



City of Hamilton Revised Urban Land Needs Assessment (L.N.A.), 2031

Final Report

September 15, 2022

Watson & Associates Economists Ltd.
905-272-3600
info@watsonecon.ca



Table of Contents

	Page
Executive Summary	i
1. Introduction.....	1
1.1 Terms of Reference	1
1.2 Applicable Provincial and Local Planning Policy Framework	1
1.2.1 Provincial Policy Framework	1
1.2.2 Local Planning Policy Framework	2
1.3 Technical Approach to Land Needs Assessment	4
2. City of Hamilton Population and Housing Forecast, 2021 to 2031	4
3. Housing Unit Supply Potential in the Community Area D.G.A.	9
4. D.G.A. Community Area Land Needs.....	10
5. Conclusions	13
Appendix A City of Hamilton Residential Growth Forecast and Urban Community Area Land Needs.....	A-1



Executive Summary

Watson & Associates Economists Ltd. (Watson) was retained in May of 2022 by the City of Hamilton to prepare an updated urban land needs analysis (L.N.A.) for the City to the year 2031. The purpose of this analysis is to provide an updated assessment of the City's Growth-Related Integrated Development Strategy (GRIDS), which was initiated in 2003 and approved by City of Hamilton Council in 2006. This update has been prepared by Watson based on a review of the latest relevant data provided by the City of Hamilton as well available data provided through the release of the Statistics Canada 2021 Census. This L.N.A. update has been prepared in response to on-going appeals to the Urban Hamilton Official Plan (U.H.O.P.) and Rural Hamilton Official Plan (R.H.O.P.) with respect to special policy area (S.P.A.) and GRIDS polices.¹

The updated urban L.N.A. prepared herein has been developed within the context of the Growth Plan for the Greater Golden Horseshoe (G.G.H.), 2006, the Provincial Policy Statement (P.P.S.), 2005, and the current City of Hamilton U.H.O.P.^{2,3,4} It is noted that this 2022 L.N.A. update is not compliant with the Growth Plan, 2019. It is further noted that the Growth Plan, 2019 requires that sufficient housing supply is provided by GGH municipalities that reflects market demand and what is needed in local communities.⁵ Such requirements to address housing market demand are not explicitly addressed in the Growth Plan, 2006. These changes related to the Provincial Growth Plan, 2006 and Growth Plan, 2019 legislation as well as additional 2021 Census data, which was not available at the time the City of Hamilton 2021 M.C.R. was prepared, result in differences in the L.N.A. results when comparing the City's 2021 M.C.R. with this 2022 M.C.R. update.⁶

¹ Ontario Land Tribunal (O.L.T.). Case NO(S): PL090114, PL110331. February 4, 2022.

² Places to Grow. Better Choices. Brighter Future. Growth Plan for the Greater Golden Horseshoe, 2006. Ministry of Public Infrastructure Renewal. Ontario.

³ Provincial Policy Statement, 2005. Ontario

⁴ City of Hamilton Urban Hamilton Official Plan, May 2022.

⁵ A Place to Grow: Growth Plan for the Greater Golden Horseshoe. May 2019. Ontario. p. 4.

⁶ City of Hamilton Land Needs Assessment to 2051. Technical Working Paper – Summary of Results. March 2021. Lorus and Associates.



The results of this 2022 L.N.A. update identifies that the Growth Plan, 2006 population forecast for the City of Hamilton is tracking relatively close to the 2021 Statistics Canada Census. In contrast, the housing forecast prepared as background to the Growth Plan, 2006, which was used as the basis for the GRIDS household forecast, is tracking noticeably lower than the actual households for the City, as reported by the Statistics Canada 2021 Census.¹ More specifically the 2021 Census households for the City of Hamilton are approximately 16,000 units lower than the 2021 housing forecast used in GRIDS. This discrepancy is largely a result of a trend toward higher average household sizes or persons per unit (P.P.U.) relative to what was previously projected under GRIDS.

Based on our assessment of the City's housing needs to 2031 using 2021 household formation rates (i.e. headship rates) derived from 2016 and 2021 Statistics Canada Census and a review of forecast population growth by major age group between 2021 and 2031, the City is forecast to require approximately 14,000 less households to 2031 to achieve a 2031 population of 660,000, as previously set out through GRIDS.²

In accordance with Section 2.3.3.3 of the City of Hamilton Urban Official Plan (U.H.O.P.), the City of Hamilton is planning for an overall average greenfield density target of 70 people and jobs per hectare (ha) within its Community Areas and 37 jobs per ha within its Employment Areas.

The City of Hamilton Urban Official Plan U.H.O.P. plans for an overall D.G.A. density target of 50 people and jobs per hectare. This target is broken down further into Employment Areas (37 people jobs) and Community Area (70 people jobs/ha). This differentiation was made to account for the generally lower density development of Employment Areas, in particular the Airport Employment Growth District (A.E.G.D.), which was approved in 2015 at a lower density of 37 jobs/ha (instead of 50 jobs/ha) by the Ontario Municipal Board (O.M.B.).³ A higher Community Area target was required

¹ The Growth Outlook for the Greater Golden Horseshoe, Hemson Consulting Ltd. January 2005.

² 2031 Population forecast includes an upward adjustment of approximately 3% to account for the Census undercount. The Census undercount represents the net number of permanent residents who are missed (i.e., over-coverage less under-coverage) during Census enumeration in accordance with Statistics Canada. All population forecasts prepared under the Growth Plan, 2006 include an upward adjustment for the Census undercount.

³ Now referred to as the Ontario Land Tribunal (O.L.T.).



to offset the Employment Areas and balance out to the overall Growth Plan, 2006 target of 50 people and jobs/ha. It is important to note that GRIDS was prepared prior to the preparation of the A.E.G.D. Secondary Plan and approval of the A.E.G.D. by the O.M.B. in 2015.

As of 2021, the average Community Area density related to the City's occupied designated greenfield area (D.G.A.) lands was approximately 63 people and jobs/ha. Accordingly, reaching an average density of 70 people and jobs/ha across the entire D.G.A. requires an incremental density of 78 people and jobs in Community Areas to offset the lower D.G.A. density associated with the City's occupied greenfield areas.

In accordance with this average D.G.A. density assumption of 78 people and jobs per hectare for new greenfield development, the City of Hamilton requires approximately 687 gross ha of Community Area D.G.A. lands to accommodate the D.G.A. housing forecast from 2021 to 2031. The City has an estimated vacant Community Area D.G.A. land supply of 1,016 gross ha. As a result, there is a surplus of approximately **329 gross ha** of Community Area D.G.A. lands to accommodate the City's population and housing forecast to 2031.



