

The Regional Municipality of Durham

Report To: Planning and Economic Development Committee

From: Commissioner of Planning and Economic Development

Report: #2022-P-11 Date: May 3, 2022

Subject:

Envision Durham – Growth Management Study Land Need Assessment - Staff Recommendation on Land Need Scenarios, File D 12-01

Recommendation:

That the Planning and Economic Development Committee recommends to Regional Council:

- A) That Community Area Land Need Scenario 4 be endorsed, as follows:
 - i) an intensification rate of 50%;
 - ii) an overall Designated Greenfield Area density target of 60 people and jobs per hectare by 2051;
 - iii) a unit mix consisting of 28% low density units, 28% medium density units, 41% high density units, and 3% secondary units;
 - iv) an additional Community Area urban land need of **950 hectares (2,348 acres)**.
- B) That Employment Area Land Need Scenario 2 be endorsed, as follows:
 - i) a vacant Employment Area density target of 27 jobs per hectare;
 - ii) an employment intensification rate of 20%;
 - iii) an additional Employment Area urban land need of **1,171 hectares (2,894 acres)**.

- C) That future Regional Official Plan policies for the required settlement area boundary expansion area address sustainability practices to reduce greenhouse gas emissions, energy and water consumption, and waste generation through measures including:
 - i) The phasing of new growth in any settlement area boundary expansion area be undertaken in an orderly and sequential manner;
 - ii) the establishment of multi-modal transportation opportunities, and active transportation facilities to encourage healthy and active living, and smart transportation technologies;
 - iii) implementation of measures to ensure communities are resilient to our changing climate through infrastructure, building, housing unit and community design and construction practices;
 - iv) the use of low-carbon and smart energy systems and technologies at the district scale or building-scale in these new areas;
 - v) protection and enhancement of the Regional Natural Heritage System; and
 - vi) providing strong connections between employment areas and community areas to contribute to economic sustainability;
- D) That staff be directed to proceed to Phase 2 of the Growth Management Study to identify, assess and consult on candidate locations for settlement area boundary expansion and report back following the completion of the consultation process;
- E) That a copy of this report be forwarded to Durham's area municipalities, Indigenous communities, conservation authorities, the Building Industry and Land Development Association (BILD), Durham Region Homebuilders Association, agencies and service providers that may have an interest in where and how long term growth in the region is being planned for (school boards, hospitals, utility providers, as specified in Appendix 2), the Ministry of Municipal Affairs and Housing, the Envision Durham Interested Parties List, and any persons that have made a submission for a settlement area boundary expansion request.

Report:

1. Glossary of Terms

1.1 A Glossary of key terms can be found in Appendix 1 which provides explanations for terms used in this report such as "Intensification Rate", "Designated Greenfield Area Density", "Low" "Medium" "High Density Unit", "Missing Middle", and "Market Demand".

2. Purpose

- 2.1 The purpose of this report is to present Regional Planning staff's recommended land need scenario for Community Areas and Employment Areas. Council's endorsement of a preferred land need scenario will represent the completion of Phase 1 of the Growth Management Study (GMS). The purpose of Phase 1 is to establish the quantum of additional urban land needed to accommodate the province's forecasted population and employment for the Region to the year 2051.
- 2.2 Through extensive analysis and a fulsome consultation process, staff recommend that Community Area Land Need Scenario 4 and Employment Area Land Need Scenario 2 be endorsed. Community Area Land Need Scenario 4 best balances the objectives of providing a housing supply that will support a full range of demographic and socio-economic needs, while also promoting more compact and higher density communities, support downtowns and existing and planned transit, and limit settlement area boundary expansion to only what is needed to accommodate population related growth. Employment Area Land Need Scenario 2 will provide the Region with a sufficient supply of new employment lands over the long term, while also encouraging the more intensive and higher-order use of existing employment lands, thereby reducing the need for further settlement area boundary expansion.
- 2.3 Upon Council's endorsement of a preferred land need scenario for Community Areas and Employment Areas, Phase 2 of the GMS will identify candidate locations for settlement area boundary expansion. This work will be done in consultation with Durham's area municipalities. Regional population and employment forecasts will then be allocated to each of Durham Region's eight area municipalities.

3. Background

3.1 As a key component of Envision Durham, a GMS is being undertaken. The first phase focuses on the completion of a Land Needs Assessment (LNA), which is a requirement of the Growth Plan that must be completed to demonstrate the need for any proposed settlement area boundary expansions. The Region's LNA must implement, at a minimum, the provincial population and employment forecasts

assigned to Durham and also follow a series of steps and requirements that are detailed in the Provincial Land Needs Assessment Methodology for the Greater Golden Horseshoe. The LNA is a detailed review of the Region's land base to determine how much of the Growth Plan population and employment forecasts (1.3 million people and 460,000 jobs to the year 2051) for Durham can be accommodated within existing urban areas, in the built-up area, and the designated greenfield area (DGA). Any growth that cannot be accommodated within existing urban areas would trigger a requirement for additional urban land by means of a Settlement Area Boundary Expansion. The Growth Plan for the Greater Golden Horseshoe directs upper and single-tier municipalities to plan for complete, resilient and transit-oriented communities by taking an "intensification first" approach, while addressing housing affordability and supply through their Growth Plan conformity exercises.

- 3.2 The Region's GMS was initiated in 2019, with Urban Strategies Inc. and Watson and Associates Economists Ltd. retained in a consulting capacity to undertake the major technical components. Prior to engaging the consultant team, regional staff worked with area municipal staff to collect and update the necessary data and background information to support the study. This included compiling various data sets related to development applications (subdivisions, condominiums, site plans, etc.), geocoded Building Permit data, updating the Regional Employment Land Inventory, as well as assembling other relevant underlying GIS data such as the Regional and Area Municipal Official Plan designation layers.
- 3.3 Certain area specific studies were also initiated as parallel work streams that support the overall GMS. This included the evaluation of Major Transit Station Areas, which were first delineated in consultation with area municipal staff in 2019. More recently Regional Council adopted Amendment #186 to the Regional Official Plan which will implement refined MTSA delineations and include implementing policies.
- 3.4 Area specific evaluations of other structural elements of the Region's Official Plan have also been conducted including Urban Growth Centres, Regional Centres, and Regional Corridors. Also in consultation with area municipal staff, an evaluation of 46 site specific employment area conversion requests was undertaken. Staff's recommendations and Council's decision on these requests were completed in December of 2021. Employment area conversions, which reduce the amount of existing Employment Area land, but increase the amount of Community Area land, have been taken into account when calculating the amount of land required to accommodate population and employment growth to the year 2051.

- 3.5 The Region's GMS is guided by the policies and requirements of the Growth Plan, including minimum density targets and land use planning objectives. Each of the key targets of the Growth Plan have been tested, using the latest available data and through mapping-based evaluations. Through this work, various objectives will have been met, including achieving a minimum intensification target of 50% for Durham Region, while providing a "market based" housing supply.
- 3.6 As reported in the Annual Subdivision/Condominium Activity Report for 2020, there were a total of 33,357 draft approved residential units and 25,714 residential units in-process (i.e. not yet draft approved) region-wide, indicative of an active housing supply being brought to market in the Region's existing Urban Area. Assuming a forecasted average annual rate of 7,300 housing completions per year, there would be an 8-year supply of residential units in draft approved plans and pending developments.
- 3.7 In developing its recommended scenarios, the Region's GMS has considered regional trends in development and construction activity. Current trends reveal that construction of high density (apartment) units accounted for 29% of building permits from 2015-2019, and 41% of building permits issued in 2020.
- 3.8 During the summer and early fall of 2021, four Technical Reports were released as part of the draft LNA for public review and comment. The Technical Reports included a number of key recommendations to the Region for completing the LNA, as noted below:
 - The Region Wide Growth Analysis (released on July 2, 2021) presented region-wide population and employment forecasts, various trends in demographics, unit mix, housing prices, and built form. The Report included a forecast housing unit mix for new units being built during the 2021 to 2051 timeframe of 22% low density units, 31% medium density units, and 48% high density units.
 - The Housing Intensification Study Technical Report (released on September 3, 2021) evaluated the supply and demand for housing within the built-up area, including a detailed assessment of likely opportunities and supply potential for intensification and associated population and employment accommodation. The Report revealed the region can readily accommodate a significant level of intensification and recommended a regional intensification target of 50%, consistent with the Growth Plan.

