

CITY OF BRANTFORD
OFFICIAL PLAN
ENVISIONING OUR CITY: 2051

Envisioning Brantford - Municipal Comprehensive Review

Addendum Report

October 2020

SGL Planning & Design Inc. DILLON CONSULTING BluePlan ENGINEERING

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ATTACHMENT

1 INTRODUCTION

1.1 BACKGROUND

The City of Brantford started its Official Plan Review in 2013. Between 2013 and 2016, much work was accomplished, including the hosting of visioning sessions, the preparation of technical background papers and the creation of a new Draft Official Plan (Version 1, issued in July 2016). The Official Plan Review was put on hold while the Municipal Boundary Adjustment Agreement between the City of Brantford and County of Brant was being finalized and approved by the Province and pending updates to the Growth Plan for the Greater Golden Horseshoe to which the new Official Plan must conform.

In 2016, the municipal boundary between the City of Brantford and the County of Brant was adjusted in order to secure additional lands in the City for future growth, effective January 1, 2017. These lands are known as the Boundary Adjustment Lands.

The boundary adjustment brought new lands into Brantford's municipal boundary. However, that does not automatically bring the lands into the City's urban area boundary, also referred to as a Settlement Area boundary. To bring additional lands into the City's Settlement Area boundary, the Province requires municipalities to conduct a Municipal Comprehensive Review (MCR) as input into their new or amended Official Plan. The MCR is to determine the extent that the Settlement Area boundary is to be expanded. Once that is done, the new or amended Official Plan can designate urban land uses within the expanded Settlement Area boundary.

The City has undertaken a Municipal Comprehensive Review and revisions to the 2016 Draft Official Plan to include the Boundary Adjustment Lands. The City of Brantford has established an eight-stage study process to complete the Municipal Comprehensive Review and finalize the new Official Plan – entitled Envisioning Brantford. To complete this work, the City has retained a consulting team led by SGL Planning & Design Inc., which includes The Planning Partnership, Cushman Wakefield, Hemson Consulting, AgPlan Limited, ASI (Archaeological Services Inc.), Ecosystem Recovery Inc., GM BluePlan Engineering, Plan B Natural Heritage, and Dillon Consulting.

Three reports were produced as part of the Municipal Comprehensive Review, prior to this Addendum.

The Envisioning Brantford - Municipal Comprehensive Review - Part 1: Employment Strategy, Intensification Strategy, Housing Strategy and Land Needs report (MCR Part 1 Report), identified appropriate intensification and Designated Greenfield Area (DGA) density targets, lands to convert from employment use, and whether there is a need for a Settlement Area boundary expansion and the extent of that need.

The Envisioning Brantford - Municipal Comprehensive Review - Part 2: Settlement Area Boundary Expansion report (MCR Part 2 Report) documented Stage 4 of the study and contained an extensive evaluation to determine the preferred lands for Community Area and Employment Area uses. The evaluation of the Community Area Expansion Blocks identified two potential Options for Settlement Area boundary expansion. These two Options were carried forward to Stage 6 of the Study.

The Envisioning Brantford - Municipal Comprehensive Review - Part 3: Preferred Settlement Area Boundary Expansion and Preliminary Land Use and Transportation Plan (MCR Part 3 Report), prepared land uses, transportation networks and servicing options for the two Settlement Area boundary expansion options. These options were evaluated to determine the preferred Settlement Area boundary for the Community Area as well as to determine the preliminary land uses, transportation network and servicing solution for the northern Boundary Adjustment Lands. That preferred Settlement Area boundary was reflected in the June 2020 Draft Official Plan.

1.2 REPORT PURPOSE

The purpose of this report is to document new information that has arisen since the completion of the three reports and to describe how this information effects the previous conclusions and recommendations. The report addresses six matters:

1. Changes within the 2020 Land Needs Assessment Methodology for the Greater Golden Horseshoe;
2. Changes to the land areas within the Employment Areas and changes to the areas to be converted;
3. Changes to the approach of incorporating rural employment into the urban employment categories;
4. Changes to the Employment Land Needs Assessment based on the Province's 2020 Land Needs Assessment Methodology;
5. Changes to the Community Land Needs Assessment based on the Province's 2020 Land Needs Assessment Methodology; and
6. Revised Settlement Area boundary to accommodate both additional Employment and Community Areas.

2 2020 LAND NEEDS ASSESSMENT METHODOLOGY

The Province released a new Methodology for Land Needs Assessment on August 28th, 2020 to reflect the new policy structure of the Growth Plan, 2020. The methodology replaces the previous Land Needs Assessment Methodology for the Greater Golden Horseshoe that was issued on May 4th, 2018. Both Land Needs Assessment Methodologies provide a framework for determining the quantity of land needed to accommodate forecasted population and employment growth in regard to the planning horizon. The 2018 and 2020 Land Needs Assessment Methodologies' contain similar approaches for determining land shortages and surpluses in both community and employment areas within the Greater Golden Horseshoe.

The 2018 Land Needs Assessment Methodology conformed with the in effect Growth Plan at the time and as such contemplated a Growth Plan Horizon to the year 2041. Whereas, the 2020 Methodology for the Land Needs Assessment conforms with the 2020 Growth Plan, which now extends the planning horizon to 2051. A key component of the 2020 Land Needs Assessment Methodology is the consideration of land supply and market contingency factors.

In term of the approach, the 2020 Land Needs Assessment Methodology has many similarities and subtle differences compared to the 2018 Methodology, which are described below:

Background Analysis

Both the 2018 Land Needs Assessment Methodology and the 2020 Land Needs Assessment Methodology noted that the following background analyses are required to inform the assessment:

- Assessment of current supply of housing in the Designated Greenfield Area;
- Preparation of an intensification strategy:
- Identification of an appropriate intensification target;
- Identification of an appropriate designated greenfield area density target;
- Assessment of anticipated structure and composition of employment;
- Identification of an appropriate density target for new developing employment areas; and
- Assessment of housing needs.

Land Needs Assessment Geographies

Both the 2018 Land Needs Assessment Methodology and the 2020 Land Needs Assessment Methodology provide a framework for two primary geographies: Community Areas and Employment Areas, however there are subtle differences between the two methodologies described in the following sections.

Community Area Land Needs

Both the 2018 and the 2020 Methodologies begin by converting the growth forecasts from Schedule 3 of the Growth Plan into projected households, however the 2020 Methodology provides greater direction in determining the housing need and factors by considering household formation rates by age cohorts to determine the number of households by dwelling type. Another key component in the assessment is determining the current greenfield housing supply and the potential strategy for accommodating intensification. Both methodologies divide the housing potential into different geographies including the built up area, designated greenfield area and rural area. However, the 2020 methodology does this division while considering housing types and the market demand forecast. This last step informs the community area land needs, by converting the housing and community area job needs requirements into the amount of additional land needed.

Employment Area Land Needs

The 2018 and the 2020 Employment Area Land Needs Methodologies begin by determining the amount of forecasted employment based on Schedule 3 from the Growth Plan. Based on the employment forecasts, the 2018 and the 2020 methodologies determine how the jobs will be accommodated in community areas and employment areas. Both methodologies' direct employment forecasts into four primary land use categories including employment land employment, population related employment, major office and rural based jobs. Further, both methodologies refine the employment categories into three geographic areas including rural lands, community areas, and employment areas. In the 2018 methodology, the remaining unallocated jobs are multiplied by projected density of newly developing employment areas to determine the total amount of future employment area land within Settlement Areas that is needed. The 2020 methodology determines if there is a shortage or surplus of land, by subtracting the existing undeveloped designated employment areas from the total land needed. Overall, the 2020 methodology utilizes a similar approach to the 2018 methodology in identifying employment area land needs.

Impact on Land Needs Methodology

As noted above, the approach to determining Employment Area Land Needs for the City of Brantford utilized a similar approach to the latest 2020 methodology in terms of the assumptions and approach, as such the methodology was adjusted to account for the 2051 growth projections.

3 EMPLOYMENT AREAS

Chapter 5 of the MCR Part 1 Report describes lands proposed to be converted from Employment Areas to non-employment uses through the Official Plan Review. The proposed sites were shown on Figure 4 – Employment Protection and Conversion Areas and documented in Table 5.2: Employment Lands to be Converted in the MCR Part 1 Report. That table has been updated in Table 3.1 below.

Upon review, it became apparent that not all of the sites proposed to be converted were delineated on Figure 4 nor taken into account in Table 5.2 in the MCR Part 1 Report. One larger site in particular that is being considered for conversion is in the vicinity of West Street and Charing Cross Street, in a General Industrial designation that is to be converted to an Intensification Corridor in the new Official Plan. Additional small sites that are being considered include 58 Morrell Street, 360 Brock Street, 124, 150-154 Bruce Street, 121-135 Elgin Street, 133-147 Mohawk Street and 8 Harriett Street as well as 225-233 Paris Road and Highway 403. Other sites are being converted to Natural Heritage System, Parks and Open Space and Neighbourhood designation.

It should be noted that an additional site previously considered in the southwest quadrant of the Highway 403 and Wayne Gretzky Parkway interchange is no longer being considered for conversion.

The Table 3.1, shown below, shows that the amount of land area proposed to be converted is now 98.07 hectares, which increases by approximately 32.03 hectares from the conversions identified in the MCR Part 1 report. A revised Figure 4 is also included in this report as shown in **Figure 1.**

Table 3.1: EMPLOYMENT LANDS TO BE CONVERTED

Land Use Designation – Existing	Lands Use Designation – Conversion	Area (ha)
General Industrial	Major Commercial	33.45
General Industrial	Intensification Corridor	16.11
General Industrial	Neighbourhood	20.51
General Industrial	Park and Open Space or NHS	10.38
Mixed Industrial Commercial	Major Commercial	13.34
Mixed Industrial Commercial	Neighbourhood	1.19
General Industrial	Major Institutional	3.08
TOTAL		**98.07**

