



City of Hamilton
Land Needs Assessment
Peer Review
City of Hamilton

Final Report

Date: October 4, 2021

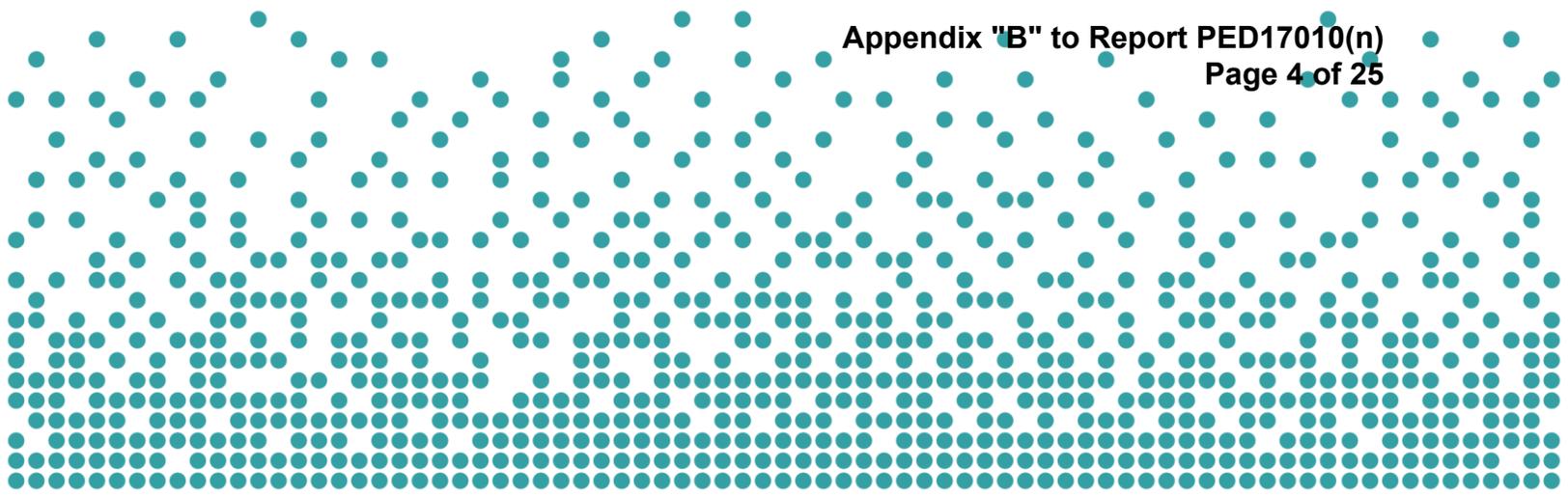
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List of Acronyms and Abbreviations

BUA	Built-up Area
DGA	Designated Greenfield Area
GGH	Greater Golden Horseshoe
LNA	Land Needs Assessment



Chapter 1

Introduction



1. Introduction

1.1 Terms of Reference

Watson & Associates Economists Ltd. (Watson) was retained in July 2021 by the City of Hamilton to undertake a Peer Review of the following reports prepared by Lorus & Associates:

- City of Hamilton Land Needs Assessment to 2051 Technical Working Paper – Summary of Results, March 2021; and
- City of Hamilton Residential Intensification Market Demand Analysis, March 2021.

The first document listed above focuses on the City's urban land needs, while the second document listed provides further information regarding market demand for residential intensification within the City of Hamilton. These documents are hereinafter referred to as the "City's LNA Documents" when referred to collectively.

Upon our review of the City's LNA documents, Watson prepared a list of questions and comments that were discussed with Lorus & Associates on August 5, 2021.

Subsequent to this meeting Lorus & Associates provided supplemental background information to Watson. The supplemental background information was also reviewed by Watson, in addition to the City's LNA Documents referenced above.

1.2 Scope of Peer Review

This peer review includes an assessment of the overall study approach and application of the requirements by component of the Provincial Land Needs Assessment (LNA) Methodology for the Greater Golden Horseshoe (GGH), 2020, hereafter referred to as the Provincial LNA Methodology.¹ The Provincial LNA methodology requires a series of inputs and analyses for each component. Each of these inputs should be tested to validate assumptions and their sensitivity within the framework of the Provincial LNA Methodology, which emphasizes providing a market-based supply of housing while conforming to the Growth Plan for the Greater Golden Horseshoe (GGH), 2020,

¹ A Place to Grow: Growth Plan for the Greater Golden Horseshoe. Land Needs Assessment Methodology for the Greater Golden Horseshoe (GGH), 2020. Ontario.