- The **Employment Strategy Technical Report** (released on September 24, 2021) provided an assessment of trends in employment and analyzed the current state of the region's Employment Areas, provided recommendations on Employment Area conversions, and recommended an overall Employment Area density target of 26 jobs per hectare. The Report concluded that an additional 1,164 hectares (2,876 acres) of Employment Area land would need to be added to the urban area boundary in order to accommodate future employment growth to the year 2051.
- The Community Area Urban Land Needs Technical Report (released on October 1, 2021) evaluated the existing state, current trends, and long-term development potential of designated greenfield areas (i.e. lands within the urban area boundary that are outside of the built-up area). The Report provided a recommended overall designated greenfield areas density target of 64 people and jobs per hectare and an additional Community Areas land need of 737 hectares (1,821 acres).
- 3.9 Just over 100 written submissions were received on the four Technical Reports. The submissions included a mixture of detailed technical and expert commentary, stakeholder comments on site specific requests being considered through Envision Durham (i.e. certain employment area conversion requests and settlement area boundary expansion requests), and more generalized statements about what the Region's LNA / growth in Durham should achieve. A summary of the comments and the Region / consultant team's response can be found here.
- 3.10 Correspondence on the four Technical Reports from BILD, other development interests, certain area municipalities and others voiced concern that the original proposed housing unit mix was too heavily weighted towards high density forms of housing. These submissions were suggesting that the proposed housing unit mix did not adequately represent the market demand for low density housing (i.e. single detached dwellings).
- 3.11 Other correspondence, including individual members of the public, certain area municipal comments and other organizations indicated that the draft LNA targets were either appropriate, or could be further adjusted to limit settlement area boundary expansions by maximizing higher density intensification opportunities. These submissions include 62 individual pieces of correspondence sent to the Regional Chair citing the desire for higher densities in the designated greenfield areas, increased secondary units in existing dwellings, and no further urban boundary expansion.

3.12 In response to the above comments, Regional Planning staff agreed at the October 5, 2021, Planning and Economic Development Committee to run modelling and assess a range of alternative land need scenarios.

4. Previous Reports and Decisions

4.1 A list of previous reports and decisions is provided in Appendix 1.

5. Alternative Land Need Scenario Modelling and Assessment Outcomes

- 5.1 Alternative scenario modelling was conducted by looking at two separate policy areas Community Areas and Employment Areas. Community Areas accommodate population related growth including future housing and population related jobs (i.e. shopping, schools, offices, etc.). Employment Areas accommodate forms of employment growth such as manufacturing, warehousing, other similar forms of industrial type job growth requiring separation from residential areas, as well as offices and certain service commercial uses.
- 5.2 Five alternative Community Area scenarios and two Employment Area scenarios have been modelled and assessed. The relative performance of each Community Area Land Need Scenario was compared based on theme areas of Conformity with the Growth Plan, Regional Priorities, Future Forward Planning, and Regional Official Plan and Envision Durham Planning Objectives. A summary of the modelling outcomes and assessment results is described in the "Alternative Land Need Scenarios Assessment Summary Report" (see Attachment #1) and an updated Technical Appendix to the Summary Report was also prepared (see Attachment #2). Each scenario and land need outcome is summarized below.

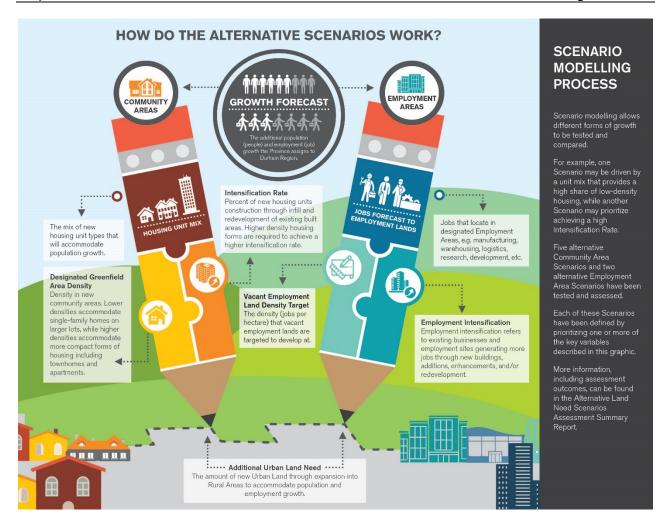


Figure 1: A graphic describing how the alternative scenarios modelling process works, which was used during public consultation. A larger version of the graphic can be found here.

Alternative Land Need Scenarios

5.3 A range of alternative Community Area scenarios has been modelled representing a spectrum of future land need outcomes. The scenarios provide a variety of options for accommodating population related growth and have been arranged from lowest density housing mix (and highest land need), to highest density housing mix (and lowest land need).

Community Area Land Need Scenarios					
Scenario 1	Scenario 1 Scenario 2		Scenario 4	Scenario 5	
Emphasis on low-density housing ("Hemson")1	Primarily low-density housing	Shifting the unit mix	Balancing the unit mix	Emphasis on higher densities	
Housing Unit Mix of new units:					
Low: 56%	Low: 39%	Low: 34%	Low: 28%	Low: 20%	
Medium: 23% High: 19% Secondary units: 2%	Medium: 26% High: 32% Secondary units: 3%	Medium: 30% High: 33% Secondary units: 3%	Medium: 28% High: 41% Secondary units: 3%	Medium: 31% High: 47% Secondary units: 3%	
Intensification Rate: 35%	Intensification Rate: 45%	Intensification Rate: 50%	Intensification Rate: 50%	Intensification Rate: 55%	
Designated Greenfield Area Density: 50 people and jobs per hectare	Designated Greenfield Area Density: 55 people and jobs per hectare	Designated Greenfield Area Density: 57 people and jobs per hectare	Designated Greenfield Area Density: 60 people and jobs per hectare	Designated Greenfield Area Density: 64 people and jobs per hectare	
New Community Area Land Need: 5,400 hectares (13,344 acres)	New Community Area Land Need: 2,600 hectares (6,425 acres)	New Community Area Land Need: 1,500 hectares (3,707 acres)	New Community Area Land Need: 950 hectares (2,348 acres)	New Community Area Land Need: 0	

Note: Totals may not add due to rounding.

¹Refers to the Growth Plan background technical report entitled: "Greater Golden Horseshoe: Growth Forecast to 2051", prepared by Hemson Consulting, dated August 26, 2020, which identified a unit mix for Durham that is largely oriented towards low density housing. The background report acknowledges that the unit mix does not replicate/predict an appropriate unit mix that would be determined through a municipal comprehensive review. However, at the request of a number of stakeholders, planning staff agreed to model and assess the outcome of applying the Hemson unit mix.

5.4 Employment Area Scenario 1 is consistent with the initial Technical Report outcomes described in Section 2.2. b) of this report but was updated to incorporate additional Employment Area conversions endorsed by Regional Council and other minor refinements. Employment Area Scenario 2 has tested a higher employment intensification rate.

