



CITY OF HAMILTON
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Planning Division

TO:	Mayor and Members General Issues Committee
COMMITTEE DATE:	November 9, 2021
SUBJECT/REPORT NO:	GRIDS 2 and Municipal Comprehensive Review – “How Should Hamilton Grow? Evaluation” (PED17010(o)) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Heather Travis (905) 546-2424 Ext. 4168
SUBMITTED BY:	Steve Robichaud Director, Planning and Chief Planner Planning and Economic Development Department
SIGNATURE:	

RECOMMENDATION

- (a) That the Growth Related Integrated Development Strategy (GRIDS 2) / Municipal Comprehensive Review (MCR) “How Should Hamilton Grow?” Evaluation, including associated technical supporting reports, attached as Appendix “A” to Report PED17010(o), be received by Council;
- (b) That Council adopt the “Ambitious Density” scenario, as identified in the Land Needs Assessment to 2051 – Technical Working Paper prepared by Lorus & Associates, dated March 2021, and Addendum, attached as Appendices “B” and “B1” to Report PED17010(o), as the preferred Community Area land needs scenario to accommodate Provincial mandated forecasted growth to 2051, and the following growth projections, intensification target, planned density of greenfield areas, and Community / Employment Area land needs be utilized and incorporated into the next phases of the GRIDS 2 / MCR process and the development and evaluation of growth scenarios:
 - (i) A projected household growth of 110,300 households;
 - (ii) An intensification target of 50% between 2021 and 2031, 60% between 2031 and 2041 and 70% between 2041 and 2051;

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- (iii) A planned density of 60 persons and jobs per hectare (pjh) in existing Designated Greenfield Areas and 77 pjh in new Designated Greenfield Areas (urban expansion areas);
 - (iv) A Community Area land need of 1,310 gross developable ha to 2051;
 - (v) An Employment Area land need of 0 ha, to be confirmed subject to the finalization of the Employment Land Review, including deferred requests;
- (c) That for the purposes of managing growth, the following phasing of land need be endorsed for planning purposes to 2051:
- (i) For the period from 2021 to 2031, a land need of 305 ha;
 - (ii) For the period from 2031 to 2041, a land need of 570 ha;
 - (iii) For the period from 2041 to 2051, a land need of 435 ha;
- (d) That Council authorize staff to evaluate phasing of growth options under the Ambitious Density scenario to identify where and when development of the whitebelt lands, comprised of one or more of the areas known as Elfrida, Twenty Road East, Twenty Road West and Whitechurch, should occur, in accordance with the GRIDS 2 / MCR Growth Evaluation Framework and Phasing Criteria, and report back to Council with the results of the evaluation and phasing analysis;
- (e) That Council authorize staff to evaluate requests for expansion from Waterdown and Binbrook, up to a maximum size of 10 ha, of which 5 ha may be for residential use, as per the Screening Criteria and Evaluation Tool (Waterdown / Binbrook), and report back to Council with the results of the evaluation analysis;
- (f) That Council direct staff to prepare a draft Official Plan Amendment as part of the MCR that implements an interim urban boundary expansion to 2031 and that includes policies to ensure that any future urban boundary expansions are controlled and phased, including consideration of options for identifying growth needs beyond 2031 without formally designating the land as urban at this time and that staff be directed and authorized to schedule a public meeting of the Planning Committee to consider an Official Plan Amendment, to give effect to the MCR.

EXECUTIVE SUMMARY

Through GRIDS (Growth Related Integrated Development Strategy) 2 and the Municipal Comprehensive Review (MCR), the City is planning for growth to the year 2051. The Provincial Growth Plan identifies an ultimate 2051 population of 820,000 persons and employment of 360,000 jobs in the year 2051. This growth equates to an increase of

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236,000 people, 110,000 housing units, and 122,000 jobs over the next 30 years. Growth in the 2006 to 2021 time period has generally been consistent with Provincial forecasts.

The “How Should Hamilton Grow?” evaluation, attached as Appendix “A” to Report PED17010(o) has been completed to compare the Ambitious Density growth scenario (urban expansion of 1,310 ha) and the No Urban Boundary Expansion (UBE) growth scenario, against a series of 11 Key Themes. The evaluation reflects input from the GRIDS 2 / MCR staff working group and a team of technical consultants.

The evaluation framework is a tool to show the trades-offs associated with different themes to inform the planning rationale for a preferred growth option. The evaluation identified the following:

- Option 1 Ambitious Density better addresses the Complete Communities and Conformity with the Provincial Methodology Themes;
- Option 2 No UBE better addresses the Growth Allocation, Climate Change, Transportation System, Natural Heritage and Water Resources, and Agricultural System Themes; and,
- Both Options equally address the Natural Hazards, Municipal Finance, Infrastructure and Public Service Facilities and Cultural Heritage Themes.

Staff are recommending Council adoption of the Ambitious Density growth option to be implemented in phases. The phased approach will allow staff to monitor and report back to Council on the implementation of the growth management strategy and recommend any refinements or adjustments to the strategy based on Provincial policy and other considerations. The Ambitious Density option represents an aggressive and forward-thinking approach to growth management, provides reasonable and achievable targets for planning purposes, and is in conformity with Provincial requirements.

Alternatives for Consideration – See Page 36

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: N/A

Staffing: N/A

Legal: N/A

HISTORICAL BACKGROUND

1.0 GRIDS 2 / Municipal Comprehensive Review (MCR)

GRIDS 2 will result in a long-term growth strategy which allocates forecasted population and employment growth for the 2021 to 2051 time period in accordance with Provincial mandated requirements. The forecasts for Hamilton project a total 2051 population of 820,000 persons and total employment of 360,000 jobs. This is an increase of 236,000 people and 122,000 jobs in the 2021 to 2051 time period.

The MCR is being completed concurrently with GRIDS 2. The MCR is broad and encompasses many inter-related components and must be completed prior to any expansion of the urban boundary. Many of the studies that are required as part of the MCR are also part of a growth strategy. Like the first GRIDS, GRIDS 2 / MCR is an integrated study which will inform the updates to the Infrastructure Master Plans, transportation network review, and Fiscal Impact Assessment (FIA) that will assist with future updates to the Development Charges By-law. The outcomes of the Growth Strategy and MCR will be implemented through the City's Official Plans.

2.0 Land Needs Assessment, March 2021, and Addendum, November 2021 – Lorius & Associates

A Land Needs Assessment (LNA) is a study that identifies how much of the forecasted growth can be accommodated within the City's existing urban area based on inputted targets, and how much growth may need to be accommodated within any potential urban expansion area. The LNA considers the need for "Community Area" lands (i.e. lands to accommodate population growth and some commercial and institutional employment growth) separate from "Employment Area" lands (i.e. lands designated to accommodate primarily business park and industrial-type uses). The LNA must be completed in accordance with the Provincial Methodology.

Report PED17010(n), dated November 9, 2021, provides an overview of the City's Land Needs Assessment (March 2021) and Addendum (November 2021), both prepared by Lorius & Associates. The LNA and the Addendum are attached to this Report as Appendices "B" and "B1" to Report PED17010(o).

For the consideration of Community Area land need, the LNA modelled four land need scenarios based on different intensification and density assumptions. The scenarios are summarized in Table 2 below:

Table 1: LNA Results – Community Area Land Need Scenarios

Scenario	Intensification Target (%)			Land Need (ha)
	2021 – 2031	2031 – 2041	2041 - 2051	
1. Current Trends	40			3,440
2. Growth Plan minimum	50			2,190
3. Increased Targets	50	55	60	1,630
	(55% average over the period)			
4. Ambitious Density	50	60	70	1,340*
	(60% average over the period)			

Source: Lorus & Associates, Land Needs Assessment Technical Working Paper, 2021

*** Land Need under the Ambitious Density scenario updated to 1,310 ha in the LNA Addendum, Lorus & Associates, November 2021.**

While the LNA did not model a ‘no urban boundary expansion’ option, the LNA Addendum prepared by Lorus & Associates, dated November, 2021, considers the No UBE scenario. The No UBE scenario would require an intensification rate of approximately 81% of new dwelling units being constructed within the Provincially defined Built-up Area over the next 30 years, and the remaining growth would be on Designated Greenfield Areas. Both the lands with the Built-up Area and the Designated Greenfield Area are located within the City’s current urban area. The requirement to accommodate all of the City’s growth within the urban boundary under the No UBE scenario (save and except for a minor provision for infill on vacant lots and in rural settlement areas within Rural Hamilton), results in a required shift of 59,300 ‘ground-related’ units (i.e. single detached, semi-detached and townhouse units) into apartments under this scenario.

