COMMERCIAL AND INDUSTRIAL MARKET DEMAND STUDY: CLARENCE-ROCKLAND ONTARIO

PREPARED FOR:

J. L. RICHARDS & ASSOCIATES LIMITED ON BEHALF OF THE CITY OF CLARENCE-ROCKLAND

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I. EXECUTIVE SUMMARY

On behalf of the City of Clarence-Rockland, and as a member of a multi-disciplinary team of consultants under the direction of J.L. Richards & Associates Limited, this study has been carried out by Shore-Tanner & Associates. Its purpose is to determine the scope of market demand for retail, office, and industrial businesses in a new part of Rockland. The main findings of the study are summarized below, followed by more detailed substantiation in the main body of the report.

A. Subject Site

The Subject Site is approximately 36 hectares (almost 90 acres) in size, adjacent to Rockland's existing Urban Area Boundary to the west. It is proposed to be added to the Rockland part of the City of Clarence-Rockland through an Expansion Lands Secondary Plan.

B. Major Socio-Demographic Findings

- 1. Rockland is a major commercial hub in Prescott and Russell United Counties (PRUC) and its businesses attract customers from within this area and beyond.
- 2. The total population of Clarence-Rockland increased by an average of 372 or 1.8%, and in PRUC by 915 or 1.1% per year from 2006 to 2016 (Table 3.1).
- 3. The 2021 population of Clarence-Rockland is estimated at 27,400 and that of PRUC at 96,500. Their estimated average annual growth to the year 2031 is 760 or 2.8% and 1,356 or 1.4% respectively (Table 4.3).
- 4. Considering that an overall average annual population growth of 1% represents a growing and balanced economy, the past and future growth of both of these areas have exceeded this generally accepted growth standard.
- 5. Due to the development of many housing units over \$350,000 and attracting affluent families, including from Ottawa, incomes in both areas have significantly increased recently. As shown in Table 3.3, the 2016 **median** household incomes were:

Clarence-Rockland \$88,823
 PRUC \$78,748
 City of Ottawa \$85,981

This is particularly important since the adjacent City of Ottawa's household incomes are often among the top three to five cities in Canada.

C. Industrial Sector

- 1. Industrial and commercial businesses provide numerous economic benefits and spin-offs. They provide employment, increase municipal taxes, reduce work-related travel, and significantly contribute to the economic self-sufficiency of cities and towns.
- 2. The City of Clarence-Rockland is a relatively rural, farming, but growing area. As shown in Table 10.1, the number of the working residents in industrial-type jobs are:

• Clarence-Rockland 2,785 or 20.9% of total

• PRUC 10,900 or 22.9% of total

- 3. Most of these industrial-type jobs are in construction, repair of trucks and farm machinery, light manufacturing and assembly. Some of these construction and other jobs in Table 10.1 are outside the City of Clarence-Rockland, or PRUC.
- 4. The existing industries in PRUC are limited to small manufacturing, food processing, repair and maintenance of farm equipment, tractors, cars and trucks.
- 5. As PRUC, especially its Rockland part, grow in population and become more urbanized, their need for various industries, especially knowledge-based, economic growth businesses will increase.
- 6. Due to the rapid absorption and price increases for industrial lands in the City of Ottawa, we expect that demand for industrial lands in PRUC will increase in the coming years from Ottawa and the rest of PRUC.
- 7. Due to the nature of the products and services provided by industrial businesses, access to highways is ultimately essential for their success.

D. Retail Spending

- 1. On average, each resident of Clarence-Rockland is estimated to have spent \$18,110, and those of PRUC as a whole, \$17,380 in 2018 at all retail and service businesses within and outside these areas (we have estimated and used per capita spending for 2021–2031 in this report).
- 2. The total spending of PRUC residents is estimated at \$1.677 **billion** in 2021, and expected to increase by \$23.4 million or 1.4% annually by the year 2031, to \$1.911 **billion** (Table 6.2).

- 3. The estimated spending portion of the residents of Clarence-Rockland from PRUC's total is \$514.3 million in 2021, and \$632.2 million in 2031 (i.e., average annual growth in spending of \$11.9 million or 2.3% (Table 6.3).
- 4. At present, some of the spending of PRUC residents takes place at businesses in Ottawa and elsewhere. This leakage-out is due to the following factors:
 - a) Some of the PRUC residents work in Ottawa and spend some of their retail dollars there.
 - b) There are no senior department stores (i.e., Simons, The Bay, Nordstrom) or other new and popular/trendy stores (e.g., J. Crew, Michael Kors) within PRUC. These stores exist in Ottawa, and attract customers from PRUC and other cities and towns within 1-2 hours drive.
- 5. There are, as well, customers from outside PRUC who shop at businesses there, especially at those in Rockland (i.e., leakage-in).

As more, especially new, businesses are attracted to Rockland, the leakages of PRUC's shopping dollars to Ottawa will decrease, and the leakages into PRUC will increase.

E. Retail Demand Estimation

- 1. The spending of the residents of Clarence-Rockland is estimated to support a minimum total of 1.027 million sq. ft. of floor space in 2021, increasing by an average of 24,160 sq. ft. or 2.3% annually, to 1.266 million sq. ft. by 2031 (Table 7.1).
- 2. The supportable increase by time frame is (Table 7.1):
 - 2021–2023 73,600 sq. ft.
 - 2023–2026 21,600 sq. ft.
 - 2026–2031 143,400 sq. ft.
 - 2021–2031 238,600 sq. ft.
- 3. At present, some of the total supportable space is outside Clarence-Rockland since its residents spend some of their total shopping dollars at businesses outside.

F. Inventory of Existing Businesses

As of May 2018 and late 2021, there were 146 retail and service businesses in Rockland, and they occupied an estimated total of 538,000 sq. ft. of floor space.

Including the limited number of such businesses in the Clarence part, the overall average floor space per capita in Clarence-Rockland is estimated to be 20 sq. ft.

Based on the industry standard of 30 to 40 sq. ft. of floor space per capita, the City of Clarence-Rockland is under-stored for retail and service businesses.

Of the 146 existing stores, a total of 14 with a combined size of 29,200 sq. ft. or 5.4% were vacant in 2018, and this rate is within the industry range of 4% to 8%. The vacancy rate is now more than 10% due to the pandemic since late 2019.

G. Recommendations

In the order of priority, and in the context of economic growth for the City of Clarence-Rockland, we recommend the following on the Subject Expansion Lands:

- 1. Industrial/Business Park
- 2. Office Buildings
- 3. Shopping Centre
- 4. Due to the fact that there is already ample vacant land for residential developments in Clarence-Rockland, we do not recommend residential developments.

Each of the above is further described below.

H. Recommended Industrial/Business Park

- 1. Demand for traditional land-intensive, as well as modern, knowledge-based industries is increasing due to the locational and other characteristics of Clarence-Rockland.
- 2. Historically, many industrial/business parks were started by land-intensive uses, such as warehouses, truck repair yards and low-tech manufacturing facilities.
- 3. Demand for land-intensive industries is generally declining. Due to farming in PRUC on the one hand, the growing need for industrial land including from the City of

Ottawa, we expect the demand for land-intensive businesses to grow in Clarence-Rockland.

- 4. The location of Clarence-Rockland, and economic growth expectations of its residents point to a growing demand for knowledge-based, digital, IT, life sciences and other such modern industries.
- 5. These industries, furthermore, are needed for the present and long-term economic health and growth of the City of Clarence-Rockland.
- 6. Therefore, we recommend as follows:
 - a. At 90 acres, the Expansion Land is large and can accommodate a combination of the old and new industries.
 - b. The new, modern, knowledge-based industries are mostly in office buildings, including some in industrial/business parks.
 - c. From the perspective of economic growth and future prosperity of the City of Clarence-Rockland, the best jobs in the Expansion Land would be IT, digital, life science, and other such industries.
 - d. In view of the increasing industrial land prices in the City of Ottawa, the resulting shortages and the adjacency of the City of Ottawa, some of the Expansion Land can be quickly used by the land-intensive industries in Ottawa who want to move out, but still be close to Ottawa.

7. Samples of Traditional/Land-Intensive Uses for the Subject Site

- a. RV dealership
- b. Micro-brewery
- c. Auto mall
- d. Show Room and Display
- e. Recreation, Entertainment, Hospitality
- f. Boat dealership & indoor winter facilities
- g. ATV, Snow Mobile
- h. Medical/dental businesses
- i. Truck parking/yard
- i. Auto mechanics
- k. Lumber & other home improvement supplies
- 1. Low-technology manufacturing and assembly businesses

8. Samples of Modern Industries/Offices for the Subject Site

- a. Information technology
- b. Software engineering
- c. Life science laboratories
- d. Engineering firms
- e. Environmental research facilities
- f. Scientific testing, product safety & approval
- g. Professional businesses (accounting, legal, health)

The above are typically in office buildings, open and enclosed yards, manufacturing, testing, and storage buildings.

I. Recommended Office Space for the Subject Site

- 1. The existing estimated total office floor space of approximately 300,000 sq. ft. is too low for Rockland's future office industry advancements.
- 2. We recommend promoting Rockland for modern, knowledge-based industries such as IT and life sciences.
- 3. With a successful promotion of the above industries, we recommend a total of approximately 100,000 sq. ft. of additional office floor space in Rockland.
- 4. Being close to the City of Ottawa, the Subject Expansion Land is considered to be the best location in Rockland for new office space, in our opinion.
- 5. Most to all 100,000 sq. ft. of new office space are thus recommended to be on the Subject Expansion Land.

J. Retail Business Recommendations For the Expansion Lands

An overall average of up to 40 sq. ft. of retail and service floor space is generally supportable on a per capita basis.¹ Due to leakages in and out, however, it is not always

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¹ At a total population of 27,400 in Clarence-Rockland in 2021, the total supportable floor space of 967,000 sq. ft. in 2018 represents 36 sq. ft. per capita at businesses within, but also outside this city (i.e., total supportable space within and outside Clarence-Rockland).

possible to accurately calculate the actual floor space supported by each resident by location of shopping.

What would be most needed on the Subject Site are locally-oriented food, convenience, and service businesses in the first few years. Other businesses will also be in demand, but the risk of over-storing should be avoided. Based on these considerations, we recommend the businesses in Table 1.1 for Rockland:

- 1. Total of approximately 100,000 sq. ft. of floor space by 2031.
- 2. Food, convenience, personal services: approximately 60,000 sq. ft. of above.
- 3. Specialty retail, fashion, gifts, others: approximately 40,000 sq. ft. of above.
- 4. No businesses offering durable or semi-durable products which already exist in Rockland (e.g., Walmart).
- 5. Review of the supply-demand dynamics in the entire expanded Rocklands once every five years in order to revise 1-4 above based on market forces.

The stores in Table 1.1 are for the entire City of Clarence-Rockland. Most, however, would be in Rockland, which is already a commercial hub within the County.

Since Clarence-Rockland is already understored and can support up to 238,600 sq. ft. of additional retail and service businesses, and given the proximity of the Subject Land to the eastern parts of Ottawa, we recommend up to 150,000 sq. ft. shopping centre on this land to be gradually developed after 2023.²

The Rockland part of Clarence-Rockland is not geographically very large. New retail developments can thus be located in different places within Rockland. The Subject Expansion Land, however, is adjacent to Orleans, and other southeastern parts of the City of Ottawa. A new shopping centre on this land can, therefore, attract shoppers from the eastern parts of Ottawa as well.

