2	3.5	4.0
3.ESTIMATE of WARRANTED ADDITIONAL new 'ALL OTHER' Retail/Commercial Sq.Ft.	**31,000**	**615,000**	**1,100,000**
ADDITIONAL Sq.Ft. Per Capita 'ALL OTHER' Space	1.4	10.9	13.6
OVERALL TOTAL WARRANTED ADDITIONAL NEW SPACE IN BROOKLIN	**472,000**	**2,057,000**	**3,356,000**
OVERALL TOTAL ADDITIONAL Sq.Ft. Per Capita	**21.5**	**36.6**	**41.6**

Source: Realty Research Group Ltd.

1. Background, Objective and Scope of Study

1.1 Background

The Town of Whitby is undertaking a comprehensive study, called the Brooklin Study, to prepare a Secondary Plan and Transportation Master Plan to enable the Town to guide and manage growth in the Brooklin area. The purpose of the Secondary Plan is to determine the land use designations for the urban expansion areas north and west of Brooklin, the industrial lands adjacent to the future Highway 407 and the lands in the vicinity of the Conlin Road/Anderson Street intersection, as well as to update the existing Brooklin Community Secondary Plan. Stage 1 involves the preparation of a number of background studies to inform the secondary plan and potential land uses.

This report, *2014 Retail/Commercial Space Needs Analysis*, is one of the background studies prepared as part of Stage 1 of the Brooklin Study.

Realty Research Group Ltd. was retained to prepare this report which provides a retail/commercial "space needs" analysis and projections for the Town of Whitby and Brooklin community.

In terms of background, Realty Research Group has undertaken a number of assignments for Whitby over the past number of years, with the most recent being the 2010 Update: Brooklin Community & Special Purpose Commercial Use Analysis. Other assignments have included full scale market analysis studies such as the *2006 Retail Market Analysis Update*, the Retail Market Report 2000 and various Peer Reviews of proposed development projects.

1.2 Objective of the Assignment

The objective of the assignment is twofold:

- to review, analyze, forecast and recommend the retail/commercial space requirements that will be necessary to satisfy the existing and future population and demand needs in the Brooklin community.
- to ensure that it (the Town) provides convenient and accessible goods and services for its residents.

In order to do this, the future retail/commercial space needs for the entire Town of Whitby must first be determined for the same period (up to 2031) and an appropriate allocation made to the Brooklin community.

1.3 Scope of Work

The scope of work for the assignment will broadly include data collection, survey of Brooklin merchants, partial inventory update and an analysis of the retail/commercial environment in order to provide forecasts of the future retail/commercial space needs for Town of Whitby as a whole and then more specifically the Brooklin community.

The work tasks to be undertaken are as follows:

- Survey retail merchants in the Brooklin community.

- Obtain and integrate updated retail/commercial space information into the Town of Whitby inventory compiled by Realty Research Group in 2006. The updates for the Whitby space inventory are to be provided by the Planning Department at the Town . Updates for Brooklin are to be provided by the firm Malone Given Parsons Ltd.

    - Review the various approvals by the Town that have been given for new projects and incorporate applicable sites into inventory.

    - Verify through physical inspection the inventory for the Brooklin community.

- Obtain and review data related to new projects in the competitive surrounding communities.

- Obtain population estimates from Hemson Consulting Ltd. and estimate populations for intervening years

- Obtain, review and discuss the general nature of retail sales growth in Ontario and applicability to Whitby area.

- Obtain new population projections from the Town of Whitby, integrate data into the analysis and estimate the required/warranted new retail/commercial space in the Town and in the Brooklin Community.

1.4 Study Methodology

The methodology used in a Retail/Commercial Needs Analysis for a Town or Municipality such as Whitby, or for any specific area within a Town such as the Brooklin community, is distinctly different from a Market Study used by the developer of a specific retail/commercial project.

A Market Study is used by a developer to estimate the 'opportunity' or ability of a single project to capture sufficient sales dollars in its market (which may ignore municipal boundaries) to support that specific project.

A Retail/Commercial Needs Analysis is used by a Town or Municipality for long term planning purposes. It helps to ensure that there is sufficient land to accommodate the amount of future building space that would be required by a community as it grows, as well as an adequate mix of retail/commercial uses to fully service the needs of its residents.

In planning for new retail/commercial space, a municipality must rely on the expenditure potential of its own residents. It cannot plan on capturing dollar 'inflow' from residents in adjacent municipalities.

For many categories of retail/commercial space, the most reasonable means by which to determine future "space needs" relative to population growth is to make a sq.ft. per capita projection based on the existing retail/commercial floor space inventory, population forecasts and assumptions unique to its market. Once known, the sq.ft. per capita projection can be used to estimate the total amount and type of retail/commercial space that is warranted in the community now and into the future.

2. Sources of Data, Definitions and Assumptions

2.1 Sources of Data

A number of sources were used in compiling the information in this report. They are briefly summarized as follows:

1) Existing Population, Housing Growth and Population Forecasts

Data on housing growth and some of the existing population data for both the Town of Whitby and Brooklin community were provided by the Planning Department at the Town of Whitby and the Regional Municipality of Durham. Additional population data and population forecasts for the years 2011, 2013, 2031 and 2044 (Brooklin only) were provided by Hemson Consulting Ltd.

Other sources include the Government of Canada (Statistics Canada) and Province of Ontario (Ministry of Finance).

The specific source documents will be identified in the appropriate sections of the report.

2) Inventory of Retail/Commercial Space

The retail/commercial space inventory for the Town of Whitby, and in particular the Brooklin community, was compiled from data obtained from previous studies and reports undertaken for/by the Town of Whitby.

The inventory for Whitby utilizes data obtained from an earlier Realty Research Group study (*2006 Retail Market Analysis Update*) and updated with building permit data provided by the Town of Whitby Planning Department.

The inventory for Brooklin community utilizes data prepared by the firm Malone Given Parsons Ltd. in September 2013. A number of adjustments were made to this inventory based on the findings from a physical inspection made by Realty Research Group in May 2014 (and using rough physical measurements), from inquiries of property managers and from updated information provided by the Town.

3) Recently Approved and Proposed New Space (Approved and Under Review)

Data on recently constructed, approved and proposed new space in Whitby was provided by the Town of Whitby Planning Department.

4) Library Information

Realty Research Group utilized published data obtained from Statistics Canada, the Regional Municipality of Durham, the Town of Whitby Planning Department, the City of Oshawa Planning Department and its own library.

2.2 Definition of Terms

A variety of terms are used in retail/commercial studies. It is useful for the reader to understand some of the most common terms and these are listed below.

1) Trade Area

The Trade Area is considered to be the geographical area from which 80% to 95% of the retail and commercial sales are generated for a particular community, district, project or use. The remaining 5% to 20% of sales come from outside the defined Trade Area.

2) Primary Trade Area

Primary Trade Area is defined as the area from which at least 50% of retail and commercial sales are generated for a particular community or for a particular shopping district or facility.

3) Secondary Trade Area

The Secondary Trade Area is defined as the area surrounding the Primary Trade Area. It is the area from which 30% to 45% of retail and commercial sales are generated for a community or for a specific shopping district or facility.

4) Shopping Centre

Based on the Urban Land Institute definition:

"a shopping centre is defined as a group of architecturally unified commercial establishments built on a site that is planned, developed, owned and managed as an operating unit, related in its location, size and type of shops to the trade area that it serves. The unit provides on-site parking in definite relationship to the types and total size of the stores."

Thus, a group of independent or connected freestanding 'big box' stores qualify as a shopping centre.

5) Retail/Commercial Space (or Retail Goods & Retail Services Space)

The broadly defined category of retail/commercial space accounts for the largest amount of floor space in any community. It is primarily comprised of two types of space uses:

(i) Retail Goods Type Space - space used to sell "hard" tangible retail goods.

(ii) Retail Service Type Space - space used to sell and/or provide a range of personal services.

All other space is broadly defined as 'Commercial Space'. A more detailed description is provided on the following page.

Retail Goods Type Space

This type of space is comprised of two categories:

- Department Store Type Merchandise Space or Non-Food Store Retail Space (DSTM/NFSR)

- Food Store Space

DSTM/NFSR Space is occupied by the following types of stores:

- Clothing, shoe and accessorizing stores
- Furniture, appliance and computer stores
- Outdoor, home improvement and building supply stores
- General merchandise stores (i.e. department stores, warehouse clubs, superstores, etc.)
- Drug, cosmetic and personal care stores
- Miscellaneous (other) stores

Food Store Space is occupied by the following types of stores:

- Supermarket and large food stores
- Convenience and specialty food stores
- Warehouse membership clubs (WMC) – food component only

Retail Service Type Space

This type of space is occupied by a broad range of stores providing personal services such as dry cleaning, travel, hair-grooming, medical services, financial services, etc.

6) Commercial Space

A large additional component of space in a community is broadly defined as 'Commercial Space'. It is comprised of a variety of uses such as:

- general office uses
- a range of auto related uses
- restaurant/fast food services
- recreational uses
- public/institutional uses

There are some uses which, while appearing to be commercially oriented, are more appropriately categorized under industrial type uses.

7) North American Industry Classification System

For the purposes of this study, all uses are coded and categorized under the North American Industry Classification System (NAICS), which is the system used by Statistics Canada.

For the purposes of making this report easily comparable to data presented in previous reports submitted to the Town of Whitby, we also show the older Standard Industrial Classification codes and categories in the Appendix section.

2.3 Major Assumptions

In making projections about possible future market conditions, it is necessary to make certain assumptions and establish some limitations. The major assumptions used in this report are:

- a reasonable level of economic stability will continue to prevail in Canada, Ontario, Regional Municipality of Durham and Town of Whitby.

- retail sales and income data obtained from Statistics Canada publications are accurate and reliable.

- population data and forecasts obtained from Hemson Consulting Ltd., Town of Whitby and Ontario Ministry of Finance are reasonable and reliable.

- the retail/commercial space inventory of the Town of Whitby undertaken by Realty Research Group Ltd. in 2006, with updates on the Brooklin community and recent building permit activity made available by the Town, provide sufficient base data to be used in this current analysis.

- it is not within the scope of this report to assess the impact of e-commerce activity on over the counter retail/commercial sales in Whitby/Brooklin.

For clarity purposes, it is important to note the following:

- any reference to Department Store Type Merchandise space is the same as referencing Non-Food Store Retail Space. The terms are interchangeable. They are used together in this report for clarity purposes. The first is abbreviated as DSTM, the second as NFSR and together as DSTM/NFSR.

- any reference to Whitby means the Town of Whitby including the Brooklin community (unless otherwise stated) and any reference to Brooklin means the Brooklin community exclusive of all other parts and/or communities in Whitby (unless otherwise stated).

- any reference to the 2006 Report means the *2006 Retail Market Analysis Update* written by Realty Research Group Ltd. for the Town of Whitby in December 2006.

- any reference to the 2006 Inventory or the 2006 Retail/Commercial Inventory means the complete retail/commercial space inventory of the Town of Whitby undertaken by Realty Research Group Ltd. for the 2006 Report.

- any reference to the 2006 Survey means the (1) Shopper Intercept Survey and/or (2)Household Telephone Survey undertaken by the survey firm Advitek for the 2006 Report.

- all references to dollar amounts are in constant 2013/2014 dollars.

3. Whitby and Brooklin Population Growth Forecasts

In chapter 3, data on (1) historical population and housing growth and (2) population forecasts for both the Town Whitby and the Brooklin community are provided for the period 2006 to 2031.

3.1 Overview of Population Growth in Whitby and Brooklin

In the time period between 2006 and 2013, there has been considerable growth in Whitby, but even more so in the Brooklin community(see Table 3.1.2).

Overall, the population of Whitby has grown from nearly118,000 residents in 2006 to around 130,000 residents by year-end 2013. This is an increase of 10% or approximately 12,000 people in 7 years, an average of around 1,700 residents per year.

In this same time period, the Brooklin community has grown from just under 15,000 residents in 2006 to nearly 20,000 in 2013, an average increase of around 750 residents per year or 36% increase in the 7 year time period.

What is particularly notable in this growth pattern is that Brooklin has been capturing an increasing share of the overall Whitby growth, ranging from a level of around 30% in the earlier years to 44% by 2013.

Population growth for Ontario, Whitby and Brooklin are summarized in the following two tables (Tables 3.1.1 and 3.1.2):

Table 3.1.1
POPULATION GROWTH ESTIMATES FOR ONTARIO (2006 TO 2013)

	2006	2009	2010	2011	2012	2013
Ontario (*census)	**12,160,282***	**12,997,687**	**13,135,063**	**12,851,821***	**13,411,994**	**13,537,994**
Ontario increase per period		837,405	137,376	-283,242	560,173	126,000
% Change in Ontario		6.9%	1.1%	-2.2%	4.4%	0.9%

* Population figures for Ontario vary due to inconsistencies between Statistics Canada Census data and Ministry of Finance data.

Source: Ministry of Finance and Statistics Canada, April 2014.

Table 3.1.2
POPULATION GROWTH IN WHITBY AND BROOKLIN (2006 TO 2013)

	2006	2009	2010	2011	2013
Whitby Population	**117,875**	**125,070**	**126,425**	**125,755**	**129,975**
Whitby Increase Per Period		7,195	1,355	n.a.	4,220
% Change in Whitby (to 2013 = 10.3%)		6.1%	1.1%	n.a.	3.4%
Brooklin Population	**14,700**	**17,000***	**17,451**	**18,070**	**19,950**
Brooklin Increase Per Period		2,300	451	619	1,880
% Change in Brooklin (to 2013 = 35.7%)		15.6%	2.7%	3.5%	10.4%
Brooklin % Share Whitby Growth		32.0%	33.3%	n.a.	44.5%

Source: Whitby and Brooklin population data for 2006, 2009 and 2010 was obtained from Regional Municipality of Durham and Town of Whitby. Population data for 2011 and 2013 was obtained from Hemson Consulting Ltd. The decline shown in Whitby's population in 2011 is a result of using different sources of data.

3.2 Residential Growth in Whitby and Brooklin

In the year 2000, Whitby and Brooklin experienced active residential growth with the addition of nearly 1,700 housing units. Of this total, Brooklin added 321 units which represents a 19% share of Whitby as a whole.

In 2006, the residential building activity in Brooklin declined considerably to only 152 units and a 12.5% share of Whitby.

In the most recent years, from 2010 to 2013, Brooklin experienced an increase in its share of housing growth, moving well into a 30%+ share range of Whitby.

Table 4.2.1 provides a summary of housing growth in Whitby and the Brooklin community.

Table 3.2.1
NEW RESIDENTIAL CONSTRUCTION IN WHITBY AND BROOKLIN
(Years 2000 and 2006 and Period 2010 to 2013)

Residential Units	2000 # Units	2006 # Units	2010 # Units	2011 # Units	2012 # Units	2013 # Units
Whitby (as a whole)	**1,691**	**1,219**	**632**	**818**	**554**	**225**
Brooklin (only)	321	152	198	320	195	76
Brooklin as % Share of Whitby	**19.0%**	**12.5%**	**31.3%**	**39.1%**	**35.2%**	**33.8%**

Source: Town of Whitby Planning and Building Departments.

3.3 Population Forecasts for Whitby and Brooklin (2013 to 2031)

Population data and forecasts for Whitby and Brooklin were provided by Hemson Consulting Ltd. For the years 2011, 2013 and 2031.

Hemson Consulting Ltd. also provided a population estimate for the ‘ultimate build-out’ of Brooklin which is estimated to occur in 2044.

Population was estimated by Realty Research Group for the interval years of 2016, 2021 and 2026 using an ‘average’ growth per year.

In summary:

- The **population of Whitby** is forecast **to increase by a total of 62,925 residents** from year-end 2013, of nearly 130,000, to a total of 192,900 by 2031.
- The projected annual increase in population in **Whitby** is expected to average around **3,500 people per year** until 2031.
- In this same time period, the population of Brooklin is forecast to **increase by a total of 36,220 residents** to a total of 56,170, from a current population of nearly 20,000.
- In the case of **Brooklin**, the population is expected to grow by an average of **2,000 residents per year** until 2031.
- Additionally, growth in Brooklin (and West Whitby) will occur beyond 2031 as the community matures with multiple residential forms in the greenfield areas and in the built-up area through intensification.

Table 3.3.1
WHITBY POPULATION FORECAST (2013 to 2031)

	2011	2013	2016	2021	2026	2031
TOWN OF WHITBY (base years 2013 to 2031)	**124,990**	**129,975**	**n.a.**	**n.a.**	**n.a.**	**192,900**
Total increase 2013 to 2031 is 62,925 people or an average of 3,496 people per year						
ADD: Population Increase Per Period			10,487	17,476	17,476	17,480
ESTIMATED POPULATION WHITBY	**124,990**	**129,975**	**140,462**	**157,938**	**175,414**	**192,900**

* Annual population figures are rounded

Source: Population data for Whitby in the years 2011, 2013 and 2031 were obtained from Hemson Consulting Ltd. All intervening time periods are averages estimated by Realty Research Group Ltd.

Table 3.3.2
BROOKLIN POPULATION FORECAST (2013 TO 2031)

	2013	2016	2021	2026	2031
BROOKLIN COMMUNITY (base years 2013 to 2031)	**19,950**	**n.a.**	**n.a.**	**n.a.**	**56,170**
Total Increase 2013 to 2031 is 36,220 people or an average of 2,012 people per year.					
Add: Population Increase Per Period		6,036	10,061	10,061	10,061
ESTIMATED POPULATION BROOKLIN	**19,950**	**25,987**	**36,048**	**46,109**	**56,170**

Source: Population data for Brooklin in 2013 and 2031 were obtained from Hemson Consulting Ltd. All intervening time periods are averages estimated by Realty Research Group Ltd.

3.4 Household Forecasts for Whitby and Brooklin (2013 to 2031)

Household forecasts are provided in Tables 3.4.1 and 3.4.2. These estimates have been used to calculate the respective 'average' household size in the various communities.

- The number of households in Whitby is forecast to increase from a current level estimated at nearly 43,000 households in 2013 to nearly 72,000 households by 2031. This is an increase of around 1,600 households per year, or roughly 8,000 households per 5-year interval.
- The current estimated household size in Whitby is around 3.0 persons per household and this size is expected to decrease marginally to 2.7 person per household by 2031.
- The household forecast for Brooklin is expected to grow from approximately 6,000 households (rounded) in 2013, to around 17,500 households by 2031.
- The current household size in Brooklin is larger than household size in Whitby, at 3.35 persons per household in Brooklin versus 3.0 persons per household in Whitby.
- By 2031, the household size in both Brooklin and Whitby is expected to decrease in both areas, to 3.2 person per household and 2.69 persons per household respectively.

Table 3.4.1
WHITBY HOUSEHOLD FORECAST (2013 TO 2031)

	2013	2016	2021	2026	2031
Town of Whitby Household Forecast (base years 2013 and 2031)	**42,700**				**71,650**
Total increase 2013 to 2031 is 29,945 households or an average of 1,608 households per year.					
Average Annual Increase Per Period		4,825	8,040	8,040	8,045
TOWN OF WHITBY Household Estimate	**42,700**	**47,525**	**55,565**	**63,605**	**71,650**
TOWN OF WHITBY Population Forecast	**129,975**	**140,462**	**157,938**	**175,414**	**192,900**
Average Persons Per Household in WHITBY	3.04	2.95	2.84	2.76	2.69

Source: Population and household forecast for Whitby in 2013 and 2031 were obtained from Hemson Consulting Ltd. All intervening time periods are averages estimated by Realty Research Group Ltd.

Table 3.4.2
BROOKLIN HOUSEHOLD FORECAST (2013 TO 2031)

	2013	2016	2021	2026	2031
Estimated Households in Brooklin (base years 2013 and 2031)	**5,950**				**17,580**
Total increase 2013 to 2031 is 11,630 households or an average of 646 households per year.					
Average Annual Increase Per Period		1,938	3,230	3,230	3,230
BROOKLIN Community Household Estimate	**5,950**	**7,888**	**11,178**	**14,348**	**17,580**
Brooklin Community Population (from Table 3.3.2)	**19,952**	**25,986**	**36,047**	**46,108**	**56,170**
Average Persons Per Household in BROOKLIN	3.35	3.29	3.24	3.21	3.19

Source: Population and household forecast for Brooklin in 2013 and 2031 were obtained from Hemson Consulting Ltd. All intervening time periods are averages estimated by Realty Research Group Ltd.

4. Whitby Retail/Commercial Space Inventory

The base data used in this analysis comes from the inventory of all retail/commercial space in the Town of Whitby undertaken by Realty Research Group Ltd. in 2006 for its report titled *2006 Retail Market Analysis Update*.

This inventory was updated, in part, using recent inventory data on the Brooklin community provided by Malone Given Parsons Ltd. and recent building permit data provided by the Town. The Brooklin inventory was verified and corrected as needed by Realty Research Group Ltd. through physical inspection in May 2014.

In some instances, corrections to the 2006 Inventory were also made where there were some obvious large changes in uses or users.

Although it is typical to undertake or update the entire retail/commercial space inventory in a Municipality or community for this type of analysis, the 2006 Inventory is assumed to be sufficient for the purposes of this current analysis, as the overall amount of space in Whitby is likely the same or similar today.

4.1 Explanation of Retail/Commercial Space and Uses

For purposes of this analysis, we have continued to use the definitions from the 2006 Report to define and/or identify the type of uses in the retail/commercial space inventory. In total, there are twenty-one use types of space ranging from automotive to vacant space.

Space is defined as being the gross leasable floor area (GLA) which is understood to be the area which the tenant/owner/user pays rent on.

In the case of uses which are located in the industrial areas, they are most often industrial/commercial uses, which include electricians, plumbers, building contractors, etc. They are excluded from the inventory.

Since a complete inventory update was not undertaken, a rough estimate has been assumed for vacant space.

The following table shows the various categories used in our analysis.

Table 4.1.1
RETAIL/COMMERCIAL INVENTORY USES IDENTIFIED (WITH ABBREVIATIONS)

	Type of Retail/Commercial Use (Arranged Alphabetically)	Code		Type of Retail/Commercial Use (Arranged Alphabetically)	Code
1	Auto Gas Only	Agas	12	Office/Financial - banks	OF
2	Auto Gas& Convenience store	Agasconv	13	Office/Medical	OM
3	Auto/New Car Dealer	ADealer	14	Office/Services – Insur/RE/acctg/etc	OS
4	Auto/Used Car Sales	ASales	15	Retail -Dept. Store Type Mdse (NFSR)	DSTM
5	Auto/Service	Aser	16	Retail - Other	OtherRet
6	Tires/Batteries/Accessories (TBA)	A-TBA	17	Services -Restaurant	RS
7	Food -Wine/Beer/Liquor	WBL	18	Services – Personal -dry clean etc.	S
8	Food - Convenience Store	FC	19	Services - Recreational -spas ,etc.	SRec
9	Food/Supermarket	F	20	Vacant – primarily retail, some office	V, VO
10	Food - Specialty Stores	FSp	21	Under construction	U/C
11	Office/General - Corporate type offices	O			

Source: Realty Research Group Ltd.

4.2 Retail/Commercial Space Inventory in Whitby by Area

The primary highlights of the partially updated retail/commercial space inventory for Whitby are summarized in the points below:

- At present, there is nearly 6,200,000 sq.ft. of space in Whitby. This compares to a total of just less than 5,670,000 sq.ft. in 2006, an increase of roughly 500,000 sq.ft.

- **Brooklin has just over 400,000 sq.ft. of retail/ commercial space**.

- The largest concentrations of all types of retail/commercial space are located in four physical areas:

(i) Downtown Central & Adjacent Areas, with 1,259,000 sq.ft.

Total CBD CA (Central Area #1)	765,890 sq.ft.
Total DOWNTOWN CA Adjacent Areas (#1A,B,C,D	493,309 sq.ft.
Total	1,259,199 sq.ft.

(ii) Dundas East Central & Adjacent Areas, with 1,246,000 sq.ft.