1. Introduction

1.1 Terms of Reference

Watson & Associates Economists Ltd. (Watson) was retained in May of 2022 by the City of Hamilton to prepare an updated urban land needs analysis (L.N.A.) for the City to the year 2031. The purpose of this analysis is to provide an updated assessment of the City's Growth-Related Integrated Development Strategy (GRIDS), which was initiated in 2003 and approved by City of Hamilton Council in 2006. This update has been prepared by Watson based on a review of the latest relevant data provided by the City of Hamilton as well available data provided through the release of the Statistics Canada 2021 Census. This L.N.A. update has been prepared in response to on-going appeals to the Urban Hamilton Official Plan (U.H.O.P.) and Rural Hamilton Official Plan (R.H.O.P.) with respect to special policy area (S.P.A.) and GRIDS polices.¹

1.2 Applicable Provincial and Local Planning Policy Framework

1.2.1 Provincial Policy Framework

The updated urban L.N.A. prepared herein has been developed within the context of the Growth Plan for the Greater Golden Horseshoe (G.G.H.), 2006, the Provincial Policy Statement (P.P.S.), 2005, and the current City of Hamilton U.H.O.P.^{2,3,4} It is noted that this 2022 L.N.A. update is not compliant with the Growth Plan, 2019.

The Growth Plan, 2006 includes a number of key policy directions which must be considered in the development of a Municipal Comprehensive Review (M.C.R.). In accordance with the Growth Plan, 2006, a M.C.R. is defined as:

¹ Ontario Land Tribunal (O.L.T.). Case NO(S): PL090114, PL110331. February 4, 2022.

² Places to Grow. Better Choices. Brighter Future. Growth Plan for the Greater Golden Horseshoe, 2006. Ministry of Public Infrastructure Renewal. Ontario.

³ Provincial Policy Statement, 2005. Ontario

⁴ City of Hamilton Urban Hamilton Official Plan, May 2022.



“An official plan review, or an official plan amendment, initiated by a municipality that comprehensively applies the policies and schedules of this Plan.”

Specific Growth Plan, 2006 policy directions which are particularly relevant to the urban land needs analysis update provided herein, are summarized below:

Housing Intensification

The Growth Plan, 2006 establishes a requirement in Section 2.2.3.1 that:

“By the year 2015 and for each year thereafter, a minimum of 40 per cent of all residential development occurring annually within each upper- and single-tier municipality will be within the built-up area.”

Greenfield Development

The Growth Plan, 2006 permits development on lands in urban settlement areas which are located outside the Built Boundary known as “greenfield areas.” The Growth Plan, 2006 establishes a minimum density target of not less than 50 residents and jobs combined per hectare (Sections 2.2.7.2 and 2.2.7.3.). It is noted under Section 2.2.7.3 of the Growth Plan, 2006, the minimum greenfield density requirement includes the entire D.G.A., including both Community Areas and Employment Areas, excluding identified non-developable natural features. The Growth Plan, 2006 permits expansion of the settlement boundary as part of a M.C.R subject to specific criteria (Section 2.2.8).

1.2.2 Local Planning Policy Framework

The City of Hamilton has four Official Plans which guide development within the City. The Urban Hamilton Official Plan (U.H.O.P.) applies to lands in the urban area of Hamilton. The Rural Hamilton Official Plan (R.H.O.P.) applies to lands in the rural area of Hamilton. The U.H.O.P. was adopted by Council on July 9, 2009 and approved by the Ministry of Municipal Affairs and Housing (M.M.A.H.) on March 16, 2011. The U.H.O.P. came into effect on August 16, 2013 except for polices, schedules, maps and appendices that are still under appeal by the Ontario Land Tribunal (O.L.T.).

The U.H.O.P. provides direction and guidance on the management of the City’s communities, land use change and physical development over a 30-year planning horizon from 2001 to 2031. Particularly relevant to this L.N.A. update are the U.H.O.P. policies related to residential intensification and greenfield density. In accordance with



the key policy requirements of the Growth Plan, 2006, regarding greenfield density and residential intensification, Section 2.3.3.3 and 2.3.3.4 of the City of Hamilton U.H.O.P. states:

“Greenfield areas shall be planned to achieve an overall minimum density of **50** people and jobs per hectare. The greenfield density target shall be measured over Hamilton’s greenfield area, excluding natural heritage features designated in this Plan. The greenfield area includes designated employment areas. On employment lands, the City shall plan to meet a density target of **37** people and jobs per hectare. On non-employment lands, densities will need to achieve a minimum average density of **70** persons and jobs per hectare to meet the overall density target.”

Section 2.3.3.4 of the City of Hamilton U.H.O.P. states:

“Hamilton is required to plan to achieve a minimum of 40% of all residential development occurring annually within its built-up area by 2015.

It is noted that neither Section 2.3.3.3 or 2.3.3.4 of the U.H.O.P. are currently under appeal.

In 2003, the City of Hamilton initiated GRIDS, which was developed to identify a broad land use structure, associated infrastructure, economic development strategy and financial implications for the growth options to serve Hamilton to the year 2031. The G.R.I.D.S process was completed and approved by City Council in 2006.

Based on the City’s existing land supply (subject to resolution of servicing constraints) the results of the GRIDS process concluded that an urban boundary expansion was not required in the short-term, but would be required in the 2016-2021 time period to allow for sufficient time to complete the secondary planning process.¹

It is important to note that the Built Boundary in the City of Hamilton which identifies the B.U.A. was delineated by the Province in 2006 after the completion of the technical work carried out under GRIDS. The Built Boundary is an important line that sets the

¹ Report to Mayor and Members Committee of the Whole. April 25, 2006. RE: Growth Related Integrated Development Strategy – Final Report (City Wide) (CM06015). Pg. 7.



geographic area to measure residential intensification (within the B.U.A.) and density in the D.G.A.

As previously discussed, the U.H.O.P. plans for an overall D.G.A. density target of 50 people and jobs per hectare. This target is broken down further into Employment Areas (37 people jobs) and Community Area (70 people jobs/ha). This differentiation was made to account for the generally lower density development of Employment Areas, in particular the Airport Employment Growth District (A.E.G.D.) which was approved in 2015 at a lower density of 37 jobs/ha (instead of 50 jobs/ha) by the Ontario Municipal Board (O.M.B).¹ A higher Community Area target was required to offset the Employment Areas and balance out to the overall Growth Plan, 2006 target of 50 people and jobs/ha. It is important to note that GRIDS was prepared prior to the preparation of the A.E.G.D. Secondary Plan and approval of the A.E.G.D. by the O.M.B. in 2015.