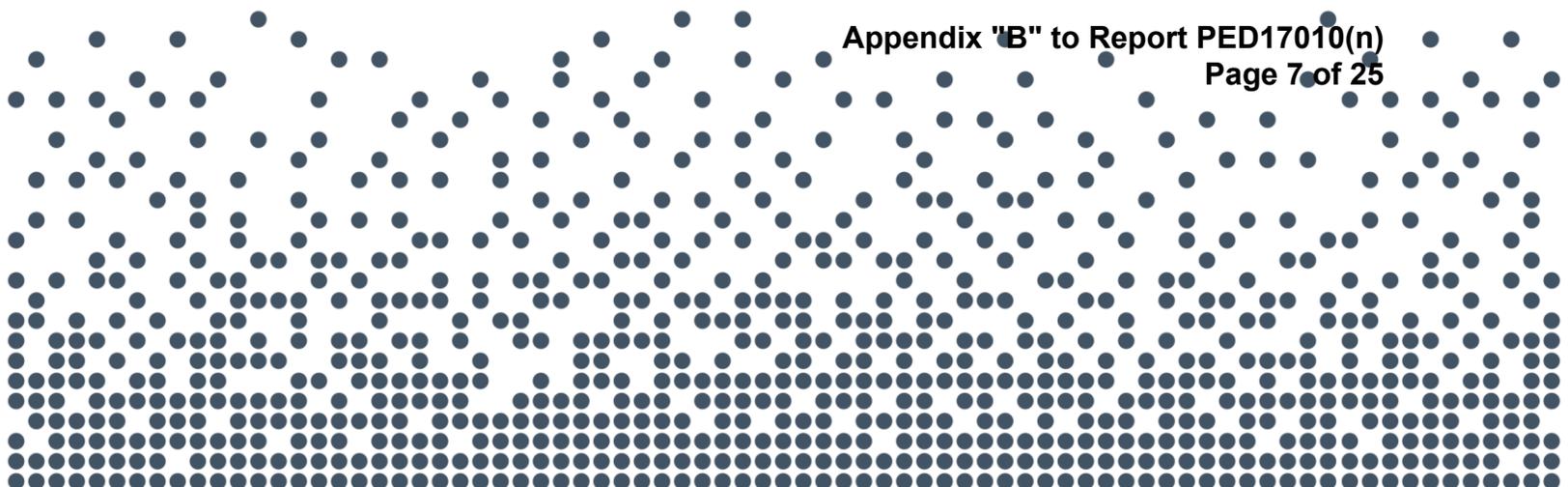


hereafter, referred to as the Growth Plan.² Watson has reviewed the data and analysis provided in the City's LNA documents to confirm if the assumptions and analysis logically support the conclusions regarding the City's long-term Land Need Scenarios, including: 1) Growth Plan Minimum, 2) Increased Targets and 3) Ambitious Density. Further, our peer review identifies potential gaps that the City's consulting team should potentially explore to strengthen the City's LNA analysis and conclusions.

Based on the aforementioned, our review of the City's LNA Documents includes the following:

- A high-level examination of the methodology adopted in the City's LNA Documents, including underlying assumptions and overall empirical design;
- A review of key inputs and supporting analysis related to required Growth Plan targets, including: percentage housing intensification, Designated Greenfield Area (DGA) density, and Employment Area density;
- An examination of the overall conclusions provided in the City's LNA documents; and
- Recommendations to strengthen the City's LNA Documents.
- It is important to note that as part of our review, Watson has not undertaken comprehensive original research or data compilation related to the City's LNA.

² A Place to Grow: Growth Plan for Greater Golden Horseshoe (GGH). Office Consolidation, 2020. Ontario.



Chapter 2

Summary of Key Findings



2. Summary of Key Findings

In accordance with the findings of our review, it is our opinion that the overall approach and methodology utilized in the City's LNA Documents prepared by Lorus & Associates is generally an appropriate application of the Growth Plan and the Provincial LNA Methodology. Notwithstanding, we have identified key areas of the LNA documents that would benefit from further clarification and additional supporting analysis, which are discussed below.

2.1 Review of Land Needs Assessment Scenarios

Three scenarios are contemplated in the City's LNA Documents, including:

- 1) Growth Plan Minimum: 50% intensification, Community Area density of 65 people and jobs/ha in new greenfield areas.
 - 2) Increase Target: 50% Intensification to 2031, 55% to 2041, 60% to 2051 and Community Area density of 75 people and jobs/ha on new greenfield lands.
 - 3) Ambitious Target: 50% Intensification to 2031, 60% to 2041, 70% to 2051, Community Area density of 77 people and jobs/ha on new greenfield lands.
- While not specifically noted in the City's LNA Documents, it is our understanding that that the Ambitious Density Scenario had been selected by staff as the preferred scenario. This scenario is premised on the following:
 - A transitional housing intensification target starting at 50% of total City-wide housing growth to 2031, followed by 60% to 2041 and 70% to 2051;
 - 60 people and jobs per ha in the existing designated area of the DGA;
 - Community Area density of 77 people and jobs/ha on new DGA expansion lands;
 - Community Area land need of 1,340 gross ha; and
 - A small surplus (60 net ha) of Employment Area land to 2051.
 - All scenarios adopt the Growth Plan, Schedule 3 population and housing forecasts to 2051 for the City of Hamilton.