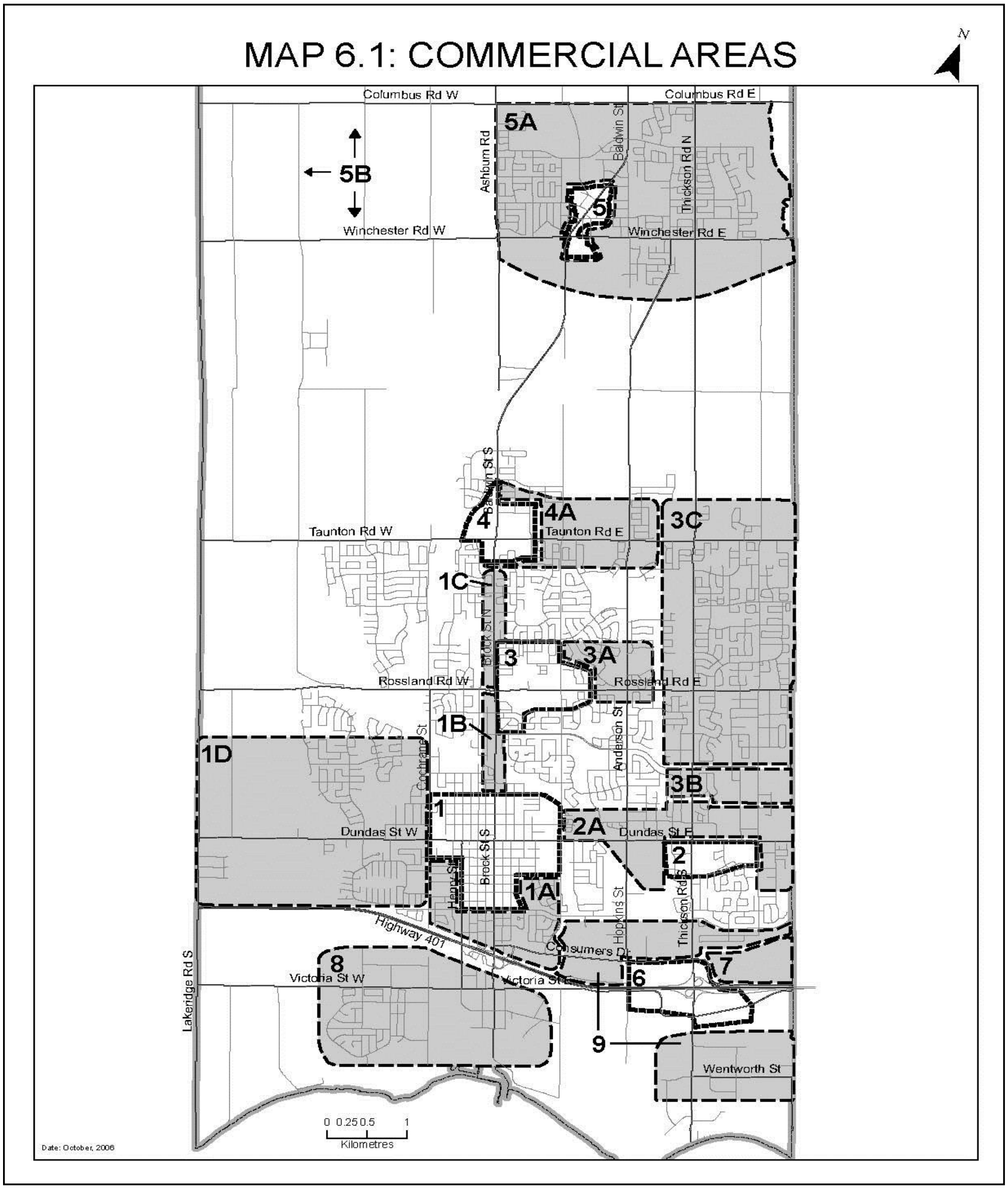
Total DUNDAS EAST CA (Central Area #2)	628,190 sq.ft.
Total DUNDAS EAST CORRIDOR (#2A,B)	618,746 sq.ft.
Total	1,246,936 sq.ft.

Table 4.2.1
EXISTING RETAIL/COMMERCIAL SPACE IN WHITBY BY AREA (2013)

Map 6.1 Ref. #	IDENTIFIED INVENTORY SUB-AREAS	Floor Area Sq.Ft.	Total Sq.Ft.	Floor Area Sq.M.	Total Sq.M.
1	Subtotal CBD - East CA	147,884		13738	
1	Subtotal CBD -West CA	193,547		17981	
1	Subtotal CBD N CA	190,600		17707	
1	Subtotal CBD - South CA	233,859		21726	
	TOTAL CBD CA (Central Area)		**765,890**		**71151**
1A	Total CA Brock S &Consumers (S of CBD)	137,115		12738	
1B	Total CA Brock N of CBD	102,669		9538	
1C	Total CA Brock North of Rossland	46,000		4273	
1D	Total CA Dundas West of CBD	207,525		19279	
	TOTAL DOWNTOWN CA Adjacent Areas		**493,309**		**45828**
2	Total at Whitby Mall Dundas E CA	322,117		29925	
2	Total Dundas E/Kendalwood Dundas CA	174,930		16251	
2	Total Thickson Place Dundas CA	131,143		12183	
	TOTAL DUNDAS EAST CA (Central Area)		**628,190**		**58359**
2A	Total Dundas E Corridor South Side	106,140		9860	
2B	Total Dundas Corridor E North Side	512,606		47621	
	TOTAL DUNDAS E Corridor N&S Side		**618,746**		**57482**
3	Total Rossland Garden CA	41,598		3864	
3	Total Whitby Square & Garden Corridor N	157,469		14629	
	TOTAL ROSSLAND GARDEN CA (Central Area)		**199,067**		**18493**
3A	Total Rossland E Corridor	47,212		4386	
3B	Total Thickson Corridor N Dundas to Manning	20,440		1899	
3C	Total Thickson Square	145,442		13512	
3C	Total Thickson Corridor North of Manning/Taunton	13,200		1226	
	TOTAL THICKSON CORRIDOR N & GARRARD		**226,294**		**21023**
4	TOTAL Fieldgate & Other at Brock/Taunton	116,862		10856	
4	Total Smart Centre Wal Mart & Loblaw Superstore	474,425		44074	
	TOTAL BROCK/TAUNTON CA (Central Area)		**591,287**		**54931**
4A	Total Taunton Corridor East to Garden	251,724		23385	
4A	Total Taunton Garden Power Centre	355,523		33028	
	TOTAL TAUNTON CORRIDOR EAST/Garden		**607,247**		**56413**
5	BROOKLIN				
5	TOTAL BROOKLIN CA	256,285		23809	
5A	TOTAL Along Winchester East & West& Carnwith	87,054		8087	
5B	TOTAL RURAL BROOKLIN WHITBY	59,563		5533	
	TOTAL BROOKLIN		**402,902**		**37430**
6	Total Special Activity Node B NW	349,039		32426	
6	Total Special Activity Node B NE	8,080		751	
6	Total Special Activity Node B SE (Thickson Ridge)	614,856		57120	
6	Total Special Activity Node B SW	180,000		16722	
	TOTAL SPECIAL ACTIVITY NODE B		**1,151,975**		**107018**
7	Total NE Industrial/Champlain	130,812		12152	
8	Total Port Whitby / Lynde Shores	67,518		6272	
9	Total SE Industrial Areas	289,772		26920	
	TOTAL INDUSTRIAL AREAS		**488,102**		**45345**
	OVERALL TOTAL WHITBY		**6,173,009**		**573473**

Source: Realty Research Group Ltd.

Map 4.2
PHYSICAL AREAS IN WHITBY



Source: This map was extracted from the *2006 Retail Market Analysis Update* by Realty Research Group Ltd. It shows the Physical Areas in Whitby used to categorize the retail/commercial space inventor.

(iii) Taunton Corridor from Brock to Garden, with 1,200,000 sq.ft.

Total BROCK TAUNTON CA (#4)	591,287 sq.ft.
Total TAUNTON CORRIDOR EAST (#4A)	607,247 sq.ft.
Total	1,198,534 sq.ft.

(iv) Special Activity Node B, (#6), with 1,151,000 sq.ft.

- The area described as the South East Industrial sub-area (#9), which is primarily industrial type buildings, has a total of 290,000 sq.ft.
- The NE Industrial/Champlain area (#7)(east of Thickson and north of #401) has nearly 131,000 sq.ft., including the Burns/Sawdon Plaza.
- The Lynde Shores/Port Whitby area (#8) has just less than 70,000 sq.ft., of which a large part in the industrial area is office space.

4.3 Total Retail/Commercial Space in Whitby by Type

For ease of discussion and comparison to the inventory data presented in the 2006 Report, the twenty-one use types of space have been consolidated into ten larger use type categories.

Based on these larger use type categories, the total retail/commercial space in Whitby can be summarized as follows:

- The largest use type category in Whitby at nearly **2,300,000 sq.ft. is Department Store Type Merchandise or Non-Food Store Retail Space** (DSTM/NFSR).
- The **second largest use type group is office space. It comprises nearly 990,000 sq.ft.** under four separate use types - the largest being the services category at around 330,000 sq.ft.
- **Food stores**, under the category of moderate to very large grocery stores and small specialty outlets, comprise **around 625,000 sq.ft.** The Convenience stores, also in the food category, comprise nearly 65,000 sq.ft.
- **Restaurants** are also a very large use type category with just over **500,000 sq.ft.**
- **Automotive related uses**, including auto dealerships, used car sales, and the broad range of service type facilities such as tire shops and gas stations, comprise around **510,000 sq.ft.**

- **Recreational/entertainment uses** (movie theatres, private health/fitness clubs, etc.) occupy just over **400,000 sq.ft.**

- The broad range of **Service type uses** in Whitby occupy just over **375,000 sq.ft.**

Table 4.3.1
SUMMARY OF RETAIL/COMMERCIAL USES IN WHITBY BY TYPE (2013)

Type #	Type of Use	Type of Use Abbreviation	Sq.Ft.	Sq.M.
1	**Department Store Merchandise (or Non-Food Store Retail Space)**	**DSTM / NFSR**	**2,283,823**	**212168**
2a	Food Stores (Groceries)	F	568,968	52857
2b	Food Specialty Stores	FSp	55,407	5147
2	**Total Food Stores**	**F&FSp**	**624,375**	**58004**
3	Food Convenience Stores	FC	64,381	5981
4	Beer Wine Liquor	BWL	72,749	6758
5	Other Retail	OtherRetail	109,902	10210
6	Service Retail Type	S	376,567	34983
7	Service Recreational Type	SRec	408,860	37983
8	Restaurants (Large & Fast Food)	Rest	501,152	46557
3-8	**Total Various Retail/Commercial Stores**		**1,533,611**	**142473**
9a	Office Service Type	OS	330,032	30660
9b	Office Medical	OM	265,828	24695
9c	Office Financial (Banks)	OF	109,404	10164
9d	Office Other Corporate Type	O	177,916	16528
9	**Total Office Type Uses**	**O**	**883,180**	**82047**
10a	Auto Dealer	ADealer	242,380	22517
10b	Auto Gas	Agas	15,461	1436
10c	Auto Gas/Restaurant	AgasRest	39,707	3689
10d	Auto Sales	ASales	23,925	2223
10e	Auto Service	Aser	109,749	10196
10f	Auto Tubes/Tires/Batteries	A-TBA	79,012	7340
10	**Total Auto Related Type Uses**		**510,234**	**47401**
	TOTAL OCCUPIED RETAIL/COMMERCIAL USES		**5,835,223**	**542093**
	Vacant Space (Estimate Only)		**337,786**	**31380**
	TOTAL ALL RETAIL/COMMERCIAL USES		**6,173,009**	**573473**

Source: Realty Research Group Ltd.

4.4 Retail/Commercial Space Per Capita in Whitby

The following Table 4.4.1 summarizes the retail/commercial space in Whitby on the basis of sq.ft. per capita. These values are used to estimate new space needs for many of the use type categories.

The major changes in the amount of sq.ft. per capita from year 2000 to 2013 are noted as follows:

- There has been an increase in the **total overall amount of retail/ commercial space, increasing from 45.5 sq.ft. per capita to 47.1 sq.ft.** per capita.
- The per capita amount of **Department Store Type Merchandise or Non-Food Store Retail Space (DSTM/NFSR) has decreased from 20.3 sq.ft. per capita to 18.3 sq.ft.** per capita.
- **Major Food store and convenience/specialty food type space** have **increased** on a per capita basis from 4.2 to 5.2 sq.ft.

Table 4.4.1
COMPARATIVE RETAIL/COMMERCIAL SPACE PER CAPITA IN WHITBY (2000, 2006 AND 2013)

Various Use Type Categories	2000 Sq.Ft. Per Capita	2006 Sq.Ft. Per Capita	2013 Sq.Ft. Per Capita
Total DSTM/NFSR Type Space	17.7	19.6	17.5
Other Retail Space	1.4	0.7	0.8
Total DSTM/NFSR & Other Space	**19.1**	**20.3**	**18.3**
Liquor, Beer, Wine Space	**0.4**	**0.4**	**0.6**
Supermarket/Large Store Space	3.2	3.8	4.3
Other Food Store Space	1.0	1.1	0.9
Total Food Store Space	**4.2**	**4.9**	**5.2**
Restaurant Service Space	4.5	4.0	3.8
Service Type Space – personal services	3.8	2.5	2.9
Service Recreational Space	3.6	3.1	3.1
Office Space – services/medical/financial	4.9	5.6	6.8
Total Services Type Space	**16.7**	**15.3**	**16.6**
Automotive Space – repair/service/other	1.8	1.3	1.9
Auto Used Car Sales Space	0.4	0.2	0.2
New Auto Dealership Space	2.4	2.4	1.8
Total Auto Type Space	**4.6**	**3.9**	**3.9**
Total All Occupied Space	**44.5**	**44.4**	**44.6**
Vacant Retail Space	**2.0**	**1.1**	**2.5**
Total All Retail/Commercial Space	**46.5**	**45.5**	**47.1**

Source: Realty Research Group Ltd.

5. Brooklin Retail/Commercial Space Inventory

This chapter provides an overview of the amount and type of retail/ commercial space in the Brooklin community. The same type of use categories (and abbreviations) used in Whitby also apply in Brooklin.

5.1 Retail/Commercial Space Inventory in Brooklin by Area

The primary highlights of the retail/commercial space inventory for Brooklin are summarized in the points below:

- Retail/commercial uses in Brooklin are situated in one of three locations: (1) Downtown Brooklin Central Area, (2) East/West Winchester Rd. Corridor, and (3) various small retail nodes such as Carnwith Drive and the outlying Rural areas both north and south of the community.
- There is **nearly 420,000 sq.ft.** of retail/commercial space in Brooklin. This compares to a total of 280,000 sq.ft. in 2006 - an increase of roughly 140,000 sq.ft.
- The amount of space in the **Brooklin Central Area** has increased significantly over the past few years to a total of nearly **260,000 sq.ft.**
- The **remaining two areas** (East/West Winchester Rd. Corridor and the outlying rural areas) have remained relatively the same over the past number of years, with a total of **just over 146,000 sq.ft.**

Table 5.1.1
EXISTING RETAIL/COMMERCIAL SPACE IN BROOKLIN BY AREA (2013)

Map 6.1 Ref. #	IDENTIFIED INVENTORY SUB-AREAS	Floor Area Sq.Ft.	Total Sq.Ft.	Floor Area Sq.M.	Total Sq.M.
5	TOTAL BROOKLIN CA	256,285		23809	
5A	TOTAL Along Winchester East/West & Carnwith	87,054		8087	
5B	TOTAL RURAL BROOKLIN WHITBY	59,563		5533	
5	**OVERALL TOTAL BROOKLIN**		**402,902**		**37430**

Source: Brooklin Retail/Commercial Inventory undertaken by Malone Given Parsons Ltd in Sept 2013 and updated by Realty Research Group Ltd. in May 2014.

5.2 Total Retail/Commercial Space in Brooklin by Type

Based on the large use type categories identified in section 3.4, the total retail/commercial space in Brooklin can be summarized as follows:

- The **total amount of occupied** retail commercial space in Brooklin is roughly **403,000 sq.ft.**
- The **largest use type category** in Brooklin is **Department Store Type Merchandise or Non-Food Store Retail Space** (DSTM/NFSR) at nearly **88,000 sq.ft.**
- The **second largest** use type of space is the group categorized as **Service Type** retail uses, with **a total of just under 65,000 sq.ft.**
- The **third largest** use type is the combined **office space** uses, comprising **just over 62,000 sq.ft.**
- **Restaurants** are also a **relatively large use type** in Brooklin with **nearly 50,000 sq.ft.**

Table 5.2.1
SUMMARY OF RETAIL/COMMERCIAL USES IN BROOKLIN BY TYPE (2013)

Type #	Type of Use	Type of Use Abbreviation	Sq.Ft.	Sq.M.
1	**Department Store Type Merchandise (or Non-Food Store Retail Space)**	**DSTM/NFSR**	**87,696**	**8147**
2a	Food Stores (Groceries)	F	36,377	3379
2b	Food Specialty Stores	FSp	7,205	669
2	**Total Food Stores**	**F&FSp**	**43,582**	**4049**
3	**Food Convenience Stores**	**FC**	**11,537**	**1072**
4	**Beer Wine Liquor**	**BWL**	**15,975**	**1484**
5	**Other Retail**	**OtherRetail**	**15,239**	**1416**
6	**Service Retail Type**	**S**	**64,874**	**6027**
7	**Service Recreational Type**	**SRec**	**22,197**	**2062**
8	**Restaurants (Large & Fast Food)**	**Rest**	**49,588**	**4607**
9a	Office Service Type	OS	27,864	2589
9b	Office Medical	OM	22,371	2078
9c	Office Financial (Banks)	OF	11,852	1101
9	**Total Office Type Uses**	**O**	**62,087**	**5768**
10	**Total Auto Related Type Uses**	**Auto/Ser**	**25,667**	**2384**
	TOTAL OCCUPIED RETAIL/COMMERCIAL USES		**398,442**	**37016**
	Vacant Space		**4,460**	**414**
	TOTAL ALL RETAIL/COMMERCIAL USES		**402,902**	**37430**

Source: Brooklin Retail/Commercial Inventory undertaken by Malone Given Parsons Ltd. in Sept 2013 and updated by Realty Research Group Ltd. in May 2014.

5.3 Retail/Commercial Space Per Capita in Brooklin

The following Table 5.3.1 summarizes Brooklin's retail/commercial space inventory on the basis of sq.ft. per capita comparing 2006 and 2013. Data for 2000 was not available. The major changes in the space inventory over the 7 year period were as follows:

- Overall, there has been an **increase in the overall amount** of retail commercial space, increasing from 14.7 sq.ft. per capita to 20.8 sq.ft. per capita.
- The retail store category of **Department Store Type Merchandise or Non-Food Store Retail Space (DSTM/NFSR) decreased** from 6.3 sq.ft. per capita to 5.3 sq.ft. per capita.
- The overall **Food store space** category **decreased** from 3.6 sq.ft. per capita to 2.8 sq.ft. per capita.
- The category of **Various Service type** space **increased** from 6.1 sq.ft. per capita to 10.2 sq.ft. per capita.

Table 5.3.1
COMPARATIVE RETAIL/COMMERCIAL SPACE PER CAPITA IN BROOKLIN (2006 AND 2013)

Various Use Type Categories	2006 Sq.Ft.	2006 Sq.Ft. Per Capita	2013 Sq.Ft.	2013 Sq.Ft. Per Capita
Total DSTM/NFSR Type Space	73,356	4.73	87,696	4.52
Other Retail Space	24,659	1.59	15,239	0.79
Total DSTM & Other Retail Space	**98,015**	**6.32**	**102,935**	**5.31**
Liquor, Beer, Wine Space	**1,600**	**0.10**	**15,975**	**0.82**
Supermarket/Large Store Space	36,253	2.34	36,377	1.88
Specialty Food Store Space	-	-	7,205	0.37
Convenience Food Store Space	20,046	1.29	11,537	0.59
Total Food Store Space	**56,299**	**3.63**	**55,119**	**2.84**
Restaurant Service Space	22,228	1.43	49.588	2.56
Service Type Space – personal services	31,812	2.05	64,874	3.34
Service Recreational Space	12,100	0.78	22,197	1.14
Office Space – services/medical/financial	29,272	1.89	62,087	3.20
Total Services Type Space	**95,412**	**6.16**	**198,746**	**10.25**
Automotive Space – repair/service/other	28,470	1.84	16,723	0.86
Auto Used Car Sales Space	9,250	0.60	8,944	0.46
New Auto Dealership Space	0	-	0	-
Total Auto Type Space	**37,720**	**2.43**	**25,667**	**1.32**
Total All Occupied Space	**222,906**	**1.48**	**398,442**	**20.54**
Vacant Retail Space	**4,264**	**0.28**	**4,460**	**0.23**
Total All Retail/Commercial Space	**227,170**	**14.66**	**402,902**	**20.77**

Source: Realty Research Group Ltd.

5.4 Major Factors Affecting Retail/Commercial Growth in Brooklin

At present, there are two projects underway in the vicinity of Brooklin that will significantly impact the future development potential of retail/ commercial space in the community. Interestingly, each factor will have a different effect - one beneficial and the other a competitive obstacle!

The first is the Highway #407 project which is now under construction from Pickering to Oshawa. The highway will intersect several major roads in the Brooklin area at three locations: 1) Winchester Road West just west of Ashburn Road, 2) Baldwin Street South just south of Winchester Road, and Winchester Road East at Thornton Road. The highway will also connect to Highway #401 via a north-south corridor called the Highway #407 West Durham Link running along the east side of Lake Ridge Road. Once complete, Brooklin will benefit from much improved access to the area and greater exposure to a larger market. This will act to strengthen the opportunity for retail/commercial facilities in the community.

The second is the future development of a new, recently approved 1,300,000 sq.ft. shopping centre in Oshawa by Rio Can. It will be located at the intersection of Winchester Road and Simcoe Street North, less than 5 kilometres directly east of downtown Brooklin. Once complete, the new facility will provide increased competition for Brooklin merchants and will act to weaken the opportunity for additional new retail/ commercial facilities in the community.

It is easy to see how both projects will affect the Brooklin community, but much more difficult to quantify these effects.

In the short term, we know that the population base in Brooklin is established and actively growing and that this population will no doubt require additional goods and services from local providers to supply its needs. Better and faster access to Brooklin for outside residents will also create more demand for goods and services from suppliers in the community.

In the longer term, the emergence of an extremely large regional type shopping centre a short distance away in Oshawa will likely lead potential developers in Brooklin to act cautiously.

Thus, in making projections for existing and future retail/commercial space needs in Brooklin, particularly for the major store type of Department Store Type Merchandise or Non-Food Store Retail Space, we must be somewhat cautious too.

6. Growth in Retail/Commercial Space in Whitby

6.1 Growth in Retail/Commercial Space in Whitby

In order to better understand the amount of growth that has taken place in Whitby's retail/commercial sector over the past number of years, the following Tables 7.1.1 and 7.1.2, provide an indication of both the change in total floor area and the change in sq.ft. per capita for three time periods - 2000, 2006 and 2013.

The major changes in Whitby's floor space growth during this period were:

- The total inventory of retail/commercial space in Whitby **increased by over 2,000,000 sq.ft.** in the 13-year period from 2000 and 2013.
- In the **last five years**, from 2006 and 2013, the total amount of space in Whitby **increased** by around **1,000,000 sq.ft.**
- Notwithstanding a significant total space increase, **the amount of space per capita increased only marginally from 46.5 sq.ft. to 47.2 sq.ft.**
- The **retail goods** sector (Department Store Type Merchandise or Non-Food Store Retail Space) increased significantly between 2000 and 2006 by around 700,000 sq.ft. or 1.0 sq.ft. per capita. However, from 2006 to 2013, retail goods space only grew by approximately 65,000 sq.ft. and the overall space (sq.ft.) per capita **decreased from 20.3 sq.ft. to 18.3 sq.ft.**
- The **food store space** category **increased** considerably in both time periods (2000 to 2006 to 2013) **from 4.2 sq.ft. to 5.3 sq.ft. per capita.**
- Both the **Services and Automotive** space categories increased in absolute terms, but **did not increase in terms of sq.ft. per capita**.
- One major use category, **Office Space** (Public/Institutional Type Office Space), **has not been included** in the 2013 inventory or in the estimates for new space. In 2006, it comprised some 900,000 sq.ft., equivalent to nearly 8 sq.ft. per capita.

Table 6.1.1
COMPARATIVE TOTAL SPACE INVENTORY IN WHITBY (YEARS 2000, 2006 AND 2013)

Various Use Type Categories	2000 Total Sq.Ft.	2006 Total Sq.Ft.	2013 Total Sq.Ft.
Total DSTM/NFSR Type Retail Space	1,525,894	2,245,931	2,283,823
Other Retail Space	118,412	81,322	109,902
Total DSTM/NFSR & Other Space	**1,644,306**	**2,327,253**	**2,393,725**
Liquor, Beer, Wine Space	**30,359**	**49,382**	**72,749**
Supermarket Space	274,129	439,511	568,968
Other Food Space	85,288	121,092	119,788
Total Food Store Type Space	**359,417**	**560,603**	**688,756**
Restaurant Service Space	383,750	457,287	501,152
Service Type Space – personal services	323,404	284,994	376,567
Service Recreational Space	308,605	352,763	408,860
Offices – services/medical/financial *	418,073	654,041	883,180
Total Services Type Space	**1,433,832**	**1,749,085**	**2,169,759**
Total Automotive Related Type Space	**392,955**	**448,046**	**510,234**
Total All Occupied Space	**3,830,510**	**5,084,987**	**5,835,223**
Add Vacant Retail/Commercial Space	**174,732**	**129,083**	**337,786**
Total All Retail/Commercial Space	**4,005,242**	**5,214,070**	**6,173,009**

* Major Public/Institutional Office Space is excluded.

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table D-1).