The LNA Addendum also includes updated assumptions regarding Detached Secondary Dwelling Units resulting in a decreased land need under the Ambitious Density scenario to 1,310 ha.

The How Should Hamilton Grow? Evaluation being presented in this report is a comparative evaluation of the Ambitious Density scenario as presented in the March, 2021 LNA, and updated in the November, 2021 Addendum, and the No UBE scenario as described in the November, 2021 Addendum.

For Employment Area lands, based on the City’s existing available Employment Area land supply and assumptions about the future density of development of those lands, the LNA identifies that the City’s supply and demand for Employment Area jobs is in balance, with a small surplus of approximately 60 ha of Employment Area lands. No additional employment lands are required for current planning purposes. This

conclusion will need to be confirmed following a final decision on the City's outstanding employment land conversion requests.

2.0 March 29, 2021 General Issues Committee Meeting – Staff Recommendation

At the March 29, 2021 meeting of the General Issues Committee (GIC), staff presented Report PED17010(i), including the City's LNA to 2051, and recommended the adoption of the Ambitious Density Growth scenario.

Delegations were made at the meeting with concerns being raised about the lack of consideration of a 'no urban boundary expansion' option within the LNA. Further, concerns over the challenges and limitations of virtual public engagement were also cited.

Based on public input on the LNA at the March, 2021 meeting, Committee approved the following revised Recommendation to Report PED17010(i) (as shown in bold text below):

"That Report PED17010(i), respecting GRIDS 2 and Municipal Comprehensive Review - Final Land Needs Assessment, be amended by deleting sub-sections (a) through (c) in their entirety and replacing them with the following in lieu thereof, and by re-lettering the balance accordingly:

- (a) That staff be directed to conduct a city-wide mail consultation with a survey on the Land Needs Assessment and the Municipal Comprehensive Review that includes the Ambitious Density Scenario, a "no boundary expansion" scenario, and that also allows residents to submit their own alternative scenario, to be funded from the Tax Stabilization Reserve No. 110046 at an estimated cost of \$35,000;**
- (b) That, with respect the mailout survey regarding the Land Needs Assessment and the Municipal Comprehensive Review, staff be directed to:**
 - (i) include a postage prepaid return envelope as part of the mailout; and,**
 - (ii) give residents 30 days to respond to the survey, respecting the Land Needs Assessment and the Municipal Comprehensive Review;**
- (c) That staff be directed to compile the data from the Land Needs Assessment and the Municipal Comprehensive Review survey and provide an Information Report to be presented at a Special General Issues Committee no later than October 2021;**

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- (d) That staff be directed to prepare scenarios for where and how growth would be accommodated under the Ambitious Density Scenario as well as a “no boundary expansion” scenario, and to present these scenarios as well as staff’s recommended land needs assessment, growth targets, and preferred growth scenario at that same Special General Issues Committee to be held no later than October 2021;***

- (e) That the GRIDS 2 / MCR process and the development and evaluation of scenarios consider phasing options that would ensure that any future urban boundary expansions are controlled and phased, including consideration of options for identifying growth needs beyond 2041 without formally designating the land as urban at this time; and,***

- (f) That at the conclusion of GRIDS 2 / MCR and the final approval of the implementing Official Plan Amendments identifying the land need to accommodate growth to 2051, staff prepare a report for Council with respect to the necessary steps for recommending to the Province that any remaining Community Area Whitebelt lands be added to the Greenbelt.”***

Approval of the LNA and the Ambitious Density scenario was deferred to October 2021. Rather, the revised Council recommendation directed staff to undertake additional consultation on the LNA in the form of a City-wide mail-out survey, including an option for respondents to select a preference for ‘no urban boundary expansion’. For discussion of the mail-out community consultation, see section 3.0 below.

Staff were directed to undertake modelling and evaluation of both the Ambitious Density scenario and the no UBE scenario, and to report back on the findings of the modelling and evaluation in Fall 2021. This report which presents the modelling and evaluation of both the Ambitious Density scenario and the no UBE scenario using the How Should Hamilton Grow? framework is consistent with the Council direction above.

3.0 LNA Urban Growth Mail-Out

As noted above, at the March 29 GIC meeting, in response to rural broadband / internet connectivity issues being a barrier to virtual engagement and participation in the GRIDS 2/ MCR process, Council directed staff to undertake additional community consultation in the form of a mail-out to all households (urban and rural areas) to allow households to select either the ‘No Urban Boundary Expansion’ scenario or the ‘Ambitious Density’ scenario. If the homeowner preferred neither of these two options, then the homeowner could submit an alternative third option.. The city-wide mail-out was launched in June to all households in Hamilton. The results of the mail-out are summarized in Staff Report PED17010(m), dated November 2021. More than 18,000

responses were received by mail and email. The results favour Option 2 – No Urban Boundary Expansion as the preferred option for accommodating the City’s future growth.

4.0 Approval of Evaluation Framework and Additional Consultation

Two draft evaluation tools were also presented at the March 29, 2021 GIC meeting. The tools would be used to assess the location and timing of future urban expansion growth in accordance with the Ambitious Density scenario: the GRIDS 2 / MCR – Planning for Growth to 2051: Evaluation Framework and Phasing Criteria (Whitebelt Lands) and the GRIDS 2 / MCR – Screening Criteria and Evaluation Tool (Waterdown and Binbrook). Staff recommended the draft tools be received by Committee and requested authorization for staff to commence public consultation on the draft frameworks. Committee approved the recommendation, including the request to consult with the general public and stakeholders.

During the month of May 2021, the Engage Hamilton platform was used to obtain feedback from members of the public and stakeholders on the draft evaluation tools. In summary, 94 responses were received through Engage Hamilton and through email to the survey question on the two draft evaluation tools. Key themes that emerged from the consultation included the need to evaluate the No UBE on the weighting of criteria, and the need to address climate change and Green House Gas (GHG) emissions through the evaluation.

At the August 4, 2021 GIC meeting, Council approved, with minor modifications, the GRIDS 2 / MCR: Final Growth Evaluation Framework and Phasing Criteria, including the How Should Hamilton Grow? Framework to evaluate the No UBE and the Ambitious Density growth options through Report PED17010(l).

Council directed staff to undertake additional engagement on the How Should Hamilton Grow? Framework. The results of the additional engagement are summarized in Appendix “E1” and the Relevant Consultation section of this report.

The How Should Hamilton Grow? Framework has been used to evaluate the No UBE and the Ambitious Density growth scenarios. Should Council select the Ambitious Density growth scenario, the analysis of where and when the City would grow would be undertaken using Parts 3 and 4 of the Evaluation Framework and Phasing Criteria that were approved at the August 4 GIC meeting.

In addition, throughout the GRIDS 2 process, City staff have forwarded to the Province reports for their review and comment to ensure that the work complete is done in accordance with Provincial requirements, especially in terms of Indigenous consultation and the LNA methodology.

5.0 Project Chronology

The project chronology is provided in Report PED17010(n), dated November 9, 2021.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

A full policy review is attached as Appendix “D” to Report PED17010(o), including consistency with the Provincial Policy Statement, and conformity to the Growth Plan, 2019 as amended, and the Urban Hamilton Official Plan.

RELEVANT CONSULTATION

1.0 How Should Hamilton Grow Evaluation Framework Updates

At the August 4 GIC meeting, Committee approved the following direction to staff through report PED17010(l):

“That staff be directed to conduct a 5 to 10-day comment period respecting the Evaluation Framework and report back to the General Issue Committee with those results.”

On August 6, 2021 through email to the GRIDS 2 / MCR project mailing list and stakeholder group, members of the public and stakeholders were requested to submit comment on the How Should Hamilton Grow? Evaluation framework. A total of 120 responses were received from the public and stakeholders, summarized in Appendix “E1” to Report PED17010(o), with several key themes being highlighted in the comments. The key themes and staff’s response are highlighted below. Other general comments received from the public (not related to the evaluation framework) have been summarized in Appendix “E2” attached to Report PED17010(o).