- The housing forecast by structure type utilized for the Growth Plan Minimum Scenario has been derived from a report, entitled, “Technical Report: Greater Golden Horseshoe Forecast to 2051”, hereafter referred to as the Technical Report to the Growth Plan.³
- All scenarios assume the same density assumptions for Employment Areas.

As further background to the City’s LNA Documents, a memorandum prepared by Lorus & Associates, entitled, “City of Hamilton Land Needs Assessment (LNA) Technical Update”, prepared as of July 31, 2021, was reviewed as part of our review. This memo provides the following supplemental information with respect to the City’s LNA Documents and the corresponding long-term Land Need Scenarios:

- An illustrative Current Trends scenario was prepared to show the results of a lower intensification target (40% of new units). It was noted that this scenario is not considered suitable given the potential for Hamilton to shift the pattern of development towards denser urban forms.
- It was noted that a “No Urban Expansion Option” was not modelled, as such an option does not meet Provincial planning policy requirements and is not considered good planning. It was suggested that a No Urban Expansion Option would result in the City not meeting its Schedule 3 minimum forecasts, as growth would be directed elsewhere.
- The density assumption under the Ambitious Density scenario, for new greenfield housing is very high: on average 35 units per net ha for single and semi-detached units and 70 units per net ha for row houses. It is further noted, while there may be some site-specific examples of such units at higher densities, on a community-wide basis the Ambitious Density Scenario represent an extremely compact urban form.
- The Ambitious Density Scenario is not a pure “market-based” approach to the LNA, but rather embodies deliberate policy intervention to optimize the use of the existing urban land supply and avoid over-designating land for future urban

³ Greater Golden Horseshoe: Growth Forecast to 2051, August 26, 2020. Technical Report. Hemson Consulting Ltd.



development while still planning to achieve the Schedule 3 Growth Plan forecasts. Given the level of policy intervention involved, the Ambitious Density Scenario requires careful monitoring and reporting on progress to ensure a balanced supply of housing types to 2051, in accordance with the mandated LNA method.

Comments:

- It should be noted that the Growth Plan minimum for the City of Hamilton is 50% residential intensification and an average of 50 people and jobs/ha across the entire DGA, as per Growth Plan, policy 2.2.7.2. It is recommended that the description of the Growth Plan Minimum Land Needs Scenario should be modified accordingly to avoid confusion.
- As summarized in Table 19 of the City of Hamilton LNA to 2051 Technical Working Paper, we understand that the average density subject to policy 2.2.7.3 under the Ambitious Density Scenario is 60 people and jobs/ha with a higher density of 77 people and jobs assumed for Community Area expansion lands. The descriptions of the Land Needs Scenarios should include metrics on average people and jobs density over the entire DGA including both occupied and vacant lands. As per Growth Plan policy 2.2.7.3: “the minimum density target will be measured over the entire designated greenfield area.”
- All three Land Needs Scenarios assume 60 people and jobs/ha for DGA lands currently designated within the City of Hamilton. The Land Needs Scenarios apply different densities for the urban lands to be brought into the settlement areas, but do not alter the average density on existing DGA lands. It would benefit the reader if this assumption was more clearly explained in Section 1 of the City of Hamilton LNA to 2051 Technical Working Paper when the Land Needs Scenarios are first introduced. It would also be helpful to understand the impact of the adjusted densities related to the settlement boundary expansion lands on the total DGA density (existing plus future lands) under each Land Need Scenario. It is important that this distinction is made in the City’s LNA documents when addressing DGA density variation between the three Land Needs Scenarios.



- The City's LNA Documents would benefit from additional background analysis which describes existing conditions regarding average DGA density. It is unclear how much average DGA levels are expected to rise relative to existing conditions, and what the near-term real estate conditions are to support such a rise in average DGA density. It is recommended that DGA lands within registered unbuilt, drafted approved, proposed development applications, and lands with no development applications are identified and categorized. This would help to determine how much average the density on DGA lands in active plans are likely to increase relative to existing conditions, and what weight this represents when considering the City's total DGA land supply. It is recommended that further information is provided regarding the housing supply assumptions in Table 9 of the City of Hamilton LNA to 2051 Technical Working Paper by development approval status.
- Further context should be provided to explain why a higher DGA density (and/or a shift with a greater share of high-density) is assumed for the new Community Area lands (those in the whitebelt to be brought into the settlement areas) versus the existing DGA under each Land Needs Scenario. This should include a discussion which addresses if this proposed shift reflects anticipated market trends influenced by housing affordability, major infrastructure investment (i.e. high-order transit), demographics and planning policy, or simply just a planning policy shift. Further, it would be beneficial to discuss how a higher density assumption in the DGA would not undermine efforts to direct high density development in the BUA.