Table 6.1.2
COMPARATIVE SPACE PER CAPITA INVENTORY IN WHITBY (YEARS 2000, 2006 AND 2013)

Various Use Type Categories	2000 Sq.Ft. Per Capita	2006 Sq.Ft. Per Capita	2013 Sq.Ft. Per Capita
Total DSTM/NFSR Type Retail Space	17.7	19.6	17.4
Other Retail Space	1.4	0.7	0.8
Total DSTM & Other Space	**19.1**	**20.3**	**18.3**
Liquor, Beer, Wine Space	**0.4**	**0.4**	**0.6**
Supermarket Space	3.2	3.8	4.3
Other Food Space	1.0	1.1	0.9
Total Food Store Type Space	**4.2**	**4.9**	**5.3**
Restaurant Service Space	4.5	4.0	3.8
Service Type Space – personal services	3.8	2.5	2.9
Service Recreational Space	3.6	3.1	3.1
Offices – services/medical/financial *	4.9	5.6	6.7
Total Services Type Space	**16.7**	**15.3**	**16.6**
Total Automotive Related Type Space	**4.6**	**3.9**	**3.9**
Total All Occupied Space	**44.5**	**44.4**	**44.7**
Add Vacant Retail/Commercial Space	**2.0**	**1.1**	**2.6**
Total All Retail/Commercial Space Whitby	**46.5**	**45.5**	**47.2**

* Major Public/Institutional Office Space is excluded.

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table D-1).

6.2 Growth in Retail/Commercial Space in Brooklin

The majority of the retail/commercial space in Brooklin is located in the Brooklin Central Area. This area extends north, south, east and west from the intersection of Winchester Road and Baldwin Street for approximately one kilometre.

Most of the growth in Brooklin over the past decade has occurred in the Brooklin Central Area, with the largest facility in this area being the Brooklin Towne Centre, a shopping facility with nearly 125,000 sq.ft.

Tables 6.2.1 and 6.2.2 summarize both the change in total floor area and change in sq.ft. per capita which occurred in Brooklin in the years 2006, 2010 and 2013.

In brief, the major changes include:

- In 2006, Brooklin had a total of around 278,000 sq.ft. of retail/ commercial space and by 2013 this increased to just over 400,000 sq.ft. This equates to a total supply **increase from 18 sq.ft. per capita to nearly 21 sq.ft. per capita**.
- At this early stage in the development and growth of Brooklin, there is, as yet, no dominant type of retail/commercial use. The **Department Store Type Merchandise or Non-Food Store Retail Space type stores** currently have the **largest** amount of floor space with just under 90,000 sq.ft or **4.5 sq.ft. per capita** - a small reduction from 4.7 and 4.8 sq.ft. per capita in 2006 and 2010 respectively.
- The second largest use category is the **Office/Service type use**. It has a total of around **62,000 sq.ft.** and **3.2 sq.ft. per capita** which increased from around 2.0 sq.ft. per capita in 2006 and 2010.
- The third largest use category is the **Food Store** use with just over 55,000 sq.ft. The space per capita **decreased from 3.6 sq.ft to 2.8 sq.ft.** from 2006.
- The **Restaurant use** category is an increasingly important use type in Brooklin. The space **increased** from just over 22,000 sq.ft. to nearly 50,000 sq.ft. in 2013 - **an increase from 1.4 sq.ft. per capita to 2.6 sq.ft. per capita**.

TABLE 6.2.1
COMPARATIVE TOTAL SPACE INVENTORY IN BROOKLIN (2006, 2010 AND 2013)

Type	Various Use Type Categories	Abbreviation	2006	2010	2013
1	**DSTM/NFSR Type Retail Uses**	**DSTM /NFSR**	**73,356**	**83,811**	**87,696**
2	Food – Supermarket & Specialty Food Uses	F&FSp	48,487	47,403	43,582
3	Food – Convenience Stores	FC	7,812	6,850	11,537
	Total Food Type Space		**56,299**	**54,253**	**55,119**
4	**Wine, Beer & Liquor stores**	**WBL**	**1,600**	**9,597**	**15,975**
5	**Other Retail Uses – cable/phone/RV sales, etc.**	**Other Retail**	**24,659**	**20,950**	**15,239**
6	**Service Retail Uses**	**S**	**31,812**	**34,505**	**64,874**
7	**Service Uses – recreational, entertainment, etc.**	**SRec**	**12,100**	**20,195**	**22,197**
8	**Restaurant Uses**	**RS (Rest)**	**22,238**	**35,895**	**49,588**
9a	Office – Service Uses (insurance, accounting, etc.)	OS	12,535	11,989	27,864
9b	Office – Medical Uses	OM	10,388	16,246	22,371
9c	Office – Financial Uses (Banks)	OF	6,349	7,649	11,852
9d	Office – Other/Corporate	O	0	0	0
	Total Office/Service Type Uses		**29,272**	**35,884**	**62,087**
10	**Total Auto Related Uses**	**A**	**22,490**	**25,090**	**25,667**
	OVERALL TOTAL Occupied Space		**273,826**	**320,180**	**398,442**
	Add Vacant Retail & Service Office Space	**V**	**4,264**	**4,728**	**4,460**
	TOTAL SPACE INVENTORIED		**278,090**	**324,908**	**402,902**

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table D-2).

Table 6.2.2
COMPARATIVE SPACE PER CAPITA INVENTORY IN BROOKLIN (2006, 2010 AND 2013)

Type	Various Use Type Categories	Abbreviation	2006	2010	2013
1	**DSTM/NFSR Type Retail Uses**	**DSTM /NFSR**	**4.7**	**4.8**	**4.5**
2	Food – Supermarket & Specialty Food Uses	F&FSp	3.1	2.7	2.2
3	Food – Convenience Stores	FC	0.5	0.4	0.6
	Total Food Type Space		**3.6**	**3.1**	**2.8**
4	Wine, Beer & Liquor Stores	WBL	0.1	0.5	0.8
5	Other Retail Uses – mostly phone/video stores	Other Retail	1.6	1.2	0.8
6	Service Retail Uses	S	2.1	2.0	3.3
7	Service Uses – recreational, entertainment, etc.	SRec	0.8	1.2	1.1
8	Restaurant Uses	RS (Rest)	1.4	2.1	2.6
	Total Various Retail & Service		**6.0**	**7.0**	**8.6**
9a	Office – Service Uses (insurance, accounting, etc.)	OS	0.8	0.7	1.4
9b	Office – Medical Uses	OM	0.7	0.9	1.2
9c	Office – Financial Uses (Banks)	OF	0.4	0.4	0.6
9d	Office – Other/Corporate	O	0	0	0
	Total Office/Service Type Uses		**1.9**	**2.1**	**3.2**
10	**Total Auto Related Uses**	**A**	**1.5**	**1.4**	**1.3**
	OVERALL TOTAL Occupied Space		**17.7**	**18.3**	**20.5**
	Add-Vacant Retail & Service Office Space	**V**	**0.3**	**0.3**	**0.2**
	TOTAL SPACE INVENTORIED		**17.9**	**18.6**	**20.7**

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table D-2).

7. Summary of 2014 Brooklin Merchant Survey

Given that the major thrust of this Retail/Commercial Needs Analysis is to assess the long term growth prospects of the Brooklin community, it was deemed important to obtain some input from the existing merchants/businesses operating in the community. A summary of the most important Questionnaire findings are provided in this chapter and the complete survey report is submitted separately.

In mid April 2014, the survey firm Advitek undertook a survey of the merchants in Brooklin. The objective of the survey was to obtain information on a variety of issues related to retailing in the community and the merchants were asked the following questions:

(1) How long has the business been in operation at its current location?

(2) What is your role in the business (owner, manager or staff)?

(3) What is the gross leasable size of the space that the business occupies?

(4) What portion of the gross leasable space is used for selling, storage and office?

(5) How many full-time and part-time employees work for the business?

(6) How many employees live-in and live-outside of Whitby?

(7) Do you (the "business") plan on moving to a new location?

(8) How many of your customers do you think come from Brooklin, other parts of Whitby and places outside of Whitby?

(9) What are your major concerns about doing business in Brooklin?

(10) What do you think the Town could do to assist retailing in Whitby?

(11) What are your (the "businesses") annual net sales?

(12) What is the change in sales over last year?

(13) What is the change in sales over the last 5 years?

Overall, a total of 81 merchant/businesses responded to the survey. Of this total, 23% were in the DSTM type retail goods category, 7% were in the food store category and 69% were in the category referred to as 'Other' which is comprised of various service type businesses.

A summary of the responses to the most important questions is provided below:

Question #5 / How many full-time and part-time employees work for the business?

Most merchants (40%), indicated that they employed between 1 and 2 full-time people, another 21% employed 5 to 6 people and 16% of the responding merchants indicated that they employed 3 to 4 people.

In terms of part-time employment, 27% of the merchants employed no part-time people at all. The next largest part-time employment category was 25% of merchants employing 1 to 2 part-time people, followed by 17% employing 3 to 4 part-time people and 12% employing 5 to 6 part-time people.

Question #6 / How many employees live-in and live-outside of Whitby?

In total, responding merchants in Brooklin reported employing a total of 925 people. Of the total number of employees, 542 lived inside Whitby and 383 lived outside Whitby.

In terms of the size of the businesses who employed people who lived inside Whitby, the largest size categories were: (1) merchants employing 3 to 4 people at 33%; and (2) merchants employing 1 to 2 people at 27%. Additionally, 27% of the businesses employed more than 5 people who lived in Whitby, upwards to more than 20 people.

In terms of those businesses who employed people who lived outside Whitby, the largest size categories were: (1) merchants employing 1 person at 21%; (2) merchants employing 1 to 2 people at 36%; and (3) merchants employing 3 to 4 people at 16%. The remaining 25% of merchants employed over 5 people who lived outside Whitby, upward to over 20 people.

Question #8 / How many of your customers do you think come from Brooklin, other parts of Whitby and places outside of Whitby?

For customers originating from Brooklin, 63% of merchants believed that between 51% to 81% of their customers lived in Brooklin.

For customers originating from other parts of Whitby, 80% of merchants believed that between 1% to 30% of their customers lived in Whitby but outside of Brooklin.

And for customers originating from outside of Whitby, 75% of merchants believed that between 0% to 20% of their customers did not live in Whitby.

Question #9 / What are you major concerns about doing business in Brooklin?

The most frequent responses from merchants were:

(1) No concerns or did not know, at 19%,
(2) Highway #407 construction, at 15%,
(3) Increasing competition, at 12%,
(4) Traffic congestion and lack of parking, each with 11%
(5) Construction and rent increasing, each with 10%.

Question #10 / What do you think the Town could do to assist retailing in Whitby?

The most popular responses were:

(1) Nothing or did not know, at 31%,
(2) Support local business with free signage/advertising, at 20%
(3) reduced taxes, at 15%.

Question #11 / What are your (the "businesses") annual net sales?

Merchants reported net annual sales as follows:

(1) Under $500,000, at 28%,
(2) $500,000 to $999,999, at 7% and
(3) $1,000,000 plus, at 19%.

A further 26% of merchants did not know and 20% refused to answer.

8. General Impact of e-Commerce on Traditional Retail Market

Although it is not within the scope of this report to analyze, assess or quantify the effect of e-commerce activity on over the counter retail sales in Whitby, or on the amount of retail/commercial space that could possibly be affected now or in the future, it is necessary to present a brief overview of the retailing changes that are rapidly occurring throughout North America.

8.1 Impact of e-Commerce on Traditional Retail Sales

Ten years ago, e-Commerce was in its infancy. Sales were limited to a few items such as books, video, travel, banking and software. Today, there are few items or services that people cannot buy online, with shoppers showing a preference for bulkier products, like electronics and baby goods, that can be delivered direct to their door.

The internet has not only enabled e-commerce sales, it has completely changed the “path-to-purchase,” impacting the way shoppers come to, and ultimately buy, products and brands. Shoppers are doing more research before they buy, using the internet to pre-shop, price compare, read reviews, browse and purchase at **any time**. Mobile technology takes this one step further, giving shoppers both access to the internet and the ability to shop from **any place**.

This has had a significant impact on brick-and-mortar stores. According to ShopperTrak (which tracks store traffic in 60,000 locations in 90 countries), retailers got only about half the holiday traffic in 2013 over what they did in 2011. ShopperTrak measured declines of 14.6% in 2013, 16.3% in 2012 and 28.2% in 2011.[1]

The US Census Bureau estimates that e-Commerce sales in the United States in 2012 were US$263 billion.[2] In 2011, U.S. retailers reported online sales of US$194 billion, about 4.7 percent of total retail sales. The largest retail merchandise category in the Electronic Shopping and Mail-Order Houses industry (NAICS 4541) was Clothing and Clothing Accessories with US$27 billion. E-commerce sales in 2010 were reported at US$167 billion.[3]

[1] Retail Sales Traffic Decreased Last Week, ShopperTrak PR, December 11, 2013 and other ShopperTrak articles.
[2] US Census Bureau News, Quarterly Retail E-Commerce Sales, 4th Quarter 2013, February 18, 2014.
[3] E-Stats, US Census Bureau, May 23, 2013.

According to Forrester Research, online retail sales in the United States are expected to reach $294 billion in 2014 or approximately 9% of total retail sales. By 2018, they are expected to account for 11% of total US retail sales.[4]

8.2 Possible Impact of e-Commerce on Future Retail Space Needs

As e-Commerce continues to grow, and an increasing number of consumers begin to, and continue to, buy products online, there will be less and less reason for consumers to go to the store. "If the physical store loses relevancy, it needs less space, or in the worst-case scenario, no space."[5] This will not only affect the inventory of existing retail space (i.e. in shopping centers) in communities, but also reduce the future need for additional retail space in those communities.

Demand for retail space is driven by the population and income of the residents in any given community or trade area. Future demand for retail space is a function of said community experiencing increases in either its population or income or both. Since income growth in Canada is now moderate to non-existent, the primary driver for future retail space need will be population growth.

In 2010, e-Commerce sales in Canada were $15.3 billion.[6] In 2012, they were $18.9 billion.[7] By 2018, sales are projected to be some $33.8 billion.[8] In terms of physical store space, this is equal to 50 to 60 million sq.ft. of space using a sales performance level of between $500 and $600 per sq.ft.

A study by Ryerson University estimated that the physical retail space made redundant by the Internet in Toronto was approximately 4.6 million sq.ft. in 2010. This is equivalent to approximately 1.0 sq.ft. per capita.[9]

In Canada, e-commerce currently accounts for 1.5 to 2.0 sq.ft. per capita of the established retail service ratio. With e-commerce sales growing three to four times faster than total retail sales, e-commerce is projected to account for 4.0 to 5.0 sq.ft. per capita within the next ten years.[10]

In considering the potential effects in future years, Herman Kircher (in his article noted below) clearly indicates that the "future reduction in retail space demand will

[4] US eCommerce Forecast: 2013 to 2018, Forrester, May 12, 2014.
[5] E-commerce: Weighing the Impact on Bricks and Mortar, , International Council of Shopping Centres, Retail Property Insights Vol. 20, No. 2, 2013 by Herman J. Kircher.
[6] The Daily, Individual Internet use and e-commerce, Statistics Canada, April 15, 2013.
[7] The Daily, Individual Internet use and e-commerce, Statistics Canada, October 28, 2013.
[8] Canadian Online Retail Shifts up a Gear, eh?, Forrester, July, 2013.
[9] Maurice Yeates, Charting the GTA, CSCA Research Report 2011-06, Centre for the Study of Commercial Activity, Ryerson University, Toronto, Canada.
[10] E-commerce: Weighing the Impact on Bricks and Mortar, International Council of Shopping Centres, Retail Property Insights Vol. 20, No. 2, 2013 by Herman J. Kircher.

create significant new vacancies in existing centers ... but that much of the potential vacant shopping centre space could be absorbed through the addition of a large range of other uses" such as medical offices, financial institutions, restaurants and a range of governmental and public uses.

Beyond this, stakeholders will have to be vigilant and watch how retailers react to or drive change in this emerging market. e-Commerce cannot be ignored.

For Towns and Municipalities, these changes must be understood and be incorporated into the future planning and approval process.

For the purposes of this study, the issue is partly addressed by using a more cautious estimate of the growth rate on expenditures and space requirements.

9. Whitby Trade Area and Expenditure Levels

The definition of a Trade Area is different depending on the type of situation that is being evaluated. In the case of a single store, depending on store type and size, a trade area might be a very small local area or it might extend well beyond the local area into adjacent communities. In general, a Trade Area is the geographic area that provides the majority of customers necessary to support either a single facility, such as a store, a larger facility such as a multi-store shopping centre, or as is the case may be in the Town of Whitby, all of the facilities in the entire community.

The Trade Area for Whitby and Brooklin are discussed in the following sections, as well as spending estimates for the various types of goods and services.

9.1 Primary Trade Area for Town of Whitby

For the purposes of this study the Primary Trade Area is the entire Town of Whitby.

Since shopper surveys were not undertaken for this assignment, surveys done for the 2006 Report are used for reference purposes. These surveys include (1) a Shoppers' Intercept Survey and (2) a Household Telephone Survey undertaken by the firm Advitek.

Based on the 2006 Survey findings, there was a considerable 'outflow' of local expenditures into other adjacent communities, particularly for Department Store Type Merchandise or Non-Food Store Retail Space (DSTM/NFSR). Conversely, there was relatively little 'inflow' of expenditure dollars into Whitby, except for certain goods and services primarily furniture.

Notwithstanding that current expenditure capture levels in the Town of Whitby may not be satisfactory, future space estimates must look to achieve capture levels in the range of 75% to 95% of all expenditures made in its Primary Trade Area.

It is important from a planning perspective that any Town or Municipality make every effort to ensure that the amount and type of retail/ commercial space meets the total 'local' needs of its residents, independent of goods and services available in adjacent communities.

9.2 Secondary Trade Area 'Spending Inflow' into Whitby

The Secondary Trade Area for the Town of Whitby is considered to be the communities in the immediate surrounding area, essentially Ajax, Oshawa and Port Perry.

In the 2006 Survey, it was found that just under 10%, and in many cases less than 5%, of shoppers who made purchases in Whitby came from the various surrounding communities in the Secondary Trade Area.

In order to ensure that estimates for future retail/commercial space need in Whitby are not dependent on or impact the surrounding communities, an 'inflow rate' of 5% is used and applied against the 'total Whitby dollar expenditure potential'. It is not applied against the total dollar potential of communities in the Secondary Trade Area. In this way, any potential impact on adjacent communities would be considerably below 5%.

9.3 Tertiary Trade Area 'Spending Inflow' into Whitby

The Tertiary Trade Area represents the broad area beyond the Secondary Trade Area from Windsor in the west to Cornwall in the east and Haliburton in the north.

Past surveys indicated that 10% to 14% of shoppers in the Town of Whitby came from some considerable distance away - beyond the Primary and Secondary Trade Areas - and were likely tourists/visitors to the Town from the Tertiary Trade Area.

In order to take this 'tourist/visitor' amount into account, an 'inflow rate' of 5% from the Tertiary Trade Area is used, and again, this rate is applied against the 'total Whitby dollar expenditure potential'.

9.4 Negligible Impact on Adjacent Communities

The estimated new retail/commercial space needs for Whitby in this report are not dependent to any significant amount on the 'inflow capture' from other surrounding communities.

Furthermore, any potential 'impact' on these communities in terms of loss of spending potential is minimized due to the 'inflow' methodology used and described above in Sections 9.2 and 9.3.

9.5 Background Expenditure Pattern of Whitby Residents (2006 Survey)

The Shopper Intercept Survey and Household Telephone Survey undertaken for the 2006 Report provided important information on the spending patterns of Whitby residents in 2006. Given the marginal change in some of the major store categories, the same pattern of 'outflow' spending from Whitby should be similar today.

The following Table 9.5.1 has been copied from the 2006 Report showing the total per capita expenditures of Whitby residents, the total spending in the various identified store types and the percentage of spending 'outflow' by Whitby residents in 2006.

In brief, Whitby residents spent an average of $5,117 per capita on retail goods in 2006. Of the total expenditures made by residents, Whitby stores captured only 72% and 'outflow' expenditures were quite significant at 28%.

Table 9.5.1
SUMMARY PER CAPITA EXPENDITURES BY RESIDENTS, STORE CAPTURE AND OUTFLOW EXPENDITURES IN WHITBY (2006)

Store Type Categories	Total Per Capita Expenditure by Whitby Residents	Whitby Store Capture of Whitby Resident Expenditures	Per Capita OUTFLOW Expenditure from Whitby	% OUTFLOW of Spending from Whitby
Whitby Discount/Major Department Stores	$696	$253	$443	64%
Whitby Warehouse Membership Clubs	$206	$0	$206	100%
Whitby Canadian Tire Stores	$255	$225	$30	12%
Whitby Furniture/Appliance Stores	$463	$229	$234	51%
Whitby Home Improvement Stores	$874	$623	$251	29%
Whitby Food/Supermarket Stores	$1,823	$1,552	$271	15%
Whitby Drug/Cosmetics Stores	$148	$137	$11	7%
Whitby Clothing/Accessory Stores	$267	$48	$219	82%
Whitby General Merchandise Stores	$35	$30	$5	14%
Whitby Specialty Retail Stores	$287	$149	$138	48%
Internet Expenditures	$63	$0	$63	100%
OVERALL TOTAL - Per Capita Expenditure	**$5,117**	**$3,246**	**$1,871**	**28%**

Source: Table 9.4, *2006 Retail Market Analysis Update* by Realty Research Group Ltd.

9.6 Background 'Inflow' Expenditures into Whitby (2006 Survey)

In 2006, 'inflow' expenditures from the Secondary and Tertiary Trade Areas was very low.

The following Table 9.6.1 has been copied from the 2006 Report showing the percentage of spending 'inflow' to Whitby from adjacent communities and beyond.

Table 9.6.1
SUMMARY PER CAPITA INFLOW EXPENDITURE CAPTURE IN WHITBY (2006)

Store Type Categories	Per Capita INFLOW Capture to Whitby from Oshawa	Per Capita INFLOW Capture to Whitby from Ajax	Per Capita INFLOW Capture to Whitby from Clarington	Per Capita INFLOW Capture to Whitby from Other Areas
Whitby Discount/Major Department Stores	$20	$3	$5	$8
Whitby Warehouse Membership Clubs	n.a.	n.a.	n.a.	n.a.
Whitby Canadian Tire Stores	$19	$3	$4	$ -
Whitby Furniture/Appliance Stores	$299	$84	$115	$ -
Whitby Home Improvement Stores	$80	$1	$260	$ -
Whitby Food/Supermarket Stores	$144	$ 31	$ 10	$44
Whitby Drug/Cosmetics Stores	$13	>$1	>$3	$ -
Whitby Clothing/Accessory Stores	$5	$10	$11	$ -
Whitby General Merchandise Stores	>$4	$0.55	$ -	$ -
Whitby Specialty Retail Stores	$35	$12	$58	$10

Source: Table 9.5, *2006 Retail Market Analysis Update* by Realty Research Group Ltd.

9.7 Background Sales Performance of Whitby Stores (2006 Survey)

The sales performance of retail stores in Whitby in 2006 is summarized in the following Table 9.7.1. It is based on the 2006 Survey findings and provides an indication of both the sales and performance on a per sq.ft. basis.

Table 9.7.1
SALES PERFORMANCE OF WHITBY STORES IN DOLLARS PER SQ.FT. (2006)

Store Type Categories	Floor Area Sq.Ft. in Whitby Stores 2006	Estimated Sales Per Sq.Ft. in Whitby Stores 2006	Estimated Total Retail $ Expenditures in Millions 2006
Whitby Discount/Major Department Stores	132,375	$409	$54.1
Whitby Warehouse Membership Clubs	nil	nil	nil
Whitby Canadian Tire Stores (total auto plus retail)	170,538	$284	$48.4
Whitby Canadian Tire Stores (retail only)	113,222	$428	same
Whitby Furniture/Appliance Stores	616,450	$163	$100.5
Whitby Home Improvement Stores	430,503	$361	$155.4
Whitby Grocery/Food Stores	439,511	$767	$337.1
Whitby Drug/Cosmetics Stores	124,385	$235	$29.2
Whitby Clothing/Accessory Stores	139,968	$96	$13.4
Whitby General Merchandise Stores	82,483	$79	$6.5
Whitby Specialty Retail Stores	452,591	$90	$40.7

Source: Table 9.6, *2006 Retail Market Analysis Update* by Realty Research Group Ltd.

9.8 Estimated Per Capita Dollar Expenditure in Various Store Categories

In order to estimate the spending in Whitby for the various categories of goods and services, Statistics Canada data on retail sales was used to obtain a general 'overview' of spending/expenditure growth in Ontario.

Since the actual spending patterns differ considerably from one area to another, it is important to make estimates of future spending that are reasonably applicable to Whitby and to the various store categories within the community. To this end, Statistics Canada data is used in conjunction with historical spending patterns (as developed previously from the Shoppers' Intercept and Household Telephone Surveys in the 2006 Report) to estimate the probable expenditure patterns in Whitby today.