Employment Area Land Need Scenarios				
Scenario 1	Scenario 2			
Vacant Employment Area Density Target: 27 Jobs per gross hectare	Vacant Employment Area Density Target: 27 Jobs per gross hectare			
Employment Intensification Target: 15%	Employment Intensification Target: 20%			
New Employment Area Land Need: 1,351 hectares (3,338 acres)	New Employment Area Land Need: 1,171 hectares (2,894 acres)			

6. Results of Public Consultation

- 6.1 The Alterative Land Need Scenarios Assessment Summary Report (Attachment #1) was posted on the Envision Durham website on March 10, 2022 for public review for a 35 day consultation window, ending April 14, 2022. A virtual Public Information Centre (PIC) was hosted on March 24, 2022 and a feedback survey on the alterative scenarios was made available during the consultation window.
- 6.2 Public consultation was supported through a newspaper advertisement, public service announcements, posts on social media platforms, email notifications and report circulation. Early engagement with the Area Municipal Working Group also took place on February 17, 2022 to provide an overview of the key scenario parameters, assessment framework, and advise of the pending release of the Summary Report.

Public Information Centre

6.3 The virtual Public Information Centre (PIC) was hosted on March 24, 2022 from 7:00pm to 8:45pm. The PIC included presentations from planning staff to provide context and an overview of key scenario modelling concepts, and the GMS consultant team to provide the scenario modelling outcomes and the assessment results. Following the presentations, a project team panel answered questions from PIC participants. The PIC was well attended, with over 130 attendees at its peak.

- 6.4 Two poll questions were posed to participants. Poll question 1 asked what future growth in Durham should be characterized as. A total of 94 participants responded, with the results as follows:
 - **39%** Balancing growth through intensification and greenfield development in new urban expansion areas.
 - **38%** Focusing on intensification and minimizing new urban expansion areas.
 - 20% Focusing on greenfield development in new urban expansion areas,
 while having a lower rate of intensification.
 - **2%** Unsure.
- 6.5 Poll question 2 asked which Community Area Land Need Scenario best aligned with the preferred vision for growth for Durham over the next 30 years. A total of 90 participants responded, with the results as follows:
 - 29% Scenario 4
 - **28%** Scenario 5
 - **19%** Scenario 2
 - **19%** Scenario 3
 - **6%** Scenario 1
- 6.6 The poll question results identified a preference for future growth to be characterized as balanced or intensification focused, with Community Area Land Need Scenarios 4 and 5 having scored closely as the most preferred options (combined, Scenarios 4 and 5 accounted for 57% of poll selections).
- 6.7 At the conclusion of the PIC session, participants were reminded they could provide additional input on the alternative land need scenarios by completing the feedback survey.

Alternative Land Need Scenario Feedback Survey

6.8 A feedback survey on the alternative land need scenarios was available on the Envision Durham website during the 35-day consultation window, from March 10 to April 14, 2022. The survey consisted of 15 questions and typically took respondents less than 10 minutes to complete. A total of 589 people completed the survey. Reponses came from across the region, with representation from all of Durham's eight area municipalities. A mix of homeowners, tenants, business owners, those who work in Durham, and students, participated. The survey results are detailed in Appendix 3 to this report, with some key highlights provided below.

- 6.9 Similar to poll question 1 from the PIC, survey question 4 asked what future growth in Durham should be characterized. Responses were as follows:
 - **63**% Focusing on intensification and minimizing new urban expansion areas.
 - 20% Balancing growth through intensification and greenfield development in new urban expansion areas.
 - **14%** Focusing on greenfield development in new urban expansion areas while having a lower rate of intensification.
 - **3%** Unsure.
- 6.10 Survey question 5 sought input on the key principles being used to assess the alternative scenarios by asking respondents to rank the principles in order of importance. The scoring results ranked the principles in the following order:
 - Protecting Agricultural and Rural Systems, Preparing for Climate Change, and Achieving Sustainable Development (Score 4.01).
 - Setting up Strategic Growth Areas for Success (Score 3.21).
 - Housing Market Choice (Score 2.87)
 - Achieving Targets (Score 2.6)
 - Competitive Economic and Employment Conditions (Score 2.4).
- 6.11 Similar to poll question 2 from the PIC, survey question 12 asked respondents to rank the five Community Area scenarios in order of preference. The scenarios were ranked in the following order:
 - Scenario 5
 - Scenario 4
 - Scenario 3
 - Scenario 2
 - Scenario 1
- 6.12 Survey question 13 asked respondents to identify their preferred Employment Area scenario. Employment Land Need Scenario 2 received 78% of responses, while Employment Land Need Scenario 1 received 22%.
- 6.13 Survey participants were also provided with the opportunity to submit additional comments through the survey or by attaching a separate document to the survey. 182 persons provided additional comments, and 29 supplementary documents were attached to the survey. Some common themes were observed in these additional comments, as follows:

- Provide a cost breakdown of each scenario;
- Protect the Carruthers Creek Headwaters/add it to the Greenbelt Plan;
- There should be no airport on the federal lands in Pickering/add it to the Rouge National Urban Park;
- New growth should focus on intensification and achieve efficient built form,
 higher densities and sustainable forms of development;
- Housing affordability and suitability, based on demographics and tenure, is key (e.g. single detached dwellings should not be only in reach for the wealthy);
- Protect agricultural and environmental lands and features;
- Decisions of where to grow should be strongly informed by the Provincial Agricultural System;
- Stop sprawl and minimize the impacts of a changing climate; and,
- There should be a no Employment Area expansion scenario.
- 6.14 In summary, similar to the PIC, the feedback survey results identified a preference for higher density land need scenarios which produce lower additional urban area land needs. A more fulsome summary of the Survey results is found in Appendix 3.

Written Submissions on Alternative Land Needs Scenarios

- 6.15 In addition to input received at the virtual PIC and through the feedback survey, a number of written submissions have also been received. At the time of writing this report, over 230 similarly worded emails have been received which request the Region to implement a preferred land need scenario which requires no urban boundary expansion for either Community Area or Employment Area purposes. This is to be achieved by implementing a modified Community Area Scenario 5 and Employment Area Scenario which:
 - Increase the minimum density target for Designated Greenfield Areas to 90 people and jobs per hectare.
 - Increase the number of detached secondary units.
 - Increase the number of new townhouses and semi-detached dwellings for existing built-up areas.
 - Enact strong policies which ensure high-density developments include family friendly units.
 - Redesignating excess Community Areas in the Designated Greenfield Areas to Employment Areas.
 - Significantly increasing planned Employment Area land (job) densities and planning for more dense types of employment.

6.16 The submission also requests a full breakdown of costs to the taxpayer for each scenario. As further discussed in Section 7 and provided in Attachment #2, the final assessment of the alternative scenarios was updated to consider, at a high level, the implications of per capita servicing costs associated with the various Community Area Scenarios.

Area Municipal Positions

6.17 Durham's area municipalities have also reviewed the alternative scenarios and have been formalizing municipal positions through their Committee and Council reporting structures. The area municipalities provided a variety of responses, with no clear consensus.

Area Municipality	Preferred Community Area Land Need Scenario	Preferred Employment Area Scenario	
Ajax (April 4 Community affairs and Planning Committee Recommendation to Council)	Scenario 5	Scenario 2	
Brock (April 19 staff recommendation to Council)	Scenario 4	No preference identified	
Clarington (April 25 staff recommendation to Planning and Development Committee)	Request that the Region release Clarington specific allocations before making a decision or Modified Scenario 2*	Request that the Region release Clarington specific allocations before making a decision	
Oshawa (April 11 Development Services Committee Recommendation to Council)	Modified Scenario 211	No preference identified	
Pickering (April 4 Planning and Development Committee Recommendation to Council)	Modified Scenario 211*	Scenario 1	
Scugog (April 11 Planning and Community Affairs Committee)	Scenario 4	Scenario 1	
Uxbridge	Uxbridge representatives advised they will not be reporting on a preferred alternative scenario, given the unique growth and servicing challenges within the Township		
Whitby (April 4 Committee of the Whole)	Recommend a scenario similar to Scenario 3, that meets Growth Plan requirements, and provides flexibility for local circumstances and development trends	No clear preference identified	

^{*}Clarington staff request that the Region release the population and employment forecast, unit mix, and intensification and DGA density targets for Clarington (and other area municipalities) prior to selecting a land need scenario for the Region. If this is not provided before selecting a scenario, staff supports Community Area Land Need Scenario #2 for Clarington, and a modified Community Area Land Need Scenario #2 for the Region as a whole which establishes a Regional intensification rate of 50% but provides flexibility for Clarington to have a lower intensification rate (35%-40%).