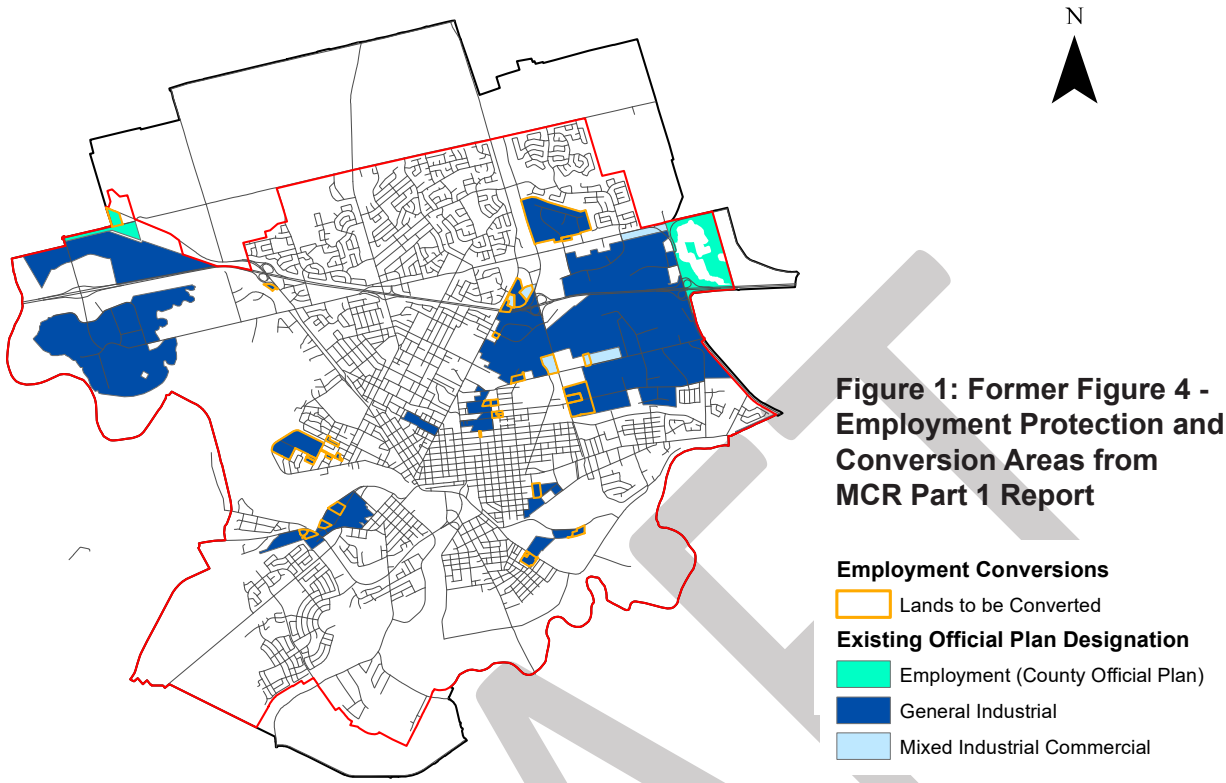


Figure 1: Former Figure 4 - Employment Protection and Conversion Areas from MCR Part 1 Report

Chapter 5 of the MCR Part 1 Report identifies the total land areas for each employment area in Table 5.1. New information on the extent of the Natural Heritage System was brought to light and refinements were made to two of the employment areas to remove Natural Heritage System designated lands from the total employment area. As well, the proposed Costco Wholesale site within the Braneida Industrial Park was added back to the employment areas, as a food production facility will be locating there and Costco is to be constructed adjacent to Lynden Park Mall instead. In addition, the new sites previously discussed in the section for employment conversion were removed. As shown on Table 3.2 the total employment area declines from 1,451.49 hectares in the MCR Part 1 Report to 1,409.76 hectares.

Table 3.2 EMPLOYMENT AREA

Employment Area	Area (ha)
Braneida Industrial Park	642.46
Northwest Industrial Park	524.87
Holmedale Employment Area	23.07
West Brant Employment Area	38.79
Elgin Street near Murray Street	23.72
Iroquois Park Industrial Area	24.88
Hopewell / Garden Ave	69.09
Paris Road at Powerline Road	53.70
Usher Street Rail Yard	9.19
Total	**1,409.76**

The revised total employment area number was inputted into the 2020 Land Needs Assessment Methodology, and the revised Employment Area Land Needs Assessment is described in Section 5 of this report.

4 RURAL EMPLOYMENT

Chapter 3 of the MCR Part 1 Report set out an employment strategy for the City. Section 3.7 set out forecast employment growth by employment category, i.e., Employment Lands Employment, Major Office Employment, Population-Related Employment and Rural Employment.

Tables 3.11 and 3.12 in the MCR Part 1 Report illustrate a declining rural employment. The decline in rural employment was distributed among the other employment categories. However, the current businesses in the rural area that will become part of the Settlement Area are typical highway commercial uses that will continue to operate as part of the urban area. As a result, that employment should not be distributed amongst the employment categories but rather maintained as part of the Population-Related Employment in the Designated Greenfield Area.

The percentages in Table 3.10 in the MCR Part 1 Report were revised to reflect the current rural employment percentage. The revised numbers are contained in Table 4.1 below. As well, 2041 has been revised to 2051 to reflect the changes in Schedule 3 of the Growth Plan (2020).

Table 4.1: Employment Growth – % Shares by CATEGORY

Scenario	Category	2016	2021	2031	2051
1 –Baseline	ELE	55%	55%	55%	55%
	PRE	44%	43.6%	42.8%	41.9%
	MOE	0%	1%	2%	3%
	Rural	1%	0.4%	0.2%	0.1%
	Total	**100%**	**100%**	**100%**	**100%**
2 –PRE-Focused Growth	ELE	56%	52%	52%	52%
	PRE	44.0%	46.6%	45.8%	44.9%
	MOE	0%	1%	2%	3%
	Rural	1.0%	0.4%	0.2%	0.1%
	Total	**100%**	**100%**	**100%**	**100%**
3 –ELE-Focused Growth	ELE	56%	58%	58%	58%
	PRE	44.0%	40.6%	39.8%	38.9%
	MOE	0%	1%	2%	3%
	Rural	1.0%	0.4%	0.2%	0.1%
	Total	**100%**	**100%**	**100%**	**100%**

By allocating the decline in Rural Employment solely to the Population-Related Employment (PRE) category and by adding in the 2051 employment forecast from Schedule 3 of the Growth Plan, the amount of employment in each category from 2021 to 2051 changed as shown in Table 4.2

Table 4.2: Employment Growth – Jobs by CATEGORY

Scenario	Category	2016	2021	2031	2051
1–Baseline	ELE	23,713	28,179	34,854	41,602
	PRE	18,632	22,573	27,379	32,058
	MOE	0	512	1,267	2,269
	Rural	430	200	150	70
	Total	**42,775**	**51,465**	**63,650**	**76,000**
2–PRE-Focused Growth	ELE	23,713	26,642	32,952	39,333
	PRE	18,632	24,111	29,280	34,327
	MOE	0	512	1,267	2,269
	Rural	430	200	150	70
	Total	**42,775**	**51,465**	**63,650**	**76,000**
3–ELE-Focused Growth	ELE	23,713	29,716	36,755	43,871
	PRE	18,632	21,036	25,478	29,789
	MOE	0	512	1,267	2,269
	Rural	430	200	150	70
	Total	**42,775**	**51,465**	**63,650**	**76,000**

The resulting 2016-2051 employment growth forecast in each category, by scenario, is illustrated in Table 4.3:

Table 4.3: Employment Growth – Jobs by CATEGORY			
Scenario	**Category**	**2016-2051**	**% Share**
1–Baseline	ELE	17,889	53.84%
	PRE	13,426	40.41%
	MOE	2,269	6.83%
	Rural	-360	-1.08%
	Total	**33,224**	**100%**
2–PRE-Focused Growth	ELE	15,620	47.20%
	PRE	15,695	46.90%
	MOE	2,269	7%
	Rural	-360	-1.10%
	Total	**32,275**	**100%**
3–ELE-Focused Growth	ELE	19,816	61.40%
	PRE	10,568	32.70%
	MOE	2,252	7%
	Rural	-360	-1.10%
	Total	**32,275**	**100%**

The Population-Related Employment growth forecast of 13,426, from Scenario 1 in Table 4.3, was allocated as described in the MCR Part 1 Report, as follows:

- 10% to employment lands;
- 30% to the existing Built-up Area (BUA); and
- 60% to the location of population growth. As described in Section 10 of the MCR Part 1 Report, 64% of the forecast population growth to 2041 was directed to the DGA and 36% to the Built-up Area. The same percentages are used to allocate the Population-Related Employment to 2051 as shown in Table 4.4 below.

Home-Based Employment (HBE), which is a form of Population-Related Employment, but is not included in the employment growth in Table 4.3, is forecast to grow by 1,835 jobs to 2051, as shown in Table 4.4. The allocation of HBE is similar to the PRE allocation related to population growth, with 64% allocated to the DGA and 36% to the Built-up Area.

Table 4.4 includes the Total PRE and a new line item was added to account for the allocation of the Rural PRE to the DGA.

TABLE 4.4: DISTRIBUTION OF POPULATION-RELATED AND HOME-BASED EMPLOYMENT GROWTH		
Total PRE	13,426	100%
Rural Pre to DGA	360	
Remaining Pre	13,066	100%
PRE to employment lands	1,307	10%
PRE to existing BUA	3,920	30%
PRE to DGA as per pop'n growth	5,017	38% (64% of 60%)
PRE to BUA as per pop'n growth	2,822	22% (36% of 60%)
TOTAL HBE	1,885	100%
HBE to DGA as per pop'n growth	1,206	64%
HBE to BUA as per pop'n growth	679	36%
Total PRE in DGA	6,583	

Based on the revised Table 4.4, 6,5843 Population-Related Employment jobs, including HBE Employment, are allocated to the DGA. This revised number is input into a revised Community Area Land Needs Assessment in Section 6 of this report.

5 REVISED EMPLOYMENT AREA LAND NEEDS ASSESSMENT

Chapter 6 in the MCR Part 1 Report set out the Land Needs Assessment for Employment Areas through a series of Steps and tables based on the Province's former Land Needs Methodology. Section 2 of this Report outlines the differences between the former 2018 and 2020 Land Needs Methodology. New tables have been created to reflect the revised employment area land areas described in Section 3 of this report and the revised employment categories described in Section 4 of this report as well as the updated growth forecast.

As shown in the final Table 5.17, the additional Employment Area land needs has increased by 50 hectares from 336 hectares to 383 hectares.

COMPONENT 1 EMPLOYMENT FORECASTS

The first component of the Land Needs Assessment is determining the forecast of employment by type based on the Schedule 3 of the Growth Plan using place of work categories including usual place of work, no-fixed workplace and work at home. The percentage breakdown is consistent to what was used in the MCR Part 1 report as shown in Table 5.1 and the resulting breakdown by type is shown in Table 5.2.

Table 5.1 MIX OF JOBS BY PLACE OF WORK

Place of Work Category	% Share (2016)	% Share (2031 and 2051)
Usual Place of Work (UPOW)	83.2%	80.0%
Home-Based Employment (HBE)	4.7%	5.0%
No Fixed Place of Employment (NFPE)	12.1%	15.0%
Total	**100.0%**	**100.0%**

Table 5.2 EMPLOYMENT GROWTH - BY PLACE OF WORK								
Year	UPOW		HBE		NFPE		Total	
	#	%	#	%	#	%	#	%
2016	37,350	83.2%	2,115	4.7%	5,425	12.1%	44,890	100%
2021	44,031	82.1%	2,144	4.0%	7,434	13.9%	53,609	100%
2031	53,600	80.0%	3,350	5.0%	10,050	15.0%	67,000	100%
2041	63,200	80.0%	3,950	5.0%	11,850	15.0%	79,000	100%
2051	64,000	80.0%	4,000	5.0%	12,000	15.0%	80,000	100%
Growth 2016-2051	26,650	75.9%	1,885	5.4%	6,575	18.7%	35,110	100%

The next step is to take the employment by type and allocate it to the four primary employment land use categories: employment area land, population-related, major office and rural-based jobs (i.e., those located outside settlement areas). Tables 4.1, 4.2, and 4.3 in Section 4 of this Addendum Report project employment growth by land use category for three scenarios. Of the three growth scenarios considered, the baseline was utilized going forward in this assessment consistent with the Part 1 MCR Report.