After adjusting actual reported annual expenditures in the various retail goods categories by the Consumer Price Index to arrive at 'real growth' in Ontario, the per capita spending estimates by store category for Whitby have been summarized as follows:

- For retail goods, growth has been marginal and somewhat negative in several major goods categories in the period 2005 to 2013.
- For the category of **Major Food Stores**, the 'real growth' in Per Capita spending **declined** by just below 1%. As a result, the expenditure amount for Major Food Store goods in Whitby is estimated at **$2,246 per capita**.
- For **Department Store Type Merchandise or Non-Food Store Retail Space** (DSTM/NSFR), the annual increase in real growth was 2.2%. As a result, the expenditure is **estimated at $1,746 per capita** for 2014. (It is important to note that the broad category of DSTM/NFSR now includes department store space, discount stores, dollar stores and all general retail merchandise stores.)
- For the **Furniture/Appliance** category, the expenditure is estimated at **$863 per capita**.
- For the **Health and Personal Care** store category (which includes pharmacies, cosmetics, etc.), the expenditure is estimated at **$983 per capita**.
- For the **Clothing/Accessory** store category, the expenditure is estimated at **$653 per capita**.
- For the **Sporting Goods/Books/Specialty** category, the expenditure is estimated at **$277 per capita**.

- For the **Miscellaneous Specialty** retail category, the expenditure is estimated is **$304 per capita**.

- For the entire **Building/Outdoor/Home Improvement** category of stores, the expenditure is estimated at **$866 per capita**.

The Per Capita expenditure estimates for the various store categories are summarized in the following Table 9.8.1 and more detailed background worksheets are provided in the Appendix.

Table 9.8.1
ESTIMATED PER CAPITA DOLLAR EXPENDITURES IN WHITBY STORES (2006 TO 2013)

Store Type Categories	Per Capita Expenditures Used in 2006 RRG Report	2013 Per Capita Expenditure Ontario Residents*	Per Capita Expenditure Used in 2014 New Space Estimates
Total Grocery/Food Stores Expenditures	**$1,820**	**$2,371**	**$2,246**
Total DSTM/NFSR Type Retail Stores			
Furniture/Appliance Stores	$750	$876	$863
Health/Personal Care Stores	$770	$993	$983
Clothing/Accessory Stores	$550	$813	$653
Sporting Goods/Books/Specialty Stores	$275	$289	$277
Miscellaneous/Specialty Stores	$275	$311	$304
Total ALL Department/General Merchandise Stores	**$1,390**	**$1,705**	**$1,746**
Building Materials/Improvement	$750	$763	$866
Canadian Tire Stores (auto and retail)	$255	included	included
TOTAL ALL DSTM/NFSR Expenditures	**$5,015**	**$5,750**	**$5,692**

Source: Realty Research Group Ltd. (For more detail, refer to Appendix C).

9.9 Estimated Sq.ft. Per Capita for 'ALL OTHER' Commercial Space

There are a number of retail/commercial uses that are categorized as 'ALL OTHER' commercial space. For the purpose of estimating future space needs for these commercial uses, they have been categorized into nine commercial space use types which include:

(1) Various Other Retail uses
(2) Specialty/Convenience Food uses
(3) Liquor, Wine, Beer uses
(4) Service Use type uses
(5) Recreational/Entertainment uses
(6) Office -Various Service type uses

(7) Restaurant uses
(8) Various Automotive Service uses
(9) New Car & Used Car Sales uses

Since commercial uses differ considerably in terms of operation, location needs and amount of space required, the future space need for the Town as a whole is estimated by applying a relatively similar per sq.ft. factor as currently exists in the Town of Whitby.

In the case of the Brooklin community, this factor is adjusted downward since it is likely that residents in smaller sub-areas will often continue to use the facilities that they have previously used elsewhere in the Town.

The following Table 9.9.1 summarizes the per capita amounts used for each type of commercial space use category in the overall Town of Whitby and the Brooklin community.

Table 9.9.1
ASSUMPTIONS USED FOR 'ALL OTHER' RETAIL/COMMERCIAL FLOOR SPACE SQ.FT. PER CAPITA PROJECTIONS

Store Type Categories	Per Capita Sq.Ft. Space Estimate Used For All Whitby 2006*	Per Capita Sq.Ft. Space Estimate Used For All Whitby 2013/14	Per Capita Sq.Ft. Space Estimate Used For Brooklin 2013/14
1.Various Other Retail	0.71	0.84	0.8
2. Specialty/Convenience Food Space	1.07	0.91	0.6
3.Liquor, Wine, Beer Space	0.43	0.56	0.6
4.Service Use Type Space	2.50	2.87	2.8
5.Recreational/Entertainment Space	3.10	3.12	1.5
6. Office -Various Service Type Space	7.30	6.75	3.2
7.Restaurant Space	4.01	3.83	2.6
8. Various Automotive Services Space	0.95	1.86	1.3
9.New Car & Used Car Sales Space	2.64	2.03	1.5
Total Sq.Ft. Per Capita Assumptions	22.71*	22.77	14.9

* The category of Major Public/Institutional Office space has been removed from the 2006 Inventory and does not apply to the estimates for 2013/14. This use category was 6.75 Sq.Ft. per capita.

Source: Realty Research Group Ltd.

9.10 Estimates of Annual Escalation for Future Growth

In reviewing the historical pattern of the annual expenditures on various types of merchandise, there is a considerable fluctuation from year to year. Occasionally the growth may be above 2%, but then, because of varying market conditions, the changes in growth became much lower.

For the purposes of forecasting growth in expenditures and floor space in future years, the following annual escalation factors are applied:

- 1% annual escalation is applied on all per capita expenditures in the Department Store Type Merchandise or Non-Food Store Retail Space (DSTM/NFSR) category.
- 0.5% annual escalation is applied on all expenditures in the Major Food store category.
- 0.3% to 0.5% annual escalation is applied to the estimates of the per capita floor space required in the 'ALL OTHER' retail/commercial space category.

9.11 Methodology Used to Estimate New 'Warranted' Floor Space

The methodology used to estimate future new 'warranted' retail/commercial space is different depending on the type of space.

All types of space (which include the twenty-one use types of space and the ten larger use type categories of space introduced in Section 4.3), can be grouped into one of three major 'class types' of space:

(1) Department Store Type Merchandise/Non-Food Store Retail Space (DSTM/NFSR)

(2) Food/Supermarket Type Space

(3) 'ALL OTHER' Retail/Commercial Type Space

For (1) Department Store Type Merchandise/Non-Food Store Retail Space (DSTM/NFSR) and (2) Food/Supermarket Type Space, the methodology uses per capita expenditures to estimate the total available expenditure potential. For (3) 'ALL OTHER' Retail/Commercial Type Space, the methodology uses the measure of sq.ft. per capita.

In the case of the first two 'class types' of space (DSTM/NFSR Type Space and Food/Supermarket Type Space), the first step is to calculate the 'Total Available Expenditure Potential' of Whitby Trade Area residents.

This is done by multiplying the population of the Town by the Per Capita Expenditures (where it is assumed that 100% of the dollar potential in the Primary Trade Area is captured) and adding to this an estimate of the spending 'inflow' from the surrounding Secondary and Tertiary Trade Areas. As discussed in Section 9.2 and 9.3 an 'inflow rate' of 5% is used for each of these trade areas.

After the 'Total Available Expenditure Potential' is calculated for the Town, the second step is to calculate the 'Total Supportable Space' in the Town. This is done by estimating the capture rates for each of the various store uses. For planning purposes, it is important to know the maximum amount of retail/commercial floor space (and ultimately the amount of land) that may 'potentially' be required to fully service the needs of the population now and in the foreseeable future. Again, a 100% capture rate is assumed, even though in reality, it may never be achieved.

In estimating capture rates for a specific area or community in the Town, such as Brooklin, it is unlikely that the community would achieve the same high capture levels as that of the whole Town. As a result, an estimate must be made that reflects the 'realistic' and somewhat lower capture levels that the area or community would achieve on its own. This estimate is a "judgment call". It factors a number of variables into account, such as the ultimate future size of the community, the location, and the amount and nature of the competitive facilities that currently exist in the surrounding area or that may be added in the future.

In Brooklin, which is currently a relatively small community with a relatively large amount of competitive shopping space in close proximity to it (i.e. along Taunton at Brock, Garden and Thickson), the prospects of achieving a high capture rate, certainly in the short term, is quite unrealistic. Over the longer term, as the population in the community increases, the prospects for increased sales capture increases. Thus, the development of greater amounts of space is likely to be more achievable over the longer term.

As a final step in estimating the future new 'WARRANTED' Retail/ Commercial Space in Whitby and/or Brooklin, the 'Existing Store Space Inventory' is deducted from the estimate of 'Total Supportable Space' to arrive at an estimate of the 'WARRANTED' New Space that should be added to the community.

In estimating the 'WARRANTED' New Space required for the third 'class' type of space ('ALL OTHER' Retail/Commercial Type Space), the process involves the following two steps: (1) apply the recommended sq.ft. per capita square factor against the projected population; and (2) subtract the existing supply of existing space. The resulting amount is the estimate of 'warranted' new space.

10. Estimate of 'Warranted' New Retail/Commercial Space in Whitby (by 2031)

10.1 Introductory Comments

This chapter provides space estimates for the various types of retail and commercial store uses that are required or 'WARRANTED' in the Town of Whitby up to the year 2031. Space estimates for Brooklin are provided separately in Chapter 11 (and Chapter 12). Detailed work sheets for all of the tables shown in this Chapter 10 are included in the Appendix.

In discussing the methodology used to estimate new 'WARRANTED' Floor Space Need in Whitby in Section 9.11, all of the various types of retail and commercial store uses were categorized into one of three major 'class types' of space. This was done in order to allow forecasts of space 'need' to be made separately for similar types of store uses.

The store uses included in each of the three major 'class types' of space are summarized below. Estimates of space 'need' are provided in Sections 10.3, 10.4 and 10.5.

To reiterate, the methodology employed to forecast space need for (1) DSTM/NFSR Type Space and (2) Food/Supermarket Type Space, uses per capita expenditures to estimate the total available expenditure potential. The methodology employed to forecast space need for (3) 'ALL OTHER' Retail/Commercial Type Space, uses the measure of sq.ft. per capita.

10.2 Store Uses Included in Three Major 'Class Types' of Space

The individual retail and commercial store uses included in each of three major 'class types' of space are:

(1) DSTM/NFSR Type Space

Virtually all of the retail goods that are sold in the various stores throughout the community are included in this class of space. They include:

- Department/Warehouse/Discount store uses
- Furniture/Appliance store uses
- Health/Personal Care (pharmacy) store uses
- Clothing/Accessory store uses
- Sporting Goods/Books/Specialty store uses
- Various Miscellaneous Specialty store uses
- Building Material/Home Improvement store uses

(2) Food/Supermarket Type Space

This class of space includes all of the large supermarket/grocery store type uses. Specialty and convenience stores are considered a part of, and are included in the "All Other' Retail/Commercial Type Space class.

(3) 'ALL OTHER' Retail/Commercial Type Space

The types of store uses in this class of space vary considerably in terms of operation, location needs and amount of space required. They include the following:

- **Various Other Retail stores uses** - a small category of miscellaneous stores such as cable/phone outlets, RV sales, monuments, etc.
- **Specialty Food and Convenience Food store uses**
- **Liquor, Wine and Beer store uses**
- **Service store uses** - cleaners, hair, flowers, nails, etc.
- **Recreation/Entertainment store uses** - fitness, dance, yoga, etc.
- **Small Office store type uses** - medical, legal, insurance, etc.
- **Restaurant store type uses** - includes fast food
- **Various Auto Service related store type uses** - tires, batteries, repairs, etc.
- **New and Used Car Dealership store type uses**

10.3 Estimate of New DSTM/NFSR Type Space 'Warranted' in Whitby

The following Table 10.3.1 shows the forecast population growth in Whitby up to the year to 2031, as well as estimates of shopper expenditures and the resulting estimates of 'WARRANTED' new DSTM/NFSR Type Space to be added to the Town's existing supply.

Table 10.3.2 provides a summary of the space estimates made in the 2006 Report. The estimates of 2006 show a much higher forecast for the category because of the inclusion of the Major Office space category, (which includes Public and Institutional space). Because of the nature of this category, even if an more updated inventory had been available, it was believed this category of use could not be estimated in this manner, and thus had to be excluded from the current forecasts.

To summarize the findings in the tables below:

- Population growth in Whitby, from 2014 to 2031 will increase from around 133,000 to 193,000 - an increase of around 59,500 residents (all rounded).

- The total growth in DSTM/NFSR expenditures in Whitby will increase from around $800 million to roughly $1.36 billion.

- The growth in the total amount of 'WARRANTED' new DSTM/NFSR type space in the Town should increase from 2.6 million sq.ft. to roughly 4.6 million sq.ft. - this would increase the space from 19.6 sq.ft. to 24 sq.ft. per capita.

- The total additional new DSTM/NFSR type space 'WARRANTED' in the Town should cumulatively increase from 234,000 sq.ft. in 2014/15 to around 2.2 million sq.ft. by 2031 - adding 11.7 sq.ft. per capita.

- The current estimates of 'WARRANTED' new space are lower than the estimates from the 2006 Report primarily because the population projections in 2006 were much higher at 226,000, than they are now at 192,000 new residents for 2031. Other contributing factors are: (1) the additional shopping centre facilities to be built in North Oshawa; and (2) the probable reduced spending as a result of e-Commerce.

Table 10.3.1
SUMMARY OF NEW DSTM/NFSR TYPE SPACE 'WARRANTED' IN WHITBY BY 2031 (Population Growth, Expenditure Potential and Warranted New Space Estimates)

WHITBY	2014	2016	2021	2026	2031
Population Estimate WHITBY	**133,471**	**140,462**	**157,938**	**175,414**	**192,900**
Total Expenditure Potential DSTM/NFSR	$805,678,000	$864,670,000	$1,019,447,000	$1,184,669,000	$1,360,405,000
Warranted Total Supply DSTM/NFSR Sq.Ft.	**2,632,000**	**2,848,000**	**3,410,000**	**4,011,000**	**4,650,000**
Resulting Sq.Ft. Per Capita of Total Warranted Supply	19.7	20.3	21.6	22.9	24.1
Existing DSTM/NFSR Space in WHITBY	**2,393,725**				
Estimate of Warranted Additional Supply of New DSTM/NFSR Sq.Ft. WHITBY	**239,000**	**454,000**	**1,017,000**	**1,618,000**	**2,257,000**
Resulting Cumulative Additional Sq.Ft. Per Capita	1.8	3.2	6.4	9.2	11.7

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table E-1a).

Table 10.3.2
SUMMARY OF NEW DSTM/NFSR TYPE SPACE 'WARRANTED' IN WHITBY (2006 Report)

WHITBY	2011	2016	2021	2026	2031
Population Estimate	**134,145**	**152,805**	**174,165**	**198,880**	**226,190**
Estimate of Warranted Additional Supply of New DSTM/NFSR Sq.Ft.	**763,000**	**1,313,000**	**1,963,000**	**2,737,000**	**3,627,000**
Resulting Cumulative Additional Sq.Ft. Per Capita	5.7	8.6	11.3	13.8	16.0

Source: *2006 Retail Market Analysis Update* by Realty Research Group Ltd.

10.4 Estimate of New Food/Supermarket Type Space 'Warranted' in Whitby

The following Table 10.4.1 shows the 'WARRANTED' new Food/Supermarket Type Space for the Town of Whitby in 2014 and in the 5-year intervals from 2016 to 2031. It also shows population growth and shopper expenditures.

Table 10.4.2 shows the space estimates made in the 2006 Report for comparative purposes. To summarize the findings in the tables below:

- Population growth from 2014 to 2031 is estimated to increase by just over 59,000 residents.
- The total expenditure growth in large supermarket type stores is estimated to increase from around $316 million to roughly $492 million.
- The total supply of new Food/Supermarket Type Space that is WARRANTED in Whitby is estimated will increase from around 570,000 sq.ft. to nearly 900,000 sq.ft. by 2031- a per capita increase from 4.3 sq.ft. to 4.6 sq.ft.
- The 'WARRANTED' new amount of space to be added should increase from around 43,000 sq.ft. in the early years (say 2016) to 326,000 sq. ft by 2031- an addition of 1.7 sq.ft. per capita.
- Again, the current estimates of 'WARRANTED' new space are lower than the estimates in the 2006 Report because the population projections were much higher in 2006 (i.e. 226,000 by 2031). They are, however, only marginally lower by approximately 70,000 to 80,000 sq.ft. and this reduction is almost entirely attributable to the use of a reduced growth rate in this report.

Table 10.4.1
SUMMARY OF NEW FOOD/SUPERMARKET TYPE SPACE 'WARRANTED' IN WHITBY BY 2031
(Population Growth, Expenditure Potential and Warranted New Space Estimate)

WHITBY	2014	2016	2021	2026	2031
Population Estimate	**133,471**	**140,462**	**157,938**	**175,414**	**192,900**
Total Expenditure Potential Food/Supermarket	$316,726,000	$336,266,000	$386,396,000	$438,359,000	$492,184,000
Warranted Total Supply Food/Supermarket Sq.Ft. (rounded)	**576,000**	**611,000**	**703,000**	**797,000**	**895,000**
Resulting Sq.Ft. Per Capita of Total Warranted Supply	4.3	4.3	4.5	4.5	4.6
Existing Food/Supermarket Space in Whitby	**568,968**				
Estimate of Warranted Additional Supply of New Food/Supermarket Sq.Ft.	**7,000**	**42,000**	**134,000**	**228,000**	**326,000**
Resulting Cumulative Additional Sq.Ft. Per Capita	0.05	0.30	0.85	1.30	1.69

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table E-2a).

Table 10.4.2
SUMMARY OF NEW FOOD/SUPERMARKET TYPE SPACE 'WARRANTED' IN WHITBY (2006 Report)

WHITBY	2011	2016	2021	2026	2031
Population Estimate	**134,145**	**152,805**	**174,165**	**198,880**	**226,190**
Total Amount of Food/Supermarket Store Space Supportable	**588,000**	**688,000**	**805,000**	**942,000**	**1,098,000**
Resulting Sq.Ft. Per Capita of Total Warranted Supply	4.38	4.50	4.62	4.74	4.85
Estimate of Warranted Additional Supply of New Food/Supermarket Sq.Ft.	**108,000**	**208,000**	**325,000**	**462,000**	**618,000**
Resulting Cumulative Additional Sq.Ft. Per Capita	0.81	1.36	1.87	2.32	2.73

Source: *2006 Retail Market Analysis Update* by Realty Research Group Ltd.

10.5 Estimate of New 'ALL OTHER' Type Space 'Warranted' in Whitby

Table 10.5.1 below, shows the total amount of the new 'ALL OTHER' Type Space that is 'WARRANTED' in Whitby up to 2031. Table 10.5.2 provides a summary of the space estimates made in the 2006 Report. To summarize:

- The amount of additional new space 'WARRANTED' for 'ALL OTHER' Retail/Commercial Type Space is 56,000 sq.ft. starting immediately in 2014 and increasing to 1,750,000 sq.ft. by 2031.

- The addition of the new 'ALL OTHER' Retail/Commercial Type Space will add up to 9 sq.ft. per capita to the Town's overall supply of retail/commercial space.

- Again, the current estimates of 'WARRANTED' new space are lower than the estimates from the 2006 Report because the population

- projections were higher in 2006. However, the very large office use

- category of public and institutional space has also been excluded in the current estimates. When these two factors are taken into account, the current forecast of future space need is only marginally lower than the forecast in 2006 - both in absolute terms and on a per sq.ft. basis.

Table 10.5.1
SUMMARY OF 'ALL OTHER' RETAIL/COMMERCIAL SPACE 'WARRANTED' IN WHITBY BY 2031
(Population Growth and Warranted New Space Estimates)

WHITBY	2014	2016	2021	2026	2031
Population Estimate	**133,471**	**140,462**	**157,938**	**175,414**	**192,900**
1.Warranted New `Various Other Retail Space	3,000	10,000	28,000	47,000	67,000
2.Warranted New Specialty/Convenience Food Space	2,000	10,000	30,000	50,000	72,000
3.Warranted Liquor, Wine, Beer Space	2,000	7,000	19,000	32,000	45,000
4.Warranted New Service Uses Space	7,000	31,000	93,000	158,000	227,000
5.Warranted New Recreational/Entertainment Space	7,000	33,000	101,000	171,000	245,000
6.Warranted New Office Service Space	16,000	69,000	204,000	343,000	485,000
7.Warranted New Major Office Space Excluded	-	-	-	-	-
8.Warranted New Restaurant Space	10,000	42,000	125,000	212,000	303,000
9.Warranted New Various Automotive Space	4,000	20,000	60,000	102,000	146,000
10.Warranted New & Used Car Sales Space	5,000	22,000	66,000	112,000	160,000
Warranted NEW Supply 'ALL OTHER' Sq.Ft.	**56,000**	**244,000**	**726,000**	**1,227,000**	**1,750,000**
Resulting Sq.Ft. Per Capita of Total Warranted Supply	0.42	1.74	4.60	6.99	9.07
Existing 'ALL OTHER' Space in Whitby	**2,982,432**				
Estimate of Warranted Total Supply of 'ALL OTHER' Sq.Ft. (rounded)	**3,038,000**	**3,226,000**	**3,708,000**	**4,209,000**	**4,732,000**
Resulting Cumulative Total Sq.Ft. Per Capita	22.8	23.0	23.5	24.0	24.5

* The large Office Use category called Public and Institutional Office Space was excluded from the analysis because a complete update of the retail/commercial inventory of Whitby was not undertaken.

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table E-3a).

Table 10.5.2
SUMMARY 'ALL OTHER' RETAIL/COMMERCIAL SPACE 'WARRANTED' IN WHITBY (2006 Report)

WHITBY	2006	2016	2021	2026	2031
Population Estimate	**134,145**	**152,805**	**174,165**	**198,880**	**226,190**
1.Warranted New Various Other Retail Space	4,000	17,000	34,000	76,000	102,000
2.Warranted New Specialty/Convenience Food Space	6,000	26,000	50,000	113,000	152,000
3.Warranted New Liquor, Wine, Beer Space	2,000	10,000	20,000	46,000	62,000
4.Warranted New Service Uses Space	13,000	59,000	117,000	265,000	356,000
5.Warranted New Recreational/Entertainment Space	16,000	73,000	144,000	327,000	440,000
6.Warranted New Office Service Space	36,000	171,000	340,000	771,000	1,038,000
7.Warranted Major Office Space (excluding Public)	28,000	126,000	247,000	546,000	723,000
8.Warranted New Restaurant Space	20,000	94,000	187,000	424,000	570,000
9.Warranted New Various Automotive Space	5,000	22,000	44,000	101,000	136,000
10.Warranted New Used Car Sales Space	1,000	5,000	10,000	22,000	30,000

WHITBY	2006	2016	2021	2026	2031
11.Warranted New Car Sales Space	12,000	57,000	114,000	257,000	346,000
Total Amount of 'ALL OTHER' Store Space Supportable	**143,000**	**660,000**	**1,307,000**	**2,948,000**	**3,955,000**
Resulting Sq.Ft. Per Capita of Total Warranted Supply	1.07	4.32	7.50	14.82	17.49
Estimate of Warranted Additional Supply of New 'ALL OTHER' Sq.Ft.	**3,475,158**	**4,639,158**	**5,393,158**	**6,280,158**	**7,287,158**
Resulting Cumulative Additional Sq.Ft. Per Capita	29.2	30.4	31.0	31.6	32.2

Source: *2006 Retail Market Analysis Update* by Realty Research Group Ltd.

10.6 Summary of Total Additional New Space 'Warranted' in Whitby

The OVERALL TOTAL ADDITIONAL WARRANTED NEW RETAIL/COMMERCIAL SPACE estimated for the Town of Whitby:

- increases from around 300,000 sq.ft. in the more current 2014/15 period, to around a total of 4.3 million sq.ft. of new space by 2031.
- this increase in the amount of additional 'warranted' new space in the Town will necessitate a considerable amount of new land area to accommodate this required new additional supply of retail/commercial floor space.