Our recommendations are for the next 10 years which is normal for market demand studies. For the next 25 years, a lot more than our recommendations would be needed in Clarence-Rockland.

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² For the next 1–2 years, it would be best to let the present vacant stores be occupied/absorbed before adding new stores.

Table 1.1 Recommended Businesses To Select For Rockland						
Business Type No. Approximate Size (sq. ft.)						
Supermarket	1	40,000-50,000				
Convenience Stores	3	5,000-6,000				
Specialty Food Stores	3	4,000-6,000				
Pharmacies	2	8,000-12,000				
Computer Supply & Services	1	1,000-2,000				
Hardware Store	1	3,000-8,000				
Fashion Stores	2	3,000-8,000				
Specialty Retail	3	3,000-7,000				
Table Service Restaurants ¹	3	5,000-7,000				
Coffee Shops	2	3,000-4,000				
Fast Food Eateries	3	5,000-8,000				
Banks & Other Financial	3	6,000-10,000				
Beauty Salons, Barber, Spa	3	4,000-6,000				
Cannabis Stores	2	2,500-3,000				
Miscellaneous	5	2,500-5,000				
Office	5	5,000-8,000				
Total: Up to 40 Businesses 100,000-150,000						

¹ A destination-type restaurant (see pages 33-34).

Notes:

- 1. The above businesses are estimated to be needed and supported by the residents of Clarence-Rockland in the period 2021–2031.
- 2. If not provided on the Subject Lands, or elsewhere in Clarence-Rockland, the residents will increase their shopping at businesses elsewhere.

Source: Shore-Tanner & Associates

II. SUBJECT SITE AND ENVIRONS

A. Subject Site

The Subject Site is approximately 36 hectares (90 acres) in size, vacant, mostly flat, and located west of Rockland's existing Urban Area Boundary. There are several owners of this land, and it is proposed to be added to the City of Rockland through an Expansion Lands Secondary Plan.

B. Environs

At present, the Subject Site is being considered for low- and medium-density residential developments, commercial and industrial businesses.

Rockland is the more urban part of the City of Clarence-Rockland, and it includes most of the jobs, retail and office developments of the city. It is surrounded primarily by vacant and farming lands to the north, east, south and west extending to the City of Ottawa.

Another important factor about the future of the Subject Site, and more generally, the City of Clarence-Rockland, is the planned expansion of Highway 174. Its exact timing is still not known. When completed, it will make access from the eastern parts of Ottawa to Rockland much easier, faster and more convenient. Similar to the expansion of Highway 7 for Carleton Place, the expanded Highway 174 is expected to be a major economic growth catalyst for Rockland.

III. SOCIO-DEMOGRAPHIC ANALYSIS

A. Trade Area

The Subject Land would be most needed for retail, office and industrial businesses.

Based on the retail industry standards and practices, capture, market or trade area is one from which customers can be attracted for the purchase of the goods and services offered by the area's businesses. Primary Trade Area (PTA) typically provides at least 50% of the total sales of the businesses within. The rest of the area(s) which provide the balance of the total sales, is called Secondary Trade Area (STA). There can also be Tertiary Trade Areas (TTA) for businesses which attract/capture at least 10% of their total sales from outside the PTA and STA combined.

Based on field research, our knowledge of the area, and past studies, we have defined the following as the effective Market or Trade Area for non-residential developments on the Subject Site:

The City of Clarence-Rockland as the Primary, and the rest of Prescott & Russell United Counties (PRUC) as the Secondary Trade Area. The focus of this study, however, is the City of Clarence-Rockland.

Trade areas are not rigid, and change over time based on growth, transportation, competitive facilities, lifestyle, and other such changes and trends. A somewhat larger or smaller Trade Area would also be valid for the purposes of this study. However, we believe that what we have defined is quite reasonable for the commercial and industrial development objectives of this study.

B. Total Population: 2006-2016

1. The City of Clarence-Rockland and the rest of PRUC have continued to grow. For the 10-year period 2006-2016, their average annual growth was (Table 3.1):

• Clarence-Rockland 372 or 1.8%

• PRUC 915 or 1.1%

2. As of mid-2016, Statistics Canada's Census data show total populations of:

• Clarence-Rockland 24,512

• PRUC 89.333

C. Households

1. The City of Clarence-Rockland has continued to experience higher growth rates and be more family-dominated than the rest of PRUC.

2. In 2016, the median age of the residents of Clarence-Rockland was 42.2 years (44.3 in PRUC), its overall average household size was 2.63 (2.52 in PRUC), and 5.8 in 10 of its households (6.2 in PRUC) consisted of only one ro two persons (Table 3.2).

D. Incomes

In 2016, the median household income of Clarence-Rockland residents was \$88,823, which is higher than the City of Ottawa's corresponding income of \$85,981 and much higher than PRUC's \$78,748. We believe that household incomes have increased significantly in Clarence-Rockland since 2016.

E. Growth Forecasts

Since 2016, residential and thus population growth have accelerated in Clarence-Rockland, and to a lesser extent, in the rest of PRUC. Based on the actual growth since 2016, under construction, planned, and proposed housing developments, the City of Clarence-Rockland, and Hemson Consulting Ltd. have provided population forecasts for both areas. Based on these forecasts, as well as housing starts in Table 4.2, we have prepared **Table 4.3**, which demonstrates the following average annual population increases for the period 2021-2031:

1. Clarence-Rockland 760 or 2.8%

2. PRUC 1,350 or 1.4%

Compared to the actual annual growth from 2006 to 2016, the figures in Table 4.3 appear to be too optimistic. However, for infrastructure planning purposes, it is prudent to use somewhat generous forecasts. As well, the actual 2016 population of PRUC was 89,333 (Table 3.3), whereas Hemson report's estimate was 88,700 (i.e., 633 or 0.7% lower than actual). Above all, as the City of Ottawa continues to expand eastward, while its housing

costs continue to be much higher than in Rockland, growth in Rockland/ PRUC will only further intensify. From this perspective, the forecasts in Table 4.3 seem quite reasonable, and may even be somewhat too low for the period 2021-2031.

As population grows, demand for jobs, commercial and industrial developments also grow (in addition to housing, of course). Our recommendations for the Subject Land are thus for the economic advancement of the present and future residents of Clarence-Rockland.

Table 3.1 Historical Population Data						
Year Clarence-Rockland Prescott and Russell United Counties (PRUC)						
2006	20,790	80,184				
2011	23,185	85,381				
2016	24,512	89,333				
Average Annual Change: 2006-2016:						
Numeric	372	915				
%	1.8	1.1				

Notes:

- ¹ In 2016, the median age of the residents was 42.2 in Clarence-Rockland, and 44.3 in PRUC.
- ² Due to the development of large family-housing units since then, both median ages may be about the same in 2021, or possibly slightly lower.
- ³ Generally, economists and planners consider an average annual population growth of 1.0% to represent an economically growing area.

Source: Shore-Tanner & Associates based on Statistics Canada's census data.

Table 3.2 Households By Size: 2016								
Household Size	Clarence-Rockland Prescott and Russell United Counties (PRUC							
	No.	9/0	No.	%				
Single Person	1,810	19.4	8,125	23.0				
Two Persons	3,635	40.0	13,880	39.2				
Three Persons	1,590	17.0	5,665	16.0				
Four or More Persons	2,295	24.6	7,720	21.8				
Total	9,330	100.0	35,390	100.0				
Average Size	2.63	_	2.52	_				
Single and Two Persons Combined 5,445 58.4 22,005								

Source: Shore-Tanner & Associates based on Statistics Canada's census data.

Table 3.3 Household Income Distribution: 2016						
		Clarence-Rockland		d Russell ties (PRUC)		
	No.	%	No.	0/0		
Under 40,000	1,460	15.6	7,825	22.1		
40,000-59,999	1,315	14.1	5,250	14.8		
60,000-79,999	1,355	14.5	4,925	13.9		
80,000-99,999	1,200	12.9	4,445	12.6		
100,000-124,999	1,375	14.7	4,550	12.9		
125,000-149,999	1,025	11.0	3,210	9.1		
150,000 & over	1,600	17.1	5,185	14.6		
Total	9,330	100.0	35,390	100.0		
Median Household	88,823	_	78,748	_		
Median Per Capita	33,773	_	31,249	_		
Average Household In	Average Household Income (\$):					
Single Persons		47,855		43,317		
• Two or More Persons		110,699		104,452		

Note: The 2016 median income for the City of Ottawa was \$85,981 and for the Province of Ontario it was \$74,287.

Source: Shore-Tanner & Associates based on Statistics Canada's census data.

IV. HOUSING INVENTORY AND GROWTH FORECASTS

The purpose of this chapter is mainly substantiation for Clarence-Rockland's population forecasts.

A. Existing Housing Inventory: 2016

- 1. Based on the 2016 data, there was a total of 35,390 housing units in PRUC, including 9,330 in Clarence-Rockland or 26.4% of the total (Table 4.1).
- 2. Ground-oriented units (i.e., singles, semis, rows, towns and duplexes) made up 87.8% in PRUC, and 88.0% in Clarence-Rockland.
- 3. In PRUC, owned units made up 77.3%, and in Clarence-Rockland, 81.3% of the total.
- 4. Rental housing units made up 22.7% of the PRUC, and 18.6% of the Clarence-Rockland units.

B. Housing Starts Since 2016

- 1. In the period 2015–2019, a total of 2,408 housing units were started in PRUC, including 808 or 33.5% of it in Clarence-Rockland.
- 2. The overall average number of housing starts in 2015–2019 was:
 - PRUC

482 or 1.36%

• Clarence-Rockland 162 or 1.74%

- 3. The figures in Tables 4.1 and 4.2 indicate that:
 - a. The City of Clarence-Rockland has been more oriented towards ownership rather than rental housing units compared to PRUC as a whole.
 - b. New housing developments in Clarence-Rockland have taken place at a slightly higher rate than in PRUC.

C. Population Forecasts

The vast majority of the existing housing as well as those under construction are family-type units consisting of singles, semis, towns and rows. We expect this trend to be dominant in the next 10 years, while 3, 4 and more storey apartments will also continue

to increase in number and percentage of total housing. These trends provide further substantiation for our average annual population growth forecasts of 760 in Table 4.3.

D. Household Forecasts

1. In 2016, the numbers of the single and two-person households combined were (Table 3.2):

• PRUC 62.2% or 6.2 in 10

• Clarence-Rockland 58.4% or 5.8 in 10

- 2. Based on the demographic characteristics of the residents of PRUC, as well as our experience with many other small towns and cities within up to two hours' driving distance from Ottawa,³ we expect the number and proportion of small households in PRUC to be higher now than in 2016, and continue to increase at a higher rate than households consisting of 3 or more persons.
- 3. Table 4.4 presents our forecast of households by size. As shown:
 - a. The total number of households in PRUC is estimated to increase by an average of 970 or 2.2%, including 460 of the total or 3.9% in Clarence-Rockland.
 - b. The total number of single and two-person households in PRUC is estimated to increase by an average of 620 or 2.3%, including 170 (3.9%) in Clarence-Rockland.

E. Housing Unit Requirements

- 1. Due to sharing of units by some single-person households, we estimate 0.95 housing unit requirement per single and two-person household combined. For the 3-person and larger, we estimate one housing unit per household.
- 2. Based on the above assumptions, we estimate the following additional housing requirements for the 10-year period 2021–2031 (Table 4.5):
 - Clarence-Rockland Total of 4,455 or 445 per year
 - PRUC Total of 9,939 or 939 per year

³ We have carried out studies in the Township of Russell, Towns of Carleton Place, Perth, Mississippi Mills, Renfrew, Kemptville, Pembroke, Smiths Falls, Lindsay, and the City of Brockville in the last 5 years.