1.1 Climate

Several comments were received in relation to the need for the evaluation framework to evaluate GHG emissions resulting from each scenario.

Staff note that the evaluation of GHG emissions is intended as one component of the consideration “Does the growth option contribute to the City’s goal of carbon neutrality by 2050 by providing opportunities for reductions in greenhouse gas emissions” under the Climate Change theme. The City has retained Sustainability Solutions Group (SSG) to model GHG emissions resulting from each growth scenario. As GHG Emissions modelling is an input into the process, there is no requirement to amend the framework. The modelling being prepared by SSG will identify and compare the GHG emissions from each scenario and will address the concerns noted by commenters.

1.2 Urban Growth Mail-Out

Many comments were received regarding the GRIDS 2 / MCR urban growth mail-out and consultation and how or if the consultation results would be included as part of the evaluation framework. The framework does not include a consideration of the mail-out results as a Theme Area. The framework is a technical evaluation tool based on the policies of the Growth Plan Section 2.2.1 Managing Growth.

The mail-out consultation results are being reported as part of Report PED17010(m), dated November 9, 2021, and therefore are part of the inputs into the decision making on the growth options before Council.

1.3 Weighting / Ranking

Several comments were received which suggested that the framework should include a weighting or ranking system to prioritize certain themes over others, with climate change being the theme most often suggested to be prioritized.

The evaluation framework is a tool to show the trades-offs associated with different themes to develop a rationale for a preferred growth option. The framework is intended to be used as a method for documenting a wide range of information considered in the development of the final recommended growth option that is a mix of qualitative and quantitative data.

The evaluation results show the findings for each theme and associated considerations. Based on the balance of considerations, each 'How to Grow' growth option receives a theme level assessment. The theme level assessment is provided to be user friendly to help interpret the results. The technical analysis presented in the evaluation tables is complex and draws from a variety of technical sources. The detailed technical analysis has been made available to the public and stakeholders and is attached as Appendices to the "How Should Hamilton Grow?" evaluation report (attached as Appendix "A" to Report PED17010(o)).

It is important to note that from a policy alignment perspective, there are foundational considerations which must be addressed, consistent with the Provincial planning policy framework. For example, the Growth Plan requires municipalities to plan for the population and employment forecasts in Schedule 3; plan to achieve a minimum of 50% intensification across the Built Up Area; plan to achieve a minimum of 50 people and jobs per hectare across the Designated Greenfield Areas; and requires municipalities to use the Provincial methodology for land needs assessment.

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1.4 Cultural Heritage

In response to comments received, a theme area to address cultural heritage considerations has been added, addressing both built heritage and archaeological considerations.

1.5 Need for Clarity on Assessment / Measurement

Comments were received on the need for clarity in how certain considerations will be measured / assessed. Theme areas where this question arose included transportation, growth allocations, municipal finance and infrastructure / public service facilities.

The analysis provided in Appendix “A” to Report PED17010(o) in the How Should Hamilton Grow? Evaluation responds to these suggestions and clarifies the intent of the consideration. For example, under the transportation theme, comments suggested that metrics should include change in modal split resulting from the growth options, impacts on the transit system and active transportation system, and support for the BLAST network with a focus on the rapid transit lines. The analysis provided in the Transportation Report (attached to the How Should Hamilton Grow? Evaluation in Appendix “A” to Report PED17010(o)) responds to these suggested metrics.

2.0 GRIDS 2 / MCR Staff Working Group

The following members of the GRIDS 2 / MCR staff working group have provided input into the evaluation framework attached as Appendix “A” to Report PED17010(o):

- Public Works – Water and Wastewater;
- Transportation Planning;
- HSR;
- Community Planning;
- Parks and Open Space;
- Recreation Planning;
- Public Health Services;
- Finance; and,
- Natural Heritage Planning.

3.0 Province of Ontario – Ministry of Municipal Affairs

The Official Plan Amendment (OPA) to implement the outcome of the GRIDS 2 / MCR process will be approved by the Province, and as such, ongoing input from the Province is important to ensure that the OPA will comply with the Growth Plan.

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Correspondence from the Province of Ontario, Ministry of Municipal Affairs was reported in Report PED17010(n), dated November 2021. A summary is provided below:

3.1 December, 2020 – Draft LNA

In November 2020, Staff provided the draft LNA to Provincial Ontario Growth Secretariat staff for review to ensure compliance with the provincially-mandated LNA method. The LNA identified four land need scenarios for Community Area land need: Current Trends, Growth Plan Minimum, Increased Targets, and Ambitious Density. The December 2020 LNA did not include a No UBE scenario.

Provincial staff provided feedback that the Draft LNA, including the Ambitious Density scenario, appeared to conform to the requirements set out in the Land Needs Assessment Methodology (2020). The December 2020 letter from the Province was included in Report PED17010(n), dated November 9, 2021.

3.2 September 2021 – No Urban Boundary Expansion Scenario

As a result of Council's direction that staff develop, model and assess a No UBE scenario, additional work was undertaken to determine the form, type and quantity of housing required under this scenario. This work was completed as a Technical Update memo by Lorus & Associates. The Technical Update memo was prepared to assist staff with developing and modelling the No UBE scenario.

In August 2021, City staff provided the Technical Update memo prepared by Lorus & Associates to the Province of Ontario with information on the No UBE option and other technical updates to the March 2021 LNA. Staff requested that the Province provide comment on the conformity of the No UBE growth scenario with the LNA Methodology. In summary, the technical update outlined preliminary findings that, if adopted, the No UBE scenario would produce a shortfall of approximately 59,300 ground-related units. The Technical Update is included as Attachment 4 to the LNA Addendum (attached as Appendix "B1" to Report PED17010(o)).

In September 2021, Provincial staff provided feedback stating that the No UBE scenario appeared to conflict with the objective of the LNA methodology to "provide sufficient land to accommodate all market segments so as to avoid shortages". Further, based on Ministry staff review, it appeared that the No UBE scenario posed a risk that the City would not conform with provincial requirements. The September 2021 letter from the Province was included in Report PED17010(n), dated November 9, 2021.

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ANALYSIS AND RATIONALE FOR RECOMMENDATION

1.0 Option Descriptions – Ambitious Density and No Urban Boundary Expansion

1.1 Options Modelling

For the purposes of conducting an evaluation and modelling between the two growth scenarios, staff allocated potential population, unit and employment distribution across the City representative of the two growth options, using the assumptions below. Details and mapping of the growth allocations, including the breakdown of units by dwelling type, are attached as Appendix “C” to Report PED17010(o).

Ambitious Density scenario: the growth allocations reflect the intensification, density and employment assumptions as identified in the LNA and supporting background documents, as summarized below:

Table 2: Growth Allocations under Ambitious Density Scenario (Option 1)

Residential Growth		
Geographic Area	Assumptions	Allocated Growth
		Units
Built Up Area (intensification)	<ul style="list-style-type: none"> Based on the City achieving an average intensification target of 60%; Target increases from 50% from 2021 – 2031; to 60% from 2031 – 2041; to 70% from 2041 – 2051; and, Intensification is distributed across the City’s built-up area and reflective of current development applications, the Vacant Residential Land Inventory, and other residential intensification supply opportunities identified in the Residential Intensification Supply Update (Appendix “D” to Report PED17010(n), November 9, 2021). 	66,190
Designated Greenfield Area	<ul style="list-style-type: none"> Based on the City’s Vacant Residential Land Inventory reflective of registered, draft approved and pending development applications, and density assumptions regarding unplanned areas (Appendix “E” to Report PED17010(n), November 9, 2021); and, Includes assumption of 300 Detached Secondary Dwelling Units (SDUs) over the planning horizon. 	15,630