Table 10.6.1
SUMMARY OF TOTAL ADDITIONAL NEW SPACE 'WARRANTED' IN WHITBY BY 2031 FOR ALL 'CLASS TYPES' OF SPACE - DSTM/NFSR, FOOD/SUPERMARKET AND 'ALL OTHER'

WHITBY	2014	2016	2021	2026	2031
Population Estimate	**133,471**	**140,462**	**157,938**	**175,414**	**192,900**
1. ESTIMATE of WARRANTED ADDITIONAL New DSTM/NFSR Sq.Ft.	**239,000**	**454,000**	**1,017,000**	**1,618,000**	**2,257,000**
ADDITIONAL Sq.Ft. Per Capita DSTM/NFSR Space	1.8	3.2	6.4	9.2	11.7
2. ESTIMATE of WARRANTED ADDITIONAL New Food/Supermarket Sq.Ft.	**7,000**	**42,000**	**134,000**	**228,000**	**326,000**
ADDITIONAL Sq.Ft. Per Capita Food/Supermarket Space	0.05	0.30	0.85	1.30	1.69
3.ESTIMATE of WARRANTED ADDITIONAL new 'ALL OTHER' Retail/Commercial Sq.Ft.	**56,000**	**244,000**	**726,000**	**1,227,000**	**1,750,000**
ADDITIONAL Sq.Ft. Per Capita 'ALL OTHER' Space	0.42	1.74	4.60	6.99	9.07
OVERALL TOTAL WARRANTED ADDITIONAL NEW SPACE IN WHITBY	**302,000**	**740,000**	**1,877,000**	**3,073,000**	**4,309,000**
OVERALL TOTAL ADDITIONAL Sq.Ft. Per Capita	**2.26**	**5.27**	**11.88**	**17.52**	**22.46**
Rounded	**2.3**	**5.3**	**11.9**	**17.5**	**22.5**

Source: Realty Research Group Ltd.

11. Estimate of `Warranted` New Retail/Commercial Space in Brooklin (by 2031)

11.1 Introductory Comments

The focus of this chapter is on estimating the new space need for the various types of retail and commercial store uses that are required or 'WARRANTED' in the Brooklin community up to the year 2031.

For the most part, the format of the summaries and tables will be the same as those in the preceding Chapter 10 on Whitby. Detailed work sheets for all of the tables shown in this Chapter 11 are included in the Appendix.

It is important to note that in analyzing space need for a specific area or community within the Town of Whitby, such as Brooklin, assumptions must be made that reflect the 'realistic' and probable somewhat lower capture levels that a 'sub-area' community would achieve on its own. These assumptions, while considered reasonable, cannot be precisely accurate since so much of the shopping and spending pattern in a specific area or community is dependent on unknown factors, such as the likelihood of existing residents to continue to shop in the already existing facilities in Whitby or elsewhere, and on future competition expected from new facilities being planned in nearby Oshawa, along Winchester Rd.

Thus, while the space estimate is deemed realistic and supportable on the basis of population in the community, it is important to keep in mind that the development of any new facility or facilities by developers and/or investors will not necessarily respond to 'theoretical' estimates. They would, more likely, take 'market' conditions at the time into account and the nature of the competitive facilities in the market.

11.2 Estimate of New DSTM/NFSR Type Space 'Warranted' in Brooklin

Table 11.2.1 shows the forecast population growth in Brooklin up to the year to 2031, as well as estimates of shopper expenditures and the resulting estimates of 'WARRANTED' new DSTM/NFSR Type Space to be added to the Brooklin community. It is important to note that the space estimates are based on sales capture rates of both 75% and 100% of the potential spending/expenditure by Brooklin residents in Brooklin stores. In reality, the capture rate may be considerably lower, particularly in the early years, when the population base in Brooklin is still relatively small and lacks sufficient and diverse retail/commercial facilities. The intent however, is to provide estimates that account for the estimated population growth of 36,000 new residents by 2031. (Potentially, the Brooklin population will 'ultimately' increase to nearly 81,000 residents and will be discussed in the next chapter).

Table 11.2.2 is provided for comparative purposes and shows the space estimates made in the 2006 Report.

To summarize:

- Population growth from 2013/2014 to 2031 will increase from the estimated current population of 20,000 to 22,000 residents to 56,170 residents by 2031 - an increase of around 34,000 to 36,000 residents.
- The existing inventory of DSTM/NFSR type space is around 88,000 sq.ft.
- The estimated growth in DSTM/NFSR expenditure potential will increase from around $132 million to roughly $366 million by 2031.
- At a **100% capture rate**, the total supply that is **'WARRANTED' for DSTM/NFSR type space** in Brooklin is estimated will increase from an existing supply of 88,000 sq.ft. to just over 1.3 million sq.ft. by 2031 - a space equivalent of 23.7 sq.ft. per capita. Thus, Brooklin will require **additional new DSTM/NFSR type space** of around 1.2 million sq ft. by 2031 - equivalent to 22.1 sq.ft. per capita.
- At a **75% capture rate**, the total amount of supply that is **'WARRANTED' for DSTM/NFSR type space** in Brooklin is estimated will increase to nearly 1.0 million sq.ft. by 2031 - a space equivalent of 17.8 sq.ft. per capita. in this case Brooklin will require **additional new DSTM/NFSR type space** of around 900,000 sq ft. by 2031- equivalent to 16.2 sq.ft. per capita.
- In comparing today's 2031 estimates with estimates made in the 2006 Report, the overall comparative sq.ft. per capita measure at the 100% capture rate becomes increasingly larger in the 2006 Report beginning after 2015/2016 to 2031. This is largely due to using a somewhat higher capture rate in the 2006 Report. (Note: the 50% capture rate used in 2006 is not compared)

Table 11.2.1
SUMMARY OF NEW DSTM/NFSR TYPE SPACE 'WARRANTED' IN BROOKLIN BY 2031 (Population Growth, Expenditure Potential and Warranted New Space Estimates)

BROOKLIN	2014	2016	2021	2026	2031
Population Estimate	**21,962**	**25,987**	**36,048**	**46,109**	**56,170**
Total Expenditure Potential DSTM/NFSR	$131,916,000	$157,642,000	$224,061,000	$293,487,000	$365,919,000
Warranted Total Supply DSTM/NFSR Sq.Ft. @ 100% Capture	**479,696**	**573,696**	**814,696**	**1,067,696**	**1,330,696**
Resulting Sq.Ft. Per Capita of Total Warranted Supply @ 100% Capture	21.8	22.1	22.6	23.2	23.7
Less Existing DSTM/NFSR Space in Brooklin	**87,696**				

BROOKLIN	2014	2016	2021	2026	2031
Estimate of Warranted Additional Supply of New DSTM/NFSR Sq.Ft. @ 100% Capture	**392,000**	**486,000**	**727,000**	**980,000**	**1,243,000**
Resulting Cumulative Additional Sq.Ft. Per Capita @ 100% Capture	17.8	18.7	20.2	21.3	22.1
Warranted Total Supply DSTM/NFSR Sq.Ft. @ 75% Capture	**359,696**	**429,696**	**610,696**	**800,696**	**997,696**
Resulting Sq.Ft. Per Capita of Total Warranted Supply @ 75% Capture	16.4	16.5	16.9	17.4	17.8
Less Existing DSTM/NFSR Space in Brooklin	**87,696**				
Estimate of Warranted Additional Supply of New DSTM/NFSR Sq.Ft. @ 75% Capture	**272,000**	**342,000**	**523,000**	**713,000**	**910,000**
Resulting Cumulative Additional Sq.Ft. Per Capita @ 75% Capture	12.4	13.2	14.5	15.5	16.2

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table E-1b).

Table 11.2.2
SUMMARY OF NEW DSTM/NFSR TYPE SPACE 'WARRANTED' IN BROOKLIN (2006 Report)

BROOKLIN	2011	2016	2021	2026	2031
Population Estimate	**16,000**	**24,000**	**32,600**	**44,200**	**60,000**
Estimate of Warranted Additional Supply of New DSTM/NFSR Sq.Ft. @ 100% Capture	**305,000**	**550,000**	**811,000**	**1,178,000**	**1,696,000**
Resulting Cumulative Additional Sq.Ft. Per Capita (100% Capture)	19.1	22.9	24.9	26.7	28.3
Estimate of Warranted Additional Supply of New DSTM/NFSR Sq.Ft. @ 50% Capture	**152,500**	**275,000**	**405,500**	**589,000**	**848,000**
Resulting Cumulative Additional Sq.Ft. Per Capita (50% Capture)	9.5	11.5	12.4	13.3	14.1

Source: *2006 Retail Market Analysis Update* by Realty Research Group Ltd.

11.3 Estimate of New Food/Supermarket Type Space 'Warranted' in Brooklin

The following Table 11.3.1 shows the 'WARRANTED' new Food/Supermarket Type Space for the Brooklin community, as well as population growth and shopper expenditures. Table 11.3.2 shows the space estimates made in the 2006 Report.

To summarize:

- The total expenditure potential in Brooklin for the large supermarket type food stores is estimated to increase from around $27 million in 2014 to around $109 million by 2031, using a capture rate of 90% from the Brooklin community plus a 5% inflow.

- The amount of supply that is **'WARRANTED' for Food/Supermarket Type Space** in Brooklin is estimated to be around 85,000 to 100,000 sq.ft. in the next 1 to 3 years (2014 to 2016), and this should increase to around 235,000 sq.ft. by the year 2031 - equivalent to 4.2 sq.ft. per capita. (nearly equivalent to the per capita supply for Whitby as a whole).

- The **'WARRANTED' new Food/Supermarket Type Space** to be added is estimated to currently be around 50,000 sq.ft. and this should increase to around 200,000 sq. ft by 2031- an addition of 3.5 sq.ft. per capita.

- In comparison to the forecast made in the 2006 Report, a somewhat higher capture rate was used in the current report and as a result the estimates for new space are higher.

Table 11.3.1
SUMMARY OF NEW FOOD/SUPERMARKET TYPE SPACE 'WARRANTED' IN BROOKLIN BY 2031 (Population Growth, Expenditure Potential and Warranted New Space Estimate}

BROOKLIN	2014	2016	2021	2026	2031
Population Estimate	**21,962**	**25,987**	**36,048**	**46,109**	**56,170**
Total Expenditure Potential Maximum Capturable Food/Supermarket	$26,898,000	$35,984,000	$59,365,000	$83,696,000	$108,979,000
Warranted Total Supply Food/Supermarket Sq.Ft.	**85,377**	**102,377**	**144,377**	**189,377**	**235,377**
Resulting Sq.Ft. Per Capita of Total Warranted Supply	3.9	3.9	4.0	4.1	4.2
Less Existing Food/Supermarket Space in Brooklin	**36,377**				
Estimate of Warranted Additional Supply of New Food/Supermarket Sq.Ft.	**49,000**	**66,000**	**108,000**	**153,000**	**199,000**
Resulting Cumulative Additional Sq.Ft. Per Capita	2.2	2.5	3.0	3.3	3.5

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table E-2b).

Table 11.3.2
SUMMARY NEW FOOD/SUPERMARKET TYPE SPACE 'WARRANTED' IN BROOKLIN (2006 Report)

BROOKLIN	2011	2016	2021	2026	2031
Population Estimate	**16,000**	**24,000**	**32,600**	**44,200**	**60,000**
Total Expenditure Potential Capturable (in million $'s)	$27.67	$37.31	$43.77	$60.94	$84.79
Estimate of Warranted Additional Supply of New Food/Supermarket Sq.Ft.	**25,000**	**47,000**	**61,000**	**99,000**	**152,000**
Resulting Cumulative Additional Sq.Ft. Per Capita	1.6	2.0	1.9	2.2	2.5

Source: *2006 Retail Market Analysis Update*, Realty Research Group Ltd.

11.4 Estimate of New 'ALL OTHER' Type Space 'Warranted' in Brooklin

Table 11.4.1 below, shows the total amount of the new 'ALL OTHER' Type Space that is 'WARRANTED' in Brooklin until 2031. These space estimates have been made using the measure of sq.ft. per capita for each of nine different store type uses.

Table 11.4.2 provides a summary of the space estimates made in the 2006 Report. Again, it must be noted the 2006 Inventory included the very large office use category of public and institutional office space which has been excluded from the current analysis.

To summarize:

- The amount of new space 'WARRANTED' for 'ALL OTHER' Retail/Commercial Type Space in Brooklin is forecast to increase from some 30,000 sq.ft. in 2014 to 615,000 sq.ft. by 2031 - equivalent to an addition of 10.9 sq.ft. per capita.

- This will bring the total inventory of ''ALL OTHER' Retail/Commercial Type Space in Brooklin to 912,000 sq. ft - equivalent to 16.2 sq. ft per capita.

- The five store type uses that will require the largest amount of space in Brooklin by 2031 are:

  - Various Service store type uses 107,000 sq.ft.
  - Recreational/Entertainment uses 70,000 sq.ft.
  - Small Office service type uses 135,000 sq.ft
  - Restaurant type uses 110,000 sq.ft.
  - New and Used car type uses 69,000 sq.ft.

- The current estimates of 'WARRANTED' new 'ALL OTHER' type space are lower than the estimates made in the 2006 Report for two reasons:

  - a lower per capita space projection is used in the current analysis as a result of current levels of supply; and

  - the major public and institutional office space has been excluded from the current estimates.

Table 11.4.1
SUMMARY OF 'ALL OTHER' RETAIL/COMMERCIAL TYPE SPACE 'WARRANTED' IN BROOKLIN BY 2031 (Population Growth and Warranted New Space Estimates)

BROOKLIN	2014	2016	2021	2026	2031
Population Estimate	**21,962**	**25,987**	**36,048**	**46,109**	**56,170**
1.Warranted New `Various Other Retail Space	2,000	6,000	15,000	24,000	34,000
2.Warranted New Specialty/Convenience Food Space	(5,000)	(3,000)	4,000	11,000	18,000
3.Warranted Liquor, Wine, Beer Space	(4,000)	(1,000)	5,000	12,000	18,000
4.Warranted New Service Uses Space	(3,000)	9,000	40,000	73,000	107,000
5.Warranted New Recreational/Entertainment Space	11,000	17,000	34,000	52,000	70,000
6.Warranted New Small Office Service Space	9,000	22,000	58,000	95,000	135,000
7.Warranted New Major Office Space Excluded	-	-	-	-	-
8.Warranted New Restaurant Space	8,000	19,000	48,000	78,000	110,000
9.Warranted New Various Automotive Space	3,000	9,000	23,000	38,000	54,000
10.Warranted New & Used Car Sales Space	10,000	17,000	33,000	51,000	69,000
Warranted NEW Supply 'ALL OTHER' Sq.Ft.	**31,000**	**95,000**	**260,000**	**434,000**	**615,000**
Resulting Sq.Ft. Per Capita of Total Warranted Additional Supply	1.4	3.7	7.2	9.4	10.9
Existing 'ALL OTHER' Space in Brooklin	**297,182**				
Estimate of Warranted Total Supply of 'ALL OTHER' Sq.Ft.	**328,182**	**392,182**	**557,182**	**731,182**	**912,182**
Resulting Total Supply of 'ALL OTHER' Sq.Ft. Per Capita	14.9	15.1	15.5	15.9	16.2

* The large Office Use category called Public and Institutional Office Space was excluded from the analysis because a complete update of the retail/commercial inventory of Whitby was not undertaken.

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table E-3b).

Table 11.4.2
SUMMARY OF 'ALL OTHER' RETAIL/COMMERCIAL TYPE SPACE 'WARRANTED' BROOKLIN (2006 Report)

BROOKLIN	2006	2016	2021	2026	2031
Population Estimate	**16,000**	**24,000**	**32,600**	**44,200**	**60,000**
1.Warranted New Various Other Retail Space	1,000	7,000	14,000	24,000	37,000
2.Warranted New Specialty/Convenience Food Space	5,000	15,000	25,000	40,000	60,000
3.Warranted New Liquor, Wine, Beer Space	5,000	9,000	13,000	19,000	27,000
4.Warranted New Restaurant Space	8,000	31,000	56,000	90,000	138,000
5.Warranted New Recreational/Entertainment Space	37,000	66,000	97,000	139,000	198,000
6.Warranted New Office Service Space	27,000	60,000	94,000	143,000	210,000
7.Warranted Major Office Space (excluding Public)	16,000	24,000	33,000	44,000	60,000
8.Warranted New Restaurant Space	42,000	79,000	119,000	174,000	251,000

BROOKLIN	2006	2016	2021	2026	2031
9.Warranted New Various Automotive Space	1,000	10,000	20,000	33,000	51,000
10.Warranted New Used Car Sales Space	3,000	5,000	7,000	10,000	14,000
11.Warranted New Car Sales Space	39,000	61,000	85,000	119,000	165,000
Estimate of Warranted Additional Supply of New 'ALL OTHER' Sq.Ft.	**184,000**	**367,000**	**563,000**	**835,000**	**1,211,000**
Resulting Cumulative Additional Sq.Ft. Per Capita	11.5	15.3	17.3	18.9	20.2

Source: Table 13.3.2., *2006 Retail Market Analysis Update* by Realty Research Group Ltd.

11.5 Summary of Total Additional New Space 'Warranted' in Brooklin

The OVERALL TOTAL WARRANTED NEW SPACE estimated for the Brooklin community

- increases from around 472,000 sq.ft. in 2014
- to just over 2.0 million sq.ft. by 2031 - equivalent to 36.6 sq.ft. per capita.

Table 11.5.1
SUMMARY OF TOTAL NEW SPACE 'WARRANTED' IN BROOKLIN BY 2031 FOR ALL 'CLASS TYPES' OF SPACE - DSTM/NFSR, FOOD/SUPERMARKET AND 'ALL OTHER'

BROOKLIN	2014	2016	2021	2026	2031
Population Estimate	**21,962**	**25,987**	**36,048**	**46,109**	**56,170**
1. ESTIMATE of WARRANTED ADDITIONAL New DSTM/NFSR Sq.Ft.@ 100% Capture	**392,000**	**486,000**	**727,000**	**980,000**	**1,243,000**
ADDITIONAL Sq.Ft. Per Capita DSTM/NFSR Space	17.8	18.7	20.2	21.3	22.1
2. ESTIMATE of WARRANTED ADDITIONAL New Food/Supermarket Sq.Ft.	**49,000**	**66,000**	**108,000**	**153,000**	**199,000**
ADDITIONAL Sq.Ft. Per Capita Food/Supermarket Space	2.2	2.5	3.0	3.3	3.5
3.ESTIMATE of WARRANTED ADDITIONAL new 'ALL OTHER' Retail/Commercial Sq.Ft.	**31,000**	**97,000**	**260,000**	**260,000**	**615,000**
ADDITIONAL Sq.Ft. Per Capita 'ALL OTHER' Space	1.4	3.7	7.2	7.2	10.9
OVERALL TOTAL WARRANTED ADDITIONAL NEW SPACE IN BROOKLIN	**472,000**	**649,000**	**1,095,000**	**1,567,000**	**2,057,000**
OVERALL TOTAL ADDITIONAL Sq.Ft. Per Capita	**21.5**	**24.9**	**30.4**	**34.0**	**36.6**

Source: Realty Research Group Ltd.

12. Estimate of ‘Warranted’ New Retail/Commercial Space in Brooklin at Build-Out (by 2044)

12.1 Introductory Comments

Chapter 12 provides an estimate of Brooklin's retail/commercial space needs at the ‘ultimate build-out’ of the community. This ‘build-out’ is estimated to occur in 2044.

Again, the format of the summaries and tables will be the same as those in the preceding Chapters 10 and 11, with detailed work sheets for all of the tables shown in this Chapter 12 included in the Appendix.

The ultimate population in Brooklin is estimated to be 80,670 residents by 2044.

12.2 Estimate New DSTM/NFSR Type Space 'Warranted' in Brooklin by 2044

To summarize the findings from the table below:

- In the period from 2031 to 2044, the population of Brooklin is forecast to grow from around 56,000 residents to 80,670 residents.
- At a 100% capture rate, the total amount of DSTM/NFSR type space that will be 'WARRANTED' in Brooklin by 2044 will amount to just over 2.0 million sq.ft. (the equivalent of 25.1 sq.ft. per person).
- At a 75% capture rate, the 'WARRANTED' space will amount to 1.5 million sq.ft. (or 18.8 sq.ft. per person).
- Between 2031 and 2044, the total amount of new DSTM/NFSR type space that will need to be added in Brooklin will range between 500,00 sq.ft. and 700,000 sq.ft.

Table 12.2.1
SUMMARY OF NEW DSTM/NFSR TYPE SPACE 'WARRANTED' IN BROOKLIN BY 2044 (Population Growth, Expenditure Potential and Warranted New Space Estimates)

BROOKLIN	**2014**	**2031**	**2044**
Population Estimate	**21,962**	**56,170**	**80,670**
Total Expenditure Potential DSTM/NFSR	$131,916,000	$365,919,000	$556,863,000
Warranted Total Supply DSTM/NFSR Sq.Ft. @ 100% Capture	**479,696**	**1,330,696**	**2,024,696**
BROOKLIN	**2014**	**2031**	**2044**
Resulting Sq.Ft. Per Capita of Total Warranted Supply @ 100% Capture	21.8	23.7	25.1

Less Existing DSTM/NFSR Space in Brooklin	**87,696**		
Estimate of Warranted Additional Supply of New DSTM/NFSR Sq.Ft. @ 100% Capture	**392,000**	**1,243,000**	**1,937,000**
Resulting Cumulative Additional Sq.Ft. Per Capita @ 100% Capture	17.8	22.1	24.0
Warranted Total Supply DSTM/NFSR Sq.Ft. @ 75% Capture	**359,696**	**997,696**	**1,518,696**
Resulting Sq.Ft. Per Capita of Total Warranted Supply @ 75% Capture	16.4	17.8	18.8
Less Existing DSTM/NFSR Space in Brooklin	**87,696**		
Estimate of Warranted Additional Supply of New DSTM/NFSR Sq.Ft. @ 75% Capture	**272,000**	**910,000**	**1,431,000**
Resulting Cumulative Additional Sq.Ft. Per Capita @ 75% Capture	12.4	16.2	17.7

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table E-1c).

12.3 Estimate New Food/Supermarket Space 'Warranted' in Brooklin by 2044

Table 12.3.1 provides a summary of population growth, shopper expenditures and resulting estimates of the 'WARRANTED' new Food/Supermarket Type Space that will be required in Brooklin by 2044.

To summarize:

- The total expenditure potential in Brooklin by 2044 for large supermarket type food stores is estimated to increase from around $27 million in 2014, to around $109 million by 2031 and to around $175 million by 2044 (using a capture rate of 90% from the Brooklin community plus a 5% inflow).

- The total amount of supply that will be **'WARRANTED' for Food/Supermarket Type Space** in Brooklin is estimated to increase from 85,000 sq.ft. in 2014, to 255,000 sq.ft. by 2031 and to around 355,000 sq.ft. by 2044 (equivalent to 4.0 sq.ft. per capita).

- The 'WARRANTED' new Food/Supermarket Type Space that will be need to be added is estimated to be around 50,000 sq.ft. in 2014 (an addition of 2.2 sq.ft. per capita), to around 200,000 sq.ft. by 2031 (an addition of 3.5 sq.ft. per capita) and then to around 320,000 sq.ft. by 2044 (an addition of 4.0 sq.ft. per capita).

Table 12.3.1
SUMMARY OF NEW FOOD/SUPERMARKET TYPE SPACE 'WARRANTED' IN BROOKLIN BY 2044
(Population Growth, Expenditure Potential and Warranted New Space Estimate)

BROOKLIN	**2014**	**2031**	**2044**
Population Estimate	**21,962**	**56,170**	**80,670**
Total Expenditure Potential Maximum Capturable Food/Supermarket	$26,898,000	$108,979,000	$175,150,000
Warranted Total Supply Food/Supermarket Sq.Ft.	**85,377**	**235,377**	**355,377**
Resulting Sq.Ft. Per Capita of Total Warranted Supply	3.9	4.2	4.4
Less Existing Food/Supermarket Space in Brooklin	**36,377**		
Estimate of Warranted Additional Supply of New Food/Supermarket Sq.Ft.	**49,000**	**199,000**	**319,000**
Resulting Cumulative Additional Sq.Ft. Per Capita	2.2	3.5	4.0

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table E-2c).

12.4 Estimate New 'ALL OTHER' Type Space 'Warranted' in Brooklin by 2044

Table 12.4.1 shows the total amount of new 'ALL OTHER' Type Space that will be 'WARRANTED' in Brooklin by ‘ultimate build-out' in 2044.

To summarize the findings in the tables below:

- The amount of new space 'WARRANTED' for 'ALL OTHER' Retail/Commercial Type Space in Brooklin is forecast to increase from 31,000 sq.ft. in 2014, to 615,000 sq.ft. by 2031 and to 1.1 million sq.ft. by 2044 - equivalent to 13.6 sq.ft. per capita.

- This would amount to a total inventory of ''ALL OTHER' Retail/Commercial Type Space in Brooklin of around 1.4 million sq. ft - equivalent to 17.3 sq. ft per capita.

- The five store type uses that will require the largest amount of space by 2044 would be:
  - Various Service store type uses 199,000 sq.ft.
  - Recreational/Entertainment uses 119,000 sq.ft.
  - Small Office service type uses 239,000 sq. ft
  - Restaurant type uses 195,000 sq.ft.
  - New and Used car type uses 118,000 sq.ft.