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Table 4.1 Housing Inventory: 2016						
Housing Type	Clarence-R	ockland	PRI	J C		
	No.	0/0	No.	0/0		
Single Detached	6,975	74.6	26,005	73.5		
Semi-Detached	380	4.1	2,235	6.3		
Rows, Towns & Duplexes	855	9.2	2,825	6.3		
Apartments (up to 4 storeys)	940	10.0	3,985	11.3		
Apartments (5 storeys and higher)	70	0.7	70	0.2		
Other	110	1.2	270	0.8		
Total	9,330	100.0	35,390	100.0		
Tenure:						
1. Owned Units	7,590	81.3	27,370	77.3		
• Condominiums	495	5.3	2,010	5.7		
• Others	7,095	76.0	25,360	71.6		
2. Rented Units	1,740	18.6	8,020	22.7		

Source: Shore-Tanner & Associates based on Statistics Canada census data.

Table 4.2 Housing Starts, Clarence-Rockland				
Year				
2015	112			
2017	213			
2018	179			
2019	208			
2020	318			
Total	1,030			
Average Annual	206			

Source: Shore-Tanner & Associates based on Statistics Canada census data.

Table 4.3 Population Forecasts							
Year	Clarence-Rockland	PRUC					
2016 (actual)	24,512	89,333					
2021	27,400	96,500					
2023	28,700	99,700					
2026	31,000	104,500					
2031	35,000	110,000					
Average Annu	Average Annual Increase: 2021–2031:						
Numeric	760	1,350					
%	2.8	1.4					

Source: Shore-Tanner & Associates based on partial estimates from the City of Clarence-Rockland.

Table 4.4 Household Forecasts							
Year	Clarene	ce-Rockland]	PRUC		
	One & Two Persons	Three & Larger	Total	One & Two Persons	Three & Larger	Total	
2016 (actual)	5,445	3,885	9,330	22,005	13,385	35,390	
2021	7,200	4,700	11,900	26,400	16,900	43,300	
2023	7,800	5,180	13,000	27,300	17,200	44,500	
2026	8,200	5,400	13,600	30,400	18,100	48,500	
2031	10,100	6,400	16,500	32, 600	20,400	53,000	
Average Annual	Average Annual Change: 2021–2031						
Numeric	290	170	460	620	350	970	
%	4.0	3.6	3.9	2.3	2.1	2.2	

Source: Shore-Tanner & Associates

Table 4.5 Estimated Total Housing Requirements						
Year	Clare	ence-Rockland			PRUC	
	Small Households ¹	Large Households ²	Total	Small Households	Large Households	Total
2021	6,840	4,700	11,540	25,080	16,900	41,980
2023	7,410	5,180	12,590	25,935	17,200	43,135
2026	7,790	5,400	13,190	28,880	18,100	46,980
2031	9,595	6,400	15,995	30,970	20,400	51,370
Total	2,755	1,700	4,455	5,890	3,500	9,939
Average/Year	275	170	445	589	350	939
%/Year	4.0	3.6	3.9	2.3	2.1	2.2

- 1. Single and two-person households combined, at 0.95 units per household.
- 2. Three-person and larger households at 1.0 unit per household.
- 3. For all households combined, a total of 4,455 additional housing units of all types are estimated to be required for the growing population of Clarence-Rockland, and 9,939 for the residents of PRUC, including Clarence-Rockland.
- 4. For the single and two-person households combined, however, an average of 275 additional units is required per year, for a total of 2,755 units for Clarence-Rockland, and 589 units per year or a total of 5,890 units in PRUC.
- 5. Due to the existing ample supply of vacant land for residential developments, we do not recommend any residential developments on the Subject Expansion Land. The above table has been used as a basis for the population forecasts in Table 4.3.

Source: Shore-Tanner & Associates.

V. RETAIL MARKET TRENDS

This section presents a number of major trends and changes in shopping habits, patterns, and new retail facilities. While our recommended businesses for the Subject Land are mostly for the day to day local and convenience shopping, the knowledge of the retail industry trends provides additional understanding for this ever-changing and highly competitive industry.

A. Unprecedented Recent Changes

- 1. During approximately five years prior to the Covid-19 pandemic (2015–2019), shopping at large box stores, discount stores, luxury stores, and especially online shopping had increasingly become popular.
- 2. These trends had taken significant retail spending away from the mid-quality/mid-price retail businesses. As a result, many of these businesses in general, especially those on traditional main streets, were already struggling for survival.
- 3. The pandemic of 2020–2021 has devastated most of the retail industry in unprecedented ways, resulting in high vacancy rates, especially on traditional main streets.⁴ In a significant way, the rapid increase in online shopping with free and/or quick delivery has been the cause of this sorry situation.
- 4. Appliance, furniture, hardware and sporting goods stores, supermarkets, and pharmacies have generally performed better during the pandemic. Just about all other retail and service businesses, especially coffee shops, restaurants, bars, cinemas, musical, artistic and other performing businesses have suffered; a large number of them have closed down, or will be closing in the coming months.
- 5. Since late July 2021, the pandemic has been weakened and businesses are slowly opening up with certain restrictions.
- 6. Due to various governmental assistance programs, as well as the pandemic limitations, the majority of people generally have lots of savings (i.e., unspent money).

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⁴ For example, in February 2021, there were 19 vacant and for-lease stores on Richmond Road in Westboro, plus a number of vacant stores without "for lease" signs (based on a study for a business on Richmond Road, one of the most popular shopping districts in Ottawa).

- 7. Starting in the fall of 2021, the retail industry began to recover strongly and fast. Hospitality and cultural industries, in particular, benefited significantly from this recovery until late November, when a new variant (Omicron) began to slow down the recovery.
- 8. There are also a number of other new or strengthening trends which have been partially caused by the pandemic. They include:
 - a. Continuation of the popularity of online shopping and free delivery of products. While weaker than during the pandemic, most experts believe that it will be used more often than in the pre-pandemic period.
 - b. There is a new/stronger interest from consumers in buying local and supporting small businesses on traditional main streets.
 - c. During the pandemic, people's sense of community, helping and socializing with neighbours has increased. This could contribute to more shopping at local, especially main street stores.
 - d. Awareness and concern for the environment has also increased due to the pandemic, fires, record heatwaves, rapid weather changes, etc. These factors will impact consumption patterns, thus shopping habits.
- 9. While retail spending will begin to get back to normal and likely increase in 2022, the retail industry in general is expected to be more challenging, especially for small businesses.
- 10. The above points provide information about the recent past and near future of the retail industry. Below are more retail trends and their historical evolution.

B. Retail Stores

A number of new types of shopping facilities, most of which have their origins in the U.S., were introduced into the Canadian market in the late 1990s. The major new shopping facilities in this regard are:

1. **Box Stores:** Costco, Walmart, and The Home Depot fall into this category. These are often referred to as big-box stores, since they are typically larger than 100,000 sq. ft. There are also medium-sized box stores, such as Winner's (clothing), Staples (office products), and Globo shoes, which are typically between 20,000 to 50,000 sq. ft.;

- 2. **Large Format Stores** such as Canadian Tire and the Great Canadian Super Stores. These are mostly new versions of the same stores, but significantly larger (often between 70,000 to 150,000 sq. ft.), offering a much wider assortment of products and services;
- 3. **Dollar Stores** which are typically between 1,000 to 5,000 sq. ft., specializing in mostly low-cost imports priced at up to \$5.00 per item (e.g., Dollarama, A Buck or Two, The Dollar Store);
- 4. **Power Centres** are typically between 200,000 to 1,000,000 sq. ft., consist of a variety of box and traditional stores in open malls, with each store having its own pad and parking in front to the extent possible;
- 5. **Specialty Stores** such as Starbucks (coffee shop), Mountain Equipment Coop (outdoors store), Lululemon (Yoga wear), Sassy Beads (jewellery, craft), and Brio (shoes, clothing, accessories);

6. De-Malling

Another recent trend in the retail industry is the conversion of old and small enclosed shopping malls into open, uncovered shopping centres (referred to as demalling). Malls which are over 20 years old and up to about 300,000 sq. ft. in size are usually targets for being de-malled. A de-malled shopping centre is less costly to operate since there are no indoor areas to be heated, cooled, cleaned or supervised. As well, the corridors and other public spaces are converted to leasable floor space.

7. Store Enlargements

Another significant trend in the retail industry is the enlargement of existing stores at the same or a new location. Large stores are in a much better position than small and medium-sized stores to offer one-stop-shopping opportunities. Many supermarkets, hardware, furniture, electronics, department, and home improvement stores have in recent years expanded their size in the same or a new location within the National Capital Region. In some other cases, new stores from the same chain are built much larger.

8. Walmart Supercentres

In the early 2000s, the Walmart chain stores finally won the right to offer food products at their stores. Called Supercentres, these new Walmart stores have the equivalent of a 50,000 sq. ft. supermarket within them, including produce, fresh meat, deli, dairy, as well as general merchandise (i.e., canned and boxed food

products). The food section is usually on one side of these huge stores, and clothing, furniture, and other non-food products on the other side.

At these stores, the cost of food and other products are generally lower, but more importantly, perceived to be lower due to effective advertising, than at competitive stores.

9. Recent Entries Into the Ottawa Market

In September 2013, several (American) Target stores were opened in Ottawa in previously Zellers stores, and more were planned. Soon after, however, they were all closed down and to this date, some of them are still vacant. An H&M store was opened in Bayshore Shopping Centre in October 2013 and more since then elsewhere in Ottawa.

In February 2012, a Marshall's department store was opened in the Train Yards Shopping Centre, there are four of them now in Ottawa, and more are planned to open. In November 2011, the new and expanded IKEA store at approximately 410,000 sq. ft. was opened in Pinecrest Centre. In early 2011, a Forever 21 store was opened at the Rideau Centre. Since then, it has expanded and attracted a large number of luxury stores such as Michael Kors, Tiffany &Co., and Kate Spade.

A Whole Foods Supermarket and a large number of other retail and restaurants have opened at Lansdowne Park as part of its major redevelopment plan since 2014. Nordstrom, Topman, Simons and a few other American and European stores have also come to Ottawa in the last five years.

In addition to these new facilities, new methods of conducting business have been created. Purchasing through the Internet is one example. Twinning is another example which makes it possible for two businesses to complement each other, while saving on insurance, utilities, taxes, staff, and other costs. Examples in this regard include Chapter's book stores and Starbucks, Walmart and McDonald's restaurants, The Home Depot and Harvey's restaurants. Online shopping has been growing very rapidly in the last five years, and expected to grow further from its estimated total market share of approximately 10% or more of total spending in Ottawa (it was about 5% prepandemic).

C. Reasons For Success of the New Store Types

There are many reasons for the introduction and successful operation of these new stores, as well as the new merchandising formats. Chief among these are:

- 1. Population growth, affluence, and especially ethnic and economic diversity, create demand for new products, services, and methods of buying and selling.
- 2. Many retail markets in Canada including in Ottawa are considered to be still offering a limited variety of shopping facilities with primarily average quality products at above average prices. Choices at discount/value, as well as at upscale/high-quality ends of the shopping spectrum in particular, are still limited.
- 3. Power centres and stand-alone box stores have lower operating costs (e.g., little or no common-area charges compared to enclosed malls), provide ample parking situated very close to their entrances, offer one-stop-shopping opportunities, their prices are and/or are perceived to be lower than conventional stores, and they are very successful at selling large quantities of products.
- 4. For a wide variety of economic, demographic, and lifestyle reasons, many people seem to prefer shopping at these large, new-format and specialty stores.