2.2 Review of City of Hamilton LNA Components – Community Area

2.2.1 Component 1 – Population Forecast

This LNA component requires that municipalities review the 2051 population forecast contained in the Growth Plan Schedule 3. It is important to note that the growth forecasts in Schedule 3 of the Growth Plan are considered minimums and municipalities may prepare alternative forecast scenarios that are higher, provided that such forecasts provide a range of housing options as well as providing additional labour opportunities for the GGH labour market.

**Comments:**

- Section 2 of the City of Hamilton LNA to 2051 Technical Working Paper provides a brief explanation to support the utilization of the Growth Plan Schedule 3 forecast - the minimum growth forecast. It is noted in the City's LNA documents that the forecast to 2051 is a significant amount of growth relative to the past: twice as much over the next 20 years than the last 20 years.⁴ It is further noted that the long-term growth outlook for Hamilton is positive and that this is consistent with the expectation of the Ministry of Finance Ontario's Long-Term Report on the Economy (2017).
- It is recommended that the City consider adding more context regarding the magnitude of growth anticipated to 2051, such as:
 - historical versus forecast annual City-wide population and employment growth rates;
 - a review of the City's share of historical/forecast population and employment growth for the City of Hamilton relative to the remaining GTA; and
 - the amount of forecast net migration required to achieve the minimum forecast relative to historical trends.
- Building on the above analysis, a statement should be provided that explains why that a higher growth forecast is not appropriate for the City of Hamilton.

2.2.2 Component 2 – Housing Need by Structure Type

This LNA component requires that GGH municipalities demonstrate that the housing forecast allows for sufficient choice to meet market demand and the projected needs of current and future residents. Further, an analysis of housing by structure type is required based on a forecast of age-specific housing propensity by type.

Comments:

⁴ City of Hamilton Land Needs Assessment to 2051 Technical Working Paper, p.10.



- Watson has reviewed the housing forecasts by structure type generated in the City's LNA Documents to assess whether the forecasts are supported by the analysis in the City's LNA Documents regarding future market-based trends. Ultimately, the City's analysis must demonstrate that the housing forecast which supports the preferred Land Needs Scenario offers a suitable range of housing choice reflecting anticipated demographic trends (i.e. trends in population age structure) and socio-economic trends (i.e. housing affordability) as well as lifestyle and other factors.
- As previously discussed, the City of Hamilton LNA to 2051 Technical Working Paper, places considerable emphasis on the Technical Report to the Growth Plan, as the baseline for its "Current Trends" forecast, with some modifications for accessory units.
- The City's LNA Document would benefit from additional analysis which describes recent trends in housing by structure across the City. Page 22 of the City of Hamilton LNA Technical Working Paper describes the required shift from the "Current Trends", to achieve the "Policy-Based" outcome. While it is implied in the City's LNA Documents it should be explicitly stated that a key objective of the City's LNA is to balance "future market-based" trends and Provincial policy over the 2021 to 2051 planning horizon, not simply shift "Current Trends" as a result of required planning policy objectives. As a starting point, the City of Hamilton LNA to 2051 Technical Working Paper would benefit by comparing the "Current Trends" housing forecast over 2016 to 2021 period with actual residential building permit activity (for new dwellings) or residential completion data between 2016 to 2020 for the City of Hamilton. The review would help show that "Current Trends" have already shifted further towards high-density housing over the past few years relative to the base analysis relied on using the Technical Report to the Growth Plan (a high-level review of recent housing trend has been prepared by Watson and is summarized in Appendix A). Further analysis could then be provided regarding the housing mix associated within active development applications to indicate where near-term trends in housing by structure type appear to be heading over the next decade.
- Ultimately, the housing mix and housing intensification target associated with the preferred Land Needs Scenario should strike a balance between delivering a future housing supply which reflects an appropriate shift in housing by structure



type reflective of anticipated market trends and required policy objectives. Without the background information suggested above, it is difficult to fully assess the reasonableness of the housing forecast by structure type associated with each of the Land Needs Scenarios.

2.2.3 Component 3 – Housing Allocations by Policy Area

This component requires an allocation of housing by type and by policy area, including DGA, built-up area (BUA) and Rural Area with consideration of servicing, affordability, market demand and urban structure.