¹¹ Oshawa Development Services Committee recommended a modified Scenario 2 that includes a 50% intensification rate, a unit mix of 34% low, 41% medium, and 25% high density units, and a DGA density of 57 people and jobs per hectare (referred to as the initial BILD Scenario later in this report).

^{11*}Pickering Planning and Development Committee endorsed a modified Scenario 2 that includes a 50% intensification rate, a unit mix of 35-40% low, 40-45% medium, and 20-25% high density units, with 3% secondary units, and a DGA density of 57 people and jobs per hectare.

- 6.18 Area municipal submissions also included several comments and recommendations that have been reviewed by staff. Several municipalities commented that the consultation timeframe of 35 days was too short. Others asked that the Region include additional assessment principles, such as the servicing/infrastructure cost associated with each scenario, the concept of balancing intensification with greenfield growth, consideration of local circumstances, the importance of low and medium density housing for families, and that certain principles should be weighted higher and more important than others.
- 6.19 Area municipal submissions also sought clarification on how the alternative scenarios would affect their area municipality specifically, how overall Regional density targets and unit mixes would be applied locally, and the degree of flexibility in establishing local targets. Clarington staff have asked that the Region not make any decision on Community Area or Employment Area land need scenarios until area municipal population and employment allocations, unit mixes, and density targets are provided and not consider any settlement area boundary expansions until local allocations are agreed upon. Clarington's requested approach cannot be undertaken at this time as it would represent a substantial deviation from the Growth Management Study approach for the LNA. Local allocations are determined coincident with settlement area boundary expansions, as the geographic locations for growth contribute directly to area municipal population and employment allocations.
- 6.20 Comments were also received stating that recent secondary plan approvals reflect a DGA density target of 50 people and jobs per hectare. The Region was also asked to consider the implications of greenfield development in proximity/encompassing existing rural settlements and that lower minimum targets may be appropriate in such locations.

Consultation with BILD and input from Development Proponents

6.21 Planning staff have continued to meet with BILD representatives on a regular basis to discuss key project milestones, including multiple meetings held in late 2021 to discuss the release of the four LNA Technical Reports. Most recently, planning staff met with BILD representatives on April 6th as well as the broader BILD-Durham Chapter representative on April 8th. At these meetings, planning staff and the GMS consultant team provided information/presentations and answered questions related to the alternative scenarios modelling outcomes, assessment results, and underlying technical analysis.

6.22 BILD and several of its members provided input through a series of meetings and emails which recommend that the Region implement a modified version of Scenario2. BILD has provided the Region with two different iterations of their proposed scenario, described below:

Initial BILD Modified Scenario 2	Refined BILD Modified Scenario 2		
"Much Needed Affordable Middle"	"Much Needed Affordable Middle"		
Housing Unit Mix of new units:	Housing Unit Mix of new units:		
Low: 34%	Low: 33%		
Medium: 41%	Medium: 38%		
High: 25%	High: 29%		
Secondary units: In Low and Medium	Secondary units: In Low and Medium		
Intensification Rate: 50%	Intensification Rate: 50%		
Designated Greenfield Area Density: 57 people and jobs per hectare	Designated Greenfield Area Density: 57 people and jobs per hectare		
New Community Area Land Need: 2,600 hectares (6,425 acres)	New Community Area Land Need: ~2,500 hectares (~6,178 acres)		

- 6.23 It is understood that certain area municipal standing committees of Council may have received delegations from BILD and endorsed a scenario similar to BILD's initial Scenario described above. The difference between the two BILD scenarios is a modest increase in the supply of high-density units, arriving at a similar future urban land need outcome.
- 6.24 Letter submissions were also received from several consultant firms representing development interests. Input in these submissions varied, with support being expressed for a full spectrum of different scenarios. A number of technical comments were also received which have been reviewed by staff and the GMS consultant team.
- 6.25 Section 9 of this report provides an analysis of BILD's suggested scenario. In brief, it is staff's view that the BILD's should not be the recommended approach. BILD's scenario provides a Designated Greenfield Area (DGA) unit mix which is heavily oriented towards low and medium-density housing forms, which does not provide for a range of housing options in the DGA to support complete communities. Additional information is provided in Section 9.

Comments from Durham Region Roundtable on Climate Change, Durham Agricultural Advisory Committee, and Durham Environmental Advisory Committee

- 6.26 Through the Region's Sustainability Office, Sustainability Solutions Group (SSG) was retained to assess the greenhouse gas (GHG) emissions associated with each of the Community Area land need scenarios. The analysis did not assess the impact of non-residential buildings (i.e. the Employment Area scenarios).
- 6.27 SSG's analysis demonstrated a reduction in GHG emissions as the scenario densities increase. Accordingly, Scenario 1 was found to have the highest predicted GHG emissions, and Scenario 5 to have the lowest (40% less than Scenario 1). Additional commentary was also provided on the financial benefits of achieving a more efficient (i.e. higher density) built form which reduces energy consumption and auto-dependent modes of travel. The SSG report can be found here.
- 6.28 Planning staff presented an overview of the alternative land need scenarios to the Durham Region Roundtable on Climate Change (DRRCC) on March 18, 2022. An overview of SSG's draft analysis was also presented. DRRCC formed a subcommittee to come forward with recommendations on the alternative land need scenarios work to the DRRCC at its April 22, 2022 meeting.
- 6.29 At its April 22, 2022 meeting, the DRRCC passed a motion recommending Community Area Land Need Scenario 5, and that the advice and recommendations from the DRRCC Land Needs Assessment Subcommittee with respect to the Alternative Land Need Scenarios Assessment Summary Report be forwarded to the Planning Division for consideration. The advice includes a series of principles and recommendations intended to reduce the climate change footprint of new development.
- 6.30 The Durham Agricultural Advisory Committee (DAAC) considered the alternative land need scenarios at its April 12th, 2022 meeting, and passed a motion identifying Scenario 5 as its recommended Community Area Land Need Scenario, for Committee's consideration.
- 6.31 The Durham Environmental Advisory Committee (DEAC) considered the alternative land need scenarios at its April 21th, 2022 meeting, and passed a motion recommending Community Area Land Need Scenario 5 and Employment Area Land Need Scenario 2, for Committee's consideration.

7. Assessment Refinements and Recommendations

7.1 In response to comments received during the public engagement process, the GMS consultant team revisited the scenario assessment framework. Two key changes were made to refine the assessment framework: i) to "un-pack" Principle 4 into three separate components to be assessed independently of each other (impact on agricultural and rural land, climate change, and sustainable/transit-oriented development); and ii) to introduce a new principle that assesses the efficient use of land and infrastructure/municipal servicing costs. The updated assessment framework consists of the following principles and key questions:

Principle 1: Achieving Targets

 Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?

Principle 2: Housing Market Choice

- Does the scenario provide for the development of a fulsome range of housing types?
- Does the scenario respond to market demand?