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Residential Growth		
Geographic Area	Assumptions	Allocated Growth Units
Urban Expansion Areas – “Whitebelt”	<ul style="list-style-type: none"> • Expansion area growth is based on the density assumption of 77 pjh as identified in the Land Needs Assessment (Appendices “B” and “B1” to Report PED17010(o)); • For the purposes of the How Should Hamilton Grow? Evaluation, growth in the expansion areas is assigned to the Elfrida, Twenty Road East and Twenty Road West / Garner Road whitebelt areas; • 3 of the 4 phasing options under the Ambitious Density scenario contemplate only the above noted whitebelt lands for consideration, therefore these whitebelt lands were modelled for this purpose and growth was not assigned to the Whitechurch whitebelt lands; and, • This does not reflect a decision on phasing or location of future expansion if the Ambitious Density scenario is selected. 	28,060
Rural area	<ul style="list-style-type: none"> • Very limited growth allocated to rural area to account for infill within existing Rural Settlement Areas and vacant lots; and, • Includes assumption of 300 Detached SDUs over the planning horizon. 	440
Employment Growth		
Geographic Area	Assumptions	Jobs
Existing Urban Area	<ul style="list-style-type: none"> • Population Related; • Major Office; and, • Employment Land. 	<ul style="list-style-type: none"> • 45,900 • 32,350 • 32,350
Urban Expansion Areas	<ul style="list-style-type: none"> • Population Related. 	<ul style="list-style-type: none"> • 11,400

No Urban Boundary Expansion: growth allocations represent an additional 85,000 (approximate) population, 27,760 units and 11,400 jobs being shifted from the Urban Expansion Areas (“Whitebelt lands”) to the existing urban area, through intensification within the Built-up area.

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**Table 3: Growth Allocations under No Urban Boundary Expansion Scenario
(Option 2)**

Residential Growth		
Geographic Area	Assumptions	Allocated Growth Units
Built Up Area (intensification)	<ul style="list-style-type: none"> All growth allocated to the built up area under the Ambitious Density scenario remains; An additional 85,000 population and 27,760 units added to the built up area through intensification primarily within the Nodes and Corridors, consistent with Provincial and UHOP policy direction to focus growth in Strategic Growth Areas (Nodes and Corridors); Additional growth focussed in the Downtown and Sub-Regional Service Centre Nodes and the B-line and A-line corridors; Additional 2,000 Detached SDUs assumed within the Built Up Area (in addition to the 1,800 already assumed); and, Higher PPU assumed for apartment growth to reflect need to accommodate family sized units within the intensification areas. 	94,250
Designated Greenfield Area	<ul style="list-style-type: none"> Growth allocations are consistent with the Ambitious Density scenario allocations within the DGA. 	15,630
Urban Expansion Areas	<ul style="list-style-type: none"> No growth is allocated to the whitebelt areas. 	0
Rural area	<ul style="list-style-type: none"> Growth allocations are consistent with the Ambitious Density scenario allocations within the Rural area. 	440
Employment Growth		
Geographic Area	Assumptions	Jobs
Existing Urban Area	<ul style="list-style-type: none"> Population Related; Major Office; and, Employment Land. 	<ul style="list-style-type: none"> 57,300 32,350 32,350

Regarding the modelling of the No UBE scenario, staff note that this growth allocation represents one model of how a no UBE scenario could be accommodated by focusing growth on nodes and corridors, with emphasis on Downtown, Sub regional nodes and the B-line and A-line corridors, in keeping with provincial and local policy direction. This allocation was completed for the purpose of accommodating the comparative evaluation

and modelling of the No UBE and Ambitious Density scenarios. As noted in the 2017 GRIDS 2 / MCR Growth Summary background report on historical development patterns, it is difficult to predict with any level of certainty where the additional intensification units under the No UBE scenario will be realized. Where intensification will occur is difficult to forecast as intensification may take place throughout the urban area. Many variants of growth allocations would be possible under the No UBE scenario.

1.2 Breakdown of Growth by Ward

Table 4 below provides a breakdown of the growth allocations under the Ambitious Density and No UBE scenarios by ward. Mapping is attached as Appendix “C” to Report PED17010(o).

Table 4: Unit Distribution by Ward, 2051, Ambitious Density and No Urban Boundary Expansion scenarios

Ward	Existing Units (2021)	Ambitious Density (2051)	Share of Overall Units	No UBE (2051)	Share of Overall Units
1	16,600	21,500	6.1%	22,900	6.5%
2	22,400	48,600	13.8%	62,000	17.6%
3	20,700	24,600	7.0%	25,800	7.3%
4	17,700	20,700	5.9%	22,200	6.3%
5	19,600	26,200	7.4%	29,200	8.3%
6	14,800	16,000	4.5%	16,800	4.8%
7	19,500	22,700	6.5%	24,200	6.9%
8	13,600	21,100	6.0%	22,400	6.4%
9	11,900	26,400	7.5%	18,100	5.1%
10	15,100	23,900	6.8%	25,100	7.1%
11	10,100	32,300	9.2%	14,200	4.0%
12	16,400	20,100	5.7%	19,700	5.6%
13	14,900	15,700	4.5%	15,900	4.5%
14	12,200	14,800	4.2%	15,200	4.3%
15	11,900	17,200	4.9%	17,800	5.1%

2.0 “How Should Hamilton Grow?” Evaluation – Theme Summary

The completed How Should Hamilton Grow? framework comparing the Ambitious Density (Option 1) and the No UBE (Option 2) growth scenarios is attached as Appendix “A” to Report PED17010(o). The framework and accompanying report has been prepared by Dillon Consulting, with input from the GRIDS 2 staff working group, and the following technical reports:

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- GHG Emissions Analysis, prepared by Sustainability Solutions Group;
- Fiscal Impact Assessment and Financing Options for Growth, prepared by Watson & Associates;
- Agricultural Impact Assessment, prepared by Dillon Consulting;
- Water, Wastewater and Stormwater Servicing Needs Technical Memo, prepared by GM Blueplan and Wood;
- Background Report on GRIDS 2 Transportation Criteria, prepared by Transportation Planning, City of Hamilton; and,
- Land Needs Assessment to 2051 and Addendum, prepared by Lorus & Associates.

The following sections provide a high level summary of the results of the How Should Hamilton Grow? evaluation by theme area, including overall evaluation and key comments / considerations. Detailed results are presented in Appendix “A” attached to Report PED17010(o).

2.1 Growth Allocation Theme

Table 5: Summary of How Should Hamilton Grow? Evaluation Results – Growth Allocation

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Growth Allocation	<p>Does the growth option direct the vast majority of the growth to the settlement area?</p> <p>Does the growth option focus growth in:</p> <p>a) Delineated built-up areas;</p> <p>b) Strategic growth areas;</p> <p>c) Locations with existing or planned transit, with a priority on higher order transit where it exists or is planned; and,</p> <p>d) Areas with existing or planned public services facilities.</p>	 <p>Addresses most aspects of the theme.</p>	 <p>Addresses all aspects of the theme.</p>

Key comments:

- Option 1 directs 74% of the City’s growth to the existing settlement area, or urban area. Option 2 directs 99.6% of the growth to the existing urban area, with a small allocation of 440 units accounted for as infill in the rural area;

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- Both Options focus growth within the Built Up Area, with Option 1 planning for 60% of unit growth within the Built Up Area through intensification, and Option 2 planning for 81% of unit growth through intensification in the Built Up Area. (A map of the Built Up Area is included in the How Should Hamilton Grow? evaluation attached as Appendix “A” to Report PED17010(o));
- Strategic growth areas are the City’s nodes and corridors (See map in Appendix “A” attached to Report PED17010(o)). Option 1 plans for 36% of unit growth within a node or corridor. Option 2 focuses more growth within the nodes and corridors, at 58%; and,
- Both Options focus growth in areas with existing or planned transit. Growth Option 1 is projected to result in 56% of residents and 60.2% of jobs projected to be within 800 m of BLAST corridor and 66% of residents and 68.6% of jobs projected to be within 400 m of Local HSR network. Growth Option 2 is projected to result in 61.3% of population and 63.5% of jobs within 800 m of BLAST corridor and 77% of residents and 75.3% of jobs within 400 m of Local HSR network.