Comments:

- Watson has reviewed the allocations between BUA and DGA to ensure that the City has allocated housing demand to support market choice of housing and policy direction. We have no significant concerns regarding the allocation of growth by policy area under the Growth Plan Minimum and Increased Target Land Needs Scenarios. Notwithstanding, the City of Hamilton Residential Intensification Analysis Market Demand Analysis report would benefit by providing more detail to demonstrate the composition of housing development within the BUA since 2006 by structure type. This would help illustrate the amount and percentage of “true” intensification as opposed to greenfield lands captured within the BUA which have since developed during the post-2006 period.
- The City of Hamilton Residential Intensification Analysis Market Demand Analysis Report would also benefit by providing additional commentary which supports how recent and planning high-order transit infrastructure investment is anticipated to support the planned shift towards higher housing intensification as set out in the Increased Target and Ambitious Land Needs Scenario. Recent experiences in Hamilton, as well as across other GTA municipalities, such as York and Peel Region, associated with major infrastructure investments and the corresponding market strength for housing intensification would help to rationalize the forecast shift proposed in the intensification forecast under the Increased Target and Ambitious Land Needs Scenario.
- While not a requirement of the Provincial LNA methodology, an allocation of the preferred Land Needs Scenario by urban settlement (e.g., Ancaster, Dundas,



Hamilton, etc.) would further illustrate local influences which are anticipated to inform key targets related to residential density intensification as well as Community Area and Employment Area density. The analysis at this geographic level is important in understanding potential imbalances of supply and demand across the municipality, as well as infrastructure phasing. It would also assist in developing planning policies and other planning/financial tools where larger gaps may exist between market demand and long-term policy objectives.

2.2.4 Component 4 – Housing Supply

This LNA component requires an extensive analysis of housing supply opportunities and available land to accommodate anticipated housing. A key task of this component is an intensification supply analysis that supports the intensification target, as informed by anticipated real estate market trends, as well as policy objectives of the Growth Plan (e.g., building complete communities and supporting transit).

Comments:

- Watson has reviewed the housing supply summarized in the City's LNA Documents. As previously discussed, it is recommended that the City consider providing supplementary information on the housing supply by structure type by status, e.g., draft approved, registered unbuilt and remaining vacant lands. This information would provide insights regarding the housing supply by structure type anticipated in the short and medium-term. Further, a commentary should be provided whether the City can accommodate Provincial Policy Statement (PPS), 2020, policy 1.4.1 (a) and (b):

“...maintain at all times the ability to accommodate residential growth for a minimum of 15 years through residential intensification and redevelopment and, if necessary, lands which are designated and available for residential development; and

maintain at all times where new development is to occur, land with servicing capacity sufficient to provide at least a three-year supply of residential units available through lands suitably zoned to facilitate residential intensification and redevelopment, and land in draft approved and registered plans.”



2.2.5 Component 5 – Community Area Jobs

This LNA component requires that municipalities review opportunities to accommodate employment within the Community Area, as part of the Employment Analysis. This analysis is required for the people and jobs density target and ultimately the Community Area land needs analysis. Further, understanding the amount of non-residential growth within the Community Area is important when planning for complete Community Areas and ensuring an adequate mix of designated lands (e.g., commercial, residential and institutional).

Comments:

- It is noted on Table 17, page 33 of the City of Hamilton LNA to 2051 Technical Working Paper that a ratio of 1 job for every 8 residents is applied in Community Areas, however, this contradicts with the commentary on page 42 of the same report, which notes 1 Community Area job for every 4 residents. Perhaps the difference has to do with a different ratio assumed for the DGA versus the City-wide total, however this is unclear and should be explained.

2.2.6 Component 6 – Need for Additional Community Area Land

This LNA component requires the calculation of land demand in the DGA in accordance with the Growth Plan policy 2.2.7.3. The City's total DGA land supply, which was previously discussed in Component 4, is then compared against forecast total DGA land demand to arrive at a Community Area land need by 2051.

The Provincial LNA Methodology allows municipalities to explore adjustments to the LNA analysis, where necessary, such as provisions to account for housing vacancy rates and land vacancy (i.e. lands which are not anticipated for sale or development over the long-term planning horizon), as well as exclusions for lands that may not be developed over the planning horizon due to additional infrastructure requirements which consume land but do not generate a local population or employment yield (e.g. transit stations, highways). These adjustments are to be used, where necessary, to ensure that the municipalities plan for a range of market choice of housing.

**Comments:**

- The people and jobs density input is very sensitive. Without adequate supporting analysis, the density input can be perceived as subjective without market consideration. As previously discussed, the Hamilton LNA would benefit from a more fulsome discussion on DGA density metrics, including:
 - What is the current DGA density and associated housing mix on developed lands as of today?
 - What is the potential DGA density on lands that have been approved and draft approved for development?
 - How does a higher DGA density support a wider range of housing options and address housing affordability?
 - How does population-related employment impact the people and jobs density?