Principle 3: Setting up Strategic Growth Areas for Success

 Does the scenario support the ability of SGAs, including Urban Growth Centres, Major Transit Station Areas, Regional Centres, and Regional Corridors, to achieve their planned function as higher density, mixed-use, and transit supportive urban communities?

Principle 4: Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development

- *New assessed independently To what extent would the scenario negatively impact existing agricultural and rural areas?
- *New assessed independently Does the scenario provide efficient and sustainable development patterns, including transit-oriented development?
- *New assessed independently Does the scenario respond to the Region's Climate Change Emergency declaration?

Principle 5: Competitive Economic and Employment Conditions

 To what extent does the scenario capitalize on the Region's economic and sector strengths, including providing for appropriate Employment Area land to ensure Durham remains economically attractive and competitive over the long term?

*New - Principle 6: The Efficient used of land and infrastructure

- To what degree does the scenario provide for the efficient use of land and infrastructure?
- 7.2 The revised assessment framework, along with updated assessment results and consultant recommendations, are contained in the Alternative Growth Scenarios Recommendations Memo (Attachment #3). The principles were applied to each of the scenarios and compared to each other and assigned a relative "score". Green was assigned if the principle was achieved, yellow if the principle was partially supported/achieved, and red if the principle was not achieved/supported. Principle 1 was scored on a quantitative basis by measuring the scenario modelling outcome against the targets of the Growth Plan, while principles 2-6 were compared on a qualitative and relative basis. The assessment results are summarized below.

Principle	Scenario 1 Emphasis on low-density housing ("Hemson")	Scenario 2 Primarily low-density housing	Scenario 3 Shifting the unit mix	Scenario 4 Balancing the unit mix	Scenario 5 Emphasis on higher densities
Principle 1: Achieving Growth Plan Targets					
Principle 2: Housing Market Choice					
Principle 3: Setting Up Strategic Growth Areas for Success					
Principle 4a: Protecting Agricultural and Rural Systems					
Principle 4b: Responding to Climate Change					

Principle	Scenario 1 Emphasis on low-density housing ("Hemson")	Scenario 2 Primarily low-density housing	Scenario 3 Shifting the unit mix	Scenario 4 Balancing the unit mix	Scenario 5 Emphasis on higher densities
Principle 4c: Achieving Sustainable Development including TOD					
Principle 5: Competitive Economic and Employment Conditions					
Principle 6: The efficient use of land and infrastructure					

- 7.3 The consultant's updated assessment re-confirms the initial results. Scenario 1 remains the lowest performing option, primarily as it fails to achieve Growth Plan targets, poses a challenge to Strategic Growth Areas achieving their planned densities/function, has difficulty achieving transit oriented built form and instead increases auto dependency and resultant increases in greenhouse gas and CO2 emissions, and requires the largest quantum of additional urban land.
- 7.4 Scenario 2 is also a low-density focused option but has an increase share of medium and high-density units. Scenario 2 fails to achieve the intensification target and was also found to pose a challenge to achieving transit supportive densities outside of Urban Growth Centres and Major Transit Station Areas. While an improvement over Scenario 1, Scenario 2 requires the second highest additional urban land need and associated impacts on agricultural and rural lands, greenhouse gas and CO2, and auto-dependant built form were noted.

- 7.5 Scenario 3 achieves the intensification target and also provides a high share of low-density housing, however, was noted as posing a challenge to the Region's urban structure and planned function of Strategic Growth Areas. Accordingly, the scoring results for Scenario 3 reflect the issue of achieving the intensification target including through the provision of low-density units in locations that would otherwise be better suited for higher density and transit supportive development. Scenario 3 also requires a relatively high amount of additional urban area land and comes with the associated increased greenhouse gas emissions and lower servicing per capita efficiencies.
- 7.6 Scenario 4 was assessed as the highest performing outcome, a result of meeting the Growth Plan targets, creating land use patterns that make efficient use of land and infrastructure, providing for a range of housing options, enabling transit supportive development in Strategic Growth Areas, and requiring the second lowest additional urban land need.
- 7.7 Scenario 5 was also assessed as a high performing option, but was noted as likely to result in more high-density housing being supplied than can be absorbed by market demand.
- 7.8 In their memo, the GMS consultant team has recommended the Region proceed with Community Area Land Need Scenario 4. For Employment Areas, the consultant team recommends that achieving a 20% intensification rate as proposed in Employment Area Scenario 2 is achievable and can be monitored over the long term and revisited if necessary, during the next Municipal Comprehensive Review. Accordingly, the GMS consultant team has recommended the Region proceed with Employment Area Scenario 2.
- 7.9 Although the public consultation did not produce a unified consensus, the majority of public submissions and survey responses prefer an option which minimizes urban area boundary expansion. The development community, represented by BILD and others, prefers a modified Scenario 2 which would be largely oriented towards low and medium density units and a relatively high urban expansion outcome.
- 7.10 Having weighed all the technical analysis, and the public and stakeholder input received, staff are in agreement with the GMS consultant's assessment and recommendation that Community Area Land Need Scenario 4 is appropriate for a number of reasons including the following:
 - This scenario demonstrates that the targets of the Growth Plan can be met, including an intensification target of 50% while promoting higher densities, intensification, and enabling the creation of transit supportive and complete communities.

- This scenario provides settlement area boundary expansion to accommodate only the amount of land needed to accommodate the Region's 2051 population forecast.
- This scenario balances growth within both existing and future Designated Greenfield Areas and through intensification.
- This scenario reflects a trend towards higher density units in Durham, as represented in recent building permit data, diversifies supply and continues to supply new low and medium density housing units (56% combined) which together are attractive to a broad market, including families.
- This scenario supports the delivery of "missing middle" forms of housing, including a wide variety of multiple attached and townhouse dwellings as well as low-rise apartments, allowing for detailed planning and implementation by the area municipalities.
- This scenario provides densities in Designated Greenfield Areas on the principle of ensuring future neighbourhoods are more compact, walkable, and transit supportive.
- This scenario provides for appropriate unit types and densities in key locations to support walkability, placemaking, vibrant and animated downtowns and streetscapes, and existing and planned transit upgrades, specifically within Strategic Growth Areas such as Urban Growth Centres, Regional Centres, Major Transit Station Areas, and key Regional Corridors.
- This scenario provides for a total housing unit mix that is well balanced, offers
 a fulsome range of opportunities and choice for the full range of demographic
 groups with 50% low density, 21% medium density, and 28% high density
 (existing housing stock plus new housing stock) by 2051.
- This scenario balances the competing principles by providing a range of new housing unit choice (including low density units), helps protects agricultural and rural land by reducing urban area expansion, responds to the realities of climate change, and helps achieving sustainable and transit-oriented development patterns.
- 7.11 In summary, planning staff believe that Scenario 4 offers an appropriate balance to future population related growth, while also setting a progressive and forward-looking vision for future development in Durham. It should be noted that the examination of urban area land need will continue to be the subject of successive MCRs, where the responsiveness of the market to various unit types and densities will again be tested and evaluated.
- 7.12 With respect to Employment Area Land Need, public consultation identified a strong preference for Scenario 2. Area municipal positions were mixed, and in some cases did not provide a clear preference between the two Employment Area Scenarios. As