Following the methodology, the home based employment is subtracted from the Employment Area Lands needs assessment, employment growth by share is then structured into the four land use categories, as shown Table 5.3.

TABLE 5.3: EMPLOYMENT BY CATEGORY					
Planning Period	Major Office	Population Related	Employment Land	Other Rural Based	Total
2016	0	18,632	23,713	430	**42,775**
2051	2,270	32,060	41,600	70	**76,000**
2016 - 2051	2,269	13,426	17,889	-360	**33,224**

COMPONENT 2 EMPLOYMENT ALLOCATION

The second component of the 2020 Methodology refines the analysis of jobs through allocating them to rural areas, community areas and employment areas.

This component is first done by allocating the employment categories to the Rural Areas. It is assumed that 100% of the rural employment is allocated to the Rural Areas and no other employment land use will occur in the Rural Area as shown in Tables 5.4 and 5.5.

TABLE 5.4: EMPLOYMENT IN RURAL AREA - SHARE OF EMPLOYMENT AND TYPE

Planning Period (%)	Major Office (%)	Population Related (%)	Employment Land (%)	Other Rural Based (%)	Total (%)
2016	0%	0%	0%	100%	1%
2016-2051	0%	0%	0%	100%	-
2051	0%	0%	0%	100%	0.1%

TABLE 5.5: EMPLOYMENT IN RURAL AREA - EMPLOYMENT BY TYPE

Planning Period	Major Office	Population Related	Employment Land	Other Rural Based	Total
2016	0	0	0	430	430
2016 - 2051	0	0	0	-360	-360
2051	0	0	0	70	70

The employment land uses are then allocated to the traditional Employment Areas. It is assumed that 10% of population-related employment will occur in Employment Areas in the form of restaurants, and other personal services. As well, all of the Employment Land Employment growth is allocated to the Employment Areas as shown in Tables 5.6 and 5.7.

TABLE 5.6: EMPLOYMENT IN EMPLOYMENT AREAS SHARE OF EMPLOYMENT AND TYPE

Planning Period (%)	Major Office (%)	Population Related (%)	Employment Land (%)	Other Rural Based (%)	Total (%)
2016	0%	10%	100%	0%	60%
2016 - 2051	0%	10%	100%	0%	
2051	0%	10%	100%	0%	59%

TABLE 5.7: EMPLOYMENT IN EMPLOYMENT AREAS - EMPLOYMENT BY TYPE

Planning Period	Major Office	Population Related	Employment Land	Other Rural Based	Total
2016	0	1,863	23,713	0	25,576
2016 - 2051	0	1,343	17,889	0	19,232
2051	0	3,206	41,602	0	44,808

The remaining 90% of the Population-Related Employment and all of the Major Office Employment are allocated to the Community Areas as shown in Tables 5.8 and 5.9.

TABLE 5.8: EMPLOYMENT IN COMMUNITY AREAS - SHARE OF EMPLOYMENT AND TYPE

Planning Period	Major Office (%)	Population Related (%)	Employment Land (%)	Other Rural Based (%)	Total
2016	100%	90%	0%	0%	39%
2016 - 2051	100%	90%	0%	0%	
2051	100%	90%	0%	0%	41%

TABLE 5.9: EMPLOYMENT IN COMMUNITY AREAS - EMPLOYMENT BY TYPE

Planning Period	Major Office	Population Related	Employment Land	Other Rural Based	Total
2016	0	16,769	0	0	16,769
2016 - 2051	2,269	12,084	0	0	14,353
2051	2,269	28,852	0	0	31,122

The Home-Based Employment, from Table 5.2, then needs to be added back into the employment in Community Areas. Table 5.10 includes the Home-Based Employment in the Population-Related employment category.

TABLE 5.10: EMPLOYMENT IN COMMUNITY AREAS - EMPLOYMENT BY TYPE INCLUDING HOME-BASED EMPLOYMENT

Planning Period	Major Office	Population Related	Employment Land	Other Rural Based	Total
2016	0	18,884	0	0	18,884
2016 - 2051	2,269	13,969	0	0	16,238
2051	2,269	32,853	0	0	35,122

The last step is allocating the Community Area jobs to the two policy areas – Delineated Built-up Area (BUA) and Designated Greenfield Area (DGA).

As set out in Section 3.8 of the Part 1 MCR Report and as updated in Table 4.4 of this Addendum Report, once 10% of the Population-Related Employment (PRE) growth is accounted for on employment lands, it is recommended that 30% of the PRE growth be allocated to the Built-up Area in recognition that much of the growth in government and institutional jobs will be located where the institutions are currently situated (i.e. the hospital, university, local government, etc.), despite where the population growth is directed. The balance (60%) will be

divided proportionately to where the rest of the population growth will occur, whether within the Built-up Area, or within the DGA.

As set out further in Section 3.8 of the Part 1 MCR Report, it is anticipated that 36% of the population growth would be directed to the Built-up Area and 64% will be directed to the DGA. As such, the remaining 60% of the Population-Related Employment is divided by those proportions. In addition, all of the Major Office Employment is allocated to the Built-up Area and is assumed to be located within the Downtown Urban Growth Centre. Lastly the Home-Based Employment, which is added in Table 5.10 in this Addendum Report, is also allocated based on the proportion of the population growth in the two policy areas: Delineated Built-up Area and Designated Greenfield Area. The resulting allocations are shown in Table 5.11 below.

TABLE 5.11: DISTRIBUTION OF EMPLOYMENT IN COMMUNITY AREAS BY POLICY AREA

Planning Period	DGA	BUA	Total
2016	355	18,529	18,884
2016 - 2051	6,228	10,010	16,238
2051	6,583	28,539	35,122

COMPONENT 3 EXISTING EMPLOYMENT AREA POTENTIAL

The third component is determining the employment potential on existing lands designated for employment area. An inventory of employment uses, was previously completed in Chapter 3 and summarized in Chapter 6 of the MCR Part 1 Report. The amount of supply by employment area was updated in Chapter 2 of this Addendum Report and is summarized in Table 5.12. This table breaks down the total amount of employment into the amount built on in 2016 and the amount vacant as identified in Table 3.9 MCR Part 1 Report.

TABLE 5.12: EMPLOYMENT AREA LAND BY CATEGORY

Employment Area Land	2016 Land (ha.)	2016-2051 Land (ha.)	2051 Land (ha.)
Built Employment Areas	119.66	0.00	119.66
Newly Developing Employment Areas	860.21	429.9	1,290.11
Total Existing Employment Area	**979.87**	**429.9**	**1,409.77**

Table 5.13 sets out the employment that occurs within these two areas and the anticipated growth to 2051. The employment is based on the density targets for the Employment Lands Employment and Population-Related Employment in the Employment Areas established through the analysis in the Employment Strategy in Section 3 of the MCR Part 1 Report. The

recommended combined Employment Lands Employment density of 25 jobs per hectare is applied to the newly developing employment areas to get a total of potential Employment Area jobs on existing designated lands (after considering conversion of some lands) by 2051.

TABLE 5.13: EMPLOYMENT AREA LAND BY CATEGORY

Employment Area Land	Job 2016	Job Growth 2016-2051	Jobs 2051
Built Employment Areas	2,992	0	2,992
Newly Developing Employment Areas	21,505	10,748	32,253
Total Jobs in Existing Employment Areas	**24,497**	**10,748**	**35,244**

The allocation of employment to the Community and Employment Areas and to existing and future new DGA components of those areas is summarized in Table 5.14.

TABLE 5.14: EMPLOYMENT ALLOCATION

	2016	2051	Growth
Built-Up Area	18,529	28,539	10,010
existing DGA	*355*	*1,415*	*1,060*
future new DGA	*n/a*	*5,168*	*5,168*
Subtotal DGA	355	6,583	6,228
Subtotal Community Area	**18,884**	**35,122**	**16,238**
existing Employment Area	25,576	35,244	9,668
future new DGA Employment Area	n/a	9,564	9,564
Subtotal Employment Area	**25,576**	**44,808**	**19,232**
Rural	**430**	**70**	**-360**
Total	**44,890**	**80,000**	**35,110**

COMPONENT 4 NEED FOR ADDITIONAL LAND

The final step in the Employment Area land needs assessment is to subtract the total jobs in Employment Areas at 2051 (Table 5.7) from the total jobs in existing Employment Areas (Table 5.14). The residual or unallocated employment is shown in Table 5.15. This unallocated employment is then divided by the combined employment density of 25 jobs per hectare, which leads to a need for an additional 383 hectares of Employment Area lands beyond what is currently within the City's Settlement Area boundary.

TABLE 5.15: EMPLOYMENT AREA LAND NEEDS - ADDITIONAL LAND AREA	
Job Type	
Total Jobs forecast in Employment Areas at 2051	44,808
Total Jobs in Existing Employment Areas at 2051	35,244
Remaining Unallocated Employment	9,564
Density in Newly Developing Employment Areas (jobs/ha.)	25
Additional Employment Area Land Needs (ha.)	383

6 REVISED COMMUNITY AREA LAND NEEDS ASSESSMENT

Chapter 10 in the Part 1 MCR Report set out the Land Needs Assessment for Community Areas through a series of Steps and tables based on the Province's former 2018 Land Needs Methodology. Section 2 of this Report outlines the differences between the former 2018 and the new 2020 Land Needs Methodology. This section of the Addendum Report provides new tables and description of the Community Area Land Needs Assessment based on the 2020 Land Need Assessment Methodology.

COMPONENT 1 POPULATION FORECASTS

The first component of the Land Needs Assessment is determining the population forecast for household population based on the updated Schedule 3 forecast of the Growth Plan.

Table 6.1 identifies the household population by subtracting the Census Net Under-coverage assumes a non-household population rate of 2.39% in 2016 and rising slightly to 2.55% by 2051.

Table 6.1 POPULATION GROWTH BY PLANNING PERIOD

Population	2016	2051
Total Population*	101,710	165,000
Census Net Under-coverage rate	3.0%	3.0%
Census Population**	98,659	160,050
Household Population	96,301	155,976
Non-Household population	2,358	4,074
Non-Household population rate	2.39%	2.55%

The next step is preparing population projections by age group. Hemson Consulting Ltd. prepared these projections for the Census District as a whole which includes Brantford and Brant County (see Attachment A).

COMPONENT 2 HOUSING NEED

The second Component is to convert the population forecast by age group into forecast households. To do this, the Land Needs Assessment prescribes the use of household formation rates for each age-group to determine housing need, which is then broken down by type of dwelling. Hemson Consulting Ltd. applied headship rates for each age-group in 5 year intervals

to determine the housing need as shown in Attachment B. The resulting overall household forecast from 2016 to 2051 is summarized in Table 6.2.