2.3 Review of City of Hamilton LNA Components – Employment Area

2.3.1 Components 1 and 2 – Employment Forecasts and Allocations

Consistent with the approach to forecast population, the Provincial LNA Methodology requires municipalities to review Schedule 3 of the Growth Plan and assess whether a higher forecast is required for employment. Further, municipalities are required to understand their current employment base and future employment opportunities by type (Employment Lands Employment, Population-Related Employment and Rural Employment) and location (Employment Area, Community Area and Rural Area). A key emphasis in the Provincial LNA Methodology is an understanding of how macro economic trends and regional drivers are anticipated to influence the amount, type and location of employment growth.

Comments:

Watson has reviewed the employment analysis prepared as part of the Hamilton LNA, including consideration of key disruptive forces and labour market trends. The City's



LNA documents provide an adequate discussion of current employment disruptors and labour market trends, however, no discussion is provided on recent local employment trends since 2016. It would be beneficial to include a commentary and any supporting analysis on development trends in established Employment Areas across the City. Most notably, how much and what type of development activity has occurred across the City's Employment Areas in recent years (i.e. past five to ten years).

Based on our discussion with Lorus & Associates, it is our understanding that the port lands in Hamilton have experienced strong growth over the past few years. The City of Hamilton Residential Intensification Market Demand Analysis document provides a brief discussion of the redevelopment potential of the port lands. It would benefit the City of Hamilton Land Needs Assessment to 2051 Technical Working Paper if additional background discussion of the port lands was included to support whether the Stelco lands are likely to develop at this density from a market perspective.

2.3.2 Components 3 and 4 – Employment Supply and Additional Land Required

Ensuring an adequate supply of designated lands for employment growth is critical for the long-term prosperity of the City of Hamilton. The Employment Area land supply is an important component of the LNA and should include insights on the characteristics of the land supply and its alignment with demand.

Comments:

Watson has reviewed the Employment Land Needs analysis provided in the City of Hamilton LNA to 2051 Technical Working Paper. The conclusions of the Employment Area LNA is that there is a surplus of 60 net ha by 2051. It is important to recognize that the Employment Area density assumption is a very sensitive input. The Employment Area density assumption utilized is 39.5 jobs over the 2016 to 2051 period. If the City utilized its Employment Area density as of 2016 of 24.3 jobs/ha, the City Employment Area capacity would decrease by approximately 19,600 employees.⁵

The City's Employment Area LNA uses 2016 as base year. It is recommended that the City consider providing more supporting analysis regarding the density assumption utilized and why the density is assumed to be considerably higher than what was

⁵ Based on vacant employment land supply of 1,290 ha.



observed as of 2016. This could include a sample analysis of recent development that has occurred on employment lands in recent years which supports the increasing Employment Area density trend.

The Provincial LNA Methodology document stresses that municipalities are to review the Employment Area land supply to ensure sufficient quantity to meet the overall employment demand and that they include lands that meet the attributes that are important to businesses. As part of this analysis, municipalities are required to consider the following in addition to the quantum of land needed to support employment growth:

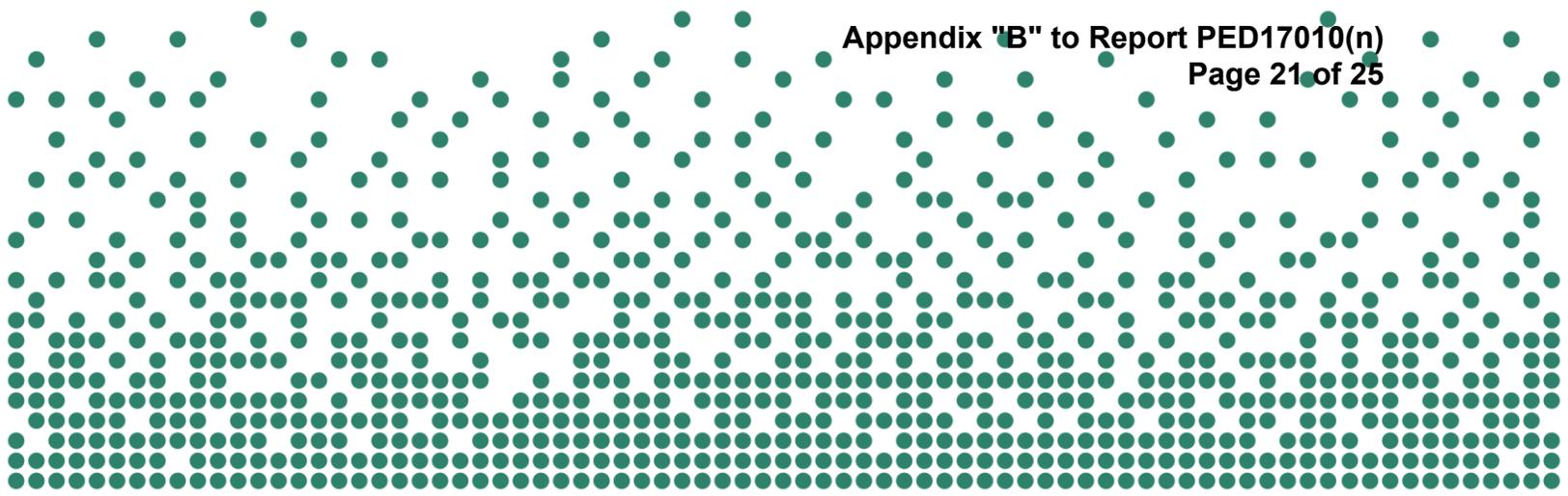
- Servicing (either existing or near-term potential);
- Visibility, access to highways, proximity to other major goods movement facilities and corridors;
- A range and size of available sites to meet market choice, including:
 - vacancy factors to account for lands that may not develop to the Plan horizon;
 - a sufficient supply of large parcels to accommodate extensive uses; and
 - strategic investment sites to attract investment that may otherwise choose to locate outside of Ontario;
- Proximity to sensitive uses; and
- Other factors that reflect the changing need of businesses.⁶