- noted earlier in the report, a number of submissions have asked that a no expansion Employment Area scenario also be considered.
- 7.13 Regional planning staff agree with the consultant's recommendation to advance Employment Area Land Need Scenario 2. While there is some inherent risk involved with over-estimating the amount of employment intensification that may occur, building trends over recent years and a review of existing underutilized employment parcels suggest that achieving 20% of Employment Area job growth through intensification is feasible. Achieving employment intensification can be supported through Regional Official Policies and monitored and revisited through the next Municipal Comprehensive Review.
- 7.14 Planning staff recommend that Community Area Land Need Scenario 4 and Employment Area Land Need Scenario 2 be endorsed as the preferred land need scenario. Once Regional Council has endorsed a preferred land need scenario, Phase 2 of the Growth Management Study will be initiated. In Phase 2, candidate areas for settlement area boundary expansion will be assessed, and regional growth will be further distributed to Durham's eight area municipalities.
- 8. Response and commentary on Durham Environmental Advisory Committee Motion to include the Carruthers Creek Headwaters in the Greenbelt Plan Boundary
- 8.1 In early 2022 a motion was passed by the Durham Environmental Advisory Committee requesting that "Regional Council support the inclusion of the Carruthers Creek Headwaters (also known as northeast Pickering) in the Greenbelt Plan and that the Ministers of Environment, Conversation, and Parks, and Municipal Affairs and Housing be notified". At the February 1, 2022 Planning and Economic Development Committee the resolution was referred to staff for a report.
- 8.2 In June of 2021, Regional Council endorsed the updated Carruthers Creek Watershed Plan (CCWP). Throughout the course of that project there has been vocal opposition to any consideration of the urbanization of the Carruthers Creek headwaters area.
- 8.3 The CCWP study identifies issues associated with potential urbanization in the headwaters, and actions needed to achieve watershed health more broadly. Challenges with future urbanization include stormwater management, downstream water quality, flooding and erosion impacts, increased impervious surface and the impact on Redside Dace, broad protection of the Water Resource System, and the importance of securing a sufficiently sized and distributed Natural Heritage System to ensure long-term ecosystem resilience. The CCWP provides a series of management recommendations aimed at addressing such issues should settlement

area boundary expansion be advanced in the headwaters area.

- 8.4 Within the context of the alternative land need scenarios, planning staff estimate the Region's supply of whitebelt lands to be approximately 6,300 hectares (15,567 acres)². Only Community Area Land Need Scenario 1, combined with either of the two Employment Area Scenarios, would produce the additional urban land need that would exhaust all of the whitebelt lands in the Region, including northeast Pickering/the Carruthers Creek headwaters area. For the remaining scenarios, there are sufficient land in alternative whitebelt locations to allow consideration of a range of options for urban boundary expansion, which may or may not include northeast Pickering, to be considered.
- 8.5 As discussed earlier in this report, the evaluation of candidate areas for settlement area boundary expansion will occur in Phase 2 of the Growth Management Study. As part of the evaluation, various candidate locations for settlement area boundary expansion including the agricultural capacity of the land, servicing feasibility, transportation connectivity, environmental and other considerations will be addressed. In addition, it has been recommended that future land use planning policies and development practices within areas planned for settlement area boundary expansion incorporate sustainability measures to reduce/offset greenhouse gas emissions.
- 8.6 Planning staff are of the opinion it would be premature to present a recommendation that the Carruthers Creek headwaters area, also known as northeast Pickering, to be included within the Greenbelt Plan boundary at this time, prior to making decisions on land need and locations for settlement area boundary expansion. This recommendation will be addressed as part of Phase 2 of the GMS. However, there is an opportunity as part of any settlement area boundary expansion to identify additional areas for designation as future Urban River Valleys under the Greenbelt Plan. Inclusion of additional Urban River Valleys could form a recommendation to the province through the review and approval of the new ROP.

9. Implications of BILD's Modified Scenario

9.1 As previously noted, BILD has advanced a modified Community Area Land Need Scenario 2. The second iteration of "BILD" Scenario 2 represents a mix between the key drivers of Scenario 3 (an intensification rate of 50%, designated greenfield area density target of 57 people and jobs per hectare, but a shifted unit mix of 33% low density units, 38% medium density units, and 29% high density units) and the land

² This figure excludes the following non-developable areas: highways, rail lines, pipelines, hydro corridors, cemeteries, and Natural Heritage Features (based on the Region's draft Natural Heritage System).

need outcome from Scenario 2 (~2,500 hectares/6,177 acres).

- 9.2 Planning staff and the GMS consultant team have conducted a review of the BILD Modified Scenario 2, with the following key considerations having been identified:
 - There are areas of commonality between recommended Community Area Land Need Scenario 4 and the BILD Scenario, including the intensification rate (50%), and the Designated Greenfield Area density target (60 people and jobs per hectare in Scenario 4 vs. 57 people and jobs in the BILD Scenario).
 - The areas of major difference are the housing unit mix (Scenario 4: low 28%, medium 28% and high 41% and 3% secondary units vs. BILD Scenario: 33% low, 38% medium, and 29% high) and the total additional urban area land requirement (Scenario 4: 950 hectares/2,348 acres vs. BILD Scenario: 2,500 hectares/6,178 acres).
 - It is noted that a unit mix heavily focused on low (33%) and medium density (38%) housing units is highly unlikely to achieve a 50% intensification rate given the supply opportunities that were identified in the Housing Intensification Study Technical Report.
 - There are also methodological differences in how the BILD Scenario has been developed, and how the Region's Alternative Scenarios have been developed. The Region's Scenarios are all derived from a population age structure forecast in Durham Region, which dictates the total number of housing units required to accommodate the Regional population by 2051. The population age structure informs the total housing unit outlook by considering varying demographic and family structures (families, aging populations, young singles). Similar analysis has not been provided in support of the BILD scenario.
 - The key concerns identified with Scenario 3 primarily the impacts to the Regional Structure and Strategic Growth Areas - would also be prevalent in the BILD scenario.
 - The BILD scenario provides a Designated Greenfield Area (DGA) unit mix which is heavily oriented towards low- and medium-density housing forms, which does not provide for a range of housing options in the DGA to support complete communities. Further, this unit mix would complicate achieving the Central Pickering Development Plan population targets in Seaton by 2051 and potentially delay high-density housing forms in the Courtice Major Transit Station Area the majority of which is located in the DGA.

- Due to the methodological differences referenced above, and others, using the unit mix and DGA density target recommended by BILD as an input in the Region's LNA would not produce the same DGA Community Area land need that BILD has recommended (2,500 hectares/6,178 acres).
- 9.3 Regional Planning staff and the consultant team are of the view that the BILD scenario does not represent an appropriate vision for growth for Durham to the year 2051.

10. Relationship to Strategic Plan

- 10.1 By planning for growth in a sustainable, progressive, and responsible manner, the Land Needs Assessment and supporting technical reports address the following strategic goals and priorities in the Durham Region Strategic Plan:
 - a) Under Goal Area 2, Community Vitality:
 - 2.1 Revitalize existing neighbourhoods and build complete communities that are walkable, well connected, and have a mix of attainable housing
 - 2.5 Build a healthy, inclusive, age-friendly community where everyone feels a sense of belonging
 - b) Under Goal Area 3, Economic Prosperity:
 - 3.1 Position Durham Region as the location of choice for business
 - 3.2 Leverage Durham's prime geography, social infrastructure, and strong partnerships to foster economic growth
 - 3.4 Capitalize on Durham's strengths in key economic sectors to attract high-quality jobs
 - c) Under Goal Area 4, Social Investment:
 - 4.1 Revitalize community housing and improve housing choice, affordability and sustainability

11. Conclusion

- 11.1 A Regional Council decision on a preferred land need scenario is required to allow planning staff and the GMS consultant team to complete the LNA. Regional Planning staff recommend that Regional Council endorse Community Area Land Need Scenario 4 and Employment Area Land Need Scenario 2, resulting in a total additional urban area land need of 950 hectares (2,348 acres) for Community Area purposes and 1,171 hectares (2,894 acres) for Employment Area purposes.
- 11.2 Upon Region Council's endorsement of a preferred land need scenario, Phase 2 of the Growth Management Study will commence. The final Land Need Assessment technical document will be drafted, submitted to the Province of Ontario, and also

released for information concurrent with the completion of Phase 2 of the Growth Management Study. In Phase 2, Regional growth will be allocated to each of Durham's eight area municipalities, and geographic locations for settlement area boundary expansions will be evaluated and recommended.