D. Present Shopping Patterns and Habits

Based on knowledge, experience, observations, and **hundreds** of consumer research surveys, we believe that shopping patterns and habits are solidifying, as follows:

1. Power centres, big-box and other discount-oriented shopping facilities are here to stay. Their main advantages are real and/or perceived value, choice, and large quantities. Shoppers tend to go to these stores about once a month, and for the specific and pre-determined purpose of actual shopping (for household and/or office products), rather than browsing, window shopping, socializing or just passing time. Typically, they prepare a list of what they want to buy ahead of time, follow it through, buy and bring home large quantities of products.

This type of shopping is rather arduous, especially for older people, those who do not have or wish to spend lots of time for shopping, and those who are affluent enough for whom discount/value is not that important. The amount of time, planning, and the energy required are the main reasons why shopping at these

- facilities is generally infrequent (although there are customers from all socioeconomic classes who only or mostly shop at these stores).
- 2. Shopping at regional, community shopping centres, and especially in downtown and on other pedestrian-friendly streets such as Bank Street, is often for fashion, specialty products and services, meeting, dining, socializing, entertainment and cultural activities. There is frequently comparison-shopping, browsing, and cross-shopping at these facilities, especially during holidays and for special occasions (birthdays, anniversaries, etc.). Trips to these facilities do not necessarily always result in purchases due to the entertainment/socializing/dining factors, and also for purposes of comparison shopping. Thus, the fun and multipurpose functions of these trips, combined with the far more diverse, attractive, and comfortable atmospheres of these facilities, attract shoppers there more frequently than power centres and big-box stores do.
- 3. Shopping at highway commercial facilities is also destination oriented and closer in function to shopping at power centres and big-box stores, than to shopping at regional and community shopping centres, or on main streets. Furniture, electronics, appliances, automotive, box stores, restaurants, and other services often dominate highway commercial strips. Shoppers typically go to these establishments for specific products and/or services, based on pre-determined shopping plan. While there may be comparison shopping, there is usually no window-shopping, socializing, browsing, or cross-shopping. Other than for restaurants, banks, gasoline, and other services, shopping at highway commercial stores is infrequent (furniture, electronics, appliances, and major auto repairs are normally needed less than once a year by most households).
- 4. The retail industry is dynamic and rapidly evolving. Shoppers demand choice, variety, convenience, value, and fun. In a healthy market, there is a balance between the traditional main street retail stores, suburban shopping centres, and the new and emerging retail facilities as described above.
- 5. In the competitive environment of today, maintaining market share, and especially increasing it, is a major challenge for all shopping facilities and districts, requiring new thinking and approaches to merchandising and customer relationship. Targeted use of social media, online services, better understanding of the retail market trends, more awareness of competition from shopping centres and districts, and better recognition of the needs,

preferences, and desires of the Trade Area residents are among the key elements of new thinking and approaches, which have to be considered for the planned retail market on the Subject Site, and more generally, in the City of Clarence-Rockland.

VI. RETAIL EXPENDITURE ANALYSIS

Spending at retail and service businesses depends on numerous socio-demographic, lifestyle, and locational factors. Based on hundreds of retail market studies by our firm and other research organizations, income is the most influential factor. Often, the higher their income, the more people shop, spend, and thus support the continuation and/or expansion of businesses.

The estimation of demand for supportable floor space is highly analytical and therefore numerically oriented. The detailed results of the analytical part of the demand estimation are presented in the next chapter, after the estimation of expenditure potentials below.

A. Base Year Spending Selection

Based on population growth, increasing incomes, additional employment and tourism, the overall average spending per person typically increases. There are, however, situations where the average spending stays static or even declines. The years 2000 and 2008 are two examples in this regard.

The most recent, longest lasting, and severest decline in retail spending since 2000 started in late 2019 due to the Covid-19 pandemic, which is still having an impact on shopping and spending. From late 2019 to September 2021, per capita spending has, overall, been declining and/or fluctuating. What is known in this respect is as follows:

- 1. Spending at supermarkets, most other food stores, hardware, furniture, sporting goods and appliance stores, pharmacies, psychotherapy, Zoom, Netflix and some other businesses has increased very significantly. These are mostly necessity, homeimprovement, and mental health industries.
- 2. In areas with a large number of tourists, visitors, large government and/or corporate/industry centres (e.g., Town of Lindsay for its cottages, City of Ottawa for the Federal Government, and City of Toronto for the finance industry), the total spending (i.e., sales) at some of the businesses in number 1 above have actually declined since late 2019 due to the pandemic.
- 3. Spending at clothing, shoe, jewellery, gift, and specialty stores; restaurants, gasoline stations, dry cleaning, cultural, sports, entertainment facilities, and many other businesses have declined drastically.

The pandemic, in short, has caused too many changes in retail spending/sales since late 2019. As a result, the available data on retail expenditures for 2019–2021 are not considered valid as a base for future spending forecasts.

With the majority of residents in Canada having been twice vaccinated as of September 2021, businesses are slowly opening up. Assuming that the year 2022 will be the beginning of the return to normality as far as retail spending is concerned, we have decided to use the spending for the full year 2018 as the base year for forecasting purposes for this study, and estimated it for 2021–2031.

B. Per Capita Expenditures

Statistics Canada is the primary source for expenditure data at retail and service stores across Canada. For this study's Trade Area, the data are estimated based on income comparisons, since they are not available for Clarence-Rockland.

The overall median per capita income in 2016 of Trade Area residents was \$33,773 and this was higher than Ontario's which was \$28,572 in 2016. Incomes in both areas are higher now.

In Table 5.1, we have provided estimates of per capita expenditures by the residents of the Trade Area for a number of trade groups which are standard in the retail industry. As noted, we estimate the overall average per capita spending of the TA residents to be \$17,386 in 2018. Of course, due to mortgages, family size and other factors, some individuals and families spend less, and others more than these averages, depending on their disposable income.

C. Total Retail and Service Expenditures

The estimated total expenditures of the residents of UCPR and Clarence-Rockland are provided in Tables 5.2 and 5.3.

Trade Group	UCPR Spending (\$)	Clarence-Rockland Spending (\$)
A. Retail Product Stores	opening (+)	openang (+)
Supermarkets	2,290	2,400
Convenience Stores	220	235
Specialty Food	195	205
Beer, Wine & Liquor	670	700
Drugs & Patent Medicine*	1,105	1,160
Clothing	820	860
Shoes, Jewellery & Accessories	235	250
Home Furnishings	125	130
Electronics & Appliances	495	520
Furniture	285	300
Building Materials, Hardware & Garden Supplies	850	890
Sporting Goods, Hobbies, Music & Books	300	315
Used, Recreation & Other Vehicles	470	490
New Car Sales	2,800	2,900
Auto Parts & Accessories	190	200
Gasoline & Service Stations	1,410	1,400
General Merchandise	960	980
Department Stores	720	750
Other Retail Stores	350	370
Subtotal: Retail Products	14,490	15,055
B. Retail Service Businesses		
Restaurants, Bars & Other Eateries*	1,220	1,300
Personal Care Businesses*	215	225
Sports, Recreation & Entertainment*	1,455	1,530
Subtotal: Service Businesses	2,890	3,055
Grand Total: All Stores & Businesses	17,380	18,110

^{*} Estimated

Source: Shore-Tanner & Associates based on CANSIM Tables 080-0030 and other relevant Statistics Canada data.

^{1.} These figures have been estimated for the period 2021–2031 for the calculation of total spending potential in Tables 6.1–6.3.

^{2.} Online spending is **not** included.

Table 6.2 Estimates of Total Spending By PRUC Residents					
Trade Group	2021 (\$M)	2023 (\$M)	2026 (\$M)	2031 (\$M)	
Population	96,500	99,700	104,500	110,000	
A. Retail Product Stores					
Supermarkets	221.0	228.3	239.3	251.9	
Convenience Stores	21.2	21.9	23.0	24.2	
Specialty Food	18.8	19.4	20.4	21.4	
Beer, Wine & Liquor	64.6	66.8	69.9	73.7	
Drugs & Patent Medicine*	106.6	110.1	115.4	121.5	
Clothing	79.1	81.7	85.6	90.2	
Shoes, Jewellery & Accessories	22.7	23.3	24.5	25.8	
Home Furnishings	12.1	12.5	13.1	13.7	
Electronics & Appliances	47.8	46.2	51.7	54.4	
Furniture	27.5	28.4	29.8	31.4	
Building Materials, Hardware & Garden Supplies	82.0	84.7	88.7	93.5	
Sporting Goods, Hobbies, Music & Books	29.0	29.8	31.3	32.9	
Used, Recreation & Other Vehicles	45.3	46.8	49.1	51.7	
New Car Sales	270.2	279.1	292.6	307.9	
Auto Parts & Accessories	18.3	18.9	19.8	20.9	
Gasoline & Service Stations	136.1	140.5	147.2	155.1	
General Merchandise	92.6	95.6	100.4	105.5	
Department Stores	69.5	71.8	77.2	79.2	
Other Retail Stores	33.8	34.9	36.6	38.5	
Subtotal: Retail Products	1,398.3	1,444.2	1,513.8	1,593.6	
B. Retail Service Businesses					
Restaurants, Bars & Other Eateries*	117.7	121.6	127.5	134.1	
Personal Care Businesses*	20.7	21.4	22.4	23.7	
Sports, Recreation & Entertainment*	140.4	145.0	152.0	160.0	
Subtotal: Service Businesses	278.9	288.0	301.9	317.8	
Grand Total: All Stores & Businesses	1,677.2	1,732.2	1,815.7	1,911.4	

^{*} Estimated

Note: The average annual percentage increases in spending are identical to the estimated population growth of 1.4% in Table 4.3. The dollar figures above are all in the constant value of the Canadian dollar in 2018. In other words, inflation is **not** included in order to avoid possible over-estimation.

Source: Shore-Tanner & Associates.

^{1.} Online spending is **not** included.

Table 6.3 Estimates of Total Spending By Clarence-Rockland Residents					
Trade Group	2021 (\$M)	2023 (\$M)	2026 (\$M)	2031 (\$M)	
Population	27,400	28,700	31,000	35,000	
A. Retail Product Stores					
Supermarkets	68.1	68.9	74.4	84.0	
Convenience Stores	6.7	6.8	7.3	8.2	
Specialty Food	5.8	5.9	6.3	7.2	
Beer, Wine & Liquor	19.9	20.1	21.7	24.5	
Drugs & Patent Medicine*	32.9	33.3	36.0	40.6	
Clothing	24.4	24.7	26.6	30.1	
Shoes, Jewellery & Accessories	7.1	7.1	7.8	8.8	
Home Furnishings	3.7	3.8	4.0	4.6	
Electronics & Appliances	14.7	14.9	16.1	18.2	
Furniture	8.6	8.7	9.3	10.5	
Building Materials, Hardware & Garden Supplies	25.3	25.6	27.6	30.5	
Sporting Goods, Hobbies, Music & Books	8.9	9.1	9.8	11.0	
Used, Recreation & Other Vehicles	13.9	14.1	15.2	17.1	
New Car Sales	82.3	83.3	90.0	101.5	
Auto Parts & Accessories	5.7	5.9	6.4	6.9	
Gasoline & Service Stations	39.8	40.1	43.4	48.9	
General Merchandise	27.8	28.1	30.4	34.3	
Department Stores	21.3	21.5	23.2	26.2	
Other Retail Stores	10.5	10.6	11.5	12.9	
Subtotal: Retail Products	427.2	432.1	476.0	526.4	
B. Retail Service Businesses					
Restaurants, Bars & Other Eateries*	37.1	38.7	43.5	45.5	
Personal Care Businesses*	6.4	6.7	7.4	7.8	
Sports, Recreation & Entertainment*	43.6	45.5	50.1	53.5	
Subtotal: Service Businesses	87.1	90.9	99.6	106.8	
Grand Total: All Stores & Businesses	514.3	523.0	757.6	633.2	

^{*} Estimated

Note: The average annual percentage increases in spending are identical to the estimated population growth of 2.8% in Table 4.3. The dollar figures above are all in the **constant** value of the Canadian dollar in 2018. In other words, inflation is **not** included in order to avoid possible over-estimation of demand for additional floor space.