2.2 Climate Change Theme

Table 6: Summary of How Should Hamilton Grow? Evaluation Results – Climate Change

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Climate Change	<p>Does the growth scenario contribute to the City’s long-term goal of carbon neutrality by providing opportunities for reductions in greenhouse gas emissions?</p> <p>Does the growth option present any significant opportunities associated with climate change?</p> <p>Does the growth option present any significant risks associated with climate change?</p>	 <p>Addresses some aspects of the theme.</p>	 <p>Addresses most aspects of the theme.</p>

Key comments:

- GHG Emissions Analysis prepared by SSG identifies that Option 1 results 9.24 MtCO_{2e} annual GHG emissions in 2050, compared to 9.21 MtCO_{2e} annual GHG emissions under Option 2. GHG emissions for Option 2 are 0.33% lower than Option 1.

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- Part of the reason that the difference between the two options have similar GHG emissions is that Hamilton's GHG emissions are dominated by industrial emissions (63%) which are the same for both options. Transportation emissions account for 19% of the total GHG emissions and residential buildings account for 7.6% of the the total GHG emissions in Hamilton.
- The City's Transportation model and the SSG analysis utilize different assumptions regarding Vehicle Kilometres Travelled (VKT). For Option 2, the City's model identified 400 million kilometres (VKTs) less in 2050 than Option 1, This is approximately four times the reduction that was identified in the SSG analysis. As a result, the SSG analysis likely understates the GHG reduction from transportation. Staff have requested that SSG undertake additional analysis of the discrepancy in VKTs between the models. An addendum report will be provided based on the analysis. SSG has been requested to complete this work in advance of the November 9, 2021 GIC meeting.
- Both Options present opportunities with higher levels of intensification and greenfield density than traditionally experienced. The increased level of intensification will help to support the City's planned urban structure, including opportunities for transit-supportive development;
- Option 1 presents an opportunity to plan for new and innovative net zero greenfield communities incorporating climate mitigation and adaptation measures;
- Option 2 presents opportunities to optimize the efficiency of land use and limits land consumption reflecting an opportunity to not increase direct and embodied GHG emissions. Further, land not used for urban boundary expansion could be considered for uses that enhance climate change mitigation and adaptation (e.g., naturalization of land, crop production for local food generation, renewable energy generation, enhanced carbon sequestration, etc.);
- Both options present risks related to climate adaptation related to urban stormwater management and the urban heat island effect resulting from the high levels of intensification. Option 1 presents further risks through an increase in impermeable area into current permeable rural areas that either are or could contribute to growing local food and providing carbon sequestration; and,
- The implications of embodied carbon and redevelopment (demolition) of existing buildings and structures was not assessed by SSG.

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2.3 Natural Hazards Theme

Table 7: Summary of How Should Hamilton Grow? Evaluation Results – Natural Hazards

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Natural Hazards	Does the growth option direct development away from hazardous lands?	 Addresses most aspects of the theme.	 Addresses most aspects of the theme.

Key comments:

- Future development in the existing urban area and within new greenfield expansion lands under both options would be directed away from hazardous lands, as required by the Provincial Policy Statement, Conservation Authorities Act and the City’s Official Plan.
- For Option 1, existing Natural hazard lands, including karst potential, within the Expansion Areas would be delineated and would inform the layout of future development blocks. Downstream hazard areas and associated buffers would need to be re-evaluated in terms of function and capacity to ensure that they can adequately convey and absorb increased run-off volumes from new development.
- For Option 2, while no new natural hazards would need to be identified within the Urban Area, the anticipated amount of growth may add stress to known existing natural hazards within the urban boundary. Accordingly, across the built up and greenfield areas, flooding may be exacerbated by increased impervious surfaces, requiring comprehensive approaches to stormwater management.
- The natural hazards assessment did not consider the urban heat island effect of climate change on existing communities and the ability of the existing housing stock to respond to heat emergencies and / or extreme heat events.

2.4 Municipal Finance Theme

Table 8: Summary of How Should Hamilton Grow? Evaluation Results – Municipal Finance

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Municipal Finance	Are there any significant municipal financial risks associated with the growth option?	 <p>Addresses most aspects of the theme.</p>	 <p>Addresses some aspects of the theme.</p>

Key comments:

- Fiscal Impact Assessment prepared by Watson & Associates provides comparative evaluation of two growth options as related to infrastructure, transportation and parks / recreation needs;
- Water / wastewater – Option 1 will require the installation of new transmission infrastructure to provide water to certain Pressure Districts in new greenfield areas; Option 2 will require upgrades and expansion to existing infrastructure across the built up area. Replacement of existing linear water infrastructure normally costs 250-300% more versus the cost of putting new linear services in a greenfield area;
- Stormwater - the expansion into lands outside of the existing urban boundary under Option 1 would entail higher costs for stormwater infrastructure, but the capital costs would be offset by development charges;
- Transportation – it can be less costly to build new roads in new greenfield areas under Option 1 versus expanding existing roadways across the built up area;
- Transit – Option 1 would require more bus service to accommodate the growth within Whitebelt areas leading to a potentially higher capital expenditure; and,
- Parks / Recreation - land costs required to develop parks and recreation facilities will be lower within new greenfield areas under Option 1 in comparison to lands across the Built Up Area (both Options).

2.5 Infrastructure & Public Service Facilities Theme

Table 9: Summary of How Should Hamilton Grow? Evaluation Results – Infrastructure & Public Service Facilities

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Infrastructure & Public Service Facilities	Does the growth option result in significant impacts to the City’s existing or planned infrastructure and public service facilities?	 <p>Addresses most aspects of the theme.</p>	 <p>Addresses most aspects of the theme.</p>

Key comments:

- With regards to Infrastructure, the Water, Wastewater, and Stormwater Servicing Needs Technical Memo prepared by GM BluePlan and Wood identifies that additional servicing infrastructure will be required under Option 1 with the potential for more overall length of linear works and potentially more facilities as compared to Option 2;
- Further, for infrastructure needs, as the result of the reallocation of approximately 28,000 households to the primary intensification areas, it is anticipated that additional servicing infrastructure will be required under Option 2. The infrastructure upgrades required as part of Option 2 are anticipated to be more significant as compared to Option 1. Development, design, and implementation of required upgrades may be more challenging due to a range of factors (e.g. combined sewer system, more existing capacity constraints in built up area, challenges with construction in intensification areas);
- For stormwater, both scenarios will require significant on-site controls within intensification areas and, although more growth is projected in Option 2, the upgrade requirements will likely be similar to that of Option 1 since the degree of land use change (i.e., impervious coverage) will be comparable across both scenarios;
- Within Greenfield areas, new stormwater infrastructure will be required for Option 1, which may impact natural receiving systems and may require alteration of some watercourses;
- For parks, the high levels of intensification under both scenarios will present challenges in accommodating and planning for parks due to access to land within established areas. Proactive planning and investment by the City would be required in order to have appropriate amounts of park space and may require

- creative solutions and planning to provide park and open space, such as re-imagining existing park spaces or underutilized parcels of land; and,
- For recreation, growth within the Built-Up Area will place pressure on existing recreation facilities, necessitating renewal, expansion, and new forms of facility provision under both Options.

2.6 Transportation System Theme

Table 10: Summary of How Should Hamilton Grow? Evaluation Results – Transportation System

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Transportation System	<p>Does the growth option result in significant impacts to the City’s existing or planned transportation infrastructure?</p> <p>Does the growth option provide an urban form that will expand convenient access to a range of transportation options including active transportation, to promote complete communities?</p> <p>Does the growth option prioritize development of areas that would be connected to the planned BLAST network or existing transit?</p>	 <p>Addresses some aspects of the theme.</p>	 <p>Addresses most aspects of the theme.</p>

Key Comments:

- Both options will result in a need for significant improvements to the road network, with Option 1 resulting in a greater need (50.8 km of new roadways (centreline km), 157.16 km of new capacity improvements, 34.71 km of urbanized roads) as compared to Option 2 (18.81 km of new roadways (centreline km), 91.35 km of new capacity improvements, 18.81 km of urbanized roads);
- Both options will result in a significant impact on transit with an approximate 79% increase in transit service hours required City-wide. Option 1 will require extension of routes or new routes to serve new expansion areas and increased capital costs for new and upgraded transit amenities. Option 2 will require enhanced service levels in intensification areas and need for transit amenity upgrades;
- Regarding active transportation, under Option 1, new growth areas will be designed with a complete streets approach. Both Options will require upgrades to