Table 12.4.1
SUMMARY OF 'ALL OTHER' RETAIL/COMMERCIAL SPACE 'WARRANTED' IN BROOKLIN BY 2044
(Population Growth, Expenditure Potential and Warranted New Space Estimates)

BROOKLIN	2014	2031	2044
Population Estimate	**21,962**	**56,170**	**80,670**
1.Warranted New `Various Other Retail Space	2,000	34,000	60,000
2.Warranted New Specialty/Convenience Food Space	(5,000)	18,000	37,000
3.Warranted Liquor, Wine, Beer Space	(4,000)	18,000	37,000
4.Warranted New Service Uses Space	(3,000)	107,000	199,000
5.Warranted New Recreational/Entertainment Space	11,000	70,000	119,000
6.Warranted New Office Service Space	9,000	135,000	239,000
7.Warranted New Major Office Space Excluded	-	-	-
8.Warranted New Restaurant Space	8,000	110,000	195,000
9.Warranted New Various Automotive Space	3,000	54,000	96,000
10.Warranted New & Used Car Sales Space	10,000	69,000	118,000
Warranted NEW Supply 'ALL OTHER' Sq.Ft.	**31,000**	**615,000**	**1,100,000**
Resulting Sq.Ft. Per Capita of Total Warranted Additional Supply	1.4	10.9	13.6
Add Existing 'ALL OTHER' Space in Brooklin	**297,182**		
Estimate of Warranted Total Supply of 'ALL OTHER' Sq.Ft.	**328,182**	**912,182**	**1,397,182**
Resulting Total Supply of 'ALL OTHER' Sq.Ft. Per Capita	14.9	16.2	17.3

* The large Office Use category called Public and Institutional Office Space was excluded from the analysis because a complete update of the retail/commercial inventory of Whitby was not undertaken.

Source: Realty Research Group Ltd. (For more detail, refer to Appendix Table E-3c).

12.5 Summary of Total Additional New Space 'Warranted' in Brooklin by 2044

The OVERALL TOTAL WARRANTED NEW SPACE estimated for the Brooklin community at ‘ultimate build-out' in 2044 is estimated will be as follows:

- increases from around 472,000 sq.ft. in 2014 to a total of over 2.0 million sq.ft. by 2031
- increases to a total of nearly 3.4 million sq.ft. by 2044 - equivalent to 41.6 sq.ft. per capita.

Table 12.5.1
SUMMARY OF TOTAL NEW SPACE 'WARRANTED' IN BROOKLIN BY 2044 FOR ALL 'CLASS TYPES' OF SPACE - DSTM/NFSR, FOOD/SUPERMARKET AND 'ALL OTHER'

BROOKLIN	2014	2031	2044
Population Estimate	**21,962**	**56,170**	**80,670**
1. ESTIMATE of WARRANTED ADDITIONAL New DSTM/NFSR Sq.Ft.	**392,000**	**1,243,000**	**1,937,000**
ADDITIONAL Sq.Ft. Per Capita DSTM/NFSR Space	17.8	22.1	24.0
2. ESTIMATE of WARRANTED ADDITIONAL New Food/Supermarket Sq.Ft.	**49,000**	**199,000**	**319,000**
ADDITIONAL Sq.Ft. Per Capita Food/Supermarket Space	2.2	3.5	4.0
3.ESTIMATE of WARRANTED ADDITIONAL new 'ALL OTHER' Retail/Commercial Sq.Ft.	31,000	615,000	1,100,000
ADDITIONAL Sq.Ft. Per Capita 'ALL OTHER' Space	1.4	10.9	13.6
OVERALL TOTAL WARRANTED ADDITIONAL NEW SPACE IN BROOKLIN	**472,000**	**2,057,000**	**3,356,000**
OVERALL TOTAL ADDITIONAL Sq.Ft. Per Capita	**21.5**	**36.6**	**41.6**

Source: Realty Research Group Ltd.

Real Estate Consultants
* Appraisals/Valuations
* Development Studies
* Feasibility Studies
* Investment Studies
* Market Studies

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December 31, 2014

APPENDIX

2014 Retail/Commercial Space Needs Analysis

Whitby/Brooklin, Ontario

Our File: #2013-1051

Prepared for:

The Corporation of the Town of Whitby
575 Rossland Road East
Whitby, Ontario
L1N 2M8

Attention:

Robert B. Short, MCIP, RPP
Commissioner of Planning

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Appendix A: Definition and Explanation of Retail Goods Type Space

1. Food Store Space

Food Store type space represents those stores in which more than 50 percent of sales being generated comprise the sale of food items. This, of course, excludes any revenue from meals prepared for consumption either on or off the premises.

The Food Store Group always includes the larger, supermarket type stores, as well as a whole series of smaller stores, such as "jug milk", convenience, specialty and other food item stores. A description of the categories of food stores is as follows:

(a) Supermarket & Large Food Store Type Space

Typically, supermarkets or large food stores are those which are large enough in size to conveniently and conspicuously display a full range of food stuffs. In general, these stores, in an urban context, are at least 10,000 square feet of Gross Leasable Area (G.L.A.) in size, (though in smaller communities they may be even smaller). In larger markets the size may now range upwards to 150-200,000 square feet. Some new stores continue to build in the size range of 30-50,000 square feet.

(b) Convenience and Other Specialty Food Store Space

The category, Convenience and Other Specialty Food Stores, typically include (but are not limited to) the following types of stores:

- Variety Store
- Candy/Nut
- Fruit & Vegetable Market
- Bakery
- Dairy Products
- Confectionery Store
- Freezer Meat
- Miscellaneous Food
- Meat/Seafood Market

(c) Warehouse Membership Club Stores

2. Retail Goods - Department Store Type Merchandise/Non-Food Store Type Retail Space (DSTM/NFSR)

3. Various Types of Retail/Commercial Service Space

This category of retail/commercial space does not sell retail goods, but rather provides services directly to the public on a "face to face" basis.

These service businesses are found in all types of locations, including downtown areas, in shopping centres, in strip retail areas along major highways, in residential premises and in various industrial areas.

They are the retail/commercial uses that are categorized as 'ALL OTHER' commercial space. For the purpose of estimating future space needs for these commercial uses, they have been categorized into nine commercial space use types which include the following:

(1) Various Other Retail uses
(2) Specialty/Convenience Food uses
(3) Liquor, Wine, Beer uses
(4) Service Type uses
(5) Recreational/Entertainment uses
(6) Office/Various Service Type uses
(7) Major Office Space **– EXCLUDED from this analysis**
(8) Restaurant uses
(9) Various Automotive Service uses
(10) New Car & Used Car Sales uses

Appendix B: Statistics Canada Retail Trade Store Classifications/Types (NAICS)

North American Industry Classification System (NAICS) and Statistics Canada Catalogue (old Trade Group category also shown).

A - Automotive

Used & New Recreational Motor Vehicles and Parts Dealers (Old Trade Group 020)

44112 Used Car Dealers
44131 Automotive Parts and Accessories Stores
44132 Tire Dealers

B - Furniture, Home Furnishings and Electronic Stores (DSTM)

Furniture Stores (Old Trade Group 030)

44211 Furniture Stores

Home Furnishings Stores (Old Trade Group 040)

44221 Floor Covering Stores
44229 Other Home Furnishings Stores/Window Treatment/All Other

Computer and Software Stores (Old Trade Group 050)

44311 Appliance, Television and Other Electronics Stores

Home Electronics and Appliance stores (Old Trade Group 060)

44312
44313 Camera & Photographic Supplies Stores
44314 Electronic & Appliance Stores

C - Building and Outdoor Home Supplies Stores (DSTM & HI)

Home Centres and Hardware Stores (Old Trade Group 070)

444 Building Material and Garden Equipment Supplies
44411 Home Centres
44412 Paint and Wallpaper Stores
44413 Hardware Stores

Specialized Building Materials &Garden Stores (Old Trade Group 080)

44412 Paint and Wallpaper Stores
44419 Other Building Material Dealers
44421 Outdoor Power Equipment Stores
44422 Nursery, Garden Centres, Farm Supply Stores

D - Food and Beverage Stores

Supermarkets (Old Trade Group 090)

4451 Food and Beverage Stores
44511 Supermarkets and Other Grocery Stores (except Convenience Stores)

Convenience and Specialty Food Stores (Old Trade Group 100)

44512 Convenience Stores
4452 Specialty Food Stores
44521 Meat Markets
44522 Fish and Seafood Markets
44523 Fruit and Vegetable Markets
44529 Other Specialty Food Stores (Baked Goods/Confectionary/Other)

Beer, Wine and Liquor Stores or Other Retail (Old Trade Group 110)

44531 Beer, Wine and Liquor Stores

E - Health and Personal Care Stores (DSTM)

Health and Personal Care Stores (Old Trade Group 120)

4461 Health and Personal Care Stores
44611 Pharmacies and Drug Stores
44612 Cosmetics, Beauty Supplies and Perfume Stores
44613 Optical Goods Stores
44619 Other Health and Personal Care stores and All Other

F - Clothing and Clothing Accessories Stores (DSTM)

448 Clothing and Clothing Accessories

Clothing Stores (Old Trade Group 140)

4481 Clothing Stores
44811 Men's Clothing Stores
44812 Women's Clothing Stores
44813 Children's and infants Clothing Stores

44814 Family Clothing Stores
44815 Clothing Accessory Stores
44819 Other clothing Stores

Shoe, Clothing Accessories and Jewellery Stores (Old Trade Group 150)

4482 Shoe Stores
4483 Jewellery, Luggage and Leather Goods Stores
44831 Jewellery Stores
44832 Luggage and Leather Goods Stores

G - General Merchandise Stores (DSTM)

Department Stores (Old Trade Group 170)

4521 Department Stores
45211 Department Stores – includes Major, Discount/Junior/Promotional
452112 Discount Department Stores

Other General Merchandise Stores (Old Trade Group 180)

4529 Other General Merchandise
45291 Warehouse Clubs and Superstores
45299 All Other General Merchandise Stores

H - Miscellaneous Retailers (DSTM)

Sporting Goods, Hobby, Music and Book Stores (Old Trade Group 160)

45111 Sporting Goods Stores
45112 Hobby, Toy and Game Stores
45113 Sewing, Needlework and Piece Goods Stores
45114 Musical Instrument and Supplies Stores
45121 Book Stores and News Dealers
45122 Pre-recorded Tape, Compact Disc and Record Stores

Miscellaneous Store Retail (Old Trade Group 190)

45311 Florists
45321 Office Supplies and Stationery Stores
45322 Gift, Novelty and Souvenir Stores
45331 Used Merchandise Stores
45391 Pet and Pet Supplies Stores
45392 Art Dealers
45393 Manufactured Mobile Home Dealers
45399 All Other Miscellaneous Store Retailers

I - Non-Store Retailers

454	Non-store Retailer Groups
4541	Electronic Shopping and Mail Order Houses
4542	Vending Machine Operators
4553	Direct Selling Establishments

Appendix C: Growth in Ontario Per Capita Retail Expenditures

This section provides a presentation on the Ontario Retail Sales Expenditures and the resulting changes (growth) in the Per Capita Expenditures from 2005 to 2013. **The data used in the Realty Research Group report titled *2006 Retail Market Analysis Update Final Report* was based on the 2005 data.** It should be noted that tables will also include the year 2012, since there was some data that was unavailable for certain categories in 2013.

In the following table, the data obtained from Statistics Canada data CANSIM 80-0020 is summarized using NAICS data and the sales expenditures and per capita calculations are shown for the major store categories.

In summary, the major retail goods categories show the 'average' annual 'real growth' over the 8 year time period from 2005 to 2013 to be as follows:

- Total annual average decrease in Grocery/Food stores to be (-0.1%) / see Table C-3
- Total annual average increase in Furniture/Electronics stores to be 0.3% / see Table C-4
- Total annual average increase in Health/personal care stores to be 1.7% / see Table C-5
- Total annual average increase in Clothing stores to be 0.7% / see Table C-6
- Total annual average decrease in Sporting Goods/Books/Etc. stores to be (-1.2%) / see Table C-7
- Total annual average increase in Department Stores/General Merchandise stores to be 1.5% / see Table C-8
- Total annual average decrease in Miscellaneous retail stores to be (-0.2%) / see Table C-9
- Total annual average increase in Building Materials/Garden equipment stores to be 1.1% / see Table C-10
- The overall total 'average' increase in the entire Non Food Store Retail Goods category had an increase of 2.6% before taking into account the Consumer Price Index and a 'Real Growth' increase of only 0.9% after applying the CPI / see Table C-11

Table C.1
ONTARIO PER CAPITA RETAIL EXPENDITURES (2005, 2012 AND 2013)

NAICS #	Old Trade Group #	Merchandise Category	2005 Per Capita Sales $	2012* Per Capita Sales $	2013 Per Capita Sales $	Change 2005 to 2012/13*	% Change 8 Yrs.	Average % Change Per Year
44511	90	Supermarket & Other Grocery Stores	$1,710	$2,027	$2,048	$338	19.8%	2.5%
44512	100	Convenience Stores	-	$159	$150			
4452		Specialty Food Stores	-	$160	$173			
44512/2		Total Convenience and Specialty Food	$211	$319	$323	$112	53.1%	6.6%
4451		TOTAL FOOD/GROCERY STORES	$1,921	$2,346	$2,371	$450	23.4%	2.9%
4453	110	Beer, Wine, Liquor Stores	$499	$582	$596	$97	19.4%	2.4%
		ALL NON FOOD RETAIL TYPE GOODS						
4421	30	Furniture Stores	$254	$265	$271	$17	6.7%	0.8%
4422	40	Home Furnishings	$164	$167	$163	-$1	-0.6%	-0.1%
	50	Computer and Software	$36	-	-			
	60	Home Electronics/Appliances	$308	$464	$442	$134	43.5%	5.4%
442/3		TOTAL FURNITURE GROUP	$762	$896	$876	$114	15.0%	1.9%
4461	120	HEALTH AND PERSONAL CARESTORES	$778	$979	$993	$215	27.6%	3.5%
4481	140	Clothing Stores	$514	$615	$631	$117	22.8%	2.8%
4482	150	Shoe Stores	-	$90	$92	$92		
4483		Jewelry, Leather and Accessories		$89	$91	$91		
4482/3		Shoes/Jewelry/Accessories	$171	$179	$183	$12	7.0%	0.9%
448		CLOTHING GROUP TOTAL	$685	$794	$813	$128	18.7%	2.3%
451	160	SPORTING GOODS/BOOKS/MUSIC – Miscellaneous Specialty	$286	$296	$289	$3	1.05%	0.13%
4521	170	Department Stores	-	$843	n.a.	n.a.		
4529	180	Other General Merchandise - includes Warehouse Clubs and Superstores	-	$862	n.a.	n.a.		
		TOTAL DEPARTMENT/GENERAL MERCHANDISE STORES	$1,393	$1,705	n.a.			
		DSTM Adjustment for 2013 with 2012 data @ 3.2%/yr. = 25.6% increase to 2013			$1393 +25.6% = $1,750	$357	25.6%	3.2%
453	190	MISCELLANEOUS Store Retailers (Partial DSTM)	$281	$301	$311	$30	10.7%	1.3%
	70	- Home Centres/Hardware	$494					
	80	- Specialized Building Material/Garden Stores	$132					
444		BUILDING MATERIALS & GARDEN EQUIPMENT SUPPLIES	$626	$723	$763	$97	15.5%	1.9%
		TOTAL DSTM TYPE RETAIL GOODS (Non-Food Store Retail / NFSR)	$4,811	$5,694	n.a.			
		DSTM Adjusted for 2013 with 2012 data			$5,795	$984	20.5%	2.6%

* The year 2012 is included primarily to obtain information for DSTM type sales which were not yet available for the year 2013.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada CANSIM Table 80-0020 based on 2012 NAICS data.

Table C.2
SUMMARY OF MAJOR CATEGORIES ONTARIO PER CAPITA RETAIL EXPENDITURES (2005, 2012 AND 2013)

NAICS #	Old Trade Group #	Merchandise Category	2005 Per Capita Sales $	2012* Per Capita Sales $	2013 Per Capita Sales $	Change 2005 to 2012/13*	% Change 8 Yrs.	Average % Change Per Year
4451		TOTAL FOOD/GROCERY STORES	$1,921	$2,346	$2,371	$450	23.4%	2.9%
		ALL RETAIL GOODS						
442/3		TOTAL FURNITURE GROUP	$762	$896	$876	$114	15.0%	1.9%
4461	120	HEALTH & PERSONAL CARESTORES	$778	$979	$993	$215	27.6%	3.5%
448		CLOTHING GROUP TOTAL	$685	$794	$813	$128	18.7%	2.3%
451	160	SPORTING GOODS/BOOKS/MUSIC - Misc. Specialty	$286	$296	$289	$3	1.0%	0.1%
		TOTAL DEPT/GENERAL MDSE STORES	$1,393	$1,705	$1,750	$357	25.6%	3.2%
453	190	MISCELLANEOUS Store Retailers (Partial DSTM)	$281	$301	$311	$30	10.7%	1.3%
444		BUILDING MATERIALS & GARDEN EQUIPMENT SUPPLIES	$626	$723	$763	$97	15.5%	1.9%
		TOTAL DSTM TYPE RETAIL GOODS or (Non Food Store Type Retail / NFSR)	$4,811	$5,694	$5,795	$984	20.5%	2.6%

* The year 2012 is included primarily to obtain information for DSTM type sales which were not yet available for the year 2013.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada CANSIM Table 80-0020 based on 2012 NAICS data.

Table C.3
ESTIMATED ANNUAL REAL GROWTH IN ONTARIO FOOD STORE RETAIL SALES TAKING CPI* INTO ACCOUNT (2005 TO 2013)

Year	Estimated Per Capita Food Store/Grocery Expenditures	CPI Consumer Price Index	Estimated Real Growth Base 2002	8 Year Increase	8 Year Real % Growth	Estimated Annual Real % Growth
2005	$1,921	106.7	$1,800			
2013	$2,371	132.9	$1,784	-$137	-0.90%	-0.10%

* CPI means Consumer Price Index where year 2002 = 100.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada Table 326-0021.

Table C.4
ESTIMATED ANNUAL REAL GROWTH IN ONTARIO FURNITURE RETAIL SALES TAKING CPI* INTO ACCOUNT (2005 TO 2013)

Year	Estimated Per Capita Furniture Group Expenditures	CPI Consumer Price Index	Estimated Real Growth Base 2002	8 Year Increase from 2005	8 Year Real % Growth	Estimated Annual Real % Growth
2005	$762	105.3	$724			
2013	$876	118	$742	$19	2.6%	0.3%

* CPI means Consumer Price Index where year 2002 = 100.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada Table 326-0021.

Table C.5
ESTIMATED ANNUAL REAL GROWTH IN ONTARIO HEALTH/PERSONAL CARE SALES TAKING CPI* INTO ACCOUNT (2005 TO 2013)

Year	Estimated Per Capita Health/Personal Care Expenditures	CPI Consumer Price Index	Estimated Real Growth Base 2002	8 Year Increase from 2005	8 Year Real % Growth	Estimated Annual Real % Growth
2005	$778	105.3	$739			
2013	$993	118	$842	$103	13.9%	1.7%

* CPI means Consumer Price Index where year 2002 = 100.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada Table 326-0021.

Table C.6
ESTIMATED ANNUAL REAL GROWTH IN ONTARIO CLOTHING GROUP SALES TAKING CPI* INTO ACCOUNT (2005 TO 2013)

Year	Estimated Per Capita Clothing Group Expenditures	CPI Consumer Price Index	Estimated Real Growth Base 2002	8 Year Increase from 2005	8 Year Real % Growth	Estimated Annual Real % Growth
2005	$685	105.3	$651			
2013	$813	118	$689	$38	5.9%	0.7%

* CPI means Consumer Price Index where year 2002 = 100.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada Table 326-0021.

Table C.7
ESTIMATED ANNUAL REAL GROWTH IN ONTARIO SPORTING GOODS/MUSIC SALES TAKING CPI* INTO ACCOUNT (2005 TO 2013)

Year	Estimated Per Capita Sporting Goods/Music Expenditures	CPI Consumer Price Index	Estimated Real Growth Base 2002	8 Year Increase from 2005	8 Year Real % Growth	Estimated Annual Real % Growth
2005	$286	105.3	$272			
2013	$289	118	$245	-$27	-9.8%	-1.2%

* CPI means Consumer Price Index where year 2002 = 100.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada Table 326-0021.

Table C.8
ESTIMATED ANNUAL REAL GROWTH IN ONTARIO TOTAL DSTM/GENERAL MERCHANDISE SALES TAKING CPI* INTO ACCOUNT (2005 TO 2013)

Year	Estimated Per Capita Total DSTM/General Merchandise Expenditures	CPI Consumer Price Index	Estimated Real Growth Base 2002	8 Year Increase from 2005	8 Year Real % Growth	Estimated Annual Real % Growth
2005	$1,393	105.3	$1,323			
2012	$1,705	117	$1,457			
2013	$1,750 (estimate)	118	$1,483	$160	12.1%	1.5%

* CPI means Consumer Price Index where year 2002 = 100.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada Table 326-0021.

Table C.9
ESTIMATED ANNUAL REAL GROWTH IN ONTARIO MISCELLANEOUS GOODS SALES TAKING CPI* INTO ACCOUNT (2005 TO 2013)

Year	Estimated Per Capita Miscellaneous Goods Expenditures	CPI Consumer Price Index	Estimated Real Growth Base 2002	8 Year Increase from 2005	8 Year Real % Growth	Estimated Annual Real % Growth
2005	$281	105.3	$267			
2013	$311	118	$264	-$3	-1.2%	-0.2%

* CPI means Consumer Price Index where year 2002 = 100.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada Table 326-0021.

Table C.10
ESTIMATED ANNUAL REAL GROWTH IN ONTARIO BUILDING MATERIALS/GARDEN SALES TAKING CPI* INTO ACCOUNT (2005 TO 2013)

Year	Estimated Per Capita Building Materials/ Garden Expenditures	CPI Consumer Price Index	Estimated Real Growth Base 2002	8 Year Increase from 2005	8 Year Real % Growth	Estimated Annual Real % Growth
2005	$626	105.3	$594			
2013	$763	118	$647	$52	8.8%	1.1%

* CPI means Consumer Price Index where year 2002 = 100.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada Table 326-0021.

Table C.11
ESTIMATED ANNUAL REAL GROWTH IN ONTARIO TOTAL RETAIL GOODS SALES TAKING CPI* INTO ACCOUNT (2005 TO 2013)

Year	Estimated Per Capita Total Retail Goods Expenditures	CPI Consumer Price Index	Estimated Real Growth Base 2002	8 Year Increase from 2005	8 Year Real % Growth	Estimated Annual Real % Growth
2005	$4,811	105.3	$4,569			
2013	$5,795	118	$4,911	$342	7.5%	0.9%

* CPI means Consumer Price Index where year 2002 = 100.

Source: Compiled by Realty Research Group Ltd. from Statistics Canada Table 326-0021.

Table C.12
SUMMARY OF HISTORIC PATTERN PER CAPITA $ SALES EXPENDITURES IN WHITBY STORES

Store Type Category	2006 Whitby	Store Type Category	2006 Whitby	Store Type Category	2006 Whitby
Supermarket/Grocery/Food Stores	n.a.	$1,710			
Convenience & Specialty Food Stores	n.a.	$211			nil
Total Grocery/Food Stores	$1,823	$1,921	$1,820	$2,371	$2,246
Discount/Major Department Stores	$696	n.a.	$720		included
Warehouse Membership Club	$206	n.a.	$210		included
General Merchandise/Dollar Stores	$35	n.a.	$35		included
Superstores	n.a.	n.a.	$425		included
ALL General Merchandise (Total Above)	$937	$1,393	$1,390	$1,705	$1,746
Cdn. Tire Stores (Auto & Retail)	$255	n.a.	$255		included
Furniture/Appliance Stores	$463	$762	$750	$876	$863
Home Improvement Stores	$874	$626	$750	$763	$866
Health/Personal Care Stores (Pharmacies)	$148	$778	$770	$993	$983
Clothing/Accessory Stores	$267	$685	$550	$813	$653
Sporting Goods, Books, Etc. - Specialty	included	$286	included	$289	$277
Miscellaneous Store Retailers - Specialty	included	$281	included	$311	$304
Total Specialty Retail	$287	$567	$550		
Total All Non-Food Retail (DSTM) Space Comparative Totals	$4,168	$4,811	$5,015	$5,750	$5,692

Source: Realty Research Group Ltd.