Source: Shore-Tanner & Associates.

^{1.} Online spending is **not** included.

VII. RETAIL DEMAND ESTIMATION

A. Productivity Rates

In Tables 5.1-5.3, we have provided estimates of the available spending by Trade Area residents. The next steps involve the estimation of how much floor space these expenditures can support. For these steps, productivity rates or sales per sq. ft. are needed.

Based on over 100 retail studies in the last 20 years, including in-person confidential meetings and surveys of at least 2,000 business managers and/or owners, we have obtained actual and closely estimated sales data. Many of these studies have included presentations at the Ontario Municipal Board hearings where actual sales data were presented by opposing parties and analyzed. Based on these studies, ongoing research, and review of retail trends, we have provided realistic ranges of annual sales per sq. ft. for the types of retail and service businesses most likely to be viable on the Subject Site. As shown in Table 6.1, the average annual sales per sq. ft. at food stores, for example, is estimated to be \$559 at retail, and \$329 at service businesses.⁵

B. Total Supportable Floor Space

Table 6.1 presents the total supportable floor space for each business for the years 2021–2031. As demonstrated, Clarence-Rockland residents' spending is estimated to be supporting a total of 1.027 million sq. ft. of retail and service business floor space in 2021, at businesses within, but also outside this area. The total supportable space will, of course, increase each year, based on population growth and affluence.

In Table 6.2, we have identified the increase in supportable demand for each business. As demonstrated, the supportable increase in the total floor space is as follows by time periods by the residents of Clarence-Rockland:

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⁵ As mentioned before, we have used the average per capita spending, as well as the annual average sales per sq. ft. for 2018, because the data for 2019–2021 represent the pandemic conditions which are not normal or valid for the period 2021–2031.

1.	2021–2023	73,600 sq. ft.
2.	2023-2026	21,600 sq. ft.
3.	2026-2031	143,400 sq. ft.
4.	2021–2031	238,600 sq. ft.

In other words, the available spending potential of Clarence-Rockland is estimated to generate demand for 238,600 sq. ft. of additional retail and floor space by the year 2031.

The demand generated from the residents of PRUC is, of course, much larger. As in the past, many residents of PRUC outside the City of Clarence-Rockland are expected to do much of their shopping at businesses in Rockland. It is therefore necessary to address their spending, in addition to the spending of the Clarence-Rockland residents.

As demonstrated in Table 5.1, the overall average spending of each resident of PRUC is estimated to be \$17,380 in 2018. At this rate, the total spending of PRUC is estimated at \$1.677 **billion** in 2021, increasing by an average of \$23.4 million annually, to a total of \$1.911 **billion** in 2031 (Table 5.2).

In view of the relative abundance of retail and service businesses in Rockland, and also in the City of Ottawa, much of the total spending of PRUC residents happens in these two cities. Regardless of where their spending takes place, it is necessary to first determine how much floor space can their spending support. Table 6.1 provides this answer by individual retail and service groups. As demonstrated in Table 6.1, the total spending of residents of Clarence-Rockland is estimated to support a total of at least 1,027,500 sq. ft. of retail and service floor space in 2021 or 37.5 sq. ft. per person. By 2031, an estimated 238,600 sq. ft. of additional floor space would be supported by the residents of Clarence-Rockland.

C. Market Demand and Spending Trends

Increased incomes, knowledge, and curiosity generate demand for new and/or different retail products and services. The retail industry is also dynamic, highly competitive, and follows as well as leads consumer needs and desires.

Many of the consumer products and services fall into the category of basic necessities (e.g., food, cleaning products, and banking). Others are for pleasure, entertainment recreation, and special events. There are also discretionary products and services. Regardless of type, all retail products and services are subject to improvements, innovations, price, availability, and other changes.

In recent years, consumers as well as producers of retail products and services have been increasingly paying more attention to, and promoting local, fresh, and environmentally improved shopping. The three Rs in consumption (i.e., reduce, re-use, and recycle) are increasingly being more followed. Organic, locally produced, other real and/or believed environmentally improved products and services are being increasingly more demanded by consumers. (In contrast, so is online shopping, which is mostly in opposition to the three Rs.)

Improved products and services are being increasingly more demanded by consumers. One of the strongest and continuous expectations of consumers is new products and services. In this regard, the number of new, specialty and unique retail businesses has been increasing rapidly in recent years. A few such businesses in Ottawa are *Seed to Sausage*, *Bargain Box*, *The Papery*, *Cats R Us*, *NU Grocery*, *Uncle Tetsu's Japanese Cheesecake Bakery*, and the many microbreweries and cannabis stores.

New York City in the U.S. is one of the largest centres of new fashion and other products and services. In a recent research tour of Manhattan (July & August 2021), we observed many vacant retail stores, many more kiosks on mid-town Manhattan streets than before the pandemic selling food, clothing and other retail products, and unusual sales at normally very exclusive stores in expensive/fancy shopping centres (some of these stores allowed customers in by appointment only in the past, not for safety reasons, but for the convenience and comfort of their ultra-wealthy clients. To us, this change represented the depth of the pandemic's damage to the retail industry.

Next, we travelled to the State of Vermont, which is known for the large number of tourists it normally attracts. The town of Woodstock in Vermont is charming, and highly popular for tourists. We found it to be busy, with no more vacant stores than before the pandemic. Its restaurants, bars, clothing and especially its gift stores were quite busy, and all had more sales signs than usual.

While in Vermont, we found out about a new and unique restaurant which had been nationally advertised. It was more than one hour drive from Woodstock in the village of Royalton. As a new, unique, highly successful restaurant, we recommend this restaurant for the Subject Site.

It is called *Worthy Burgers*, was opened about 6 years ago, and two more have been opened elsewhere since then. It is in a farming area, with unpretentious, average indoor seating. It has a large bar, more than 12 picnic tables outdoors, each providing up to 10 bench seats, and a small stage for live music.

It offers beef, turkey and chicken burgers, fresh cut French fries, fried chicken, fried tuna, normal soft drinks, and beer, all served on recycled paper in baskets (i.e., no dishes). Everything, other than tuna and soft drinks, are produced and purchased from their own and/or the adjacent farms, and prices were between \$12 and \$18. The beer is made onsite. In our opinion, this business is an excellent example of a new, unique, fresh, affordable, and environmentally low-impact restaurant. Other than farms, and a few farmhouses, there is nothing near this restaurant, and it is about 30 minutes' or longer drive from other parts of Vermont.

In another recent trip to the City of Montreal (Friday September 3: Labour Day Weekend), which is also a major centre of new retail trends, we visited Saint Denis and Sainte Catherine Streets. Both are highly popular with residents and tourists. On a Friday night, with ideal weather, Saint Denis was closed to traffic from Sherbrooke Street to Maisonneuve Street (i.e., the most popular part of Saint Denis). There were outdoor seats partially on sidewalks, and partially on the street, and a 3-person band played live music. The variety of the outdoor furniture, colours, lighting, and other visual creation could hardly have been better. The atmosphere was happy, festive, and ideal for browsing, dining, drinking and socializing.

Within these two blocks, there were 8 vacant and for-lease stores, which reflect the seriousness of the pandemic's damage on this highly popular street. Other new businesses on these two blocks were three vegetarian restaurants. At least two of them were not there a few years ago, reflecting changes in consumer habits and expectations.

On Sainte Catherine Street also, there were many vacant and for-lease stores. This street is known for its new, unusual, eccentric, as well as the normal retail and service businesses.

On our visit, we noted a large number of ethnic-type restaurants, including vegetarian ones, fashion stores, tourist product stores, nude/pornographic shows, and a large and busy erotic-products store.

In contrast to our visit of this street in the summer of 2020, Sainte Catherine Street was crowded, many pedestrians were walking there leisurely, and there were customers in most stores.

Table 7.1
Estimates of Minimum Total Supportable Floor Space
By Clarence-Rockland Residents: Square Feet

Trade Group	2021	2023	2026	2031
A. Retail Product Stores				
Supermarkets at \$700/sq. ft.	97,300	98,400	106,600	120,000
Convenience Stores at \$300/sq. ft.	22,300	22,700	24,300	27,300
Specialty Food at \$450/sq. ft.	12,900	13,100	14,000	16,000
Beer, Wine & Liquor at \$700/sq. ft.	28,400	28,700	31,000	35,000
Drugs & Patent Medicine* at \$1,000/sq. ft.	32,900	33,300	36,000	40,600
Clothing at \$350/sq. ft.	69,700	70,600	76,000	86,000
Shoes, Jewellery & Accessories at \$400/sq. ft.	17,700	18,000	19,500	25,000
Home Furnishings at \$350/sq. ft.	10,600	10,900	11,400	13,100
Electronics & Appliances at \$700/sq. ft.	21,000	21,300	23,000	26,000
Furniture at \$300/sq. ft.	28,700	29,000	31,000	35,000
Building Materials, Hardware & Garden Supplies at \$250/sq. ft.	101,200	102,400	110,400	122,000
Sporting Goods, Hobbies, Music & Books at \$300/sq. ft.	29,700	30,000	32,700	36,700
Used, Recreation & Other Vehicles at \$1,000/sq. ft.	13,900	14,100	15,200	17,100
New Car Sales at \$2,000/sq. ft.	41,100	41,700	45,000	50,700
Auto Parts & Accessories at \$1,500/sq. ft.	3,800	3,900	4,300	4,600
Gasoline & Service Stations at \$1,200/sq. ft.	33,200	33,500	36,200	40,700
General Merchandise at \$350/sq. ft.	79,400	80,300	86,900	98,000
Department Stores at \$250/sq. ft.	85,200	86,000	92,800	104,800
Other Retail Stores at \$300/sq. ft.	35,000	35,500	38,300	34,000
Subtotal: Retail Products at \$559/sq. ft.	764,000	733,400	834,400	941,600
B. Retail Service Businesses				
Restaurants, Bars & Other Eateries at \$600/sq. ft.	61,500	62,200	67,200	75,800
Personal Car Businesses at \$225/sq. ft.	28,400	28,900	31,100	34,700
Sports, Recreation & Entertainment ¹ at \$250/sq. ft.	173,600	175,600	190,000	214,000
Subtotal: Retail Services at \$329/sq. ft.	263,500	266,700	288,300	324,500
Grand Total: All Stores & Businesses at \$500/sq. ft.	1,027,500	1,101,100	1,122,700	1,266,100

¹ Includes cinemas, theatres, arenas and sports fields.