Table 6.2 Household Forecast by Forecast Period

Planning Period	Total Households	Planning Period	Household Growth
2016	39,220	-	-
2021	40,904	2016-2021	1,684
2031	49,583	2021-2031	8,679
2041	59,052	2031-2041	9,469
2051	67,320	2041-2051	8,268
Total Growth		2016-2051	28,100

In the next step, age-specific occupancy patterns are applied to yield a housing forecast by type. The occupancy patterns are adjusted to yield a result consistent with current market expectations and taking account of the aging population. The market forecast projects a significant demand for Single/Semi-detached dwellings. However, Hemson noted that in Brantford, like nearly everywhere else in the Greater Golden Horseshoe, the general market expectation for housing mix is for a greater number of singles and fewer apartments than is required to meet policy goals, including:

- An Urban Growth Centre density that would need to be supported by 3,900 apartments in Brantford (over 90% of the market forecast for apartments).
- Alternative Intensification target approved by the Minister of Municipal Affairs for Brantford amounting to about 45% of all housing unit growth being directed to the built up area until 2031, and 50% thereafter. The built up area (BUA) can accommodate very few single and semi-detached units, so the vast majority of BUA units are rowhouses and apartments.

As a result, the housing was shifted away from lower density housing to more medium and higher density housing. Based on the extensive work in the Part 1 MCR Report, Hemson concluded that an appropriate overall 2016-2051 housing mix would be 35% Singles and Semi-detached, 44% Row housing, and 22% Apartments (including accessory units).

Table 6.3 summarizes the household growth by type of dwelling from between 2016 and 2051 based on Hemson's housing forecast by type.

Table 6.3 City of Brantford Housing By Census Definition including Units not Occupied by Usual Residents						
Year	Total Occupied Units	Single Detached Units	Semi-Detached Units	Row House Units	Accessory	Apartment Buildings
	Units	Units	Units	Units	Units	Units
2016	39,220	24,085	2,673	3,720	733	8,010
2051	67,320	32,153	3,718	16,070	1,280	14,101

The next step was to account for non-household growth for units not occupied by usual residents, which may be students, seasonal residents or vacant units.

As discussed in the Part 1 MCR Report, Brantford does not have any significant numbers of seasonal residents but does have post-secondary students at the Wilfrid Laurier University Campus and Conestoga College. As described in the Part 1 MCR Report, it is anticipated that 1,000 student units will be required by 2051.

Brantford currently has 8,010 apartments. The housing forecast anticipates another 6,100 apartment units primarily in the Delineated Built-up Area. In terms of vacant units, assuming a vacancy rate of 3% for apartment units only, there would be approximately 420 vacant units by 2051. It is assumed that the vast majority of the growth in student housing units and apartment units will occur be in the Built-up Area. Table 6.4 adds the housing units not occupied by usual residents to the growth in housing units.

Table 6.4 Housing Unit Growth by Forecast Period, Including Growth in Units not Occupied by Usual Residents			
Planning Period	Household Growth	Growth in Housing Units not Occupied by Usual Residents	Growth in Total Housing Units
2016-2021	1,684	250	1,934
2021-2031	8,679	390	9,069
2031-2041	9,469	390	9,859
2031-2051	8,268	390	8,658
Total	28,100	1,420	29,520

COMPONENT 3 HOUSING NEEDS ALLOCATION

The third component of the Land Needs Assessment is to allocate and distribute housing to lower tier municipalities, which is not applicable in this analysis.

COMPONENT 4 HOUSING NEEDS ALLOCATION

In the fourth component, the housing unit growth is allocated to each of the three policy areas: Delineated Built-up Area, Designated Greenfield Area and Rural Area. The allocation is based on the recommended intensification target as set out in the Part 1 MCR Report which includes a scaled increase in intensification. The allocation is also based on a decline in Rural Area households as the lands are developed for urban purposes. Table 6.5 contains the proportion of units in each policy area by time increments. Table 6.6 illustrates the unit breakdown by policy area.

Table 6.5 Forecast Share of Housing Unit Growth By Policy Area

Planning Period	Delineated Built Up Area	Designated Greenfield Area	Rural Area	Total
2016-2021	40.0%	60.0%	0.0%	100.0%
2021-2031	45.0%	55.2%	-0.2%	100.0%
2031-2041	50.0%	50.6%	-0.6%	100.0%
2041-2051	50.0%	50.6%	-0.6%	100.0%
Total	46.3%	54.1%	-0.4%	100.0%

Table 6.6 Forecast Housing Unit Growth by Policy Area

Planning Period	Delineated Built Up Area	Designated Greenfield Area	Rural Area	Total
2016-2021	774	1,160	-	1,934
2021-2031	4,081	5,002	(4)	9,079
2031-2041	4,930	4,984	(59)	9,854
2041-2051	4,329	4,377	(52)	8,654
Total	14,113	15,522	(115)	29,520

In the Part 1 MCR Report, an intensification strategy identified the potential intensification in various geographies (i.e., neighbourhoods, intensification corridors, Urban Growth Centre) and assigned units by type to those areas. This assignment of intensification was contained in Table 8.15 in the MCR Part 1 Report. We have updated that table to reflect the increase in unit forecast for the Delineated Built-up Area to 14,110 units and recognizing the new housing forecast as shown below in Table 6.7.

Table 6.7 Proposed Intensification Units By Type and Area (2016- 2051) formerly Table 8.15		
Units by Area	**Number of Units**	**%**
Semi-detached Units in the Existing Neighbourhoods	500	3.54%
Second Units in the Existing Neighbourhoods	545	3.88%
Townhouses in the Existing Neighbourhoods	1,800	12.76%
Townhouse in the Intensification Corridors and Major Commercial sites	4,500	31.89%
Student Housing Units	1,000	7.09%
Apartments in the Intensification Corridors and Major Commercial sites	1,865	13.22%
Apartments in the Downtown Urban Growth Centre	3,900	27.64%
Total	**14,110**	**100.00%**

The remaining growth of 15,522 units is directed to the Designated Greenfield Area. Table 6.8 provides the unit breakdown for the growth directed to the Designated Greenfield Area.

Table 6.8 Distribution of Housing Units by Type to DGA		
Units by Area	**Number of Units**	**%**
Single detached Units	8,183	53%
Semi-detached units	545	4%
Accessory Units	0	0%
Row Houses	6,050	39%
Apartment	746	5%
Total	**15,523**	**100%**

As per the Land Needs Assessment, the next step is to account for the number of units available in the current DGA. This supply of units in the "development pipeline" includes built units, units in registered draft plans of subdivision, units in draft plans of subdivision, units in applications and units on vacant land without an application. Table 9.4 of the Part 1 MCR Report summarizes the existing housing supply. These numbers have been included in the third column of Table 6.9 below. Subtracting these planned units from the forecasted growth in

units in the DGA results in the additional units by type that will need to be accommodated in the settlement expansion areas. As shown in Table 6.9, the portion of units by type is very similar between the units in the existing DGA and the units available for the settlement expansion areas.

Table 6.9: Subtraction of Planned Units in Existing DGA

Units	Growth in Units	Units Planned in existing DGA	% of Units Planned in the existing DGA	Units available for expansion areas	% of Units available for expansion areas
Single and Semi-detached Units	8,728	4311	56.4%	4,417	56.1%
Accessory Units	0	0	0.0%	0	0.0%
Row Houses	6,050	3021	39.5%	3,029	38.4%
Apartment	746	312	4.1%	434	5.5%
Total units	15,523	7,644	100%	7,879	100%
Total	**15,523**	**7,644**		**7,879**	

COMPONENT 5 COMMUNITY AREA JOBS

The fifth component is assessing the number of jobs available for the expansion area. Chapter 5 of this report identified the growth of 6,583 population related jobs in the DGA to 2051. The existing DGA is planned to accommodate an estimate 1,415 jobs as described in Table 9.11 in the Part 1 MCR Report. The 1,415 jobs were subtracted from the 6,583 anticipated job growth in the DGA, which results in 5,168 jobs being required to be accommodated in the Settlement Area expansion as shown in Table 6.11.

Table 6.11: Subtraction of jobs in Existing DGA

Jobs	Growth in Jobs	Jobs Planned in Existing DGA	Jobs Available for Expansion Areas
Jobs	6,583	1,415	5,168

COMPONENT 6 NEED FOR ADDITIONAL LAND

The final component converts the housing and community area jobs needs into the amount of land required for Settlement Area expansion to accommodate the forecast housing and employment in community areas.

We have forecasted the additional land needs through two different calculations. The first method ensures the new Designated Greenfield Area in the Settlement Area expansion achieves the planned density of 60 residents and jobs per hectare recommended in the Part 1 MCR Report. To calculate the density, a Persons Per Unit (PPU) rate is applied to each housing type as shown in Table 6.12. The PPU's are based on those used in the Part 1 MCR Report. The resulting projected total population and jobs to be accommodated in the Settlement Area expansion is 28,930.

Table 6.12: Population and Jobs in Expansion Area

Unit/Jobs	Units/job growth	PPU	Population/jobs
Single and Semi-detached Units	4,417	3.44	15,193
Accessory Units	0	0.00	0
Row Houses	3,029	2.60	7,875
Apartment	434	1.60	694
Jobs	5,168		5,168
Total	**13,048**		**28,930**

The 28,930 population and jobs are then divided by the recommended DGA density target of 60 residents and jobs per hectares, which results in a need for approximately 482 hectares, Table 6.13.

Table 6.13: Total land area based on Planned P&j/ha Density

Total population & jobs	28,930
Target density residents &Jobs/ha	60
Required land area (ha)	**482**

The second method of calculating land needs is to apply a gross density to each dwelling unit type category and population-related employment. The assumptions for achieving the gross density are set out in the third column of Table 6.14. The resulting land area need is 477 ha.

Comparing the two methods for calculating land need, approximately 480 ha of additional community area lands are required.

Table 6.14: Total Land Area Based on Gross Density

Unit/Jobs	Units/job growth	Gross density calculation	Land Area (Ha)
Single and Semi-detached Units	4,417	23 units per net ha - 67% net to gross	287
Accessory Units	0		0
Row Houses	3,029	45 units per net ha - 67% net to gross	100
Apartment	434	100 units per ha - 67% net to gross	6
Jobs	5,168	minus work at home @ 551 / 40 sq. m./ employee - 30% coverage - 73% net to gross*	84
Total	**13,015**		**477**

* HBE from table 3.13 minus HBE from Table 9.11

This community area land needs is based on a housing mix that closely approximates the housing mix in the development pipeline in the existing DGA. With a larger greenfield area in the expansion lands and limited constraints on land supply compared to the current DGA, it is conceivable that the market would desire a greater proportion of single and semi-detached homes. A sensitivity analysis was then undertaken to shift 500 row houses to the single and semi-detached housing category. By doing so, the housing mix in the new DGA in the Settlement Area expansion would be 62% single and semi-detached units, 32% rowhouses and 6% apartments. This housing mix would result in a land area requirement of between 489 and 493 hectares.