It is our opinion that more is needed to explain how the City's Employment Area land supply is sufficient to accommodate employment growth over the short and long-term planning horizon. This should include a more detailed description of the supply characteristics of the City's Employment Areas, such as size of vacant parcels, serviced versus serviceable lands and potential servicing constraints that may influence the rate of land absorption in Employment Areas over the planning horizon.

⁶Provincial Land Needs Assessment Methodology for the Greater Golden Horseshoe (2020) document, p. 18.



In addition, City's LNA document would be strengthened by providing more background information to support the intensification assumptions regarding the Stelco redevelopment site. The potential of 5,000 jobs is very significant and warrants a discussion of the types of uses anticipated.



Chapter 3

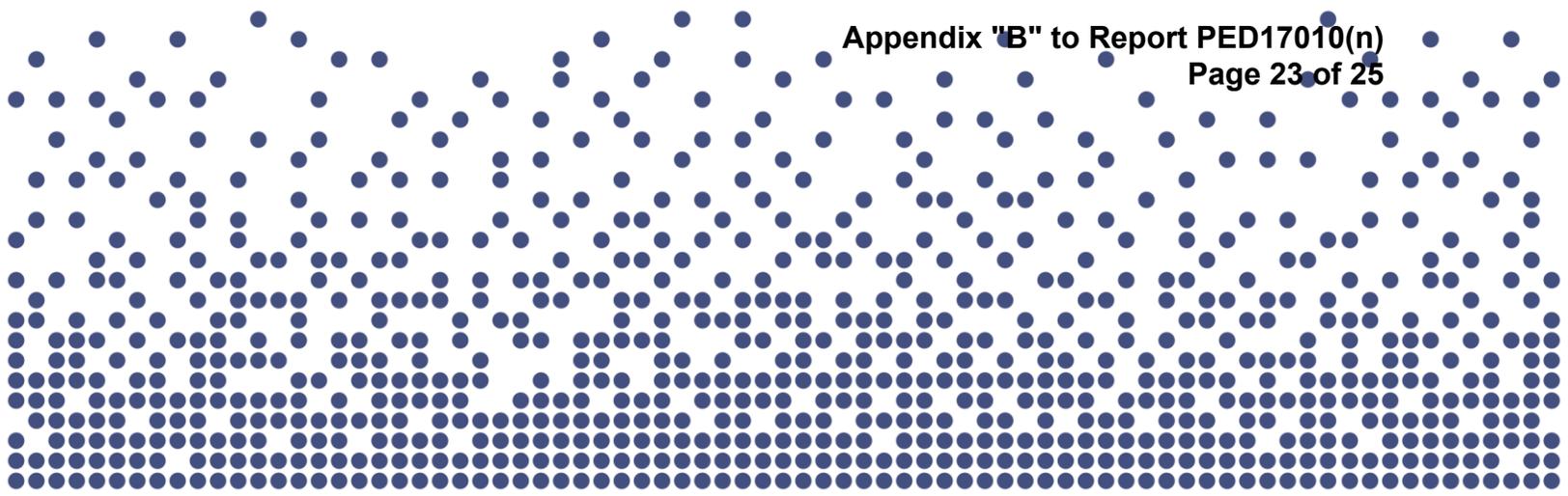
Conclusions



3. Conclusions

As previously discussed, it is our opinion that the approach and methodology utilized in the City's LNA Documents prepared by Lorius & Associates is generally an appropriate application of the Growth Plan and the Provincial LNA Methodology. Notwithstanding, we have identified key areas of the City's LNA documents that would benefit from further clarification and additional supporting analysis, including:

- Greater details to demonstrate the composition of housing development within the BUA since 2006 by structure type. This would help illustrate the amount and percentage of "true" intensification relative to greenfield lands captured within the BUA, which have since developed during the post-2006 period;
- A summary of existing DGA density, density trends in active plans within the DGA and the change in the overall DGA density under each of the Land Needs Scenarios;
- Further characteristics of the Employment Area land supply to support businesses, attract investment accommodate employment growth over the long-term; and
- Justification of the Employment Area land density assumption.