1.3 Technical Approach to Land Needs Assessment

In contrast to the Growth Plan, 2019, the Growth Plan, 2006 was not accompanied by a Provincial L.N.A. Methodology specifically established for G.G.H. municipalities.^{2,3} Accordingly, the approach to assessing the City of Hamilton's population and housing growth as well as corresponding urban land needs to the year 2031 is directed by the Province of Ontario 1995 Projection Methodology Guidelines.⁴ It is noted that the Province of Ontario 1995 Projection Methodology Guidelines are meant to be used as "best practices" and are not mandatory.

2. City of Hamilton Population and Housing Forecast, 2021 to 2031

The City of Hamilton updated 2031 population and housing growth forecast has been developed under the growth requirements of the Growth Plan, 2006, targeting a population of 660,000 in 2031 and a 40% intensification rate. The forecast has been

¹ Now referred to as the Ontario Land Tribunal, O.L.T.

² A Place to Grow: Growth Plan for the Greater Golden Horseshoe. May 2019. Ontario.

³ A Place to Grow: Growth Plan for the Greater Golden Horseshoe, Land Needs Assessment Methodology for the Greater Golden Horseshoe. August 28, 2020.

⁴ Projection Methodology Guideline. A Guide to Projecting Population, Housing Need, Employment and Related Land Requirements. 1995. Ontario.



derived taking into account the most recently available 2021 Statistics Canada Census data and growth trends (see Appendix A for additional details). The updated 2031 population and housing forecast incorporates the following:

- 2021 Census data for population and housing by structure type;
- Updated average persons per unit (P.P.U.) data and forecast P.P.U. trends over the 2021 to 2031 forecast period derived from 2016 and 2021 Census data;
- An updated household headship rate analysis has been developed using 2016 Census data by age of primary household maintainer adjusted to align with 2021 Census total headship rate data and trends;¹ and
- An assessment of forecast housing demand by structure type informed by:
 - a review of historical Census housing growth by structure type from 2006 to 2021,
 - a review of historical building permit activity by housing structure type and planning policy area from 2006 to 2021; and
 - an assessment of active residential development applications by housing structure type and planning policy area which guide the forecast propensity assumptions.

These above inputs were used to provide direction regarding trends in age-specific housing propensity rates by housing structure type over the 2021 to 2031 forecast period.

It is important to note this housing forecast update varies from the work undertaken for the City of Hamilton regarding the 2021 M.C.R.² These differences in the total housing forecast arise from the results of the 2021 Census data with respect to population by age and total housing which wasn't available at the time the 2021 M.C.R. was undertaken. It is further noted that potential differences also arise in the housing forecast by structure type between the City of Hamilton 2021 M.C.R. and the 2022 L.N.A. update provided herein. These differences relate to the requirements of the

¹ A household headship rate is defined as the ratio of primary household maintainers, or heads of households, by major population age group (i.e. cohort). The headship forecast forms the basis for determining the demand for new households generated from population growth. Dividing total units over population generates the resulting P.P.U. for the City from 2021 to 2031.

² City of Hamilton Land Needs Assessment to 2051. Technical Working Paper – Summary of Results. March 2021. Lorus and Associates.



Growth Plan, 2019 and Provincial L.N.A. methodology to ensure that sufficient housing supply is provided by G.G.H. municipalities that reflects market demand and what is needed in local communities.¹ Such requirements to address housing market demand are not explicitly addressed in the Growth Plan, 2006.

Figures 1 to 3 compare how the updated City of Hamilton population and housing forecast is tracking to GRIDS. Key findings include:

- The GRIDS housing forecast is tracking noticeably lower than Census housing, 16,000 units lower in 2021. The GRIDS population forecast is tracking relatively close to the 2021 Census.
- The 2021 Census average P.P.U. for total households of 2.63 is significantly higher than the GRIDS 2021 P.P.U. forecast of 2.47. The higher P.P.U. trend identified by the 2011, 2016 and 2021 Census results in less housing required to achieve the same population by 2031 (refer to Figure 3 herein).
- Based on the updated housing forecast prepared by Watson, a total of 255,000 households are required to achieve the Growth Plan, 2006 population of 660,000, compared to 269,000 identified in GRIDS.

The total 2031 housing forecast was then allocated to the B.U.A., D.G.A. and Rural Area by structure type in accordance with the City's 40% intensification rate target from 2015 to 2031. Please refer to Section 3 and Appendix A for additional details.

There are several types of household categories referenced in this report. The definition of these housing categories are as follows:

- **Singles and Semi-detached:** Includes all single and semi-detached houses as per Statistics Canada.
- **Multiples:** Includes townhouses, maisonettes and duplexes.
- **Apartments:** Includes bachelor, 1-bedroom and 2-bedroom+ apartments, and "stacked" townhouses.
- **Other:** "Other" detached houses as per Statistics Canada are part of low-density housing with singles and semi-detached houses.

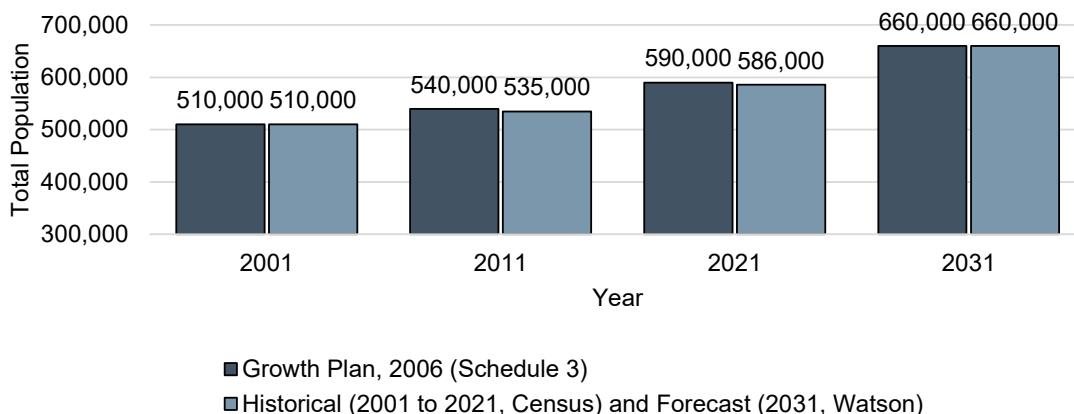
¹ A Place to Grow: Growth Plan for the Greater Golden Horseshoe. May 2019. Ontario. Pg. 4



- **Secondary Unit:** A secondary unit represents a self-contained unit within an existing home/primary dwelling unit. Statistics Canada does not implicitly identify accessory apartments in the Census housing categories. Secondary units have high-density occupancy but a grade-related built form. For the purpose of this analysis, new secondary units are assumed to be captured within the apartment housing forecast.