12. Appendices and Attachments

Appendix #1: Glossary of Terms used in this Report, and the Growth

Management Study

Appendix #2: Previous Reports and Decisions

Appendix #3: Circulated Agencies and Service Providers

Appendix #4: Alternative Land Need Scenarios – Feedback Survey Results

Attachment #1: Alternative Land Need Scenarios Assessment Summary Report,

prepared by Urban Strategies and Watson and Associates dated

March 2022.

Attachment #2: Updated Technical Appendix to the Alternative Land Need

Scenarios Assessment Summary Report

Attachment #3: Alternative Growth Scenarios Recommendations by Urban

Strategies and Watson and Associates dated April 2022

Respectfully submitted,

Original signed by

Brian Bridgeman, MCIP, RPP
Commissioner of Planning and
Economic Development

Recommended for Presentation to Committee

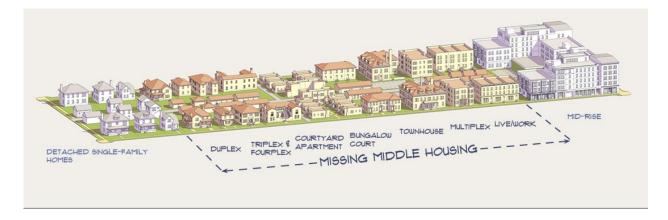
Original signed by

Elaine C. Baxter-Trahair Chief Administrative Officer Appendix 1 – to Report #2022-P-11

Glossary of Terms used in this Report and the Growth Management Study

- Delineated Built-up Area: refers to lands within the delineated built boundary which
 was identified by the Province of Ontario in 2006 as the limit of existing developed
 areas at that time.
- **Intensification Rate**: the percent of total housing units constructed on annual basis that are within the delineated built-up area.
- Designated Greenfield Area: lands within settlement areas (not including rural settlements) but outside of the delineated built-up area.
- Designated Greenfield Area Density: the density, measured in people and jobs per hectare, across the entire designated greenfield area. When calculating the density, certain non-developable features may be excluded such as natural heritage features and floodplains, electricity transmission lines and gas pipelines, highways and railways, employment areas, and cemeteries.
- Low-Density Unit: a single detached dwelling, or semi-detached dwelling.
- Medium-Density Unit: a townhouse form of multiple attached dwellings (including conventional street townhouses, condominium townhouses of various forms as well as back-to-back, and stacked forms) and duplexes.
- High-Density Unit: apartment unit and stacked back-to-back townhouse unit.
- **Secondary Unit**: a self-contained residential unit with a private kitchen, bathroom facilities, and sleeping areas that are within dwellings (i.e. basement apartments) or within structures ancillary to a dwelling (i.e. above a detached garage accessed by a rear lane).
- Community Area: in the context of a Land Needs Assessment, an area where most
 of the housing required to accommodate the forecasted population will be located,
 as well as most population-related jobs, most office jobs, and some employment
 land employment jobs. Community Areas include delineated built-up areas and
 Designated Greenfield Areas.

- Employment Areas: in the context of a Land Needs Assessment, an area where
 most of the employment land employment jobs are located (i.e. employment in
 industrial type buildings), as well as some office jobs and some population-related
 jobs, particularly those providing services to employment areas. Employment areas
 may be located in both the delineated built-up area and Designated Greenfield
 Areas.
- Strategic Growth Areas: Within settlement areas, nodes, corridors and other areas that have been identified to be the focus for accommodating intensification and higher-density mixed uses in a more compact built form. Urban Growth Centres and Major Transit Station Areas are defined in the Growth Plan as Strategic Growth Areas. The Growth Plan enables municipalities to designate other areas that represent major opportunities for redevelopment and intensification as Strategic Growth Areas, particularly those along major roads, arterials, or other areas with existing or planned frequent transit service or higher order transit. Staff believe Regional Centres in south Durham and certain Regional Corridors (i.e. Highway 2 and Simcoe) meet these criteria and should also be considered Strategic Growth Areas.
- Missing Middle: a relatively new term that has developed as cities try to address the complex issues of intensification and growth, stable neighbourhoods, complete communities, housing choice and affordability. Missing middle can be context dependent, but generally involves forms at higher densities than single or semi-detached dwellings, but at lower densities than and mid- or high-rise apartment buildings. Forms of dwelling units within the Missing Middle includes triplexes, fourplexes, various forms of townhouses, or low rise courtyard apartments. Missing middle units may also include live/work forms of accommodation, (see illustration below).



Source: Opticos Design, Inc. via Missing Middle Housing | CNU

• Market Demand / Market Based: a term that is referenced, but not defined by provincial policy or guidance documents. Planning authorities are required to plan for growth in a manner that satisfies market demand by planning for a market-based housing supply. In other words, the number of units and mix of housing unit types should align with the full range of projected demographic and social economic needs, such as families, aging populations, low and moderate income households, etc.

Appendix 2 – to Report #2022-P-11

Previous Reports and Decisions

- 12.1 Several Reports have been prepared related to Envision Durham and Growth Management related topics:
 - On May 2, 2018 Commissioner's Report #2018-COW-93 requested authorization to proceed with the municipal comprehensive review of the Durham Regional Official Plan;
 - Over the course of 2019, six theme-based Discussion Papers were released seeking public input on a range of topics. The Discussion Papers can be found on the project webpage at <u>durham.ca/EnvisionDurham</u>
 - On June 2, 2020 Commissioner's Report #2020-P-11 recommended evaluation criteria and a submission review process for the consideration of Employment Area conversion requests.
 - On July 29, 2020 Commissioner's Report #2020-P-14 outlined Amendment #1 to A Place to Grow: Growth Plan for the Greater Golden Horseshoe, including recommended comments to the Province on the updated 2051 growth forecasts for the Region of Durham and the updated Land Needs Assessment Methodology.
 - On December 1, 2020 Commissioner's Report #2020-P-27 provided proposed policy directions and boundary delineations for existing and future Major Transit Station Areas.
 - On March 2, 2021 Commissioner's Report #2021-P-7 provided proposed policy directions related to all key components of Envision Durham, including initial directions for the Urban System and growth related topics. Also included was a Growth Opportunities and Challenges Report prepared by the Region's consultants, which serves as a starting point for the LNA and related technical studies.
 - On July 2, 2021 Commissioner's Report #2021-INFO-71 reviewed the Region-Wide Growth Analysis. The purpose of the report is to analyze the region's long-term population, housing, and employment growth forecast within the context of provincial and regional policy, historical trends, and predicted future influences.

- On September 3, 2021 Commissioner's Report #2021-INFO-94 presented the
 Housing Intensification Study. The purpose of the report is to document the
 capacity for accommodating residential and mixed-use growth within the
 region's built-up area (BUA), and determine the intensification potential of
 strategic growth areas (SGAs).
- On September 24, 2021 Commissioner's Report #2021-INFO-97 summarized the Employment Strategy. The purpose of the Employment Strategy is to provide a comprehensive assessment of current industrial and office market conditions and trends, anticipated growth patterns, market opportunities and disrupters that are anticipated to influence employment growth across Durham Region through 2051. This report include a recommended Employment Areas density target and future land need to accommodate Employment Area growth to 2051.
- On October 1, 2021 Commissioner's Report #2021-INFO-100 presented the Community Area Urban Land Needs Assessment which provided an assessment of the Region's current and future Designated Greenfield Areas, including development trends and amount of developed, non-developable, and vacant areas. The Report recommended an overall Designated Greenfield Areas density target and future land need to accommodate greenfield growth to 2051.
- On December 7, 2021 Commissioner's Report #2021-P-25 provided staff recommendations on Employment Area conversion requests received through Envision Durham and additional areas identified by staff and the GMS consultant team as appropriate for conversion.
- On December 22, 2021, Regional Council received a <u>memorandum</u> from Commissioner Brian Bridgeman that responded to the request for additional information related to Commissioner's Report #2021-P-25 and the Employment Area conversion requests.
- On February 11, 2020, Commissioner's Report #2022-INFO-9 provided an update on the alternative scenario modelling, the assessment framework that will be applied, and planned consultation activities.
- On March 11, 2020, Commissioner's Report #2022-INFO-19 advised of the release of the scenario modelling and assessment results for public review and comment.