Source: Shore-Tanner & Associates.

² It should also be noted that the sales per sq. ft. per year as well refer to the year 2018; i.e., both per capita spending and sales per sq. ft. refer to 2018. Therefore, the estimates of supportable additional floor space are consistent with the 2018 trends, which were normal, and expected to return from 2022.

Table 7.2 Estimated Demand For Additional Floor Space By the Spending of Clarence-Rockland Residents		
Time Period Floor Space (sq. ft.)		
2021–2023	73,600	
2023–2026	21,600	
2026–2031	143,400	
2021–2031 238,600		

Source: Shore-Tanner & Associates.

VIII. SUMMARY OF EXISTING BUSINESSES

A. Review of Businesses

In June and July 2021, we drove on the streets of Rockland to observe the impacts of the pandemic. We have a list of Rockland's retail and service businesses as of May 2018 (Appendix A). Also, in 2002–2003, we had carried out a detailed retail market demand study on behalf of the City of Clarence-Rockland and have its detailed inventory as of then. As well, in February and March of 2021, we carried out a residential market demand study for one of the developers in Morris Village, and noted that there was no retail or service business in this Village. As of May 2018, there was a total of 146 retail and service businesses in Rockland with a total of approximately 538,000 sq. ft. At that time, only 14 of the stores, with a total floor space of 29,200 sq. ft. or 5.4%, were vacant (Appendix A).

In the summer of 2021, the number of known vacant stores had increased to more than 25 (in addition, some stores were vacant but had no For Lease signs). There were also some business changes, without significant changes in their previous sizes.

We are certain that the number and floor size of the vacant stores are on the decline now, and that Rockland's retail industry is recovering from the worst of the pandemic. The present (December 2021) occupied retail floor space is still lower than in 2018. It may take up to one or more years before the total occupied floor space reaches the 500,000 sq. ft. mark. For the purposes of this study (and to avoid over-estimation of supportable retail floor space), we assume that the total occupied retail and service floor space in Rockland is approximately 500,000 sq. ft. as of September 2021.

B. Supportable Additional Floor Space

As demonstrated in Table 6.2, the spending of the residents of Clarence-Rockland can support a total of 1.266 million sq. ft. of space by 2031 or an additional 766,000 sq. ft. However, there are no department stores, or a number of other traditional or box stores in Clarence-Rockland. As well, a large number of the working residents of Clarence-Rockland actually work in the City of Ottawa, or elsewhere. As a result, the residents of Clarence-Rockland and the rest of PRUC will most likely continue to shop at stores in Ottawa, and elsewhere for some of their needs/desires.

As Clarence-Rockland's population increases, and becomes more diversified, more floor space than the current 500,000 sq. ft. would be supportable. The addition of new retail and service businesses in Clarence-Rockland can also potentially attract customers from Orleans and other parts of the City of Ottawa.

The main conclusion of this review is, therefore, as follows:

As/if the residents of Clarence-Rockland shop more locally, more retail floor space, up to 238,600 sq. ft. by 2031, would be locally supportable.

The following is a description of the existing retail inventory of 2018 which is valid as of September 2021 as well.

C. Scope of Research

Several days in May 2018 we carried out extensive field research in Rockland. Every retail and service business was visited, its name and type identified, and its size visually estimated.

The field research was started at the Smart Centre, then continued on Laurier Street in the eastern direction to Highway 17. From there, all businesses in the western direction to Laurier Street were visited. There are a few scattered businesses on the intersecting roadways which were also visited, and their names, types, and estimated sizes recorded. The details of this research are presented in Appendix A.

D. Major Findings

As of May 2018, there was a total of 146 retail and service businesses in Rockland occupying an estimated 538,000 sq. ft. of floor space.

With the 2018 population of 26,746 in Clarence-Rockland, the overall average floor space per resident is 20.1 sq. ft. However, some of this space is supported by the spending of the other residents of the UCPR. Therefore, the effective floor space per resident is lower than 20.1 sq. ft. There are as well, a number of retail and service businesses in the Clarence part of the City of Clarence-Rockland and they may increase the per capita floor space to 21 or 22 sq. ft.

Based on the industry standard of 30 to 40 sq. ft. of floor space per capita, it is evident that the City of Clarence-Rockland is currently under-stored for retail and service businesses.

If the residents of Clarence-Rockland spend 100% of their shopping dollars at businesses within the City, still more floor space could be supported in 2018, and still more in future years. Due to the proximity of Ottawa and its variety of businesses, there will always be some shopping there by the residents of Clarence-Rockland. However, as its population grows, more retail and service businesses can be supported and will be attracted to Clarence-Rockland (as it has been the case in the 10-15 years).

At present, a total of 14 stores with a combined floor space of 29,200 sq. ft. or 5.4% of the total space of 538,000 sq. ft., are vacant in Rockland (industry standard vacancy rate is within 4% and 8%).

IX. OFFICE MARKET DEMAND ANALYSIS

A. Overview of Office Market

In Clarence-Rockland, as in similar cities in size close to major urban areas, there is little office space, and not much data available. The existing space is almost entirely for local needs such as medical, insurance, and financial. To better address the supportable office space on the Subject Site, we have first analyzed Ottawa's rich office market.

Due to the presence of the Federal Government, the City of Ottawa's office market is unique. The various Federal Departments, Crown Corporations, and other government agencies own and occupy approximately 30 million sq. ft. of office space.

The privately-owned office space in the City of Ottawa is approximately 41 million sq. ft., most of which is also rented to and occupied by different Federal Government organizations. There are, as well, some 300 associations, major legal, accounting, auditing and consulting firms, most of whose work is government related.

At a total population of slightly more than one million, the City of Ottawa is the fourth largest in Canada, but its total office floor space of approximately 71 million sq. ft. is the third largest after Toronto and Montreal.

The Ottawa office market has historically been strong and stable. In the last five years, a number of new, large office towers have been developed, pushing its overall total vacancy rate close to 11%, then declining to under 10% in 2019. Due to the Covid-19 pandemic since early 2020, the office vacancy rate has again exceeded 10%.

B. Types of Office Space

Generally speaking, office spaces fall into the following categories:

- Government/Public Sector
- Corporate
- Professional
- Business

There is some overlap in the bottom three types.

A **Corporate** office is usually large, high quality, located in a Class A building in a prime location, and occupied by banks, insurance companies, other major and often national and/or international corporations. Prestige, visibility, luxury, access, status, and image are important for corporate occupants of this type of office space.

A **Professional** office can be of various sizes and locations, and mostly in a Class B or C building. Legal, accounting, medical, high technology, artificial intelligence, associations, and consultancies are typical occupants of this type of space. In terms of prestige, status, visibility, and access, this type of office is often between the corporate and the business types.

A **Business** office is typically small, occupied by locally-oriented companies, located in affordable areas, including business parks, and in Class B, C or lower buildings. Engineering, architectural, accounting, development, construction, transportation, retail, and other such businesses, mostly with up to about 10 employees, are typical occupants of this type of office space.

C. Most Important Office Space on the Subject Site

Government, and to some extent, Corporate offices, are not dependent on the economy or population of a city. Most professional and business office enterprises, however, serve the residents and local economy of a given area. We believe that for the Subject Site, the most market viable types of office businesses would be those that serve the larger area residents, and ones which would be used for and by knowledge-based enterprises. While government, corporate, or any specialty type office developments are also possible, they cannot be counted on.⁶

D. Demand Analysis

1. Locally-Oriented Office Space

Of the approximately 41 million sq. ft. of privately-owned office space in the City of Ottawa, we estimate that up to 8 million sq. ft. or almost 20.0% are used by professional and business tenants who primarily serve the residents and the local

⁶ The need for them is not locally or even city-wide generated. However, elected officials, business leaders, and/or connections may be able to influence the locational decisions of government and corporate officials.

economy.⁷ These tenants, furthermore, are in Class B, C or lower buildings. The rest are occupied by various levels of governments, corporate, and prestigious professional/high technology tenants.

At 8 million sq. ft. of office space and a total City of Ottawa population of almost one million, the overall average office space associated per resident is about 8 sq. ft. Of course, parts of Ottawa have much higher, and others much lower averages.

In Clarence-Rockland, the total inventory of office space is now almost 0.3 million sq. ft., or approximately 11 sq. ft. per resident, based on a total population of over 27,400 (Table 4.3). Due to the mostly rural and agricultural characteristics of PRUC, its need for office space per capita is much less, and office businesses in Rockland tend to be used by its residents and employees. We have, therefore, used an estimate of 6 sq. ft. for PRUC. The Trade Area is, therefore, concluded to generate an average annual demand for total additional office space of up to 8,000 sq. ft. in Clarence-Rockland, and 3,500 sq. ft. in the rest of PRUC, (i.e., total of up to 11,500 sq. ft.).

2. Digital Age Office Space

Office space used for/by knowledge-based (i.e., Information Technology, Digital-Oriented, Health Care, Software Engineering, Life Sciences, and other modern industries) are economically most desirable for now and the future. The products of these industries can be marketed and sold internationally. They are typically high-paying, and provide many spin-off jobs, services and incomes.

The creation of these modern business/industrial parks often requires funds, leadership and foresight by various levels of government, as well as private sector champions. When successful, however, these parks generate far more municipal, provincial and federal benefits than their costs. For the economic advancement and future prosperity of Clarence-Rockland and diversification of its economy, we strongly recommend undertaking the needed activities, and providing the

⁷ In other words, the combination of population and economic factors generate demand for 8 million sq. ft. of locally-oriented office floor space.

⁸ The Colonnade Business Park is an example of these municipal government initiatives: it is now occupied by a large variety of health, research & development, IT, other modern as well as traditional industries, and large retail showrooms. The municipal taxes paid by the businesses in the park have been a significant source of income for the City of Ottawa in the last few decades, and already more than paid back the City's initial investments.

necessary budget to develop a modern, scientific/technology-oriented business park on the subject land in the expansion area. The promotion of this park, and recruitment of tenants/buyers are recommended to follow shortly after the City's decisions to proceed with the creation of this park.

E. Office Space Recommendations

- 1. The existing estimated total office floor space of approximately 300,000 sq. ft. is too low for Rockland's future office industry advancements.
- 2. We recommend promoting Rockland for modern, knowledge-based industries such as IT and life sciences.
- 3. With a successful promotion of the above industries, we recommend a total of approximately 100,000 sq. ft. of additional office floor space in Rockland.
- 4. Being close to the City of Ottawa, the Subject Expansion Land is considered to be the best location in Rockland for new office space, in our opinion.
- 5. Most to all 100,000 sq. ft. of new office space are thus recommended to be on the Subject Expansion Land.

X. INDUSTRIAL MARKET DEMAND ANALYSIS

In this chapter, we have addressed issues related to employment of the working residents of Clarence-Rockland and PRUC by type, location and other characteristics. This information, along with trends in future jobs, provide useful clues to future demand for industrial lands. In this regard, it should be kept in mind that in the last 2-4 years, the price of industrial land, as well as rental rates for buildings on industrial lands in Ottawa have been increasing very rapidly. This trend is expected to continue, and one result of it is likely to be increased interest and demand for industrial land in areas within up to one hour drive from Ottawa.