It is recognized that secondary units will be developed over the forecast period to 2031, however they are not explicitly shown in the forecast. Over the 2021 to 2031 forecast period there are 100 secondary units forecast for the D.G.A., and for the purposes of land needs these are anticipated to have a minimal impact on the City's urban land needs assessment.¹

Figure 1²
City of Hamilton
Population Forecast to 2031



Note: Figures have been rounded.

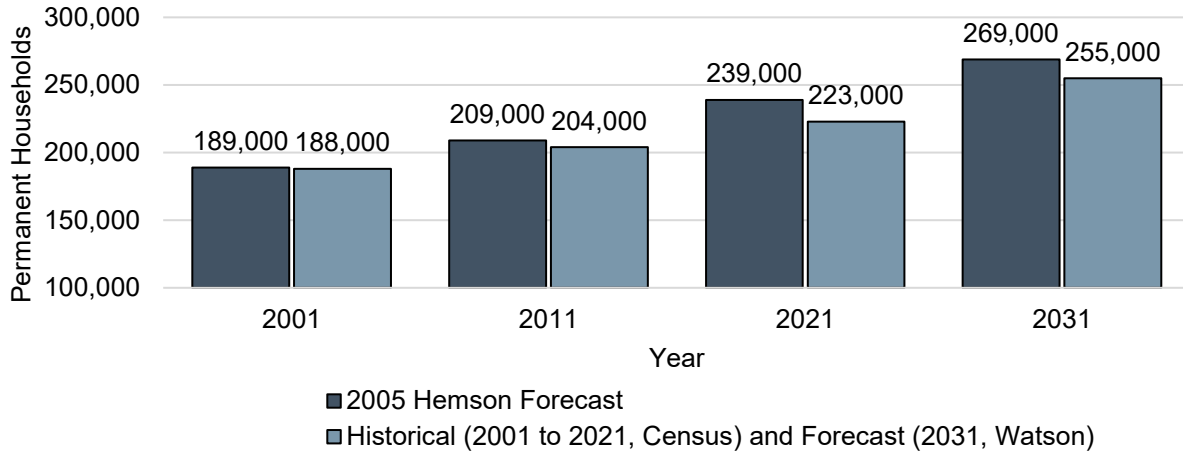
Source: Growth Plan, 2006 (Schedule 3) based on Schedule 3 of Places to Grow. Better Choices. Brighter Future. Growth Plan for the Greater Golden Horseshoe, 2006. Ministry of Public Infrastructure Renewal. Ontario. Population forecast includes an upward adjustment of 3% to account for the Census undercount.

¹ Secondary unit forecast based on Table 4 of the City of Hamilton GRIDS 2 and Municipal Comprehensive Review – Final Land Needs Assessment and Addendum and Peer Review Results (PED17010(n)) (City Wide).

² Population forecast includes an upward adjustment of 3% to account for the Census undercount. The Census undercount represents the net number of permanent residents who are missed (i.e., over-coverage less under-coverage) during Census enumeration in accordance with Statistics Canada. All population forecasts prepared under the Growth Plan, 2006 include an upward adjustment for the Census undercount.



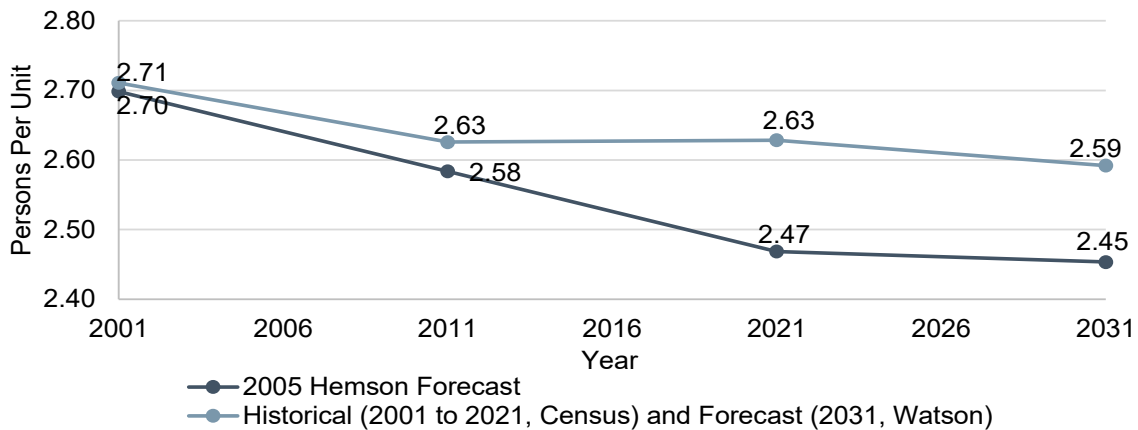
Figure 2
City of Hamilton
Housing Forecast to 2031



Note: Figures have been rounded.

Source: 2005 Hemson Forecast based on the Current Trends and Compact Scenario from The Growth Outlook for the Greater Golden Horseshoe, Hemson Consulting Ltd., January 2005. Historical derived from Statistics Canada Census, 2001 to 2021, and 2031 forecast by Watson & Associates Economists Ltd.

Figure 3
City of Hamilton
Average Persons per Unit (P.P.U.) Forecast to 2031



Note: Figures have been rounded.