- existing and planned cycling facilities in the built up area to accommodate increased demand and result in more competition for road space;
- In terms of providing an urban form to expand access to a range of transportation options, both options, with high intensification and density targets, will expand opportunities for complete community development and transportation options across the City. Option 1 results in 45% of residents and 50% of jobs being located within transit supportive areas, as compared to 53% and 56% respectively under Option 2. Both Options represent an increase from the City's current percentages of residents and jobs within transit supportive areas which is at 27% and 37% respectively;
 - Option 1 results in 85.4% of residents and 85.3% of jobs are projected to be within 400 m of planned active transportation network; while Option 2 results in 89.6% of residents and 87.6% of jobs projected to be within 400 m of planned active transportation network;
 - Both options prioritize development of areas that would be connected to the BLAST network and existing transit, though the extent that Option 1 can fulfil this criteria depends partially on which areas are selected for expansion; and,
 - Growth Option 1 is projected to result in 56% of residents and 60.2% of jobs projected to be within 800 m of BLAST corridor and 66% of residents and 68.6% of jobs projected to be within 400 m of the Local HSR network. Option 2 is projected to result in 61.3% of population and 63.5% of jobs within 800 m of BLAST corridor and 77% of residents and 75.3% of jobs within 400 m of the Local HSR network.

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2.7 Complete Communities

Table 11: Summary of How Should Hamilton Grow? Evaluation Results – Complete Communities

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Complete Communities	<p>Does the growth option provide a diverse mix of land uses in a compact built form, with a range of housing options to accommodate people at all stages of life and to accommodate the needs of all household sizes and incomes?</p> <p>Does the growth option improve social equity and overall quality of life, including human health, for people of all ages, abilities and incomes?</p> <p>Does the growth option expand convenient access to an appropriate supply of open spaces, parks, trails and recreation facilities?</p>	 <p>Addresses most aspects of the theme.</p>	 <p>Addresses some aspects of the theme.</p>

Key comments:

- Option 1 plans for planning for a full range of uses in new expansion areas to ensure a range of housing forms, community amenities, and services are provided that will create a complete community;
- Option 1 forecasts a City-wide housing unit growth of 25% single / semi-detached, 25% townhouses, and 50% apartments by 2051. This option allows for a variety of housing options to be developed which could accommodate a variety of households at different stages;
- Option 2 forecasts a City-wide housing unit growth of 9% single / semi-detached, 13% townhouses, and 78% apartments by 2051. The limited percentage of ground-oriented housing options would not provide a full range of housing options. The resulting housing supply could result in a lack of choice for households larger than two persons;
- Option 2 provides a less balanced supply of housing options, offering mostly high density housing choices and limited options for ground oriented housing. The housing mix in Option 2 is not aligned with anticipated market demand and could have negative impacts on access to housing choices and housing affordability;

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- As Option 1 would require 1,310 ha of new urban land to accommodate growth, open spaces, parks, trails and recreation facilities have the potential to be centralized due to the flexibility of available space within the Expansion Area; and,
- As Option 2 requires no new urban land to accommodate growth, existing open spaces, parks, trails and recreation facilities which are already established within the Urban Area are generally conveniently accessible. Neighbourhood-level park amenities are likely to be more congested due to higher use. In addition, space constraints may limit the supply of new open spaces, parks, trails and recreation facilities, pushing larger recreational facilities (such as sports fields and recreation complexes) to suburban areas, necessitating travel beyond the neighbourhood.

2.8 Agricultural System Theme

Table 12: Summary of How Should Hamilton Grow? Evaluation Results – Complete Communities

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Agricultural System	<p>Does the growth option prioritize development of areas that are non-prime agricultural?</p> <p>Does the growth option avoid, minimize and mitigate impacts on the Agricultural System, including Prime Agricultural Lands classifications 1, 2 and 3?</p> <p>Does the growth option promote healthy, local and affordable food options, including urban agriculture?</p>	 <p>Addresses a few aspects of the theme</p>	 <p>Addresses most aspects of the theme</p>

Key comments:

- The Agricultural Impact Assessment (AIA) prepared by Dillon Consulting provides information on the agricultural classifications and agricultural activity within the whitebelt lands being the Elfrida, Twenty Road East, Twenty Road West and Whitechurch areas;
- All of the of lands outside the existing urban boundary in the whitebelt (2,197.6 ha) include soils with a Canada Land Inventory (CLI) Class 1 to 3 rating, which are considered Prime Agricultural Lands within the AIA Study Area:
 - Class 1: 1,522.4 ha or 69.3%;
 - Class 2: 556 ha or 25.3%; and,
 - Class 3: 119.1 ha or 5.4%;

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- Growth Option 1 would require the conversion of up to 1,310 ha of existing Prime Agricultural Lands with CLI Soil Classes ranging from 1 to 3 to accommodate growth. Growth Option 2 would require the conversion of 0 ha of Prime Agricultural Lands to accommodate growth;
- The AIA identifies that there are 149 farm related active infrastructure in the AIA Study Area under Option 1, 24 within the whitebelt areas and 125 within the 1,500 m buffer area; and,
- Based on the AIA, fields within the Urban Expansion Area include crops (corn, soybean, winter wheat and hay), as well as some fallow fields and pasture land. One specialty crop is grown within two orchards (apples), as well as one abandoned orchard (apples). While information regarding active agricultural fields is not available, of the 2,197.6 ha of Candidate Expansion Area, 1,921.4 ha are considered agriculturally viable (meaning a parcel size of greater than 40 ha), and 1,721.4 ha have an existing primary land use of agricultural.

2.9 Natural Heritage and Water Resources Theme

Table 13: Summary of How Should Hamilton Grow? Evaluation Results – Natural Heritage and Water Resources

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Natural Heritage and Water Resources	<p>Does the growth option avoid and protect Natural Heritage Systems as identified by the City and the Growth Plan?</p> <p>Does the growth option demonstrate an avoidance and / or mitigation of potential negative impacts on watershed conditions and the water resource system including quality and quantity of water?</p> <p>Does the growth option promote healthy, local and affordable food options, including urban agriculture?</p>	 <p>Addresses some aspects of the theme.</p>	 <p>Addresses most aspects of the theme.</p>

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Key Comments:

- Option 1 would require the addition of 1,310 ha of new urban land. Option 1 expands impacts of development into a larger portion of the Natural Heritage System, impacting additional natural heritage features and functions. Portions of the Natural Heritage System are located within the potential Expansion Areas, including Core Areas and Linkages:
 - Life Science ANSI and Earth Science ANSI;
 - Significant Woodlands;
 - Environmentally Significant Areas;
 - Wetlands and Streams; and,
 - Greenbelt Natural Heritage System;
- Option 2 carries the risk that existing natural features within the existing Urban Area will be subjected to increased pressures through encroachment, invasive species, reduced buffers, biodiversity degradation and removal of natural areas as a result of the significantly high quantum of development directed to the Built-Up area and existing Designated Greenfield Areas;
- Option 1 has some potential to avoid and protect the City's Natural Heritage Systems on the basis that development will generally be directed away from designated natural heritage features. Under Option 1, the necessary studies will have to be completed to demonstrate the avoidance and protection of Heritage Systems as identified by the City and the Growth Plan, as well as other Provincial policy direction;
- While Sub-watershed Studies have partially been completed (i.e., Phase 1) or fully completed for portions of land associated with the Candidate Expansion Areas, a Sub-watershed Study/Studies would be required to confirm avoidance and / or mitigation of potential negative impacts on watershed conditions and the water resource system; and,
- Under both Options, comprehensive stormwater management would be required to minimize and mitigate negative impacts of urban runoff on water quality and to maximize opportunities for infiltration.