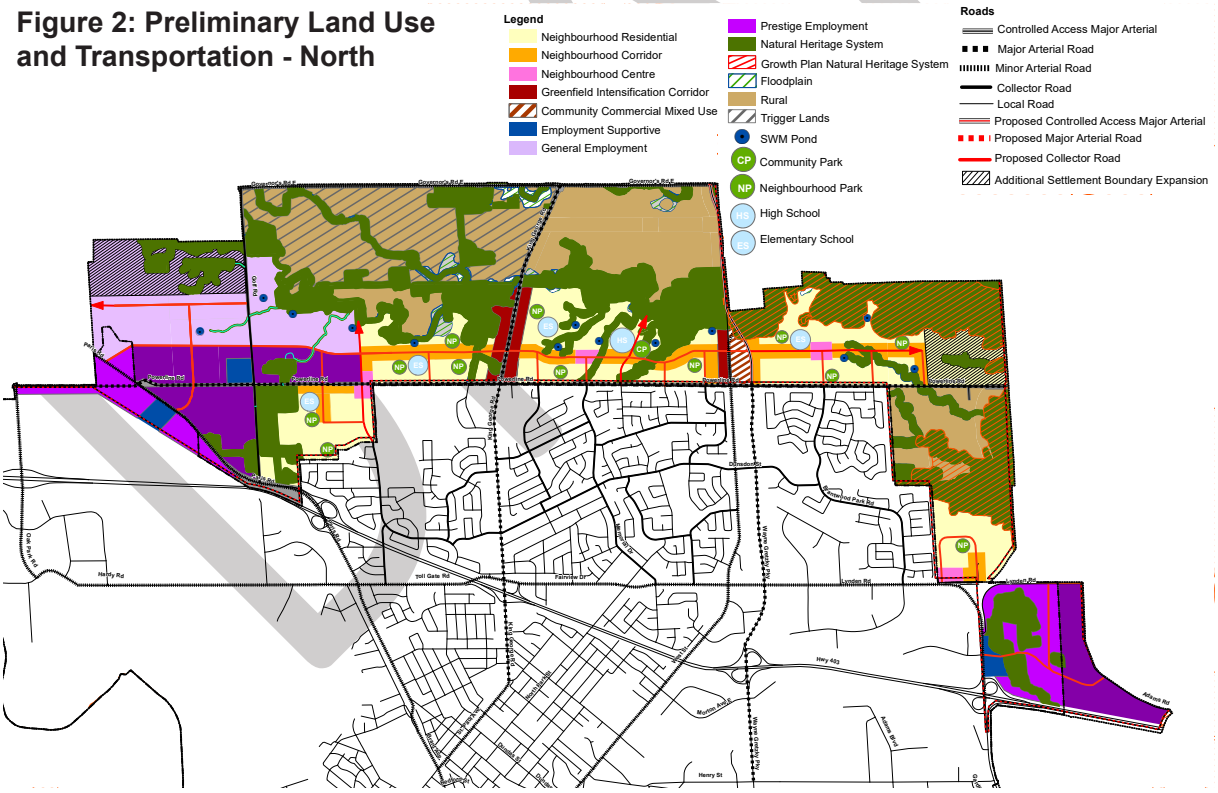
To accommodate some flexibility in the unit mix, it is recommended that the City plan for between 480 and 490 hectares for Community Area lands within the Settlement Area expansion.

7 SETTLEMENT AREA BOUNDARY

The revised Land Needs Assessment is based on the 2020 Methodology and the 2051 population and employment forecasts in Growth Plan, 2020. The employment land need assessment identified a need 383 hectares, which is an increase of 47 hectares from the 336 hectares identified in Part 1 MCR Report. It is logical that these additional lands would be accommodated in Employment Areas 2 and 3 as delineated in the Part 2 MCR Report. Only portions of Employment Areas 2 and 3 were included in the proposed Settlement Area Boundary at the conclusion of the Part 3 MCR Report. Adding an additional 47 hectares to the Settlement Area boundary would leave approximately 14 hectares in the rural area at the rear of the lots facing onto Golf Road.

The Land Needs Assessment Methodology allows for settlement area boundary expansions to be adjusted upwards in a minor way, if necessary to ensure logical boundaries of settlement areas. In our opinion, that circumstance would apply to Employment Areas 2 and 3, and the entirety of Employment Areas 2 and 3 should be included within the Settlement Area Boundary. **Figure 2** shows the recommended location for the additional lands.

Figure 2: Preliminary Land Use and Transportation - North



The MCR Part 3 Report also identified the preferred location for Community Areas. The area referred to as Community Area Block 8 (C8) in that report was only partially included within the

Settlement Area boundary. It is recommended that the additional 20-30 hectares of Community Area lands be allocated to that area as shown on **Figure 2.** This additional land would allow for the entirety of C8 to be included within the Settlement Area Boundary when considering the earlier direction to adjust the land need to ensure logical boundaries of settlement areas.

Expanding the Settlement Area Boundary in Community Area Block C8 is preferred as the MCR Part 2 and 3 Reports determined that Block C8 was a preferred block over other blocks including C3, C6 and C9, which have greater environmental, agricultural and/or servicing constraints than C8. As well, Block C8 was determined to be the best option to minimize conflict with existing agriculture and keep capital costs and life cycle costs for municipal services to a minimum.

Attachment A: Hemson Consulting Ltd. Analysis of headship rates for each age-group to determine the housing need

YEAR:	2016											
Households by Age of Household Head				Occupied Dwelling Units By Structure Type								
	Census Pop	Headship Rate	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
				Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	8,149	1.7%	139	21.4%	30	7.1%	10	7.1%	10	38.2%	53	26.22%	37
20 - 24	7,978	14.0%	1,121	25.8%	289	6.6%	74	10.6%	119	48.6%	545	8.39%	94
25 - 29	7,799	36.2%	2,820	46.4%	1,309	8.4%	237	12.8%	361	25.9%	729	6.48%	183
30 - 34	8,314	49.1%	4,080	65.3%	2,663	6.5%	267	10.1%	411	14.4%	588	3.71%	152
35 - 39	8,213	50.5%	4,145	70.4%	2,916	6.8%	282	8.2%	341	12.0%	496	2.65%	110
40 - 44	8,395	54.3%	4,559	72.5%	3,305	6.5%	297	7.6%	346	10.3%	470	3.09%	141
45 - 49	8,718	55.8%	4,867	72.5%	3,528	6.2%	302	7.0%	341	11.8%	576	2.47%	120
50 - 54	10,320	56.1%	5,794	72.0%	4,170	5.4%	312	5.6%	327	12.9%	745	4.15%	240
55 - 59	9,965	57.7%	5,754	71.5%	4,116	4.6%	262	6.9%	396	14.4%	829	2.63%	152
60 - 64	9,173	56.8%	5,211	69.6%	3,628	4.7%	247	7.1%	371	15.5%	808	3.01%	157
65 - 69	7,851	59.1%	4,643	67.1%	3,115	4.3%	198	7.7%	356	19.2%	890	1.80%	84
70 - 74	5,470	61.0%	3,338	67.8%	2,264	3.6%	119	8.7%	292	18.1%	605	1.72%	57
75 - 79	3,920	62.5%	2,451	63.8%	1,563	2.6%	64	11.7%	287	20.0%	490	1.92%	47
80 - 84	3,030	62.6%	1,898	60.6%	1,150	2.6%	49	8.9%	168	26.0%	494	1.93%	37
84 - 89	2,053	54.4%	1,116	65.6%	732	0.9%	10	11.1%	124	22.5%	251	0.00%	0
90 +	1,294	45.8%	593	68.0%	403	1.7%	10	5.0%	30	21.8%	129	3.52%	21
TOTAL	110,643	47.5%	52,530	67.0%	35,180	5.2%	2,740	8.1%	4,280	16.6%	8,700	3.10%	1,630

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YEAR:	2021											
Households by Age of Household Head				Occupied Dwelling Units By Structure Type								
	Census Pop	Headship Rate	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
				Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	8,155	1.7%	137	21.2%	29	6.9%	10	8.2%	11	36.8%	50	26.93%	37
20 - 24	8,209	13.8%	1,133	25.5%	289	6.5%	73	12.2%	138	47.2%	535	8.62%	98
25 - 29	8,505	35.5%	3,022	46.0%	1,389	8.2%	249	14.7%	445	24.4%	738	6.66%	201
30 - 34	8,776	48.2%	4,232	64.6%	2,735	6.4%	271	11.6%	490	13.6%	576	3.81%	161
35 - 39	9,084	49.6%	4,505	69.7%	3,139	6.6%	299	9.5%	427	11.5%	518	2.72%	123
40 - 44	8,838	53.4%	4,716	71.8%	3,385	6.4%	300	8.7%	412	9.9%	469	3.18%	150
45 - 49	8,868	54.9%	4,865	71.8%	3,492	6.1%	295	8.1%	392	11.6%	562	2.54%	123
50 - 54	9,031	55.2%	4,982	71.3%	3,551	5.3%	262	6.5%	323	12.7%	634	4.26%	212
55 - 59	10,476	56.7%	5,944	70.8%	4,210	4.5%	265	7.9%	470	14.1%	839	2.71%	161
60 - 64	9,970	55.8%	5,566	68.9%	3,837	4.6%	258	8.2%	456	15.1%	843	3.09%	172
65 - 69	8,954	58.1%	5,203	66.4%	3,457	4.2%	217	8.8%	459	18.7%	974	1.85%	96
70 - 74	7,388	60.0%	4,430	67.2%	2,976	3.5%	154	10.1%	446	17.5%	776	1.77%	78
75 - 79	4,892	61.4%	3,005	63.1%	1,897	2.6%	77	13.5%	405	18.9%	567	1.97%	59
80 - 84	3,196	61.6%	1,967	60.0%	1,180	2.5%	50	10.2%	200	25.3%	498	1.98%	39
84 - 89	2,025	53.4%	1,082	64.9%	702	0.9%	9	12.7%	138	21.5%	232	0.00%	0
90 +	1,435	45.0%	646	67.3%	435	1.6%	11	5.8%	37	21.7%	140	3.62%	23
TOTAL	117,802	47.1%	55,436	66.2%	36,703	5.0%	2,797	9.5%	5,249	16.1%	8,953	3.13%	1,735