A. Employed Labour Force

1. As of mid-2016 (the latest census), the total number of the working residents was (Table 10.1):

 Clarence-Rockland 	13,315
• PRUC	46,535

2. The 5 largest occupations of these working residents were:

Clarence-Ro	ckland	PRUC	
Government	17.7%	Government	14.5%
Retail	13.2%	Retail	14.1%
Construction	12.7%	Healthcare	11.2%
Education	8.7%	Education	8.2%
Total	63.1%		59.0%

- 3. The 5 largest occupations of the residents of Clarence-Rockland and PRUC are thus the same. In Clarence-Rockland, however, 6.3 and in PRUC, 5.9 in 10 of all of their working residents worked in these five occupations.
- 4. People's occupations do not change much in 5 years. The percentages in Table 10.1 are therefore valid today with minor changes.

B. Place of Work

- 1. Not all of the working residents of Clarence-Rockland or PRUC work within each of their respective areas. As well, some of the people who work in each of these two areas live elsewhere.
- 2. In Table 10.7, we have identified the places where the labour force of each area work: As noted:
 - a. Some 7,170 or 53.8% of the Clarence-Rockland, and 20,370 or 42.8% of the PRUC working residents work outside of their respective areas.
 - b. Depending on where those with no fixed work address work, the numbers of those who work and live in each area are:
 - Clarence-Rockland 4,095 to 5,699 or 30.5% to 42.9%
 - PRUC 20,050 to 23,555 or 45.5% to 53.5%
- 3. The data in Table 10.1 and 10.2, combined with our knowledge of PRUC indicate that:
 - a. The working residents of Clarence-Rockland are more mobile than the working residents of the rest of PRUC.
 - b. Most of those who work outside Clarence-Rockland or outside the rest of PRUC work in Ottawa.
 - c. While specific data for 3b above are not available, we believe that Federal Government, knowledge-based industries such as Information Technology, and Construction account for most of those who work in Ottawa, but live within PRUC.

C. Traditional Industrial Jobs

Traditional industrial jobs are typically land-intensive, are concentrated in the extraction of the earth's resources, storage, transportation, processing and manufacturing of the resources into products needed by households, businesses, and institutions. Many of these jobs require heavy machinery, the use of enormous amounts of energy, and transportation. However, they are the typical starting businesses in many new industrial parks.

Forestry, mining, quarrying, warehousing, transportation and construction yards require vast land areas, but little built floor space. Processing and manufacturing, as well, require

large land areas, but also some built floor space. Traditional industries generate very few jobs, and historically, a ratio of 20 jobs per acre of land has been used to estimate their job creation.

In Table 10.3, we have presented the number of the working residents who work in the main traditional industrial jobs. There are also other traditional industrial jobs, such as truck and boat storage and repair yards, included in the Other category in Table 10.3.

As noted in Table 10.3, in Clarence-Rockland a total of 2,596 or 19.5%, and in PRUC 9,868 or 20.6% of their entire labour force work in traditional industrial jobs.

D. Modern Industrial Jobs

- 1. Most of the traditional industries emerged approximately 250 years ago in England, and quickly spread into other Western countries.
- 2. Since about 1960, the need for some of these industries began to decline or be eliminated. More importantly, however, many of the extracting, processing, and manufacturing jobs started to be sent to Mexico, China and other low-wage countries.
- 3. As traditional industries started to decline, service, and particularly knowledge-based industries started to grow, and now dominate the western as well as a number of Asian countries.
- 4. The new and expanding services have been primarily in the health, education, wellness, and cultural industries.
- 5. The knowledge-based industries include some of the above, but mostly the enormously large and all-encompassing Information Technology industry, dominated by companies such as Google, Microsoft, Twitter, Amazon, Apple and many other lesser known enterprises.
- 6. The new industrial jobs include software engineering, computer architectural designers, high-level soft and hardware programmers and designers, automation engineers, supply-chain designers, communication engineers, and other highly technical experts.

7. The IT industries apply to every aspect of life and economies, from agriculture, health and entertainment to manufacturing, business, military and space explorations.⁹

8. IT industries require very little land and generate incomparably more jobs than the traditional industries

- 9. While traditional industrial jobs will continue to exist, their number of employees, economic contributions and relevance will continue to decline. The IT industries, on the other hand, will continue to further dominate economies, industries and the quality of life.
- 10. In Clarence-Rockland, a total of 230, and in PRUC, 838 of the working residents are employed in the general IT industry jobs.

E. Employed Labour Force

Labour force figures by type of occupation are presented in Table 10.1 for Clarence-Rockland and PRUC. As noted:

- 1. There was a total of 13,315 working residents in Clarence-Rockland and 47,535 in PRUC in 2016 (Table 10.1).
- 2. The largest number of jobs for these residents were in Retail, Health Care, Construction, Government, Education, and Accommodation & Food Services. These occupations accounted for 7,035 or 52.8% in Clarence-Rockland and 26,615 or 56.0% in PRUC.
- 3. People's occupations do not generally change much in a few years. Therefore, we believe that the distribution of the working residents' occupations in 2021 is very close to those identified in Tables 10.1 and 10.2, with minor percentage fluctuations.
- 4. The majority of the working residents in Clarence-Rockland as well as in PRUC work in various service industries:
 - Clarence-Rockland 8,315 or 62.4% of total
 - PRUC 25,970 or 54.6% of total

⁹ Of course, some of these tasks were being done prior to the dominance of the IT industries. It is the rapidly faster, and the new applications of IT which have dominated economies, and life in general.

- 5. Primary, Utilities, Manufacturing, Transportation, Warehousing, and Logistics are the main industries which are land intensive. These occupations account for only 1,340 or 10.0% in Clarence-Rockland and 7,410 or 15.6% in PRUC.
- 6. Many residents of Clarence-Rockland and PRUC work in Ottawa or elsewhere. The numbers and types of jobs within each of these areas is not known. Based on our knowledge of the towns and counties within a couple of hours' driving distance of Ottawa, we firmly believe that the number of jobs in these areas is smaller than the number of their respective labour force, and this is the main reason for the working residents of these areas to commute to Ottawa/elsewhere to work.

F. Growth Industries

- 1. In today's economy, major job growths are in various services, information technology, social media, automation, research & development, robotics, pharmacology, communication, and other knowledge-based and high technology industries. Typically, these industries are office-based.
- 2. Most manufacturing jobs, which are land-intensive, have either been transferred to Mexico, Asia and other low-wage countries, or simply disappeared by one of the above growth industries (e.g., music records, Kodak-type cameras).
- 3. Internet-based companies such as Ottawa's Shopify, and international companies such as Amazon, have been the fastest growth companies in recent years, and their future growth prospects are quite favourable. These jobs, again, are mostly office-based.
 - Various health, alternative medicine, leisure, recreational, cultural, sports, travel, wellness products and services have also been growing in popularity, and employing large numbers of people.
- 4. New, exotic, organic food items, unique restaurants, and ethnic recipes particularly, have become popular in about the last five years, creating an increasing number of small, friendly, attractive, and specialty businesses (e.g., Seed to Sausage in Ottawa and Chocolat Favouris in Gatineau). Many of the owners of these businesses are in their 20s and 30s, including some who have left their lucrative employment in Finance, IT or Government to open up their own businesses.
- 5. There is a large number of industries and businesses everywhere for the basic necessities of life. Banks, supermarkets, beauty salons, pharmacies, legal, financial,

insurance and most retail stores are among them. While there is innovation and modernization in these industries, they do not change significantly in their basic functions, and their growth depends simply on the growth of their market areas' population. These businesses are often in small shopping plazas, main-street or highway commercial locations.

- 6. As noted, other than manufacturing, utilities, farming and warehousing, industries/businesses function mostly in small retail stores, shopping plazas, and office buildings. Manufacturing, warehousing and other land-intensive industries have been on a declining course in the last 20+ years, and their future prospects are also dim. These declines, furthermore, have been negatively impacting Clarence-Rockland, PRUC, the City of Ottawa, Canada and other western industrial countries, and the future is likely to be even worse (i.e., further job losses, and thus declining demand for traditional and land-intensive industrial lands).
- 7. As part of the research for this study, we also reviewed an extensive report for the Town of Milton called:

Employment Land Needs Assessment Study

by MHBC Planning and Watson & Associates, Dated October 13, 2016.

- 8. A number of key take-aways from this report are:
 - a) From "protection of land," the Town of Milton should move to "job creation."
 - b) Employment land uses should be more intensified and diversified, resulting in higher densities.
 - c) Employment nodes should be planned for the next 30 years.
 - d) The Town of Milton's economy is heavily dependent on manufacturing, warehousing and logistics industries, all of which are highly land-intensive.

G. Clarence-Rockland's Future Land Requirements

1. Land-Intensive Industries' Land Needs

- a. The estimated growth in the number of land-intensive jobs in Clarence-Rockland or PRUC is moderate. This is due to expected further declines in Manufacturing, and low growth in other land-intensive industries.
- b. The traditional estimate of land requirement for land-intensive industrial jobs is one acre per 20 employees. This number, however, can no longer be used in a valid way since land-intensive jobs will continue to decline, based on our knowledge.
- c. Industrial and business park lands are now best used for the new economy knowledge-based jobs, from the viewpoints of prosperity, diversity, and modernization.

2. Retail Commercial Land Needs

- a. Demand for commercial land for retail (e.g., clothing) and service (e.g., beauty salons) businesses is based on the number of residents and employees within the Trade Area of businesses.
- b. Based on the retail industry standards, the spending of/for every man, woman and child supports 30 to 40 sq. ft. of retail and service businesses in urban areas (less in rural areas/small towns).
- c. In addition, employees often shop at businesses at or near their workplaces (coffee shops, restaurants, banks, food items, etc.). The spending of each employee is estimated to support up to 5 sq. ft. of commercial space at/near their place of work.
- d. Clarence-Rockland is a commercial hub for the residents of some of the nearby towns and villages. Its existing and future businesses, therefore, have a larger Trade Area than only Clarence-Rockland by itself.
- e. The 30 to 40 sq. ft. of supportable space per resident includes department stores, furniture stores, specialty retail, ethnic restaurants, and various box stores. Department stores, and a number of other businesses require well over 100,000 residents, and therefore do not exist in Clarence-Rockland now, and likely not in the future either.

- f. Under the generous assumption of 30 sq. ft. of retail and service floor space per resident, and an estimated population of 27,400 in 2021, the total supportable retail and service floor space in Clarence-Rockland is 822,000 sq. ft. This number is much larger than the approximately 500,000 sq. ft. of the existing floor space.
- g. Retail development normally takes place on one-quarter of commercial land (the rest is for various setbacks, and especially for surface parking).
- h. The estimated additional supportable floor space of 238,600 sq. ft. would thus need 954.400 sq. ft. of land or approximately 21 acres by 2031.
- i. Of course, more commercial developments will be needed after 2031, due to continued population growth. Since the nearby villages and towns will also grow in population, and thus likely to add to their own existing retail businesses, they will not need to shop as much in Clarence-Rockland as they do now.

3. Office Land Needs

- a. Most if not all of the following jobs usually require office space, including in industrial/business parks:
 - Information & Culture
 - Finance & Insurance
 - Real Estate
 - Professional, Scientific & Technical
 - Management
 - Administration & Support
 - Health Care & Social Services
 - Public Administration
- b. Some of the above office jobs are in buildings in business or industrial parks, and parts of others are in more than one industry/business (e.g., some Administration & Support jobs are in retail, restaurants and health care). To avoid double counting, we have included all of the above in office jobs.
- c. The industry standard office space per employee is 200 to 300 sq. ft.
- d. The portion of vacant land which can be built for one-storey office buildings is about 50%. The total amount of vacant commercial land for 8,000 sq. ft. of office space per year would thus be 16,000 sq. ft., plus land for parking (160,000 sq. ft. for the period 2021-2931)...
- e. One-storey office buildings are not efficient or economical. Even in many business/industrial parks, developers build two or three-storey office buildings.

f. From the perspectives of economic growth, prosperity and attraction of modern/21st Century industries, the best use of the subject industrial land in Clarence-Rockland is thus knowledge-based jobs, especially those in the digital industries.