Appendix D: Inventory Data Retail/Commercial Space in Whitby and Brooklin

Table D.1
COMPARATIVE PER CAPITA SPACE INVENTORY WHITBY (YEARS 2000, 2006 AND 2013)

Various use Type Categories	2000 Total Sq.Ft.	2000 Per Capita Sq.Ft.	2006 Total Sq.Ft.	2006 Per Capita Sq.Ft.	2013 Total Sq.Ft.	2013 Per Capita Sq.Ft.
DSTM Space	1,069,500	12.4	1,570,169	13.7		
HIRS (Home Improvement) Space	203,003	2.4	430,503	3.8		
HASS (Home & Auto) Space	177,975	2.1	192,234	1.7		
Office Supplies Space	75,416	0.9	53,025	0.5		
Total DSTM Type	1,525,894	17.7	2,245,931	19.6	2,283,823	17.4
Other Retail Space	118,412	1.4	81,322	0.7	109,902	0.8
Total DSTM & Other Space	1,644,306	19.1	2,327,253	20.3	2,393,725	18.3
Liquor, Beer, Wine Space	30,359	0.4	49,382	0.4	72,749	0.6
Supermarket Space	274,129	3.2	439,511	3.8	568,968	4.3
Other Food Space	85,288	1.0	121,092	1.1	119,788	0.9
Total Food Store Space	359,417	4.2	560,603	4.9	688,756	5.3
Restaurant Service Space	383,750	4.5	457,287	4.0	501,152	3.8
Service Type Space – Personal Services	323,404	3.8	284,994	2.5	376,567	2.9
Service Recreational Space	308,605	3.6	352,763	3.1	408,860	3.1
Offices – Services/Medical/Financial	418,073	4.9	654,041	5.6	883,180	6.7
Total Services Type Space	1,433,832	16.7	1,749,085	15.3	2,169,759	16,6
Automotive Repair/Service/Other	158,182	1.8	146,673	1.3		
Auto used Car Sales Space	31,541	0.4	23,925	0.2		
New Auto Dealership Space	203,232	2.4	277,448	2.4		
Total Auto Type Space	392,955	4.6	448,046	3.9	510,234	3.9
Total All Occupied Space	3,830,510	44.5	5,084,987	44.4	5,835,223	44.7
Vacant Retail Space	174,732	2.0	129,083	1.1	337,786	2.6
Total All Retail/Commercial	4,005,242	46.5	5,214,070	45.5	6,173,009	47.2

Source: Realty Research Group Ltd.

Table D.2
COMPARATIVE PER CAPITA SPACE INVENTORY BROOKLIN (2006, 2010 AND 2013)

Various Use Type Categories	2006 Sq.Ft.	2006 Sq.Ft. Per Capita	2010 Sq.Ft.	2010 Sq.Ft. Per Capita	2013 Sq.Ft.	2013 Sq.Ft. Per Capita
Total DSTM/NFSR Type Space	73,356	4.73	83,811	4.28	87,696	4.52
Supermarket Space	48,487	3.13	47,403	2.42	36,377	1.88
Food Specialty Type					7,205	0.37
Food Convenience Stores Type	7,812	0.50	6,850	0.35	11,537	0.59
Total Food Store Space	56,299	3.63		2.77	55,119	2.84
Liquor, Beer, Wine Space	1,600	0.10	9,597	0.49	15,975	0.82
Other Retail Space	24,659	1.59	20,950	1.07	15,239	0.79
Service Type Space – Personal Services	31,812	2.05	34,505	1.76	64,874	0.8
Service Recreational Space	12,100	0.78	20,195	1.03	22,197	1.14
Restaurant Service Space	22,238	1.43	35,895	1.83	49.588	2.6
Total Other Retail & Service Space	92,409	5.96		6.18	118,335	6.15
Offices – Service Uses (Insurance, Etc.)	12,535	0.81	11,989	0.61	n.a.	
Offices – Services/Medical/Financial	10,388	0.67	16,246	0.83	n.a.	
Offices – Financial Uses	6,349	0.41	7,649	0.39	n.a.	
Offices – Other/Corporate/Etc.	0		0		n.a.	
Total Office Use Space	29,272	1.89	35,884	1.83	62,087	3.20
Automotive Repair/Service/Other	n.a.		n.a.		16,723	0.86
Auto Used Car Sales Space	n.a.		n.a.		8,944	0.46
New Auto Dealership Space	0		0		0	-
Total Auto Type Space	22,490	1.45	25,090	1.28	25,667	1.32
Total All Occupied Space	273,826	17.67	320,180	16.34	398,442	20.5
Vacant Retail Space	4,264	0.28	4,728	0.24	4,460	0.23
Total All Retail/Commercial	278,090	17.94	324,908	16.58	402,902	20.7

* Years 2006 and 2010 from Realty Research Report entitled *2010 Update: Brooklin Community & Special Purpose Commercial Use Analysis (December 14, 2010)*.

Source: Realty Research Group Ltd.

Appendix E: Summary Worksheet Tables on Estimates of Warranted Space

This section provides the Worksheet Tables that summarize the calculations made in estimating the warranted space for Whitby from 2014 to 2031 and for the Brooklin community for the two periods of 2014 to 2031 and to 'Ultimate build-out' year estimated to be 2044.

1. Tables E-1a,1b&1c / Summary DSTM Space Warranted Estimates

E-1a Estimate of Warranted DSTM Space – All Whitby 2014 to 2031
E-1b Estimate of Warranted DSTM Space – Brooklin 2014 to 2031
E-1c Estimate of Warranted DSTM Space – Brooklin 2014, 2031 and 2044

2. Tables E-2a,2b&2c / Summary Supermarket Space Warranted Estimates

E-2a Estimate of Warranted Supermarket Space – All Whitby 2014 to 2031
E-2b Estimate of Warranted Supermarket Space – Brooklin 2014 to 2031
E-2c Estimate of Warranted Supermarket Space – Brooklin 2014, 2031 and 2044

3. Tables E-3a,3b&3c / Summary 'All Other' Space Warranted Estimates

E-3a Estimate of Warranted 'ALL OTHER' Space – All Whitby 2014 to 2031
E-3b Estimate of Warranted 'ALL OTHER' Space – Brooklin 2014 to 2031
E-3c Estimate of Warranted 'ALL OTHER' Space – Brooklin 2014, 2031 and 2044

Table E-1a
WORKSHEET TABLE: ESTIMATE OF WARRANTED NEW DSTM SPACE ALL WHITBY (2014 - 2031)

#	ALL WHITBY		2014	2016	2021	2026	2031
1	DSTM RETAIL EXPENDITURE POTENTIAL						
2	Primary Trade Area:						
3	o Population Estimate (ROPA 128)		133,471	140,462	157,938	175,414	192,900
4							
5	Per Capita EXPENDITURE ESTIMATE by Store Type						
6	Per Capita All Department Store/NFSR Retail		$1,763	$1,798	$1,886	$1,973	$2,060
7							
8	Furniture Stores/Office		$872	$889	$932	$975	$1,018
9	Health/Personal Care		$993	$1,012	$1,062	$1,111	$1,160
10	Clothing/Accessories		$660	$673	$705	$738	$771
11	Sporting Goods/Specialty		$280	$285	$299	$313	$327
12	Miscellaneous Retail Stores		$307	$313	$328	$344	$359
13							
14	Building Material/Improvements		$875	$892	$935	$979	$1,022
15	Internet Purchases		$ -	$ -	$ -	$ -	$ -
16							
17							
18	Per Capita All DSTM/NFSR		$5,749	$5,863	$6,147	$6,432	$6,717
19							
20	ESTIMATE EXPENDITURE POTENTIAL						
21	TOTAL PTA DSTM/NFSR $ Potential Expenditures		$767,312,000	$823,495,000	$970,902,000	$1,128,256,000	$1,295,624,000
22							
23	ESTIMATE DSTM/NFSR EXPENDITURE CAPTURED						
24	4.MAXIMUM Capture Potential New Space:						
25	Expenditures From Primary Trade Area		$767,312,000	$823,495,000	$970,902,000	$1,128,256,000	$1,295,624,000
26	Inflow From Outside PTA		$38,366,000	$41,175,000	$48,545,000	$56,413,000	$64,781,000
27							
28	TOTAL EXPENDITURE POTENTIAL		$2,014	$2,016	$2,021	$2,026	$2,031
29	Potentially Capturable Scenario						
30	4.MAXIMUM Capture Potential for New Space:		$805,678,000	$864,670,000	$1,019,447,000	$1,184,669,000	$1,360,405,000
31							
32	Estimated Total 100% Supportable DSTM/NFSR Sq.Ft.						
33	at Fixed Sales Performance Level						
34	Estimating Sales Performance at	$275	2,929,738	3,144,255	3,707,080	4,307,887	4,946,927
35							
36	Sales Performance/Sq.Ft. on Existing DSTM /NFSR Sq.Ft.		$321	$344	$406	$471	$541
37	Sq.Ft. with Input Sales Performance Avg.		2,482,683	2,664,467	3,141,411	3,833,067	4,401,671
38	Total Existing DSTM/NFSR Sq.Ft.		2,393,725				
39	Estimated Req Sales to 2013 Existing Space		$739,818,000	$739,818,000	$739,818,000	$739,818,000	$739,818,000
40	Estimated Potential DSTM/NFSR Dollars Available for New Space						
41	4.MAXIMUM Capture Potential for New Space:		$65,860,000	$124,852,000	$279,629,000	$444,851,000	$620,587,000
42							
43	TOTAL SUPPORTABLE DSTM SPACE						
44	BEFORE PROPOSED/DESIGNATED Space						
45	Assumed DSTM Per Sq.Ft. Performance						
46	Estimate of Warranted NEW DSTM Space		239,000	454,000	1,017,000	1,618,000	2,257,000
47	Resulting Cumulative ADDITIONAL Sq.Ft. Per Capita		1.8	3.2	6.4	9.2	11.7
48	OVERALL Total Warranted DSTM Sq.Ft.. in Whitby		2,632,725	2,847,725	3,410,725	4,011,725	4,650,725
49	Sq.Ft. Per Capita		19.7	20.3	21.6	22.9	24.1

Source: Realty Research Group Ltd.

Table E-1b
WORKSHEET TABLE: ESTIMATE OF WARRANTED NEW DSTM SPACE BROOKLIN (2014 TO 2031)

#	BROOKLIN		2014	2016	2021	2026	2031
1	DSTM RETAIL EXPENDITURE POTENTIAL						
2	BROOKLIN TRADE AREA						
3	o Population Estimate		21,962	25,987	36,048	46,109	56,170
4							
5	Estimated EXPENDITURE POTENTIAL Type						
6	Total Department Store/NFSR Expenditure		$38,538,000	$46,053,000	$65,457,000	$85,739,000	$106,899,000
7							
8	Furniture Stores/Office		$19,048,000	$22,763,000	$32,354,000	$42,378,000	$52,837,000
9	Health/Personal Care		$21,697,000	$25,928,000	$36,852,000	$48,271,000	$60,184,000
10	Clothing/Accessories		$14,413,000	$17,224,000	$24,481,000	$32,066,000	$39,980,000
11	Sporting Goods/Specialty		$6,114,000	$7,306,000	$10,385,000	$13,602,000	$16,959,000
12	Miscellaneous Retail Stores		$6,710,000	$8,018,000	$11,397,000	$14,928,000	$18,612,000
13							
14	Building Material/Improvements		$19,114,000	$22,842,000	$32,466,000	$42,526,000	$53,021,000
15	Internet Purchases		$ -	$ -	$ -	$ -	$ -
16							
17	TOTAL DSTM/NFSR $ Expenditure Potential		$125,634,000	$150,135,000	$213,391,000	$279,511,000	$348,494,000
18							
19	ESTIMATED DSTM/NFSR EXPENDITURES CAPTURED - SCENARIOS:						
20	4.MAXIMUM Capture for New Space with Inflow:						
21	Expenditures From Primary Trade Area	100%	$125,634,000	$150,135,000	$213,391,000	$279,511,000	$348,494,000
22	Inflow From Outside PTA & STA	5%	$6,282,000	$7,507,000	$10,670,000	$13,976,000	$17,425,000
23	TOTAL EXPENDITURE POTENTIAL Capture		$131,916,000	$157,642,000	$224,061,000	$293,487,000	$365,919,000
24							
25	Estimated Total Supportable @ Various DSTM/NFSR Capture Sq.Ft.						
26	at 'Estimated' Sales Per Sq.Ft. Performance Level						
27	Estimating Sales performance at	$275	479,695	573,244	814,767	1,067,225	1,330,615
28							
29	Estimating Sales performance at	$300	439,720	525,473	746,870	978,290	1,219,730
30							
31	Total Existing Inventory of DSTM/NFSR Sq.Ft.	87,696					
32	Estimated Required Sales to Existing Space@	$275	$24,116,000	$24,116,000	$24,116,000	$24,116,000	$24,116,000
33							
34	Estimated Potential DSTM Dollars Available for New Space						
35							
36	3. High Exp. Capture with Inflow Scenario	75%	$74,821,000	$94,115,000	$143,929,000	$195,999,000	$250,324,000
37							
38	4. Max. Capture for New Space with Inflow:	100%	$107,800,000	$133,526,000	$199,945,000	$269,371,000	$341,803,000
39							
40	Max.Tot NEW DSTM/NFSR % Performance	100%					
41	Max. Total NEW DSTM/NFSR @ Per Sq.Ft. Performance	$275	392,000	486,000	727,000	980,000	1,243,000
42	Sq.Ft. Per Capita		17.8	18.7	20.2	21.3	22.1
43							
44	Probable Total NEW DSTM/NFSR % Performance	75%					
45	Probable Total NEW DSTM/NFSR Per Sq.Ft.	$275	272,000	342,000	523,000	713,000	910,000
46	Sq.Ft. Per Capita		12.4	13.2	14.5	15.5	16.2
47							
48	TOTAL WARRANTED DSTM/NFSR Space Brooklin	100%	479,696	573,696	814,696	1,067,696	1,330,696
49	Sq.Ft. Per Capita		21.8	22.1	22.6	23.2	23.7
50							
51	TOTAL WARRANTED DSTM/NFSR Space Brooklin	75%	359,696	429,696	610,696	800,696	997,696
52	Sq.Ft. Per Capita		16.4	16.5	16.9	17.4	17.8

Source: Realty Research Group Ltd.

Table E-1c
WORKSHEET TABLE: ESTIMATE OF WARRANTED NEW DSTM SPACE BROOKLIN (2014, 2031 AND 2044)

#	BROOKLIN		2014	-	2031	-	2044
1	DSTM RETAIL EXPENDITURE POTENTIAL						
2	BROOKLIN TRADE AREA						
3	o Population Estimate		21,962		56,170		80,670
4							
5	Estimated EXPENDITURE POTENTIAL Type						
6	Total Department Store/NFSR Expenditure		$38,538,000		$106,899,000		$162,682,000
7							
8	Furniture Stores/Office		$19,048,000		$52,837,000		$80,409,000
9	Health/Personal Care		$21,697,000		$60,184,000		$91,590,000
10	Clothing/Accessories		$14,413,000		$39,980,000		$60,843,000
11	Sporting Goods/Specialty		$6,114,000		$16,959,000		$25,809,000
12	Miscellaneous Retail Stores		$6,710,000		$18,612,000		$28,325,000
13							
14	Building Material/Improvements		$19,114,000		$53,021,000		$80,689,000
15	Internet Purchases		$ -		$ -		$ -
16							
17	TOTAL DSTM/NFSR $ Expenditure Potential		$125,634,000		$348,494,000		$530,346,000
18							
19	ESTIMATED DSTM/NFSR EXPENDITURES CAPTURED - SCENARIOS:						
20	4. Max. Capture for New Space with Inflow:						
21	Expenditures From Primary Trade Area	100%	$125,634,000		$348,494,000		$530,346,000
22	Inflow From Outside PTA & STA	5%	$6,282,000		$17,425,000		$26,517,000
23	TOTAL EXPENDITURE POTENTIAL Capture		$131,916,000		$365,919,000		$556,863,000
24							
25	Estimated Total Supportable @ Various DSTM/NFSR Capture Sq.Ft.						
26	at 'Estimated' Sales Per Sq.Ft. Performance Level						
27	Estimating Sales performance at	$275	479,695		1,330,615		2,024,956
28							
29	Estimating Sales performance at	$300	439,720		1,219,730		1,856,210
30							
31	Total Existing Inventory of DSTM/NFSR Sq.Ft.	87,696					
32	Estimated Required Sales to Existing Space@	$275	$24,116,000		$24,116,000		$24,116,000
33							
34	Estimated Potential DSTM Dollars Available for New Space						
35							
36	3. High Exp. Capture with Inflow Scenario	75%	$74,821,000		$250,324,000		$393,532,000
37							
38	4. Max. Capture for New Space with Inflow:	100%	$107,800,000		$341,803,000		$532,747,000
39							
40	Max. Total NEW DSTM/NFSR % Performance	100%					
41	Max. Total NEW DSTM/NFSR @ Per Sq.Ft. Performance	$275	392,000		1,243,000		1,937,000
42	Sq.Ft. Per Capita		17.8		22.1		24.0
43							
44	Probable Total NEW DSTM/NFSR % Performance	75%					
45	Probable Total NEW DSTM/NFSR Per Sq.Ft.	$275	272,000		910,000		1,431,000
46	Sq.Ft. Per Capita		12.4		16.2		17.7
47							
48	TOTAL WARRANTED DSTM/NFSR Space Brooklin	100%	479,696		1,330,696		2,024,696
49	Sq.Ft. Per Capita		21.8		23.7		25.1
50							
51	TOTAL WARRANTED DSTM/NFSR Space Brooklin	75%	359,696		997,696		1,518,696
52	Sq.Ft. Per Capita		16.4		17.8		18.8

Source: Realty Research Group Ltd.

Table E-2a
WORKSHEET TABLE: ESTIMATE OF WARRANTED NEW SUPERMARKET SPACE ALL WHITBY (2014 TO 2031)

#	ALL WHITBY		2014	2016	2021	2026	2031
	SUPERMARKET EXPENDITURE POTENTIAL						
1	o Population		133,471	140,462	157,938	175,414	192,900
2							
3	SUPERMARKET EXPENDITURE POTENTIAL						
4	Primary Trade Area:						
5	Major Food Store Per Capita Expenditure Potential		$2,260	$2,280	$2,330	$2,380	$2,430
6							
7							
8	o Primary TA Expenditure Potential		$301,643,707	$320,253,360	$367,995,540	$417,485,320	$468,747,000
9	3. Maximum Capture Potential for New Space in Whitby						
10	Expenditures From Primary Trade Area		$301,644,000	$320,253,000	$367,996,000	$417,485,000	$468,747,000
11							
12	Inflow From Outside	5.0%	$15,082,000	$16,013,000	$18,400,000	$20,874,000	$23,437,000
13							
14	Total Maximum Expenditures Potentially Capturable		$316,726,000	$336,266,000	$386,396,000	$438,359,000	$492,184,000
15							
16	Estimated Minimum Sales Allocated to Existing Stores						
17	Sq.Ft. of Major Food Store Space 568,968						
18	Assumed Per Sq.Ft. Sales to Existing	$550					
19	Assumed Total Sales to Existing Stores		$312,932,000	$312,932,000	$312,932,000	$312,932,000	$312,932,000
20							
21	SALES AVAILABLE FOR NEW SPACE						
22	3. Maximum Capture Potential for New Space in Whitby		$3,794,000	$23,334,000	$73,464,000	$125,427,000	$179,252,000
23							
24	Total Amount of Major Food Space Supportable						
25	"BEFORE Deducting EXISTING Space						
26	3. Maximum Capture Potential for New Space in Whitby						
27	At Medium Sq.Ft. Performance of:	$550	576,000	611,000	703,000	797,000	895,000
28							
29	LESS: EXISTING & PROPOSED NEW SPACE						
30	Included U/C Taunton (35,000 Sq.Ft.. 2013/14)						
31	LESS: Existing Major Food Store Space (Cumulative)		568,968	568,968	568,968	568,968	568,968
32							
33	Estimate Total Supportable "NEW" Food Store Space						
34	3. Maximum Capture Potential for New Space in Whitby						
35	At Medium Sq.Ft. Performance of	$550	7,000	42,000	134,000	228,000	326,000
36	At High Sq.Ft. Performance of	$625	(62,000)	(31,000)	49,000	132,000	218,000
37							
38	Entry Level New Supermarket Space Estimate	$550	7,000	42,000	134,000	228,000	326,000
39	Warranted Sq.Ft. Per Capita Supermarket Space		0.05	0.30	0.85	1.30	1.69
40							
41	Total Warranted Supermarket Space in Whitby		575,968	610,968	702,968	796,968	894,968
42	Resulting Sq.Ft. Per Capita Supermarket Space		4.3	4.3	4.5	4.5	4.6

Source: Realty Research Group Ltd.

Table E-2b
WORKSHEET TABLE: ESTIMATE OF WARRANTED NEW SUPERMARKET SPACE BROOKLIN (2014 TO 2031)

#	BROOKLIN		2014	2016	2021	2026	2031
1	SUPERMARKET EXPENDITURE POTENTIAL						
2	PTA Brooklin Community						
3							
4	o Population		21,962	25,987	36,048	46,109	56,170
5	Major Food Store Per Capita Expenditure Potential	.05	$2,260	$2,280	$2,330	$2,380	$2,430
6	o Primary TA Expenditure Potential		$49,634,622	$59,249,600	$83,991,322	$109,739,156	$136,493,100
7							
8	Estimate of Potential Capture of Expenditure Potential:						
9	3. Maximum Capture for New Space						
10	Expenditures From Primary Trade Area - 90%	90%	$44,671,000	$53,325,000	$75,592,000	$98,765,000	$122,844,000
11	Expenditures From Secondary Trade Area -	0%	$ -	$ -	$ -	$ -	$ -
12	Inflow From Outside - 5%	5%	$2,234,000	$2,666,000	$3,780,000	$4,938,000	$6,142,000
13							
14	TOTAL FOOD EXPENDITURE CAPTURE POTENTIAL		$46,905,000	$55,991,000	$79,372,000	$103,703,000	$128,986,000
15	Summary of Total Expenditure Potential						
16	Potentially Capturable by New Stores						
17	1. Low Capture Scenario:	50%	$26,058,000	$31,106,000	$44,096,000	$57,614,000	$71,659,000
18	2. Medium Capture Scenario:	75%	$39,087,000	$46,659,000	$66,143,000	$86,419,000	$107,489,000
19	3. Maximum Capture for New Space	90%	$46,905,000	$55,991,000	$79,372,000	$103,703,000	$128,986,000
20							
21	Total Sales to Stores-36,253 Sq.Ft. at		$20,007,000	$20,007,000	$20,007,000	$20,007,000	$20,007,000
22							
23	Sales Available for New Space:						
24	3. Maximum Capture for New Space	90%	$26,898,000	$35,984,000	$59,365,000	$83,696,000	$108,979,000
25							
26	Total Amount of Major Food Space Supportable						
27	"BEFORE Deducting EXISTING Space						
28	3. Maximum Capture for New Space	90%					
29	At Low Sq.Ft. Performance of:	$550	85,000	102,000	144,000	189,000	235,000
30	At High Sq.Ft. Performance of:	$625	75,000	90,000	127,000	166,000	206,000
31							
32	LESS: Existing Major Food Store Space		36,377	36,377	36,377	36,377	36,377
33							
34	Estimate of Total Supportable "NEW" Food Store Space						
35	3. Maximum Capture for New Space						
36	At Low Sq.Ft. Performance of: $450/Sq.Ft.	$550	49,000	66,000	108,000	153,000	199,000
37	At High Sq.Ft. Performance of $500/Sq.Ft.:	$625	39,000	54,000	91,000	130,000	170,000
38							
39							
40	Entry Level New Supermarket Brooklin@	$550	49,000	66,000	108,000	153,000	199,000
41	Resulting Sq.Ft. Per Capita		2.2	2.5	3.0	3.3	3.5
42							
43	Total Warranted Space in Brooklin		85,377	102,377	144,377	189,377	235,377
44	Resulting Sq.Ft. Per Capita		3.9	3.9	4.0	4.1	4.2

Source: Realty Research Group Ltd.

Table E-2c
WORKSHEET TABLE: ESTIMATE OF WARRANTED NEW SUPERMARKET SPACE BROOKLIN (2014, 2031 AND 2044)

#	BROOKLIN		2014	-	2031	-	2044
1	SUPERMARKET EXPENDITURE POTENTIAL						
2	PTA Brooklin Community						
3							
4	o Population		21,962		56,170		80,670
5	Major Food Store Per Capita Expenditure Potential	.05	$2,260		$2,430		$2,560
6	o Primary TA Expenditure Potential		$49,634,622		$136,493,100		$206,515,200
7							
8	Estimate of Potential Capture of Expenditure Potential:						
9	3. Maximum Capture for New Space						
10	Expenditures From Primary Trade Area - 90%	90%	$44,671,000		$122,844,000		$185,864,000
11	Expenditures From Secondary Trade Area -	0%	$ -		$ -		$ -
12	Inflow From Outside - 5%	5%	$2,234,000		$6,142,000		$9,293,000
13							
14	TOTAL FOOD EXPENDITURE CAPTURE POTENTIAL		$46,905,000		$128,986,000		$195,157,000
15	Summary of Total Expenditure Potential						
16	Potentially Capturable by New Stores						
17	1. Low Capture Scenario:	50%	$26,058,000		$71,659,000		$108,421,000
18	2. Medium Capture Scenario:	75%	$39,087,000		$107,489,000		$162,630,000
19	3. Maximum Capture for New Space	90%	$46,905,000		$128,986,000		$195,157,000
20							
21	Total Sales to Stores - 36,253 Sq.Ft. at		$20,007,000		$20,007,000		$20,007,000
22							
23	Sales Available for New Space:						
24	3. Maximum Capture for New Space	90%	$26,898,000		$108,979,000		$175,150,000
25							
26	Total Amount of Major Food Space Supportable						
27	"BEFORE Deducting EXISTING Space						
28	3. Maximum Capture for New Space	90%					
29	At Low Sq.Ft. Performance of:	$550	85,000		235,000		355,000
30	At High Sq.Ft. Performance of:	$625	75,000		206,000		312,000
31							
32	LESS: Existing Major Food Store Space		36,377		36,377		36,377
33							
34	Estimate of Total Supportable "NEW" Food Store Space						
35	3. Maximum Capture for New Space						
36	At Low Sq.Ft. Performance of: $450/Sq.Ft.	$550	49,000		199,000		319,000
37	At High Sq.Ft. Performance of $500/Sq.Ft.:	$625	39,000		170,000		276,000
38							
39							
40	Entry Level New Supermarket Brooklin @	$550	49,000		199,000		319,000
41	Resulting Sq.Ft. Per Capita		2.2		3.5		4.0
42							
43	Total Warranted Space in Brooklin		85,377		235,377		355,377
44	Resulting Sq.Ft. Per Capita		3.9		4.2		4.4

Source: Realty Research Group Ltd.