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YEAR:	2026											
Households by Age of Household Head				Occupied Dwelling Units By Structure Type								
	Census Pop	Headship Rate	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
				Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	8,949	1.7%	152	20.9%	32	6.6%	10	9.5%	14	35.9%	55	27.15%	41
20 - 24	8,398	13.9%	1,171	25.1%	294	6.2%	73	14.1%	165	45.9%	537	8.69%	102
25 - 29	8,836	35.9%	3,171	45.3%	1,436	7.9%	250	17.1%	542	23.0%	730	6.72%	213
30 - 34	9,549	48.7%	4,652	63.6%	2,961	6.1%	286	13.4%	624	12.9%	602	3.85%	179
35 - 39	9,655	50.1%	4,837	68.6%	3,319	6.4%	309	11.0%	531	11.3%	545	2.74%	133
40 - 44	9,727	53.9%	5,243	70.7%	3,707	6.1%	320	10.1%	531	9.9%	516	3.20%	168
45 - 49	9,425	55.4%	5,223	70.7%	3,693	5.8%	304	9.4%	489	11.6%	604	2.56%	134
50 - 54	9,324	55.7%	5,196	70.2%	3,648	5.0%	262	7.5%	391	12.9%	672	4.30%	223
55 - 59	9,455	57.3%	5,419	69.8%	3,780	4.3%	231	9.2%	497	14.1%	762	2.73%	148
60 - 64	10,577	56.4%	5,964	67.9%	4,050	4.5%	265	9.5%	566	15.0%	896	3.11%	186
65 - 69	9,857	58.7%	5,786	65.4%	3,787	4.0%	231	10.2%	592	18.5%	1,068	1.86%	108
70 - 74	8,522	60.6%	5,162	66.2%	3,415	3.3%	172	11.7%	602	17.0%	880	1.78%	92
75 - 79	6,667	62.1%	4,138	62.2%	2,573	2.5%	102	15.6%	646	17.8%	735	1.99%	82
80 - 84	4,102	62.2%	2,551	59.1%	1,507	2.4%	62	11.8%	302	24.7%	629	2.00%	51
84 - 89	2,282	54.0%	1,231	63.9%	787	0.8%	10	14.8%	182	20.4%	252	0.00%	0
90 +	1,615	45.5%	735	66.3%	487	1.6%	11	6.7%	49	21.8%	160	3.65%	27
TOTAL	126,942	47.8%	60,629	65.1%	39,476	4.8%	2,899	11.1%	6,725	15.9%	9,644	3.11%	1,886

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[1] Hemson Consulting Ltd. prepared these projections for the Census District as a whole which includes Brantford and Brant County

YEAR:	2031			Occupied Dwelling Units By Structure Type									
Households by Age of Household Head													
	Census Pop	Headship Rate	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
				Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	9,473	1.7%	163	20.6%	33	6.4%	10	10.8%	18	34.9%	57	27.37%	44
20 - 24	9,252	14.1%	1,303	24.7%	322	6.0%	78	16.1%	210	44.4%	579	8.76%	114
25 - 29	9,388	36.3%	3,403	44.6%	1,518	7.6%	258	19.5%	663	21.6%	734	6.77%	230
30 - 34	10,291	49.2%	5,063	62.7%	3,174	5.9%	298	15.3%	775	12.2%	619	3.88%	196
35 - 39	10,639	50.6%	5,383	67.6%	3,639	6.1%	330	12.5%	674	11.0%	592	2.76%	149
40 - 44	10,478	54.4%	5,704	69.6%	3,973	5.9%	334	11.6%	659	9.7%	554	3.23%	184
45 - 49	10,428	56.0%	5,837	69.6%	4,065	5.6%	326	10.7%	623	11.5%	673	2.58%	150
50 - 54	10,048	56.3%	5,656	69.2%	3,911	4.8%	274	8.6%	485	13.1%	741	4.33%	245
55 - 59	9,933	57.9%	5,750	68.7%	3,952	4.1%	236	10.5%	601	14.0%	803	2.75%	158
60 - 64	9,903	57.0%	5,641	66.9%	3,773	4.3%	241	10.8%	611	14.9%	839	3.14%	177
65 - 69	10,619	59.3%	6,296	64.5%	4,059	3.8%	242	11.7%	735	18.2%	1,143	1.88%	118
70 - 74	9,506	61.2%	5,816	65.2%	3,790	3.2%	186	13.3%	773	16.5%	961	1.80%	105
75 - 79	7,803	62.7%	4,891	61.3%	2,996	2.4%	116	17.8%	871	16.6%	811	2.00%	98
80 - 84	5,632	62.8%	3,537	58.2%	2,058	2.3%	83	13.5%	477	24.0%	848	2.01%	71
84 - 89	2,988	54.5%	1,629	63.0%	1,026	0.8%	13	16.9%	274	19.4%	315	0.00%	0
90 +	1,910	45.9%	877	65.3%	573	1.5%	13	7.6%	67	21.9%	192	3.68%	32
TOTAL	138,291	48.4%	66,951	64.0%	42,863	4.5%	3,037	12.7%	8,515	15.6%	10,463	3.10%	2,073

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YEAR:	2036			Occupied Dwelling Units By Structure Type									
Households by Age of Household Head													
	Census Pop	Headship Rate	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
				Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	10,082	1.7%	175	20.3%	35	6.1%	11	11.9%	21	34.1%	60	27.59%	48
20 - 24	9,740	14.2%	1,386	24.4%	338	5.7%	79	17.7%	246	43.3%	600	8.83%	122
25 - 29	10,117	36.6%	3,705	44.0%	1,631	7.3%	270	21.4%	794	20.5%	758	6.82%	253
30 - 34	10,840	49.7%	5,387	61.9%	3,334	5.7%	305	16.8%	907	11.7%	632	3.91%	211
35 - 39	11,355	51.1%	5,804	66.7%	3,872	5.9%	341	13.8%	800	10.8%	629	2.79%	162
40 - 44	11,411	55.0%	6,275	68.7%	4,314	5.6%	353	12.7%	798	9.7%	607	3.26%	204
45 - 49	11,157	56.5%	6,308	68.7%	4,336	5.4%	338	11.7%	740	11.6%	730	2.60%	164
50 - 54	10,997	56.9%	6,253	68.3%	4,268	4.6%	291	9.4%	589	13.3%	832	4.36%	273
55 - 59	10,657	58.5%	6,232	67.8%	4,227	3.9%	245	11.5%	717	14.0%	870	2.77%	173
60 - 64	10,419	57.5%	5,994	66.0%	3,957	4.1%	246	11.9%	714	14.8%	887	3.16%	190
65 - 69	10,120	59.9%	6,061	63.6%	3,856	3.7%	223	12.8%	778	18.0%	1,089	1.89%	115
70 - 74	10,266	61.8%	6,344	64.3%	4,081	3.1%	195	14.6%	928	16.2%	1,025	1.81%	115
75 - 79	8,739	63.3%	5,533	60.5%	3,345	2.3%	125	19.6%	1,084	15.7%	867	2.02%	112
80 - 84	6,652	63.4%	4,219	57.4%	2,423	2.3%	95	14.8%	625	23.5%	990	2.03%	86
84 - 89	4,120	55.1%	2,268	62.2%	1,410	0.8%	17	18.5%	420	18.5%	420	0.00%	0
90 +	2,488	46.4%	1,155	64.5%	745	1.4%	17	8.4%	97	22.0%	254	3.71%	43
TOTAL	149,159	49.0%	73,100	63.2%	46,172	4.3%	3,151	14.0%	10,257	15.4%	11,251	3.10%	2,269

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YEAR:	2041			Occupied Dwelling Units By Structure Type									
Households by Age of Household Head													
	Census Pop	Headship Rate	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
				Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	10,716	1.8%	188	20.0%	38	5.9%	11	12.8%	24	33.5%	63	27.81%	52
20 - 24	10,327	14.4%	1,484	24.1%	358	5.5%	82	19.1%	284	42.4%	629	8.90%	132
25 - 29	10,623	37.0%	3,929	43.4%	1,707	7.0%	274	23.1%	909	19.6%	768	6.88%	270
30 - 34	11,542	50.2%	5,794	61.1%	3,539	5.4%	315	18.2%	1,054	11.4%	659	3.94%	228
35 - 39	11,936	51.6%	6,163	65.8%	4,058	5.6%	348	14.9%	917	10.8%	667	2.81%	173
40 - 44	12,138	55.5%	6,743	67.8%	4,575	5.4%	364	13.7%	925	9.7%	657	3.28%	221
45 - 49	12,077	57.1%	6,897	67.8%	4,680	5.1%	355	12.7%	874	11.7%	808	2.62%	181
50 - 54	11,728	57.4%	6,736	67.4%	4,538	4.5%	301	10.2%	686	13.6%	915	4.40%	296
55 - 59	11,584	59.1%	6,842	66.9%	4,580	3.8%	259	12.4%	850	14.1%	962	2.79%	191
60 - 64	11,149	58.1%	6,479	65.2%	4,222	3.9%	255	12.9%	833	14.8%	962	3.19%	207
65 - 69	10,669	60.5%	6,455	62.8%	4,053	3.5%	228	13.9%	895	17.9%	1,155	1.91%	123
70 - 74	9,938	62.4%	6,204	63.5%	3,939	3.0%	183	15.8%	980	15.9%	988	1.83%	113
75 - 79	9,497	64.0%	6,074	59.7%	3,624	2.2%	132	21.1%	1,285	15.0%	909	2.03%	124
80 - 84	7,530	64.1%	4,825	56.7%	2,735	2.2%	104	16.0%	772	23.1%	1,115	2.04%	99
84 - 89	4,959	55.6%	2,758	61.4%	1,692	0.7%	20	20.0%	552	17.9%	493	0.00%	0
90 +	3,453	46.9%	1,619	63.6%	1,030	1.4%	22	9.0%	146	22.2%	359	3.74%	61
TOTAL	159,868	49.5%	79,189	62.3%	49,367	4.1%	3,253	15.1%	11,987	15.3%	12,111	3.12%	2,471

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[1] Hemson Consulting Ltd. prepared these projections for the Census District as a whole which includes Brantford and Brant County

YEAR:	2046												
Households by Age of Household Head				Occupied Dwelling Units By Structure Type									
	Census Pop	Headship Rate	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
				Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	11,356	1.8%	199	19.8%	39	5.6%	11	13.6%	27	32.9%	65	28.03%	56
20 - 24	10,947	14.4%	1,573	23.9%	375	5.3%	83	20.3%	319	41.6%	655	8.97%	141
25 - 29	11,230	37.0%	4,153	43.0%	1,786	6.7%	279	24.5%	1,019	18.8%	782	6.93%	288
30 - 34	12,118	50.2%	6,083	60.5%	3,678	5.2%	317	19.3%	1,172	11.1%	674	3.97%	242
35 - 39	12,665	51.6%	6,539	65.2%	4,263	5.4%	354	15.8%	1,031	10.8%	706	2.83%	185
40 - 44	12,759	55.5%	7,088	67.2%	4,761	5.2%	368	14.5%	1,031	9.8%	694	3.31%	234
45 - 49	12,825	57.1%	7,324	67.2%	4,920	4.9%	362	13.4%	984	11.8%	866	2.64%	193
50 - 54	12,642	57.4%	7,260	66.7%	4,842	4.3%	311	10.8%	784	13.8%	1,002	4.43%	322
55 - 59	12,336	59.1%	7,287	66.3%	4,829	3.6%	264	13.2%	960	14.1%	1,028	2.82%	205
60 - 64	12,077	58.1%	7,018	64.5%	4,527	3.8%	265	13.6%	957	14.9%	1,043	3.22%	226
65 - 69	11,421	60.5%	6,909	62.2%	4,295	3.4%	234	14.7%	1,015	17.8%	1,231	1.92%	133
70 - 74	10,527	62.4%	6,571	62.9%	4,130	2.8%	186	16.7%	1,100	15.7%	1,033	1.84%	121
75 - 79	9,333	64.0%	5,969	59.1%	3,526	2.1%	125	22.4%	1,338	14.4%	858	2.05%	122
80 - 84	8,277	64.1%	5,303	56.1%	2,976	2.1%	110	17.0%	900	22.8%	1,208	2.06%	109
84 - 89	5,707	55.6%	3,174	60.7%	1,928	0.7%	22	21.2%	674	17.3%	550	0.00%	0
90 +	4,511	46.9%	2,114	63.0%	1,332	1.3%	28	9.6%	203	22.3%	472	3.77%	80
TOTAL	170,730	49.5%	84,567	61.7%	52,209	3.9%	3,320	16.0%	13,514	15.2%	12,867	3.14%	2,657