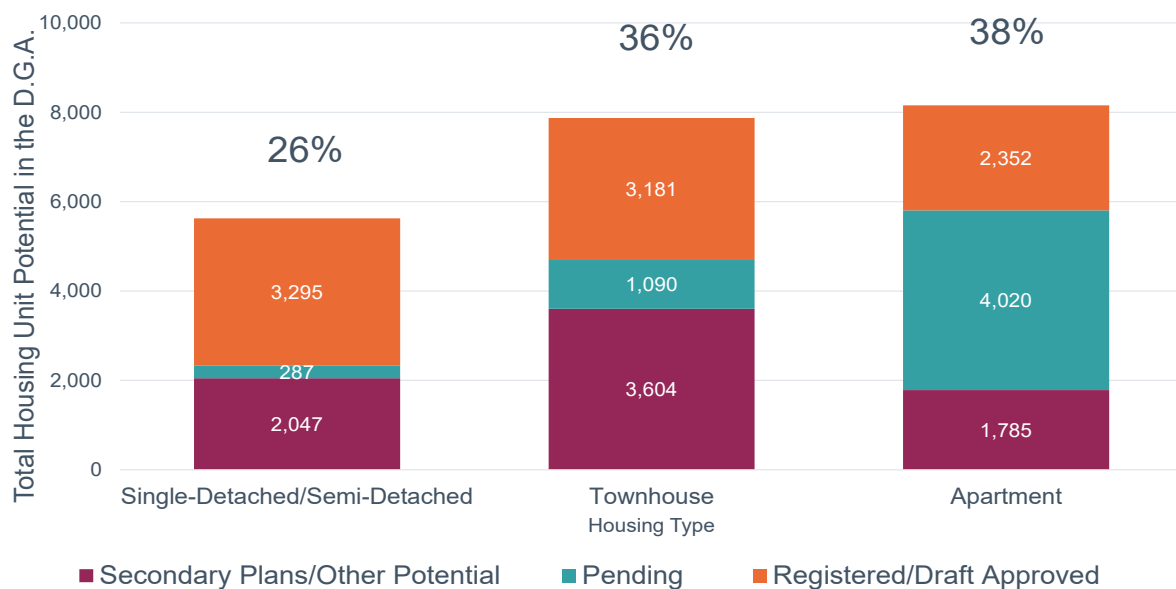
Source: 2005 Hemson Forecast based on the Current Trends and Compact Scenario from The Growth Outlook for the Greater Golden Horseshoe, Hemson Consulting Ltd., January 2005. Historical derived from Statistics Canada Census, 2001 to 2021, and 2031 forecast by Watson & Associates Economists Ltd.



3. Housing Unit Supply Potential in the Community Area D.G.A.

It is estimated as of December 2020 that the City of Hamilton has approximately 21,700 housing units in the D.G.A.¹ The housing supply is comprised of 26% singles/semi-detached; 36% townhouses; 38% apartment units, as summarized in Figure 4. Further details on housing unit supply potential in the City of Hamilton, including the D.G.A. and B.U.A. is provided in Appendix A (Figure A-9).

Figure 4
City of Hamilton
D.G.A. Community Area
Housing Unit Supply Potential as of December 2020



Note: Housing types in the above figure are the housing categories utilized by the City of Hamilton for inventory purposes.

Source: Derived from the City of Hamilton Vacant Residential Land Reports (Outside Built Boundary), December 2020 and summarized by Watson & Associates Economists Ltd.

¹ Housing unit supply potential data is derived from the City of Hamilton Vacant Residential Land Reports (Outside Built Boundary), December 2020 and summarized by Watson & Associates Economists Ltd.



4. D.G.A. Community Area Land Needs

Figures 5 through 7 provide a summary of the D.G.A. Community Area land requirements associated with the updated LNA to 2031 prepared by Watson. Key assumptions and findings include:

- The D.G.A. Community Area is anticipated to accommodate approximately 18,000 housing units based on a housing mix of 38% singles/semi-detached; 26% multiple dwelling units; and 26% apartment units.
- As previously noted, the City-wide forecast housing mix has been developed based on an age-specific housing propensity analysis by structure type from 2021 to 2031. Forecast housing trends by structure type and by planning policy area (i.e. B.U.A. and D.G.A.) have been reviewed against historical building permit activity as well as housing supply potential in active development plans by planning policy area.
- In accordance with recent residential building permit activity (new units only - as summarized in Appendix A), the housing mix in the D.G.A. has shifted from low-density housing types towards a greater range of housing options in medium and high-density housing forms. Over the 2007 to 2016 period, the housing mix associated with residential building activity was 61% singles/semi-detached; 37% townhouses; and 2% apartment units, compared to 36% singles/semi-detached; 47% townhouses; and 16% apartment units based on building permits over the past five years (2017 to 2021).¹ Further details regarding residential building permit activity in the D.G.A. is provided in Appendix A (Figure A-8).
- As summarized in Figure 5, the City's existing Community Area D.G.A. density as of 2021 is approximately 63 people and jobs/ha which is lower than the O.P. target of 70 people and jobs/ha. As a result, in order to reach an average density of 70 people and jobs/ha across the entire D.G.A. an incremental density of 78 people and jobs per ha is required on vacant D.G.A. lands developed between 2021 and 2031.
- As summarized in Figure 6, the estimated people and jobs density over the 2021 to 2031 period in the Community Area D.G.A. is 78 people and jobs/ha. Further

¹ Derived from City of Hamilton Residential Building Permit Activity data. Includes new housing unit construction.



details regarding the people and jobs calculation over the forecast is provided in Appendix A (Figure A-10).

- Based on the density assumptions identified below by housing type and an overall average people and jobs D.G.A. Community Area density target of 70 people and jobs per ha, the City of Hamilton requires approximately 687 gross ha of Community Area D.G.A. lands to accommodate the D.G.A. housing forecast from 2021 to 2031 (Figure 7, line item D).
- The City has an estimated vacant Community Area D.G.A. land supply of 1,016 gross ha (Figure 5, line item E). As a result, there is a surplus of Community Area D.G.A. lands to accommodate growth to 2031 of approximately **329 gross ha (1,106 – 687 = 329 ha)**.

Figure 5
City of Hamilton
D.G.A. Community Area Density at 2031 (People and Jobs per Hectare)

D.G.A. Component	People and Jobs	Share	Density (people and jobs/ha)
D.G.A. Community Area Developed as of 2021	61,300	53%	63
D.G.A. Community Area Growth, 2021 to 2031	53,700	47%	78
Total D.G.A. at 2031	115,000	100%	70

Notes: Includes population and jobs in the D.G.A. Developed D.G.A. is an estimate based on building permit activity and estimated D.G.A. land developed (approximately 975 ha). Rural lots within the D.G.A. are categorized as undeveloped. Forecast population undercount is approximately 3%.

Source: Watson & Associates Economists Ltd.