Table E-3a
WORKSHEET TABLE: ESTIMATE OF WARRANTED NEW 'ALL OTHER' COMMERCIAL SPACE ALL WHITBY (2014 TO 2031)

#	ALL WHITBY		2014	2016	2021	2026	2031
1	POPULATION IN TRADE AREA						
2	Primary Trade Area Whitby		133,471	140,462	157,938	175,414	192,900
3							
4	1.VARIOUS Other Retail/Commercial Space Estimates						
5	Trade Area Population		133,471	140,462	157,938	175,414	192,900
6	Sq.Ft. of Space/Capita		0.84	0.85	0.87	0.90	0.92
7							
8	Future Space Requirement		112,676	119,767	138,000	157,000	177,000
9	Less: Existing Space		109,902	109,902	109,902	109,902	109,902
10							
11	Estimated Additional New Space		2,774	9,865	28,098	47,098	67,098
12	Less: Proposed Space		-	-	-	-	-
13							
14	1.Warranted New `Various Other Retail Space		3,000	10,000	28,000	47,000	67,000
15							
16							
17	2.OTHER FOOD- Specialty/Convenience Space Estimate						
18	Trade Area Population		133,471	140,462	157,938	175,414	192,900
19	Sq.Ft. of Space/Capita		0.91	0.92	0.95	0.97	1.00
20							
21	Future Space Requirement		122,066	129,747	150,000	170,000	192,000
22	Less: Existing Space		119,788	119,788	119,788	119,788	119,788
23							
24	Estimated Additional New Space		2,278	9,959	30,212	50,212	72,212
25	Less: Proposed Space		-	-	-	-	-
26							
27	2.Warranted New Specialty/Convenience Food		2,000	10,000	30,000	50,000	72,000
28							
29							
30	3.LIQUOR, WINE, BEER Space Estimate:						
31	Trade Area Population		133,471	140,462	157,938	175,414	192,900
32	Sq.Ft. of Space/Capita		0.56	0.57	0.58	0.60	0.61
33							
34	Future Space Requirement		75,117	79,845	92,000	105,000	118,000
35	Less Existing Space		72,749	72,749	72,749	72,749	72,749
36			-	-	-	-	-
37	Estimated Additional New Space		2,368	7,096	19,251	32,251	45,251
38	Less: Proposed Space		-	-	-	-	-
39							
40	3.Warranted Liquor, Wine, Beer Space		2,000	7,000	19,000	32,000	45,000
41							
42							
43	4.SERVICE USES Space Estimate						
44	Trade Area Population		133,471	140,462	157,938	175,414	192,900
45	Sq.Ft. of Space/Capita		2.87	2.90	2.98	3.05	3.13
46							
47	Future Space Requirement		383,635	407,777	470,000	535,000	604,000
48	Less: Existing Space		376,567	376,567	376,567	376,567	376,567
49							
50	Estimated Additional New Space		7,068	31,210	93,433	158,433	227,433
51	Less: Proposed Space		-	-	-	-	-
52							
53	4.Warranted New Restaurant Space		7,000	31,000	93,000	158,000	227,000
54	5.RECREATIONAL/ENTERTAINMENT Space Estimate						
55	Trade Area Population		133,471	140,462	157,938	175,414	192,900
56	Sq.Ft. of Space/Capita		3.12	3.15	3.23	3.31	3.39
57							

#	ALL WHITBY		2014	2016	2021	2026	2031
58	Future Space Requirement		415,828	441,996	510,000	580,000	654,000
59	Less: Existing Space		408,860	408,860	408,860	408,860	408,860
60							
61	Estimated Additional New Space		6,968	33,136	101,140	171,140	245,140
62	Less: Proposed Space		-	-	-	-	-
63							
64	5.Warranted New Recreational/Entertainment Space		7,000	33,000	101,000	171,000	245,000
65							
66							
67	6. SMALL OFFICE SERVICE Space Estimate						
68	Trade Area Population		133,471	140,462	157,938	175,414	192,900
69	Sq.Ft. of Space/Capita		6.74	6.78	6.88	6.99	7.09
70							
71	Future Space Requirement		899,614	952,425	1,087,000	1,226,000	1,368,000
72	Less: Existing Space		883,180	883,180	883,180	883,180	883,180
73							
74	Estimated Additional New Space		16,434	69,245	203,820	342,820	484,820
75	Less: Proposed Space		-	-	-	-	-
76							
77	6. Warranted New Office Service Space		16,000	69,000	204,000	343,000	485,000
78							
79							
80	7. MAJOR OFFICE /Public/Institutional Space Estimate						
81	Trade Area Population		133,471	140,462	157,938	175,414	192,900
82	Sq.Ft. of Space/Capita		-	-	-	-	-
83							
84	Future Space Requirement		-	-	-	-	-
85	Less: Existing Space		-	-	-	-	-
86							
87	Estimated Additional New Space		-	-	-	-	-
88	Less: Proposed Space		-	-	-	-	-
89							
90	7.Warranted New Major Office Space NO ESTIMATE		-	-	-	-	-
91							
92							
93	8. RESTAURANT Space Estimate						
94	Trade Area Population		133,471	140,462	157,938	175,414	192,900
95	Sq.Ft. of Space/Capita		3.83	3.87	3.97	4.07	4.17
96							
97	Future Space Requirement		511,066	543,228	626,000	713,000	804,000
98	Less: Existing Space		501,152	501,152	501,152	501,152	501,152
99							
100	Estimated Additional New Space		9,914	42,076	124,848	211,848	302,848
101	Less: Proposed Space		-	-	-	-	-
102							
103	8.Warranted New Restaurant Space		10,000	42,000	125,000	212,000	303,000
104	9.VARIOUS AUTOMOTIVE SERVICES Space Estimate						
105	Trade Area Population		133,471	140,462	157,938	175,414	192,900
106	Sq.Ft. of Space/Capita		1.86	1.88	1.93	1.97	2.02
107							
108	Future Space Requirement		248,155	263,772	304,000	346,000	390,000
109	Less: Existing Space		243,929	243,929	243,929	243,929	243,929
110							
111	Estimated Additional New Space		4,226	19,843	60,071	102,071	146,071
112	Less: Proposed Space		-	-	-	-	-
113							
114	9.Warranted New Various Automotive Space		4,000	20,000	60,000	102,000	146,000
115							
116							
117	10.NEW & USED CAR SALES Space Estimate						

#	ALL WHITBY		2014	2016	2021	2026	2031
118	Trade Area Population		133,471	140,462	157,938	175,414	192,900
119	Sq.Ft. of Space/Capita		2.03	2.05	2.10	2.16	2.21
120							
121	Future Space Requirement		270,959	288,011	332,000	378,000	426,000
122	Less: Existing Space		266,305	266,305	266,305	266,305	266,305
123							
124	Estimated Additional New Space		4,654	21,706	65,695	111,695	159,695
125	Less: Proposed Space		-	-	-	-	-
126							
127	10.Warranted Used Car Sales Space		5,000	22,000	66,000	112,000	160,000
	Existing 'ALL OTHER' Space in Whitby Sq.Ft.		2,982,432				
	Summary Total Warranted Various All Other Commercial Space						
	1.Warranted New `Various Other Retail Space		3,000	10,000	27,000	51,000	67,000
	2.Warranted New Specialty/Convenience Food Space		3,000	10,000	29,000	54,000	72,000
	3.Warranted Liquor, Wine, Beer Space		3,000	7,000	18,000	34,000	45,000
	4.Warranted New Services Type Space		9,000	32,000	90,000	170,000	226,000
	5.Warranted New Recreational/Entertainment Space		9,000	34,000	97,000	184,000	245,000
	6. Warranted New Office Service Space		21,000	70,000	197,000	369,000	485,000
	7. Major Office Space Excluded						
	8.Warranted New Restaurant Space		13,000	43,000	121,000	227,000	303,000
	9.Warranted New Various Automotive Space		4,000	20,000	60,000	102,000	146,000
	10.Warranted New & Used Car Sales Space		5,000	22,000	66,000	112,000	160,000
	Warranted NEW Supply of Other Commercial Sq.Ft. ALL WHITBY		56,000	244,000	726,000	1,227,000	1,750,000
	Resulting Sq.Ft. Per Capita of Warranted New Supply		0.42	1.74	4.60	6.99	9.07
	Estimate of Warranted Total Supply of Other Sq.Ft. ALL WHITBY		3,038,432	3,226,432	3,708,432	4,209,432	4,732,432
	Resulting Sq.Ft. Per Capita Total Warranted Other Commercial Space		22.8	23.0	23.5	24.0	24.5

Source: Realty Research Group Ltd.

Table E-3b
WORKSHEET TABLE: ESTIMATE OF WARRANTED NEW 'ALL OTHER' COMMERCIAL SPACE BROOKLIN (2014 TO 2031)

#	BROOKLIN		2014	2016	2021	2026	2031
1	POPULATION IN TRADE AREA						
2	Primary Trade Area BROOKLIN		21,962	25,987	36,048	46,109	56,170
3							
4	1.VARIOUS Other Retail/Commercial Space Estimates						
5	Trade Area Population		21,962	25,987	36,048	46,109	56,170
6	Sq.Ft. of Space/Capita		0.80	0.81	0.83	0.85	0.88
7							
8	Future Space Requirement		17,658	21,103	30,000	39,000	49,000
9	Less: Existing Space		15,239	15,239	15,239	15,239	15,239
10							
11	Estimated Additional New Space		2,419	5,864	14,761	23,761	33,761
12	Less: Proposed Space		-	-	-	-	-
13							
14	1.Warranted New `Various Other Retail Space		2,000	6,000	15,000	24,000	34,000
15							
16							
17	2.OTHER FOOD- Specialty/Convenience Space Estimate						
18	Trade Area Population		21,962	25,987	36,048	46,109	56,170
19	Sq.Ft. of Space/Capita		0.60	0.61	0.62	0.64	0.66
20							
21	Future Space Requirement		13,243	15,827	23,000	30,000	37,000
22	Less: Existing Space		18,742	18,742	18,742	18,742	18,742
23							
24	Estimated Additional New Space		(5,499)	(2,915)	4,258	11,258	18,258
25	Less: Proposed Space		-	-	-	-	-
26							
27	2.Warranted New Specialty/Convenience Food		(5,000)	(3,000)	4,000	11,000	18,000
28							
29							
30	3.LIQUOR, WINE, BEER Space Estimate:						
31	Trade Area Population		21,962	25,987	36,048	46,109	56,170
32	Sq.Ft. of Space/Capita		0.56	0.57	0.58	0.60	0.61
33							
34	Future Space Requirement		12,360	14,772	21,000	28,000	34,000
35	Less Existing Space		15,975	15,975	15,975	15,975	15,975
36							
37	Estimated Additional New Space		(3,615)	(1,203)	5,025	12,025	18,025
38	Less: Proposed Space		-	-	-	-	-
39							
40	3.Warranted Liquor, Wine, Beer Space		(4,000)	(1,000)	5,000	12,000	18,000
41							
42							
43	4.SERVICE USES Space Estimate						
44	Trade Area Population		21,962	25,987	36,048	46,109	56,170
45	Sq.Ft. of Space/Capita		2.81	2.84	2.91	2.99	3.06
46							
47	Future Space Requirement		61,802	73,860	105,000	138,000	172,000
48	Less: Existing Space		64,874	64,874	64,874	64,874	64,874
49							
50	Estimated Additional New Space		(3,072)	8,986	40,126	73,126	107,126
51	Less: Proposed Space		-	-	-	-	-
52							
53	4.Warranted New Restaurant Space		(3,000)	9,000	40,000	73,000	107,000
54	5.RECREATIONAL/ENTERTAINMENT Space Estimate						
55	Trade Area Population		21,962	25,987	36,048	46,109	56,170
56	Sq.Ft. of Space/Capita		1.51	1.52	1.56	1.60	1.64

#	BROOKLIN		2014	2016	2021	2026	2031
57							
58	Future Space Requirement		33,108	39,568	56,000	74,000	92,000
59	Less: Existing Space		22,197	22,197	22,197	22,197	22,197
60							
61	Estimated Additional New Space		10,911	17,371	33,803	51,803	69,803
62	Less: Proposed Space		-	-	-	-	-
63							
64	5.Warranted New Recreational/Entertainment Space		11,000	17,000	34,000	52,000	70,000
65							
66							
67	6. SMALL OFFICE SERVICE Space Estimate						
68	Trade Area Population		21,962	25,987	36,048	46,109	56,170
69	Sq.Ft. of Space/Capita		3.22	3.25	3.33	3.41	3.50
70							
71	Future Space Requirement		70,631	84,411	120,000	157,000	197,000
72	Less: Existing Space		62,087	62,087	62,087	62,087	62,087
73							
74	Estimated Additional New Space		8,544	22,324	57,913	94,913	134,913
75	Less: Proposed Space		-	-	-	-	-
76							
77	6. Warranted New Office Service Space		9,000	22,000	58,000	95,000	135,000
78							
79							
80	7. MAJOR OFFICE /Public/Institutional Space Estimate						
81	Trade Area Population		21,962	25,987	36,048	46,109	56,170
82	Sq.Ft. of Space/Capita		-	-	-	-	-
83			-	-	-	-	-
84	Future Space Requirement						
85	Less: Existing Space		-	-	-	-	-
86							
87	Estimated Additional New Space		-	-	-	-	-
88	Less: Proposed Space		-	-	-	-	-
89							
90	7.Warranted New Major Office Space		-	-	-	-	-
91							
92							
93	8. RESTAURANT Space Estimate						
94	Trade Area Population		21,962	25,987	36,048	46,109	56,170
95	Sq.Ft. of Space/Capita		2.61	2.64	2.71	2.77	2.84
96							
97	Future Space Requirement		57,387	68,584	98,000	128,000	160,000
98	Less: Existing Space		49,588	49,588	49,588	49,588	49,588
99							
100	Estimated Additional New Space		7,799	18,996	48,412	78,412	110,412
101	Less: Proposed Space		-	-	-	-	-
102							
103	8.Warranted New Restaurant Space		8,000	19,000	48,000	78,000	110,000
104	9.VARIOUS AUTOMOTIVE SERVICES Space Estimate						
105	Trade Area Population		21,962	25,987	36,048	46,109	56,170
106	Sq.Ft. of Space/Capita		1.31	1.32	1.35	1.39	1.42
107							
108	Future Space Requirement		28,694	34,292	49,000	64,000	80,000
109	Less: Existing Space		25,667	25,667	25,667	25,667	25,667
110							
111	Estimated Additional New Space		3,027	8,625	23,333	38,333	54,333
112	Less: Proposed Space		-	-	-	-	-
113							
114	9.Warranted New Various Automotive Space		3,000	9,000	23,000	38,000	54,000
115							
116							
117	10.NEW & USED CAR SALES Space Estimate						

#	BROOKLIN		2014	2016	2021	2026	2031
118	Trade Area Population		21,962	25,987	36,048	46,109	56,170
119	Sq.Ft. of Space/Capita		1.5	1.5	1.6	1.6	1.6
120							
121	Future Space Requirement		33,108	39,568	56,000	74,000	92,000
122	Less: Existing Space		22,813	22,813	22,813	22,813	22,813
123							
124	Estimated Additional New Space		10,295	16,755	33,187	51,187	69,187
125	Less: Proposed Space		-	-	-	-	-
126							
127	10.Warranted Used Car sales Space		10,000	17,000	33,000	51,000	69,000
	Existing 'ALL OTHER' Space in Sq.Ft. BROOKLIN		297,182				
	Summary Total Warranted Various All Other Commercial Space						
	1.Warranted New `Various Other Retail Space		2,000	6,000	15,000	24,000	34,000
	2.Warranted New Specialty/Convenience Food Space		(5,000)	(3,000)	4,000	11,000	18,000
	3.Warranted Liquor, Wine, Beer Space		(4,000)	(1,000)	5,000	12,000	18,000
	4.Warranted New Services Space		(3,000)	9,000	40,000	73,000	107,000
	5.Warranted New Recreational/Entertainment Space		11,000	17,000	34,000	52,000	70,000
	6. Warranted New Office Service Space		9,000	22,000	58,000	95,000	135,000
	7. Major Office - EXCLUDED		-	-	-	-	-
	8.Warranted New Restaurant Space		8,000	19,000	48,000	78,000	110,000
	9.Warranted Various Automotive Services Space		3,000	9,000	23,000	38,000	54,000
	10.Warranted New & Used Car sales Space		10,000	17,000	33,000	51,000	69,000
	Total Warranted Various Other Commercial Sq.Ft. BROOKLIN		31,000	95,000	260,000	434,000	615,000
	WARRANTED Per Capita Space Required		1.4	3.7	7.2	9.4	10.9
	OVERALL TOTAL - EXISTING & WARRANTED SPACE		328,182	392,182	557,182	731,182	912,182
	Resulting Sq.Ft. Per Capita Total Warranted Other Commercial Space		14.9	15.1	15.5	15.9	16.2

Source: Realty Research Group Ltd.

Table E-3c
WORKSHEET TABLE: ESTIMATE OF WARRANTED NEW 'ALL OTHER' COMMERCIAL SPACE BROOKLIN (2014, 2031 AND 2044)

#	BROOKLIN		2014	-	2031	-	2044
1	POPULATION IN TRADE AREA						
2	Primary Trade Area BROOKLIN		21,962		56,170		80,670
3							
4	1.VARIOUS Other Retail/Commercial Space Estimates						
5	Trade Area Population		21,962		56,170		80,670
6	Sq.Ft. of Space/Capita		0.80		0.88		
7							
8	Future Space Requirement		17,658		49,000		80,670
9	Less: Existing Space		15,239		15,239		0.93
10							
11	Estimated Additional New Space		2,419		33,761		75,000
12	Less: Proposed Space		-		-		15,239
13							
14	1.Warranted New `Various Other Retail Space		2,000		34,000		59,761
15							-
16							
17	2.OTHER FOOD- Specialty/Convenience Space Estimate						60,000
18	Trade Area Population		21,962		56,170		
19	Sq.Ft. of Space/Capita		0.60		0.66		
20							
21	Future Space Requirement		13,243		37,000		80,670
22	Less: Existing Space		18,742		18,742		0.70
23							
24	Estimated Additional New Space		(5,499)		18,258		56,000
25	Less: Proposed Space		-		-		18,742
26							
27	2.Warranted New Specialty/Convenience Food		(5,000)		18,000		37,258
28							-
29							
30	3.LIQUOR, WINE, BEER Space Estimate:						37,000
31	Trade Area Population		21,962		56,170		
32	Sq.Ft. of Space/Capita		0.56		0.61		
33							
34	Future Space Requirement		12,360		34,000		80,670
35	Less Existing Space		15,975		15,975		0.65
36							
37	Estimated Additional New Space		(3,615)		18,025		53,000
38	Less: Proposed Space		-		-		15,975
39							
40	3.Warranted Liquor, Wine, Beer Space		(4,000)		18,000		37,025
41							-
42							
43	4.SERVICE USES Space Estimate						37,000
44	Trade Area Population		21,962		56,170		
45	Sq.Ft. of Space/Capita		2.81		3.06		
46							
47	Future Space Requirement		61,802		172,000		80,670
48	Less: Existing Space		64,874		64,874		3.27
49							
50	Estimated Additional New Space		(3,072)		107,126		264,000
51	Less: Proposed Space		-		-		64,874
52							
53	4.Warranted New Restaurant Space		(3,000)		107,000		199,126
54	5.RECREATIONAL/ENTERTAINMENT Space Estimate						
55	Trade Area Population		21,962		56,170		80,670
56	Sq.Ft. of Space/Capita		1.51		1.64		1.75
57							

#	BROOKLIN		2014	-	2031	-	2044
58	Future Space Requirement		33,108		92,000		141,000
59	Less: Existing Space		22,197		22,197		22,197
60							
61	Estimated Additional New Space		10,911		69,803		118,803
62	Less: Proposed Space		-		-		-
63							
64	5.Warranted New Recreational/Entertainment Space		11,000		70,000		119,000
65							
66							
67	6. SMALL OFFICE SERVICE Space Estimate						
68	Trade Area Population		21,962		56,170		80,670
69	Sq.Ft. of Space/Capita		3.22		3.50		3.74
70							
71	Future Space Requirement		70,631		197,000		301,000
72	Less: Existing Space		62,087		62,087		62,087
73							
74	Estimated Additional New Space		8,544		134,913		238,913
75	Less: Proposed Space		-		-		-
76							
77	6. Warranted New Office Service Space		9,000		135,000		239,000
78							
79							
80	7. MAJOR OFFICE /Public/Institutional Space Estimate						
81	Trade Area Population		21,962		56,170		80,670
82	Sq.Ft. of Space/Capita		-		-		-
83			-		-		-
84	Future Space Requirement						
85	Less: Existing Space		-		-		-
86							
87	Estimated Additional New Space		-		-		-
88	Less: Proposed Space		-		-		-
89							
90	7.Warranted New Major Office Space		-		-		-
91							
92							
93	8. RESTAURANT Space Estimate						
94	Trade Area Population		21,962		56,170		80,670
95	Sq.Ft. of Space/Capita		2.61		2.84		3.03
96							
97	Future Space Requirement		57,387		160,000		245,000
98	Less: Existing Space		49,588		49,588		49,588
99							
100	Estimated Additional New Space		7,799		110,412		195,412
101	Less: Proposed Space		-		-		-
102							
103	8.Warranted New Restaurant Space		8,000		110,000		195,000
104	9.VARIOUS AUTOMOTIVE SERVICES Space Estimate						
105	Trade Area Population		21,962		56,170		80,670
106	Sq.Ft. of Space/Capita		1.31		1.42		1.52
107							
108	Future Space Requirement		28,694		80,000		122,000
109	Less: Existing Space		25,667		25,667		25,667
110							
111	Estimated Additional New Space		3,027		54,333		96,333
112	Less: Proposed Space		-		-		-
113							
114	9.Warranted New Various Automotive Space		3,000		54,000		96,000
115							
116							
117	10.NEW & USED CAR SALES Space Estimate						
118	Trade Area Population		21,962		56,170		80,670

#	BROOKLIN		2014	-	2031	-	2044
119	Sq.Ft. of Space/Capita		1.5		1.6		1.8
120							
121	Future Space Requirement		33,108		92,000		141,000
122	Less: Existing Space		22,813		22,813		22,813
123							
124	Estimated Additional New Space		10,295		69,187		118,187
125	Less: Proposed Space		-		-		-
126							
127	10.Warranted Used Car sales Space		10,000		69,000		118,000
	Existing 'ALL OTHER' Space in Sq.Ft. BROOKLIN		297,182				
	Summary Total Warranted Various All Other Commercial Space						
	1.Warranted New `Various Other Retail Space		2,000		34,000		60,000
	2.Warranted New Specialty/Convenience Food Space		(5,000)		18,000		37,000
	3.Warranted Liquor, Wine, Beer Space		(4,000)		18,000		37,000
	4.Warranted New Services Space		(3,000)		107,000		199,000
	5.Warranted New Recreational/Entertainment Space		11,000		70,000		119,000
	6. Warranted New Office Service Space		9,000		135,000		239,000
	7. Major Office - EXCLUDED		-		-		-
	8.Warranted New Restaurant Space		8,000		110,000		195,000
	9.Warranted Various Automotive Services Space		3,000		54,000		96,000
	10.Warranted New & Used Car Sales Space		10,000		69,000		118,000
	Total Warranted Various Other Commercial Sq.Ft. BROOKLIN		31,000		615,000		1,100,000
	WARRANTED Per Capita Space Required		1.4		10.9		13.6
	OVERALL TOTAL - EXISTING & WARRANTED SPACE		328,182		912,182		1,397,182
	Resulting Sq.Ft. Per Capita Total Warranted Other Commercial Space		14.9		16.2		17.3

Source: Realty Research Group Ltd.