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2.10 Cultural Heritage Theme

Table 14: Summary of How Should Hamilton Grow? Evaluation Results – Natural Heritage and Water Resources

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Cultural Heritage	<p>Does the growth option have the potential to impact cultural heritage resources including designated heritage properties, and can they be conserved?</p> <p>Does the growth option have the potential to impact significant archaeological resources?</p>	 <p>Addresses most aspects of the theme.</p>	 <p>Addresses most aspects of the theme.</p>

Key Comments:

- Within the existing urban area, both of the Options will result in significantly higher levels of intensification than the City has historically experienced, which may result in pressures to redevelop on or adjacent to heritage properties and within cultural heritage landscapes. Opportunities for adaptive reuse of heritage buildings and appropriate redevelopment on or adjacent to heritage properties and within heritage landscapes will need to be considered.
- The pressures noted above are anticipated to be greater under Option 2 which includes 28,000 additional units being developed within the existing urban area, with focus on the City’s nodes and corridors.
- Within the Candidate Expansion Areas (Option 1), there are no known cultural heritage landscapes, individually designated properties, or Ontario Heritage Trust Easements (Part IV).
- Within the existing urban area, both of the Growth Options have the potential to impact areas of archaeological potential. Any future development may also require municipal engagement with Indigenous communities to consider their interests when identifying, protecting and managing cultural heritage and archaeological resources in accordance with Archaeology Management Plan and the Indigenous Archaeological Monitoring Policy.
- Within the Candidate Expansion Areas (Option 1) there is overall archaeological potential adjacent to or within the majority of the Candidate Expansion Areas.

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2.11 Conformity with Provincial Methodology Theme

Table 15: Summary of How Should Hamilton Grow? Evaluation Results – Conformity with Provincial LNA Methodology

Theme	Considerations	Option 1: Ambitious Density	Option 2: No Urban Boundary Expansion
Conformity with Provincial Methodology	Has the growth option been assessed in accordance with the Provincial Land Needs Assessment Methodology to determine the quantity of land required to accommodate growth to the planning horizon?	 Addresses all aspects of the theme.	 Addresses no aspects of the theme.

Key Comments:

- Option 1 is guided by A Place to Grow directions to optimize the use of the existing urban land supply to avoid over-designating lands for future urban development;
- Option 1 embodies strong growth management principles including a transitional intensification target that increases over the planning horizon, higher densities in new greenfield areas, and optimistic expectations for employment; and,
- Under Option 2, nearly 80% of all new households to 2051 would need to be accommodated in apartment units under Option 2, including those for families. Achieving this rate of apartment unit construction is unlikely from a market or demographic perspective. As a result, Option 2 is likely to bring about a shortage of ground-related housing units in Hamilton to accommodate market demand, which conflicts with the objective of the Provincial LNA methodology.

2.12 Overall summary

The evaluation framework is not a scoring tool, rather it is a tool to show the relative advantages and disadvantages of the growth options associated with different themes to develop a rationale for a preferred growth option. In summary, the comparative analysis shows:

- Option 1 Ambitious Density better addressed the Complete Communities and Conformity with the Provincial Methodology Themes;
- Option 2 No UBE better addressed the Growth Allocation, Climate Change, Transportation System, Natural Heritage and Water Resources and Agricultural System Themes; and,

- Both Options equally addressed the Natural Hazards, Municipal Finance, Infrastructure and Public Service Facilities and Cultural Heritage Themes.

3.0 Financing of Growth Options

On January 15, 2020, the following motion was passed at the General Issues Committee:

“That staff be directed to undertake a transportation infrastructure needs assessment for growth areas, as part of the analysis being undertaken as part of GRIDS 2, at an estimated cost of \$150,000, to be funded from Reserve 110324 DC Admin Studies – Hard – Residential (\$94,500) and Reserve 110325 DC Admin Studies – Hard – Non-Residential (\$55,500), with that analysis to:

- (i) Focus on areas of significant change to include, but not be limited to, Upper Stoney Creek;
- (ii) Include the implications of a model whereby major transportation infrastructure is front-ended to occur in advance of major development activity; and,
- (iii) The evaluation of growth options under GRIDS 2 include criteria that reflects the implications of a front-ended infrastructure model.”

Subsections (i) and (ii) of this motion have been addressed within the Background Report on Transportation Criteria, prepared by City of Hamilton Transportation Planning staff, and attached to the How Should Hamilton Grow? Evaluation (attached as Appendix “A” to Report PED17010(o)).

To address Subsection (iii), Watson & Associates prepared a Financing Options Memo as part of the Fiscal Impact Assessment. The Financing Options Memo is attached to the How Should Hamilton Grow? Evaluation (attached as Appendix “A” to Report PED17010(o)). The memo identifies options for financing of growth including the front ended infrastructure model as noted in the Motion, as well as Development Phasing / Staging, Service Emplacement Agreements (similar to frontending but developers pay for infrastructure up front and agree with City to be reimbursed through DC credits or repayment agreement) and Area-specific DCs. Financing options is addressed within the Municipal Finance theme of the evaluation table and the Financing Options memo.

4.0 Staff Recommendation

As per recommendation (b), staff are recommending Council adoption of the Ambitious Density scenario. This recommendation is consistent with the previous staff recommendation from Report PED17010(i) in March, 2021. The recommendation is made on the following basis, and further elaborated below:

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1. The Ambitious Density scenario represents an aggressive and forward thinking approach to growth management;
2. The Ambitious Density scenario represents an achievable, albeit challenging, growth management objective; and,
3. The Ambitious Density scenario conforms to the Provincial Growth Plan and the Provincial Land Needs Assessment Methodology.

Discussion of each point is provided below:

1. Ambitious Density scenario represents an aggressive and forward thinking approach to growth management:

The How Should Hamilton Grow? framework provided a thematic comparative evaluation of two growth options: the Ambitious Density scenario and the No UBE scenario. The No UBE scenario better addressed five themes compared to the AD scenario better addressing two themes, with four themes being consistent between the two. The How Should Hamilton Grow? evaluation focused only on the two growth options at the direction of Council arising from the March 29, 2021 GIC meeting.

The Ambitious Density scenario represents only one of the modelled scenarios from the LNA and represents the most aggressive scenario in terms of intensification and greenfield density targets. A side by side comparison, including the No UBE scenario, shows the following:

Table 16: LNA Scenarios - Comparison of Intensification and Density Targets

	Growth Plan Minimum	Increased Targets	Ambitious Density	No Expansion (not modelled in LNA)
Intensification Target	50%	55%	60%	81%
Density Target (new DGA)	65 pjh	75 pjh	77 pjh	n/a
Land Need (ha)	2190	1630	1310	0

Source: Lorus & Associates, Land Needs Assessment Technical Working Paper, 2021 and Addendum, Lorus & Associates, November 2021.

The Ambitious Density scenario represents a middle ground on the spectrum of land need scenarios. Compared to the No UBE scenario, the Ambitious Density scenario results in a land need to accommodate growth. However, compared to the Growth Plan Minimum scenario, which plans for 50% intensification (greater than the City currently averages) and a density target that is greater than the City’s current planned density, the Ambitious Density scenario requires significantly less land (2,190 ha vs 1,310 ha respectively). With higher intensification and density targets and lower land need, the Ambitious Density scenario would be preferred over the Growth Plan Minimum and

Increased Targets scenario in terms of growth allocations, climate change, agricultural system and natural heritage / water resources themes.

The intensification target which is planned to increase from 50% to 60% to 70% by decade over the planning period represents an ambitious approach to planning for intensification. The City's 10 year average intensification rate from 2011 to 2020 is 39%. Planning for increased intensification and planned density will have the impact of focusing more growth in the existing urban area but still maintaining a balanced approach to future development. This approach has the benefit of creating compact urban growth, aimed at increasing opportunities for active transportation and transit use, and minimizing the consumption of agricultural lands.

The planned density of new communities under the Ambitious Density scenario of 77 pjh is an increase from the current target for Designated Greenfield Areas (DGA) in the UHOP of 70 pjh on non-employment lands and an increase from the planned density of the City's existing DGA lands of 60 pjh. Planning the new growth areas at a higher density will result in new communities being developed with a higher proportion of smaller lot single and semi-detached dwellings and a greater proportion of various medium density housing forms including back to back townhouses, stacked townhouses and other forms of multiple dwellings. Planning for a compact form has many beneficial outcomes, including the development of walkable and active transportation-friendly communities with a range of housing options, accommodating community facilities and other services that support residents and increased housing options.