Figure 6
City of Hamilton
D.G.A. Community Area Population and Jobs Forecast and Incremental Density
(People and Jobs per Hectare), 2021 to 2031

D.G.A. Density	People and Jobs
Population (P.P.U. and undercount applied)	47,700
Jobs (1 job per 8 residents)	6,000
People and Jobs	53,700
Density (people and jobs/ha)	78

Notes: Population has been calculated based on P.P.U. of 3.38 for single-detached/semi-detached, 2.33 for townhouses and 1.63 for apartments. Population includes an institutional population (population in collective dwellings) which has been estimated at approximately 800 persons. Forecast population undercount is approximately 3%.

Source: Watson & Associates Economists Ltd.

Figure 7
City of Hamilton
D.G.A. Community Area Land Needs to 2031

D.G.A. Community Area Land Needs, 2021 to 2031	Item	Single-Detached/ Semi-Detached Units	Multiple Dwelling Units	Apartment Units	Total Housing Units
D.G.A. Housing Forecast, 2021 to 2031	A	6,890	6,467	4,587	17,944
Units Per Net Ha (U.P.H.)	B	30	70	200	52
Community Area Land Area					
Residential Net Land Required, ha	C = A / B	228	92	23	343
Adjusted Community Area Land Required to Account for Other Community Area Uses - Additional 50%, ha	D = C x 2	456	185	46	687
Vacant D.G.A. Community Area Land Supply, ha	E				1,016
D.G.A. Community Area Land Surplus, ha	F = E – D				329

Source: Watson & Associates Economists Ltd.



5. Conclusions

The results of this 2022 L.N.A. update identifies that the Growth Plan, 2006 population forecast for the City of Hamilton is tracking relatively close to the 2021 Statistics Canada Census. In contrast, the housing forecast prepared as background to the Growth Plan, 2006, which was used as the basis for the GRIDS household forecast, is tracking noticeably lower than the actual households for the City, as reported by the Statistics Canada 2021 Census.¹ More specifically the 2021 Census households for the City of Hamilton are approximately 16,000 units lower than the 2021 housing forecast used in GRIDS. This discrepancy is largely a result of a trend toward higher average household sizes or persons per unit (P.P.U.) relative to what was previously projected under GRIDS.

Based on our assessment of the City's housing needs to 2031 using 2021 household formation rates (i.e. headship rates) derived from 2016 and 2021 Statistics Canada Census and a review of forecast population growth by major age group between 2021 and 2031, the City is forecast to require approximately 14,000 less households to 2031 to achieve a 2031 population of 660,000, as previously set out through GRIDS.²

In accordance with Section 2.3.3.3 of the City of Hamilton Urban Official Plan (U.H.O.P.), the City of Hamilton is planning for an overall average greenfield density target of 70 people and jobs per hectare (ha) within its Community Areas and 37 jobs per ha within its Employment Areas.

The City of Hamilton Urban Official Plan U.H.O.P. plans for an overall D.G.A. density target of 50 people and jobs per hectare. This target is broken down further into Employment Areas (37 people jobs) and Community Area (70 people jobs/ha). This differentiation was made to account for the generally lower density development of Employment Areas, in particular the Airport Employment Growth District (A.E.G.D.)

¹ The Growth Outlook for the Greater Golden Horseshoe, Hemson Consulting Ltd. January 2005.

² 2031 Population forecast includes an upward adjustment of approximately 4% to account for the Census undercount. The Census undercount represents the net number of permanent residents who are missed (i.e., over-coverage less under-coverage) during Census enumeration in accordance with Statistics Canada. All population forecasts prepared under the Growth Plan, 2006 include an upward adjustment for the Census undercount.



which was approved in 2015 at a lower density of 37 jobs/ha (instead of 50 jobs/ha) by the Ontario Municipal Board (O.M.B.). A higher Community Area target was required to offset the Employment Areas and balance out to the overall Growth Plan, 2006 target of 50 people and jobs/ha. It is important to note that the GRIDS was prepared prior to the preparation of the A.E.G.D. Secondary Plan and approval of the A.E.G.D. by the O.M.B. in 2015.

As of 2021, the average Community Area density related to the City's occupied designated greenfield area (D.G.A.) lands was approximately 63 people and jobs/ha. Accordingly, reaching an average density of 70 people and jobs/ha across the entire D.G.A. requires an incremental density of 78 people and jobs in Community Areas to offset the lower D.G.A. density associated with the City's occupied greenfield areas.

In accordance with this average D.G.A. density assumption of 78 people and jobs per hectare for new greenfield development, the City of Hamilton requires approximately 687 gross ha of Community Area D.G.A. lands to accommodate the D.G.A. housing forecast from 2021 to 2031. The City has an estimated vacant Community Area D.G.A. land supply of 1,016 gross ha. As a result, there is a surplus of approximately **329 gross ha** of Community Area D.G.A. lands to accommodate the City's population and housing forecast to 2031.



Appendix A

City of Hamilton Residential Growth Forecast and Urban Community Area Land Needs



Figure A-2
City of Hamilton
Population by Age Cohort, 2021 to 2051

Age Cohort	2006	2011	2016	2021	2026	2031
0-19	127,700	123,800	121,400	125,200	133,100	140,100
20-34	104,700	108,700	114,400	126,100	132,200	134,400
35-44	80,200	69,300	68,500	77,700	88,600	95,700
45-54	78,900	84,500	79,700	72,100	73,900	84,100
55-64	56,800	67,000	75,200	80,100	75,600	69,000
65-74	37,600	41,600	50,600	58,600	65,500	70,100
75+	37,800	40,300	42,500	46,000	55,600	66,500
Total	523,600	535,200	552,300	585,600	624,500	660,000

Notes: Population includes net Census undercount. Figure has been rounded by nearest 100.
Source: 2006 to 2021 derived from Statistics Canada Census and Demography Division data, 2021 to 2031 derived by Watson & Associated Economists Ltd.