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YEAR:	2051												
Households by Age of Household Head				Occupied Dwelling Units By Structure Type									
	Census Pop	Headship Rate	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
				Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	12,049	1.8%	211	19.7%	41	5.4%	11	14.2%	30	32.4%	68	28.25%	60
20 - 24	11,566	14.4%	1,662	23.6%	393	5.1%	84	21.3%	353	41.0%	681	9.04%	150
25 - 29	11,853	37.0%	4,384	42.6%	1,869	6.4%	282	25.7%	1,127	18.2%	800	6.99%	306
30 - 34	12,762	50.2%	6,407	59.9%	3,839	5.0%	321	20.2%	1,294	10.9%	697	4.00%	256
35 - 39	13,286	51.6%	6,859	64.6%	4,431	5.2%	357	16.5%	1,134	10.8%	742	2.85%	196
40 - 44	13,507	55.5%	7,503	66.6%	4,994	5.0%	373	15.2%	1,144	9.9%	741	3.33%	250
45 - 49	13,476	57.1%	7,696	66.6%	5,123	4.7%	365	14.1%	1,083	12.0%	921	2.66%	205
50 - 54	13,400	57.4%	7,696	66.1%	5,086	4.1%	316	11.3%	870	14.0%	1,079	4.47%	344
55 - 59	13,246	59.1%	7,824	65.7%	5,139	3.5%	273	13.8%	1,080	14.2%	1,111	2.84%	222
60 - 64	12,844	58.1%	7,464	63.9%	4,772	3.6%	271	14.3%	1,067	14.9%	1,113	3.24%	242
65 - 69	12,340	60.5%	7,465	61.6%	4,599	3.3%	243	15.4%	1,149	17.8%	1,329	1.94%	145
70 - 74	11,278	62.4%	7,040	62.3%	4,385	2.7%	191	17.6%	1,236	15.6%	1,097	1.86%	131
75 - 79	9,934	64.0%	6,354	58.5%	3,720	2.0%	127	23.5%	1,493	13.9%	883	2.07%	131
80 - 84	8,243	64.1%	5,282	55.6%	2,937	2.0%	105	17.8%	939	22.5%	1,190	2.08%	110
84 - 89	6,339	55.6%	3,525	60.2%	2,122	0.7%	24	22.2%	784	16.9%	595	0.00%	0
90 +	5,558	46.9%	2,605	62.4%	1,626	1.3%	33	10.0%	262	22.4%	585	3.80%	99
TOTAL	181,681	49.5%	89,978	61.2%	55,077	3.8%	3,378	16.7%	15,046	15.1%	13,631	3.16%	2,847

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[1] Hemson Consulting Ltd. prepared these projections for the Census District as a whole which includes Brantford and Brant County

Attachment B: Hemson Consulting Ltd. City of Brantford Municipal Comprehensive Review – Market Housing Forecast Based on Amendment 1 to the Growth Plan (new 2020 Schedule 3)

HEMSON
Hemson Consulting Ltd
1000 – 30 St. Patrick Street
Toronto, Ontario Canada M5T 3A3

MEMORANDUM

To: Paul Lowes, SGL Planning

From: Russell Mathew and Trajce Nikolov

Date: Oct. 19, 2020

Re: City of Brantford Municipal Comprehensive Review – Market Housing Forecast Based on Amendment 1 to the Growth Plan (new 2020 Schedule 3)

Hemson Consulting was retained in 2018 by the City of Brantford through SGL Planning & Design Inc. (SGL) to assist in some aspects of the forecast and land needs assessment work of the City's Municipal Comprehensive Review (MCR) and official plan update. Hemson subsequently provided a peer review of the overall Employment Area and Community Area land needs analysis in Part 1 of the *Envisioning Brantford – Municipal Comprehensive Review* report in 2018. The review was in the context of the then-new *Land Needs Assessment Methodology for the Greater Golden Horseshoe* (LNA), released in the fall of 2018 when the City's land needs work was largely complete.

In 2019, the *Growth Plan*, 2017 was replaced by the *Growth Plan*, 2019, requiring the City to revise its MCR to meet the new policy regime. In August of 2020, the policy environment further shifted with the adoption of Amendment 1 to the *Growth Plan*, which extended the forecast period of the *Growth Plan* from 2041 to 2051. At the same time, the Ministry of Municipal Affairs released an updated LNA, an update necessitated by the need for the LNA to reflect the new policy structure in the *Growth Plan*, 2019.

The new forecast growth at 2051 of 165,000 population and 80,000 employment is nearly identical to the previous quite-aggressive forecast to 2041 of 163,000 population and 79,000 employment. Conveniently, the similar forecasts result would necessitate little change to the overall growth and land need in the MCR, despite the addition of ten years to the planning horizon. The previous version of the LNA and the new replacement mostly differ by how the different components supply and demand are characterized in terms of total housing and housing by type. The previous LNA reporting requirements kept housing type more in the background, though it was part of the analysis. As well, the new LNA provides a wider range of considerations in the land supply work, such as market contingency factors.

A key new item required is a consideration of the market demand forecast of housing by type as a step toward policy-based housing demand forecast by type, in part, to determine how much, if

any, the policy-based demand varies from the market. Following from the previous work, and to account for these recent changes, SGL has retained Hemson for providing updated housing data inputs into the most recent MCR efforts for the City. The housing data includes a forecast of housing by type to 2051, for the City of Brantford and the Brant Census Division, as well as headship rates and occupancy patterns. For this purpose the Brant Census Division is considered to be the total of Brant County and Brantford, since the Growth Plan does not apply Six Nations or the Mississaugas of the Credit. The data is in accordance with the updated LNA methodology as outlined above, as well as the projections provided in Appendix B of the *Greater Golden Horseshoe: Growth Forecast to 2051,* the technical report completed by Hemson that informed Amendment 1 to the *Growth Plan.*

UPDATED LAND NEEDS ASSESSMENT METHODOLOGY

On August 28th of 2020, an updated LNA methodology was brought into effect. The new methodology aligns with the policy structure of the *Growth Plan*, 2019. The following considers the updated forecasts in Schedule 3, and specific policies that allow the forecast to be used as minimums in municipal planning efforts. One of the key objectives of the Plan is to establish a market-based supply of housing over the forecast period.

According to the updated LNA, determining community land area needs consists of six key steps. The housing data provided by Hemson is governed by the first three of those six steps:

i. Population Forecasts

The LNA requires that population projections used for the housing need calculation be based on the updated Schedule 3 forecast from *A Place to Grow.* To satisfy this requirement for the City of Brantford, our analysis used population projections, by age group, in accordance with Appendix B of the *Greater Golden Horseshoe: Growth Forecast to 2051*, and by extension, the updated Schedule 3 forecasts.

ii. Housing Need

The LNA then requires that the population forecast by age group be converted into a forecast of number households. To do this, the LNA prescribes the use of household formation rates for each age-group to determine housing need, which is then broken down by type of dwelling and grouped into the following categories: Single/Semi detached, Row houses, Apartments, and Other dwellings. Finally, the housing growth by-type must be adjusted to account for any replacement of units, changes in level of vacancies, market contingency factors, and any other mitigating considerations.

The following steps satisfies these requirements of the LNA:

1. Calculating Household Formation Rates and Household Growth for the City of Brantford

   The City of Brantford population by age, 2016 age-specific households by age and the resulting household formation rate are in Table 1. While formation rates have declined a small amount currently (based on the estimated population and units for Census Day 2021), the 2051 assumption is that the household formation rate has returned to the starting 2016 rates by age.

Table1: Household Formation Rates by Age of Primary Household Maintainer, City of Brantford, 2016 and Forecast 2051

Age Groups	2016				2051	
	Census Population	Occupied Households	Headship Rates		Headship Rates	Occupied Households
15 - 19	5,908	130	2.20%		2.20%	204
20 - 24	6,008	978	16.30%		16.30%	1,496
25 - 29	6,196	2,315	37.40%		37.30%	3,555
30 - 34	6,396	3,206	50.10%		50.10%	5,112
35 - 39	6,183	3,260	52.70%		52.70%	5,352
40 - 44	6,143	3,376	55.00%		54.90%	5,562
45 - 49	6,181	3,500	56.60%		56.60%	5,566
50 - 54	7,274	4,186	57.50%		57.50%	5,619
55 - 59	7,069	4,139	58.50%		58.50%	5,723
60 - 64	6,492	3,774	58.10%		58.10%	5,591
65 - 69	5,539	3,407	61.50%		61.50%	5,674
70 - 74	3,812	2,403	63.00%		63.00%	5,258
75 - 79	2,790	1,768	63.40%		63.30%	4,535
80 - 84	2,189	1,448	66.20%		66.10%	3,784
84 - 89	1,537	879	57.20%		57.20%	2,475
90 +	927	445	48.00%		47.90%	1,794

2. Age-Specific Occupancy Patterns Used to Calculate a “Market” Housing Forecast

   What unit type mix represents the market for new housing? The new housing built in Brantford over the past 30 years is shown in Table 2, based on CMHC housing starts data, is a good representation of the market over that time period. Over the past two decades the rowhouse market has growing substantially as a share of the new housing market.

Presumably, this is the result of housing-price-induced increased in-migration from the GTAH. Plans in the existing DGA (based on approvals and applications) call for about 40% rowhouses in the housing mix.

Table 2: City of Brantford Housing Starts 1990 to August 2020 and Housing Mix

	Singe/Semi Detached	Row Houses	Apartments	Total
1990-1995	1,496	570	517	2,583
1996-2000	903	159	150	1,212
1990-2000	2,399	729	667	3,795
2001-2005	1,745	301	250	2,296
2006-2010	1,260	411	34	1,705
2001-2010	3,005	712	284	4,001
2011-2015	844	475	476	1,795
2016-2020	744	592	254	1,590
2011-2020	1,588	1,067	730	3,385

	Singe/Semi Detached	Row Houses	Apartments	Total
1990-1995	58%	22%	20%	100%
1996-2000	75%	13%	12%	100%
1990-2000	63%	19%	18%	100%
2001-2005	76%	13%	11%	100%
2006-2010	74%	24%	2%	100%
2001-2010	75%	18%	7%	100%
2011-2015	47%	26%	27%	100%
2016-2020	47%	37%	16%	100%
2011-2020	47%	32%	22%	100%

In accordance with the LNA age-specific occupancy patterns are applied to yield a housing forecast by type. The occupancy patterns are adjusted to yield a result consistent with current market expectations and taking account of the aging population. Rowhouse occupancy is adjusted significantly to yield the results shown in Tables 3 and 4 below (in the absence of adjusting the occupancy patterns the forecast would be less than 10% rowhouse, a share not seen in more than 30 years). Due to an aging population the

occupancy patterns are adjusted to about 15% of the market, up from the recent market shares (though still well below the 20% apartments that would result from applying constant 2016 rates).