2. Ambitious Density scenario represents an achievable, albeit challenging, growth management objective:

The City's Residential Intensification Market Demand Study by Lorius & Associates, dated March 2021, has identified 50% as being at the high end of a suitable aspirational intensification target. The Ambitious Density scenario plans for 50% intensification early in the planning period, in keeping with the report findings, and then increases the planned target as the period progresses.

Intensification has long been a planning goal of the City. This goal is reflected in the Nodes and Corridors structure of the UHOP as well as many initiatives within the City, including: two recently approved Secondary Plans in Downtown Hamilton and Centennial Neighbourhood Secondary Plans which encourage the mixed use redevelopment of commercial corridors and areas; the City's Downtown, Transit-Oriented Corridor and Commercial-Mixed Use Zones which allow redevelopment of commercial sites as-of-right; and Secondary Dwelling Units that will be permitted more broadly across the urban area.

Staff note that achieving these high levels of intensification will be challenging. The City, through planning initiatives and other incentives, can provide opportunities for

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intensification to occur. However, it is the market that drives whether or not a given site is intensified; there are a number of factors that influence market demand, including site characteristics, ownership, economic climate, and the attractiveness of the City as part of the overall region.

It is staff's opinion that achieving the intensification levels as required under the No UBE scenario (81% intensification over the entirety of the planning period) are not realistic considering the conclusions of the Residential Intensification Market Demand report and recent intensification trends.

Progress toward reaching the intensification target under the Ambitious Density scenario will need to be monitored and future adjustments can be made, as necessary.

3. Ambitious Density scenario conforms to the Provincial Growth Plan and the Provincial LNA Methodology:

As noted in the Consultation section of this Report, the Province has provided commentary on both the Ambitious Density and the No UBE growth scenarios. The Province has indicated that the Ambitious Density scenario conforms to the Growth Plan and the Land Needs Methodology. Further, the Province has noted the strong growth management principles that underpin the City's Ambitious Density scenario. The Ambitious Density scenario appears to balance market-demand for different housing types while also implementing an intensification target (60%) and a designated greenfield area density target (77 residents and jobs combined per hectare) which exceeds the targets set out in policy 2.2.2.1 and 2.2.7.2 of A Place to Grow.

The Province has further commented that the No UBE scenario does not appear to conform to the Growth Plan or the Provincial Methodology. The Province has raised concern that the shortfall of available land and ground-related units that could be created as a result of the No UBE scenario may cause forecasted growth to be redirected away from the City of Hamilton into other areas that are less suited to accommodate growth.

Staff note the risk to planning for a growth scenario that is deemed by the Province to not conform to the Growth Plan and Provincial methodology is that the Province will not ultimately approve the City's implementing MCR Official Plan Amendment. Rather, the Province could refuse the Amendment, or make revisions to the Amendment to bring it into conformity without consultation with the City.

For the three reasons noted above, the Ambitious Density scenario should be endorsed by Council and be utilized and incorporated into the GRIDS 2 / MCR process and the development and evaluation of final growth scenarios, as per Recommendation (b) of this Report.

5.0 Next Steps

5.1 Phasing Analysis

The next phase of GRIDS 2 / MCR will be the evaluation of where and when the City will grow. As summarized in previous Report PED17010(h), the City's options for where the urban boundary can be expanded are limited to those rural areas that are not within the Greenbelt Plan area (with a small exception for a 10 ha expansion from Waterdown and / or Binbrook). These lands are referred to as 'whitebelt' lands. The City's total developable whitebelt land area for Community Area lands is approximately 1,600 ha (the final developable land area will be determined through future study). Under the Ambitious Density scenario, the City will not require all of the whitebelt lands to be added to the urban area. The projected required phasing of land need by time period is indicated below:

- 2021 – 2031: 305 ha;
- 2031 – 2041: 570 ha; and,
- 2041 – 2051: 435 ha.

Using Parts 3 and 4 of the Evaluation Framework and Phasing Criteria, the phasing analysis of growth will be undertaken to determine where and when the City will grow. Comments received to date regarding expansion requests for lands within the whitebelt areas are summarized in Appendix "E3" attached to Report PED17010(o).

5.2 Waterdown / Binbrook

Growth Plan Policy 2.2.8.3(k) provides particular direction on potential settlement area boundary expansion within the Protected Countryside of the Greenbelt. The policy restricts expansions into the Greenbelt Protected Countryside to a minor expansion of up to 10 ha (of which no more than 50% may be used for residential purposes) from a defined Town / Village only (in Hamilton, both Waterdown and Binbrook are considered 'Towns' in the Greenbelt Plan). To allow for evaluation of requests for a minor expansion of the urban boundary from Waterdown or Binbrook, the GRIDS 2 / MCR – Screening Criteria and Evaluation Tool (Waterdown and Binbrook), was prepared and approved by Council in August, 2021.

Any expansion of Waterdown or Binbrook will be netted out from the Ambitious Density scenario, as the total land need required for urban boundary expansion is 1,310 ha, regardless of geographic location.

The utilization of this tool does not predetermine the need for an expansion in either Waterdown or Binbrook or City support for an expansion in either of these areas. Rather, the evaluation will allow Council to make an informed decision regarding

requests that have been received (see Appendix “E3” attached to Report PED17010(o)).

5.3 Final Preferred Growth Option and Public Consultation

Following the completion of the phasing analysis and the Waterdown / Binbrook analysis, staff will request Committee approval to consult with the public and stakeholders on the final preferred growth option to 2051, as per the timeline attached as Appendix “F” to Report PED17010(o). The Final Preferred Growth Option will be presented in April 2022 as per the updated timeline.

5.4 MCR Official Plan Amendment

Implementation of the preferred growth option will occur through the Municipal Comprehensive Review Official Plan Amendment, which is required to be submitted to the Province for approval by July 1, 2022.

Given the uncertainties that exist in planning for a 30-year time horizon, and the irreversibility of any decision to expand the urban boundary, staff will review opportunities for the phased implementation of the GRIDS 2 preferred growth option, in accordance with the phased land need requirements identified in Recommendation (c) of this Report. Consideration of options for identifying growth needs beyond 2031 without formally designating the land as urban at this time will be undertaken (Recommendation (d) of this Report).

Through UHOP policy direction and/or infrastructure phasing policies in the MCR OPA, phasing criteria will be established to identify requirements to be satisfied prior to the next phase of urban boundary expansion occurring (i.e. lands required beyond 2031). Urban boundary expansions could be contingent upon the following requirements, amongst others, to be finalized through the future MCR OPA:

- Achievement of certain performance standards (e.g. minimum intensification and / or density targets within the existing urban area);
- Achievement of city-wide growth targets (eg. meeting a minimum population threshold);
- Requirement for a minimum percentage of residential lands within previously approved expansion area to be developed and / or a minimum percentage of approved units within the previously approved expansion area to be constructed;
- Transit service levels to reach a minimum standard within existing urban area / previously approved expansion area;
- Completion of certain infrastructure and transportation projects / upgrades; and,
- Completion of cost-sharing / financing agreements.

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The MCR OPA requires approval by the Province, including the above noted phasing strategy to identify growth needs beyond 2031 without formally designating the land as urban at this time through the MCR OPA.

ALTERNATIVES FOR CONSIDERATION

1. Council may choose not to receive the How Should Hamilton Grow? Evaluation Framework or require revisions to the Framework;
2. Council may choose not to endorse the Ambitious Density growth scenario and instead select an alternative scenario; and,
3. Council may request additional information or consultation prior to selecting a growth scenario.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Economic Prosperity and Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

APPENDICES AND SCHEDULES ATTACHED

- Appendix “A” to Report PED17010(o) - How Should Hamilton Grow? Evaluation Framework
- Appendix “B” to Report PED17010(o) - City of Hamilton Land Needs Assessment to 2051 and Addendum
- Appendix “C” to Report PED17010(o) - Mapping and Description of Growth Options
- Appendix “D” to Report PED17010(o) - Policy Review
- Appendix “E1” to Report PED17010(o) - Public comments – How Should Hamilton Grow? Evaluation Framework (August 2021)
- Appendix “E2” to Report PED17010(o) - Public comments – General Comments Received After March 2021
- Appendix “E3” to Report PED17010(o) - Public Comments – Property Specific Requests
- Appendix “F” to Report PED17010(o) - Updated Workplan