Figure A-2
City of Hamilton
Housing Headship Rates, 2021 to 2051

Age Cohort	2006	2011	2016	2021	2026	2031
0-14	-	-	-	-	-	-
15-24	0.0849	0.0884	0.0743	0.0736	0.0736	0.0736
25-34	0.3783	0.3697	0.3688	0.3651	0.3651	0.3651
35-44	0.5083	0.5100	0.4999	0.4950	0.4950	0.4950
45-54	0.5509	0.5546	0.5525	0.5471	0.5471	0.5471
55-64	0.5672	0.5770	0.5762	0.5705	0.5705	0.5705
65-74	0.6083	0.6012	0.6055	0.5995	0.5995	0.5995
75+	0.6220	0.6318	0.6129	0.6069	0.6069	0.6069
Total	0.3714	0.3808	0.3831	0.3805	0.3832	0.3858

Notes: Headship rate analysis is informed by 2016 Census age of primary household maintainer data and adjusted to align with 2021 Census total headship rate data and trends.
Source: 2006 to 2016 derived from Statistics Canada Census data, 2021 to 2031 derived by Watson & Associated Economists Ltd. based on 2021 Census total headship rate data and trends.



Figure A-3
Housing Units by Age of Primary Household Maintainer

Age Cohort	2006	2011	2016	2021	2026	2031
0-14	0	0	0	0	0	0
15-24	6,290	6,760	5,325	5,528	5,560	5,720
25-34	25,415	25,735	27,950	30,626	33,300	33,755
35-44	40,750	35,335	34,220	38,465	43,850	47,380
45-54	43,450	46,870	44,050	39,445	40,435	46,015
55-64	32,200	38,635	43,335	45,694	43,120	39,385
65-74	22,855	25,005	30,660	35,138	39,265	42,040
75+	23,500	25,465	26,055	27,909	33,765	40,335
Total	194,460	203,805	211,595	222,805	239,295	254,630

Source: 2006 to 2016 derived from Statistics Canada Census data, and 2021 to 2031 derived by Watson & Associated Economists Ltd. 2021 total aligns with 2021 Census.

Figure A-4
City of Hamilton
Housing Forecast by Structure Type

Year	Population (Including Census undercount) ¹	Housing Units					Persons Per Unit (P.P.U.) with Undercount
		Singles & Semi-Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	
Historical							
Mid-2006	523,600	118,410	25,095	50,155	795	194,455	2.69
Mid-2011	535,200	124,430	27,760	50,800	810	203,800	2.63
Mid-2016	552,300	127,740	31,250	51,835	770	211,595	2.61
Mid-2021	585,600	131,900	34,835	55,510	560	222,805	2.63
Forecast							
Mid-2031	660,000	140,350	44,645	69,075	560	254,630	2.59
Incremental - Total							
Mid-2006 to Mid-2011	11,600	6,020	2,665	645	15	9,345	
Mid-2011 to Mid-2016	17,100	3,310	3,490	1,035	-40	7,795	
Mid-2016 to Mid-2021	33,300	4,160	3,585	3,675	-210	11,210	
Mid-2021 to Mid-2031	74,400	8,450	9,810	13,565	0	31,825	
Incremental - Housing Shares by Type							
Mid-2006 to Mid-2011		64%	29%	7%	0%	100%	
Mid-2011 to Mid-2016		42%	45%	13%	-1%	100%	
Mid-2016 to Mid-2021		37%	32%	33%	-2%	100%	
Mid-2021 to Mid-2031		27%	31%	43%	0%	100%	

¹ Population includes net Census undercount of Approximately 3%. Population has been rounded to nearest 100.

² Multiple dwellings include townhouses, back-to-back townhouses and apartments in duplexes.

³ Apartments include bachelor, 1-bedroom and 2-bedroom+ apartments, stacked townhouses.

Notes: Forecast housing mix derived from age specific housing propensity by age of maintainer and type analysis informed by 2016 Census data, adjusted for 2021 Census results, and future trends.

Source: 2006 to 2021 derived from Statistics Canada Census data, and 2031 by Watson & Associates Economists Ltd.



Figure A-5
City of Hamilton
Housing Forecast by Structure Type, 2021 to 2031

Development Location	Single & Semi-Detached	Multiple Dwellings ²	Apartments ³	Total Residential Units
BUA	1,046	3,342	8,978	13,366
DGA	6,890	6,467	4,587	17,944
Rural	515	0	0	515
City of Hamilton	8,451	9,809	13,565	31,825

¹ Multiple dwellings include townhouses, back-to-back townhouses and apartments in duplexes.

² Apartments include bachelor, 1-bedroom and 2-bedroom+ apartments, stacked townhouses.

Notes: Forecast housing mix derived from age specific housing propensity by age of maintainer and type analysis informed by 2016 Census data, adjusted for 2021 Census results, and future trends.

Source: Watson & Associates Economists Ltd.

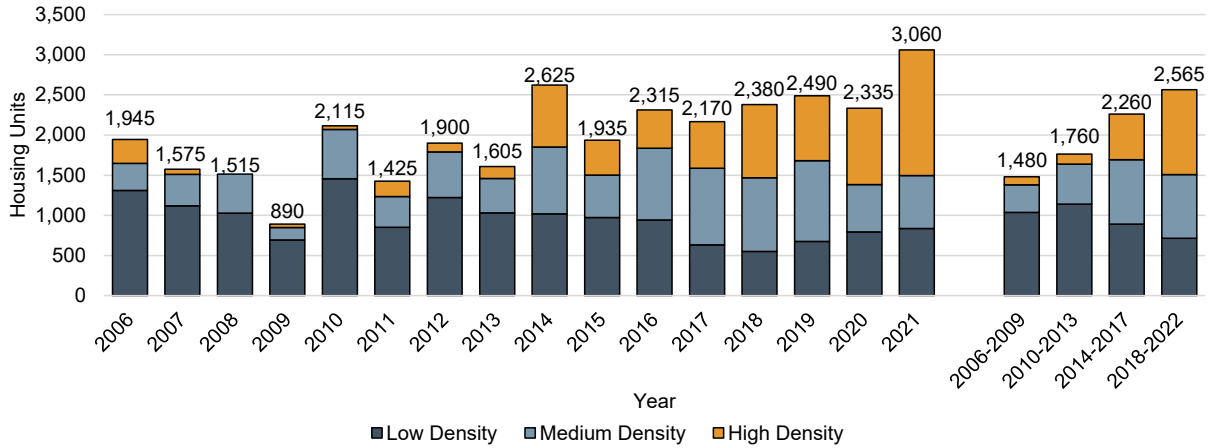
Figure A-6
City of Hamilton
Summary of 2021 to 2031 Housing Forecast by Policy Area Based on 40% Annual
Housing Intensification Target from 2015 to 2031

Planning Policy Area	Housing Units from Historical Building Permits Issued, 2015 to 2020	Housing Unit Forecast, 2021 to 2031	Total Housing Unit Growth, 2015 to 2031
Built-Area Boundary	4,810	13,366	18,176
Designated Greenfield Area	8,470	17,944	26,414
Rural Area	337	515	852
City of Hamilton	13,617	31,825	45,442
Intensification %	35.3%	42.0%	40.0%

Source: Historical housing units derived from City of Hamilton building permit data, and 2021 to 2031 forecast by Watson & Associates Economists Ltd.