Table 3: Market Forecast Summary, City of Brantford

	2006	Growth 2006-16	2016	Growth 2016-51	2051
Single/Semi Detached	23,770	2,260	26,030	14,370	40,400
Row Units	2,960	760	3,720	8,400	12,120
Apartment and Other	8,890	590	9,480	5,410	14,890
Total	35,610	3,610	39,220	28,190	67,410

Note: Totals may not add due to rounding

	2006	Growth 2006-16	2016	Growth 2016-51	2051
Single/Semi Detached	66.8%	62.6%	66.4%	51.0%	59.9%
Row House Units	8.3%	21.1%	9.5%	29.8%	18.0%
Apartment and Other	25.0%	16.3%	24.2%	19.2%	22.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4: Dwelling Units by Type in 2016, Market Forecast, City of Brantford

City of Brantford Dwelling Units by Structure Type, 2016										
Age Groups	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
		Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	130	19.2%	25	7.7%	10	7.7%	10	42.0%	55	23.4%	31
20 - 24	978	21.0%	205	6.1%	60	11.3%	110	52.8%	516	8.84%	86
25 - 29	2,315	42.1%	975	7.1%	165	14.7%	341	28.7%	665	7.25%	168
30 - 34	3,206	61.5%	1,970	6.1%	196	11.6%	371	16.6%	531	4.28%	137
35 - 39	3,260	65.6%	2,140	6.6%	216	9.7%	316	14.6%	477	3.43%	112
40 - 44	3,376	68.3%	2,305	6.4%	216	9.5%	321	12.4%	417	3.47%	117
45 - 49	3,500	67.9%	2,375	6.2%	216	8.5%	296	14.5%	507	3.05%	107
50 - 54	4,186	65.1%	2,726	5.0%	211	7.1%	296	17.3%	725	5.47%	229
55 - 59	4,139	64.8%	2,681	5.1%	211	8.6%	356	18.7%	775	2.83%	117
60 - 64	3,774	64.3%	2,426	4.8%	180	8.1%	306	19.3%	730	3.50%	132
65 - 69	3,407	61.5%	2,095	4.0%	135	8.4%	286	23.9%	814	2.24%	76
70 - 74	2,403	63.3%	1,520	2.7%	65	9.2%	221	22.9%	551	1.91%	46
75 - 79	1,768	57.1%	1,010	2.6%	45	12.2%	216	26.1%	462	2.01%	36
80 - 84	1,448	56.3%	815	1.0%	15	9.7%	140	30.5%	442	2.46%	36
84 - 89	879	59.7%	525	0.0%	0	13.1%	115	26.0%	228	1.16%	10
90 +	445	65.2%	290	0.0%	0	3.4%	15	25.7%	114	5.72%	25

Table 5: Dwelling Units by Type in 2051, Market Forecast, City of Brantford

City of Brantford Dwelling Units by Structure Type, 2051											
Age Groups	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
		Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	204	17.7%	36	6.1%	12	14.5%	30	36.8%	75	24.9%	51
20 - 24	1,496	19.3%	289	4.9%	73	21.3%	318	45.2%	676	9.40%	140
25 - 29	3,555	38.8%	1,379	5.6%	200	27.8%	988	20.1%	714	7.70%	274
30 - 34	5,112	56.6%	2,894	4.8%	246	21.8%	1,116	12.2%	624	4.50%	232
35 - 39	5,352	60.5%	3,235	5.2%	279	18.3%	978	12.4%	664	3.60%	195
40 - 44	5,562	62.9%	3,498	5.0%	280	17.9%	997	10.5%	582	3.70%	205
45 - 49	5,566	62.5%	3,478	4.9%	270	15.9%	887	13.5%	749	3.20%	180
50 - 54	5,619	60.0%	3,369	4.0%	223	13.3%	749	16.9%	952	5.80%	326
55 - 59	5,723	59.6%	3,413	4.0%	230	16.2%	929	17.1%	980	3.00%	172
60 - 64	5,591	59.2%	3,309	3.8%	211	15.3%	855	18.0%	1,009	3.70%	208
65 - 69	5,674	56.6%	3,213	3.1%	178	15.8%	898	22.0%	1,250	2.40%	135
70 - 74	5,258	58.3%	3,063	2.1%	113	17.3%	911	20.3%	1,065	2.00%	106
75 - 79	4,535	52.6%	2,386	2.0%	91	23.0%	1,043	20.2%	918	2.10%	97
80 - 84	3,784	51.8%	1,961	0.8%	31	18.3%	692	26.4%	1,001	2.60%	99
84 - 89	2,475	55.0%	1,362	0.0%	0	24.7%	613	19.0%	471	1.20%	30
90 +	1,794	60.1%	1,077	0.0%	0	6.4%	114	27.5%	493	6.10%	109

3. Market Forecast Needs to Be Further Adjusted to Yield the Housing Mix Necessary to Meet Growth Plan Policies

In Brantford, like nearly everywhere else in the GGH, the general market expectation for housing mix is for a greater number of singles and fewer apartments than is required to meet policy goals, including:

- A UGC density that would need to be supported by 3,900 apartments (over 90% of the market forecast for apartments).
- Alternative Intensification targets approved by the Minister of Municipal Affairs amounting to about 45% of all housing unit growth. The built up area can accommodate very few single and semi-detached units, so that vast majority of BUA units are rows and apartments.

The housing mix must shift away from the lower density housing in the market forecast to more medium and higher density housing to meet *Growth Plan* policies. Based on the extensive work of the City of Brantford on the housing growth that meet the various policies for the UGC, BUA and DGA, a 2016 to 2051 forecast housing mix would be:

Single and Semi-Detached:	≈ 35%
Rows	≈ 44%
Apartments (including accessory unit)	≈ 22%

Table 6: Policy-based Forecast Summary, City of Brantford

	2006	Growth 2006-16	2016	Growth 2016-51	2051
Single/Semi Detached	23,770	2,260	26,030	9,840	35,870
Row House Units	2,960	760	3,720	12,350	16,070
Apartment and Other	8,890	590	9,480	5,900	15,380
Total	35,610	3,610	39,220	28,190	67,310

Note: Totals may not add due to rounding

	2006	Growth 2006-16	2016	Growth 2016-51	2051
Single/Semi Detached	66.8%	62.6%	66.4%	34.9%	53.3%
Row House Units	8.3%	21.1%	9.5%	43.8%	23.9%
Apartment and Other	25.0%	16.3%	24.2%	20.9%	22.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Table 7: Dwelling Units by Type in 2016, Policy-based Forecast, City of Brantford

City of Brantford Dwelling Units by Structure Type, 2016										
Age Groups	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
		Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	130	19.2%	25	7.7%	10	7.7%	10	42.0%	55	23.4%	31
20 - 24	978	21.0%	205	6.1%	60	11.3%	110	52.8%	516	8.84%	86
25 - 29	2,315	42.1%	975	7.1%	165	14.7%	341	28.7%	665	7.25%	168
30 - 34	3,206	61.5%	1,970	6.1%	196	11.6%	371	16.6%	531	4.28%	137
35 - 39	3,260	65.6%	2,140	6.6%	216	9.7%	316	14.6%	477	3.43%	112
40 - 44	3,376	68.3%	2,305	6.4%	216	9.5%	321	12.4%	417	3.47%	117
45 - 49	3,500	67.9%	2,375	6.2%	216	8.5%	296	14.5%	507	3.05%	107
50 - 54	4,186	65.1%	2,726	5.0%	211	7.1%	296	17.3%	725	5.47%	229
55 - 59	4,139	64.8%	2,681	5.1%	211	8.6%	356	18.7%	775	2.83%	117
60 - 64	3,774	64.3%	2,426	4.8%	180	8.1%	306	19.3%	730	3.50%	132
65 - 69	3,407	61.5%	2,095	4.0%	135	8.4%	286	23.9%	814	2.24%	76
70 - 74	2,403	63.3%	1,520	2.7%	65	9.2%	221	22.9%	551	1.91%	46
75 - 79	1,768	57.1%	1,010	2.6%	45	12.2%	216	26.1%	462	2.01%	36
80 - 84	1,448	56.3%	815	1.0%	15	9.7%	140	30.5%	442	2.46%	36
84 - 89	879	59.7%	525	0.0%	0	13.1%	115	26.0%	228	1.16%	10
90 +	445	65.2%	290	0.0%	0	3.4%	15	25.7%	114	5.72%	25

Table 8: Dwelling Units by Type in 2051, Policy-based Forecast, City of Brantford

City of Brantford Dwelling Units by Structure Type, 2051											
Age Groups	Occupied Households	Single Detached		Semi-Detached		Row House		Apartments		Duplex	
		Rate	Units	Rate	Units	Rate	Units	Rate	Units	Rate	Units
15 - 19	204	15.6%	32	6.1%	12	19.3%	39	34.2%	70	24.9%	51
20 - 24	1,496	17.0%	255	4.9%	73	28.2%	422	40.5%	606	9.38%	140
25 - 29	3,555	34.3%	1,218	5.6%	200	36.9%	1,310	15.5%	552	7.70%	274
30 - 34	5,112	50.0%	2,556	4.8%	246	29.0%	1,481	11.7%	597	4.55%	232
35 - 39	5,352	53.4%	2,857	5.2%	279	24.2%	1,298	13.5%	723	3.64%	195
40 - 44	5,562	55.5%	3,089	5.0%	280	23.8%	1,323	12.0%	665	3.68%	205
45 - 49	5,566	55.2%	3,072	4.9%	270	21.2%	1,177	15.6%	866	3.24%	180
50 - 54	5,619	53.0%	2,976	4.0%	223	17.7%	994	19.6%	1,101	5.80%	326
55 - 59	5,723	52.7%	3,014	4.0%	230	21.5%	1,232	18.8%	1,075	3.00%	172
60 - 64	5,591	52.3%	2,922	3.8%	211	20.3%	1,134	20.0%	1,116	3.72%	208
65 - 69	5,674	50.0%	2,838	3.1%	178	21.0%	1,191	23.5%	1,332	2.38%	135
70 - 74	5,258	51.5%	2,705	2.1%	113	23.0%	1,208	21.4%	1,126	2.02%	106
75 - 79	4,535	46.5%	2,107	2.0%	91	30.5%	1,384	18.9%	856	2.14%	97
80 - 84	3,784	45.8%	1,732	0.8%	31	24.3%	918	26.5%	1,004	2.61%	99
84 - 89	2,475	48.6%	1,203	0.0%	0	32.8%	813	17.4%	430	1.23%	30
90 +	1,794	53.0%	951	0.0%	0	8.5%	152	32.4%	582	6.07%	109