Appendix



Appendix A: City of Hamilton Recent Housing Mix Trends

Figures A-1a and A-1b summarize recent residential building permit activity by housing structure type within the City of Hamilton between 2016 and 2020. As summarized, the housing unit mix has comprised 29% singles/semi-detached, 36% townhouses and 35% apartments. Apartments units have averaged 849 units annually within the City of Hamilton between 2016 and 2020.

Figure A-1a
City of Hamilton
Residential Building Permit Activity,
2016 to 2020

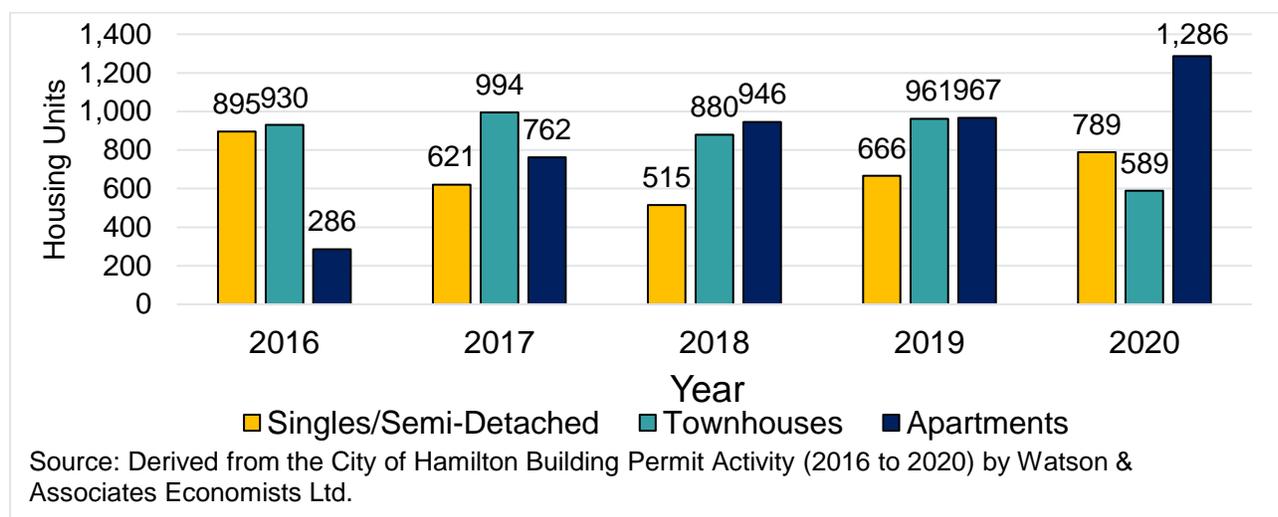


Figure A-1b
City of Hamilton
Residential Building Permit Activity,
2016 to 2020

	Singles/Semi-Detached	Townhouses	Apartments	Total
2016 to 2020	3,486	4,354	4,247	12,087
Share (%)	29%	36%	35%	100%
Annual	697	871	849	2,417

Source: Derived from the City of Hamilton Building Permit Activity (2016 to 2020) by Watson & Associates Economists Ltd.



Figure A-2 summarizes the estimated housing growth between 2016 to 2021 as reported in the City of Hamilton Residential Intensification Market Demand Analysis. This estimate, which is also consistent with the Technical Report to the Growth Plan, was used to update the City's housing base by structure type to 2021 from the most recent 2016 Statistics Canada Census.⁷ It is noted that the City of Hamilton Residential Intensification Market Demand Analysis estimates a significantly lower share of housing growth in apartments between 2016 and 2021 (320 units annually or 15% of total housing compared to 849 units annually, or 35% of total residential building permits) as summarized in Figure A-1). While it is recognized that long-term trends may not be indicative of recent trends over the past five years, its important to highlight that the City of Hamilton has experienced a greater shift towards higher housing density over the past five years than estimated in the City of Hamilton Residential Intensification Market Demand Analysis report.

Figure A-2
City of Hamilton
City of Hamilton Residential Intensification Market Demand Analysis (March 2021)
Residential Unit Growth, 2016 to 2021

	Singles/Semi-Detached	Townhouses	Accessory Apartments	Apartments	Total
2016 to 2021	4,100	4,500	700	1,600	10,900
Share (%)	38%	41%	6%	15%	100%
Annual	820	900	140	320	2,180

Source: Derived from City of Hamilton Residential Intensification Market Demand Analysis March 2021 reported by Lorious Consulting. Forecasting by Hemson Consulting Ltd.

⁷ Greater Golden Horseshoe: Growth Forecast to 2051, August 26, 2020. Technical Report. Hemson Consulting Ltd.