Figure A-7
City of Hamilton - Total
Historical Residential Building Permit Activity (New Units Only), 2006 to 2022

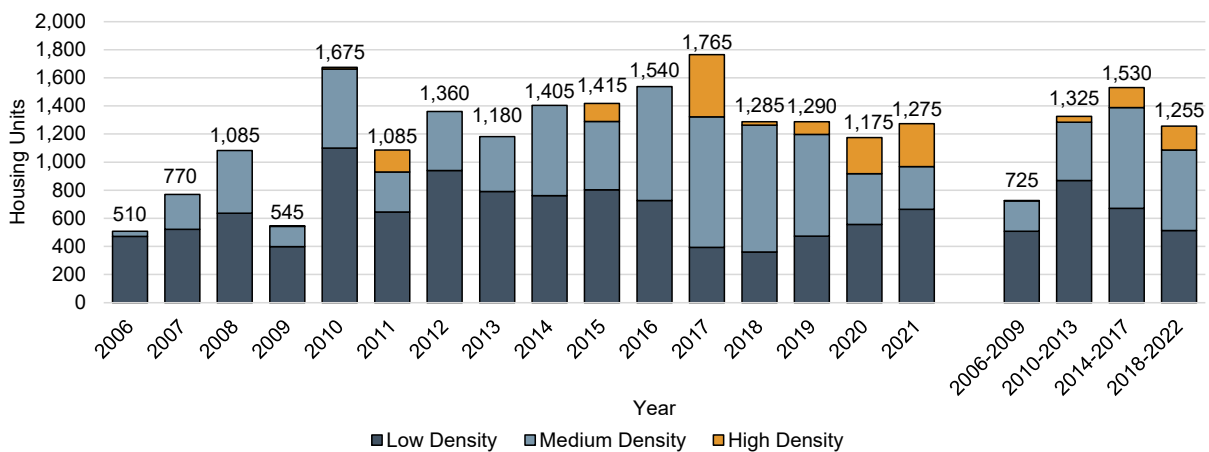


Notes:

- Low density includes single and semi-detached dwellings.
- Medium density includes townhouses, back-to-back townhouses and apartments in duplexes.
- High density includes apartments include bachelor, 1-bedroom and 2-bedroom+ apartments, stacked townhouses.

Source: Historical housing units derived from City of Hamilton building permit data by Watson & Associates Economists Ltd.

Figure A-8
City of Hamilton – Designated Greenfield Area
Historical Residential Building Permit Activity (New Units Only), 2006 to 2022



Notes:

- Low density includes single and semi-detached dwellings.
- Medium density includes townhouses, back-to-back townhouses and apartments in duplexes.
- High density includes apartments include bachelor, 1-bedroom and 2-bedroom+ apartments, stacked townhouses.

Source: Historical housing units derived from City of Hamilton building permit data by Watson & Associates Economists Ltd.



Figure A-9
City of Hamilton
Active Residential Development Application Data by Stage of Development and
Planning Policy Area

Built-Up Area

Stage Of Development	Total Housing by Density Type				Housing Share by Density Type			
	Low	Medium	High	Total	Low	Medium	High	Total
Registered/Final Approved	60	80	455	590	10%	13%	77%	100%
Draft Approved	170	920	4,625	5,715	3%	16%	81%	100%
Pending	110	670	3,945	4,725	2%	14%	83%	100%
Potential Development	705	190	980	1,875	38%	10%	52%	100%
Total	1,045	1,860	10,005	12,910	8%	14%	77%	100%

Outside Built-Up Area

Stage Of Development	Total Housing by Density Type				Housing Share by Density Type			
	Low	Medium	High	Total	Low	Medium	High	Total
Registered/Final Approved	800	1,080	1,810	3,690	22%	29%	49%	100%
Draft Approved	2,495	2,100	545	5,135	49%	41%	11%	100%
Pending	290	1,090	4,020	5,400	5%	20%	74%	100%
Potential Development	2,045	3,605	1,785	7,435	28%	48%	24%	100%
Total	5,630	7,875	8,155	21,660	26%	36%	38%	100%

Total

Stage Of Development	Total Housing by Density Type				Housing Share by Density Type			
	Low	Medium	High	Total	Low	Medium	High	Total
Registered/Final Approved	855	1,160	2,265	4,280	20%	27%	53%	100%
Draft Approved	2,665	3,020	5,170	10,855	25%	28%	48%	100%
Pending	400	1,760	7,965	10,125	4%	17%	79%	100%
Potential Development	2,755	3,795	2,765	9,310	30%	41%	30%	100%
Total	6,675	9,735	18,160	34,570	19%	28%	53%	100%

Notes:

- Low density includes single and semi-detached dwellings.
- Medium density includes townhouses, back-to-back townhouses and apartments in duplexes.
- High density includes apartments include bachelor, 1-bedroom and 2-bedroom+ apartments, stacked townhouses.

Source: Active development applications derived from City of Hamilton data by Watson & Associates Economists Ltd.



Figure A-10
City of Hamilton
D.G.A. Community Area
People and Jobs Forecast, 2021 to 2031

D.G.A.	Item	Single-Detached/Semi-Detached Units	Multiple Dwelling Units	Apartment Units	Total Housing Units
D.G.A. Forecast, 2021 to 2031	A	6,890	6,467	4,587	17,944
P.P.U.	B	3.38	2.33	1.63	
People and Jobs					
Gross Population	C = A x B	23,295	15,094	7,495	45,900
Existing Unit Population Change	D				(300)
Institutional Population	E				800
Net Population, excluding Population Undercount	F = C + D + E				46,400
Population, including Population Undercount (2.9%)	G				47,700
Jobs in D.G.A. (1 job per 8 residents)	H = G / 8				6,000
D.G.A. People and Jobs, 2021 to 2031	I = G + H				53,700

Notes:

- Multiple dwelling units include Includes townhouses, maisonettes and duplexes.
- Apartment units include bachelor, 1-bedroom and 2-bedroom+ apartments, stacked townhouses.
- Figure has been rounded.

Source: Watson & Associates Economists Ltd.