4. Recommended Industrial Park

- a. At 90 acres, the Expansion Land is large and can accommodate a combination of the old and new industries.
- b. The new, modern, knowledge-based industries are mostly in office buildings, including some in industrial/business parks.
- c. From the perspective of economic growth and future prosperity of the City of Clarence-Rockland, the best jobs in the Expansion Land would be IT, digital, and life science industries.
- d. In view of the increasing industrial land prices in the City of Ottawa, the resulting shortages and the adjacency of the City of Ottawa, some of the Expansion Land can be quickly used by the land-intensive industries in Ottawa who want to move out, but still be close to Ottawa.

Table 10.1 Occupations of Working Residents: 2016				
Occupation Categories	Clarence-R	Clarence-Rockland		
	No.	%	No.	%
Agriculture, Forestry, Fishing & Hunting	250	1.9	1,740	3.7
Mining, Quarrying, and Oil & Gas Exploration ¹	15	Neg.	95	0.2
Utilities ¹	40	0.3	150	0.3
Construction ¹	1,695	12.7	5,230	11.0
Manufacturing ¹	470	3.5	3,160	6.6
Retail Trade	1,760	13.2	6,700	14.1
Transportation & Warehousing ¹	565	4.2	2,265	4.8
Information & Culture	185	1.4	590	1.2
FIRE ²	495	3.7	1,870	3.9
Professional & Scientific	580	4.3	2,095	4.4
Administrative & Support	745	5.6	2,075	4.4
Education	1,155	8.7	3,900	8.2
Health Care	1,435	10.8	5,345	11.2
Arts & Entertainment	185	1.4	775	1.6
Accommodation & Food	700	5.2	2,440	5.1
Government (all levels)	2,355	17.7	6,900	14.5
Other	685	5.1	2,205	4.6
Total	13,315	100.0	47,535	100.0
Industrial-Type	2,785	20.9	10,900	22.9

¹ Industrial

Source: Shore-Tanner & Associates based on the 2016 census data.

² Finance, Insurance & Real Estate

Table 10.2 Place of Work of the Working Residents: 2016					
Locations	Clarence-I	Rockland	PRUC		
	No.	%	No.	%	
At Home	845	6.3	3,435	7.2	
Within Each Area	3,200	24.0	16,615	34.9	
Outside	6,650	49.9	17,900	37.6	
Other Province(s)	510	3.8	2,395	5.0	
Outside Canada	10	Neg.	75	0.2	
No Fixed Work Address	1,654	12.4	3,610	7.6	
Not Working	446	3.3	3,505	7.4	
Total	13,315	100.0	46,535	100.0	

Note:

In Clarence-Rockland, a total of 10,645 or 82.7%, and in PRUC, a total of 38,470 or 87.4% of all working residents used cars, vans or trucks to go to their places of work.

Source: Shore-Tanner & Associates based on the 2016 census data.

Table 10.3 2016 Labour Force By Selected Industrial Occupations				
Industrial Occupations	Clarence-Rockland PRUC			
_	No.	%	No.	%
Forestry ¹	25	1.0	174	1.8
Mining & Quarrying	15	0.6	95	1.0
Utilities	40	1.5	150	1.5
Construction	1,695	65.3	5,230	53.0
Manufacturing ² & Processing	188	7.2	1,264	12.8
Transportation & Warehousing	565	21.8	2,265	2.4
Other ³	68	2.6	690	7.0
Total	2,596	100.0	9,868	100.0

¹ Estimated at 10% of Agriculture, Forestry, Fishing & Hunting category.

Source: Shore-Tanner & Associates based on the 2016 census data.

² Estimated at 40% of Manufacturing category.

³Estimated at 10% of Other category.

APPENDIX A

List of Retail and Service Businesses In Rockland			
Business Name	Type	Approximate Size (sq. ft.)	
Smart Centre ¹			
Rona	Hardware	40,000	
Walmart	Department Store	110,000	
• Quizno Subs			
• Hair Salon			
• Pharmacy			
Garden Supplies			
• Grocery			
• Fashion			
Source	Electronics	2,000	
Bulk Barn	Specialty Food	3,000	
Boston Pizza	Table Service Restaurant	4,000	
Dollarama	General Merchandise	6,000	
LBCO	Liquor Store	3,000	
Laurier Street			
Ford Dealership	Automotive	6,000	
Snap Fitness	Fitness	3,000	
Tim Horton's	Coffee Shop	1,800	
Royal Plaza (on Laurier St.)			
Vapeking	Smoke Shop	2,000	
Aqua Life	Sporting Goods	2,000	
Rosalynn's	Table Service Restaurant	2,000	
New Wave (pool accessories)	Sporting Goods	2,500	
RBC	Financial	3,000	
Vacant (2)	Vacant	4,000	

¹ Started from this shopping centre, walked and/or drove eastward on Laurier Street to Highway 17, then westward on Laurier Street

List of Retail and Service Businesses In Rockland, continued			
Business Name	Туре	Approximate Size (sq. ft.)	
Laurier Street, continued			
First Choice	Barber	1,000	
Rockland Sports	Sporting Goods	3,000	
M&M Foods Market	Specialty Foods	1,500	
Shawarma Rockland	Table Service Restaurant	1,500	
Youngster Salon	Beauty Salon	1,500	
Hitices	Clothing	1,500	
La Bella Salon	Beauty Salon	1,500	
Accent	Furniture	8,000	
Touch of Distinction	Flooring Supplies	2,000	
Rising Sun	Martial Arts	2,000	
Vitrerie Glass & Mirror	Furnishings	2,000	
Derma Skin Care	Beauty Salon	1,500	
Vacant	Vacant	1,500	
Domino's Pizza	Pizza Shop	1,500	
Mortgage Intelligence	Financial	1,500	
Chiro Fashion	Specialty Retail	1,500	
Rockland Pharmacy	Pharmacy	3,000	
Pronature Sporting	Sporting Goods	2,000	
Tiny Hopper	Daycare	2,500	
Salon Tete O Pieds	Beauty Salon	1,500	
Shoppers Drug Mart	Pharmacy	4,000	
Ultramar	Gas Station & Car Wash	2,000	
Your Independent Grocer	Supermarket	50,000	
Spartas	Mediterranean Restaurant	1,500	
Scotiabank	Financial	3,000	
Beer Store	Beer Store	3,000	
Napa Auto	Automotive	2,500	
McDonald's	Fast Food	2,200	
Sullyteck	Phone Repair	600	
Bytown Lumber	Building Supplies	10,000	
The Thimble	Tailor	800	
Envy	Spa	2,000	
Vacant	Vacant	3,000	
Jumbo Pizza	Pizza Shop	2,000	

Business Name	Type	Approximate Size (sq. ft.)
Laurier Street, continued		
Dunn's Deli	Table Service Restaurant	2,500
Rama	Martial Arts	1,200
Royal Photo	Photo Shop	1,500
Rockland Music	Specialty Retail	1,500
Anne Travel	Travel Agency	1,500
Martel Mortgage	Financial	1,000
Sublime Salon	Beauty Salon	1,000
Christine Raymond Salon	Beauty Salon	1,000
Auto Morin	Automotive	3,000
Sienna Faming	Specialty Retail	2,000
Sacred Art	Tattoo Shop	1,000
The Brunet Funeral	Funeral Services	3,000
L'Atelier Salon	Beauty Salon	2,000
Vacant (several stores)	Vacant	5,000
Rockland Pizza	Pizza Shop	1,200
H & R Block	Financial	1,200
Rockland Variety	Convenience Store	1,500
Vacant	Vacant	1,500
Jean Coutu	Pharmacy	4,500
Post Office	Specialty Retail	2,000
Vacant	Vacant	1,500
Rockland Marine	Boating Supplies	3,000
Giant Tiger	General Merchandise	11,000
Fashion Sports	Clothing	2,000
New Ruby	Chinese Restaurant	3,000
Second Hand Centre	Clothing	1,500
Modelo Salon	Beauty Salon	1,500
Dalrymple Salon	Beauty Salon	1,500
Subway	Fast Food	1,500
Marie-Jo	Table Service Restaurant	2,000
RDS Laundromat	Laundromat	1,200
Chamberland Garage	Automotive	5,000
Rockland Optometry	Specialty Retail	2,000

Business Name	Type	Approximate Size (sq. ft.)
Laurier Street, continued		
Rockland Barber	Beauty Salon	600
Bourbonnais Electric	Electronic Shop	1,500
Vacant	Vacant	1,200
Friendly Restaurant	Table Service Restaurant	2,000
Big Boss Burgers	Table Service Restaurant	1,600
Vacant	Vacant	1,500
Sonx Plus	Electronics	1,500
National Bank	Financial	3,000
QV Spa	Beauty Salon	1,500
DCV Heating/Cooling	Heating/Cooling Supplies	2,000
Lavolette	Flower Shop	1,500
Café Joyeux	Table Service Restaurant	1,500
Desjardins	Financial	4,000
Maison de Xin	Table Service Restaurant	4,000
Spa Mauve	Beauty Salon	1,500
Extravadance	Specialty Fashion	2,000
Chez L'Bonlanger	Bakery	2,000
Studio Aqua (bronzage)	Beauty Salon	1,500
Main Street Pizza	Pizza Shop	1,500
Vacant	Vacant	1,500
Le Mieux	Convenience Store	1,500
GAB Sports Bar	Table Service Restaurant	2,000
Beautiful Clinic	Beauty Salon	1,500
QV Spa, Nails	Beauty Salon	1,000
Café La Roche	Table Service Restaurant	2,000
Espada	Tattoo Shop	500
Ryan's Auto	Automotive	2,000
SS Chip Wagon	Eatery	200
Vacant	Vacant	2,000
Vacant	Vacant	2,000
Belanger Dodge Dealer	Automotive	2,000
Vacant	Vacant	3,000
Harmony Hyundai	Automotive	2,000
Mr. Gas	Gas Station	100
Tim Horton's	Coffee Shop	1,000
Canadian Tire Station	Gas Station	100
TD	Financial	2,000
Shell Station	Gas Station	100
Circle K	Convenience Store	2,000

List of Retail and Service Businesses In Rockland, continued		
Business Name	Туре	Approximate Size (sq. ft.)
Plaza Rockland		
Top Mode Depot	Fashion	11,000
A & W	Fast Food	1,800
Pet Valu	Specialty Retail	2,500
Brown Cleaner	Dry Cleaning	1,200
Super Cut	Barber Shop	1,200
Pop Shoes	Shoe Store	2,500
Gabriel Pizza	Pizza Shop	1,200
Broadway Bar & Grill	Table Service Restaurant	2,500
Subway	Fast Food	1,500
Vacant	Vacant	1,500
Dollar Tree	General Merchandise	5,000
TSC	General Merchandise	25,000
Mark's	Clothing	10,000
St. Hubert	Table Service Restaurant	3,000
Oil Changer	Automotive	4,000
Speedy Glass	Automotive	4,000
Benson Auto Parts	Automotive	3,000
Grand Total	146	538,000

Source: Shore-Tanner & Associates based on field research and visual estimates in late May 2018.