Appendix 3 – to Report #2022-P-11

Circulated Agencies and Service Providers

- Canada Post
- Bell Canada
- Rogers Communications
- Shaw Cable TV
- Compton Communications
- Persona Communications
- Canadian Pacific Railway
- Canadian National Railway
- Enbridge Gas Distribution Inc. and Enbridge Pipelines Inc.
- Trans-Northern Pipelines Inc.
- TransCanada Pipelines Inc.
- Hydro One Networks Inc.
- Ontario Power Generation Inc.
- Durham District School Board
- Durham Catholic District School Board
- Conseil Scolaire Viamonde
- MonAvenir Conseil Scolaire Catholique
- Mississaugas of Scugog Island First Nation
- Ministry of Transportation
- Greater Toronto Airports Authority
- Transport Canada

- Metrolinx
- Trent-Severn Waterway
- Kawartha Pine Ridge District School Board
- Peterborough Victoria Northumberland and Clarington Catholic District School Board
- Durham Region Police Department
- Ministry of Municipal Affairs and Housing
- Elexicon
- Hydro One Networks Inc. (Brock, Scugog and Uxbridge)
- Independent Electricity System Operator
- Ontario Tech University
- Trent University Durham
- Durham College
- Durham Workforce Authority
- General Motors of Canada
- Lakeridge Health
- Ajax-Pickering Board of Trade
- Brock Board of Trade
- Clarington Board of Trade
- Newcastle & District Chamber of Commerce
- Greater Oshawa Chamber of Commerce
- Scugog Chamber of Commerce
- Uxbridge Chamber of Commerce

- Whitby Chamber of Commerce
- Downtown Ajax BIA
- Bowmanville BIA
- Brooklin BIA
- Pickering Village BIA
- Port Perry BIA
- Uxbridge BIA
- Downtown Whitby BIA
- Business Advisory Centre Durham
- Spark Centre

Appendix 4 – to Report #2022-P-11

Alternative Land Need Scenarios - Feedback Survey Results

If you are a resident of Durham, where do you live? (Question #2)

Survey responses came from across the region, with all eight Durham area municipalities represented. Among the almost 93% of survey participants (547 persons) who shared where they live, the geographic breakdown was:

- 30% Ajax
- 0.4% Brock (Beaverton, Cannington, Sunderland, etc.)
- 7.1% Clarington (Bowmanville, Courtice, Newcastle, Orono, etc.)
- 13.2% Oshawa
- 15.2% Pickering
- 5.5% Scugog (Port Perry, etc.)
- 6.6% Uxbridge
- 18.3% Whitby (Brooklin, etc.)
- 3.8% Other

Of the 3.8% of respondents that identified their location as "Other", this generally represented communities outside of Durham, such as Toronto, North York, Oakville and Peterborough. However, it should be noted that several responses under "Other" were from communities within Durham, such as Seagrave (Scugog), Claremont (Pickering), Sandford and Coppins Corners (Uxbridge).

Why are you interested in completing this survey? (Question #3)

This question asked survey participants to "select all that apply" when identifying their interest in completing this survey. Among the almost 97% of survey participants (569 persons) who responded to this question, reasons included:

- 78.6% Homeowner
- 8.6% Tenant
- 7.4% Business owner
- 4.4% Student
- 21.1% Work in Durham
- 5.8% Work in Real Estate or Development industry
- 10.2% Other

Because participants could self-identify among multiple reasons for completing the survey, there were a high number of combinations wherein participants identified more than one response. There were 58 survey respondents who identified as "Other", either as a single response or in combination with other options. "Other" responses varied considerably, and included persons such as farmers, Councillors, non-governmental organization (NGO) representatives, environmental advocates, consultants, frequent visitors to the region and prospective homeowners.

What should future growth in Durham be characterized as? (Question #4)

Survey participants were asked to select one option that best describes "what should future growth in Durham be characterized as?" Among the almost 96% of survey participants (563 persons) who responded to this question, future growth should be characterized as:

- 63.2% Focusing on intensification and minimizing new urban expansion areas.
- 19.7% Balancing growth through intensification and greenfield development in new urban expansion areas.
- 14% Focusing on greenfield development in new urban expansion areas while having a lower rate of intensification.
- 3% Unsure.

Rank the following principles guiding future growth in Durham in order of importance to you (Question #5)

Using a ranking question, with 1 being "most important" and 5 being "least important", survey participants were asked to order principles guiding future growth in Durham by way of importance to the respondent. The survey platform (SurveyMonkey) ranking questions automatically calculate the average ranking for each answer choice to clearly illustrate which responses were most preferred overall; this average ranking is referred to as a "Score" below.

Among the almost 98% of survey participants (575 persons) who responded to this question, the guiding principles ranked as:

- 1. Protecting Agricultural and Rural Systems, Preparing for Climate Change and Achieving Sustainable Development (Score 4.01)
- 2. Setting up Strategic Growth Areas for Success (Score 3.21)
- 3. Housing Market Choice (Score 2.87)
- 4. Achieving Targets (Score 2.6)
- 5. Competitive Economic and Employment Conditions (Score 2.4)

In addition, survey participants were asked to specify any other principles of importance (Question #6). Among the over 40% of survey participants (237 persons) who identified other principles, the following themes were noted most often: housing affordability and suitability, based on household formation and tenure; connected transportation/transit; maximizing existing infrastructure and minimized impact on property taxes; as well as sub-sets of the principal associated with "Protecting Agricultural and Rural Systems, Preparing for Climate Change and Achieving Sustainable Development", such as food security and protecting the natural environment.

How does each Community Area Land Need Scenario align with your vision for growth in Durham over the next 30 years? (Questions #7 to #11)

Using a slider scale, Questions #7 to #11 asked survey participants to evaluate each of the five Community Area Land Need Scenarios, individually, by way of alignment with the respondent's vision for growth in Durham over the next 30 years.

Not all survey participants responded to all five questions; however, the respondent sentiment at the aggregate level illustrated an average ranking, from 1 being "poorly aligned" to 5 being "completely aligned", for the five Community Area Land Need Scenarios as:

- Scenario 5 (Average 3.72)
- Scenario 4 (Average 2.46)
- Scenario 3 (Average 2.09)
- Scenario 2 (Average 1.96)
- Scenario 1 (Average 1.8)

Rank the five Community Area Land Need Scenarios in order of preference (Question #12)

Using a ranking question, with 1 being their "preferred scenario" and 5 being their "least preferred scenario", survey participants were asked to order the five Community Area Land Need Scenarios by way of preference to the respondent.

This question differs from Questions #7 to #11, as it asks survey participants to rank all five scenarios relative to each other, to help determine which option was most preferred overall by respondents. As noted in Question #5 above, SurveyMonkey automatically calculates the average ranking for each answer choice to clearly illustrate which responses were most preferred overall; this average ranking is referred to as a "Score" below.

Among the over 76% of survey participants (448 persons) who responded to this question, the Community Area Land Need Scenarios ranked as:

- 1. Scenario 5 Emphasis on higher densities and intensification beyond minimum Growth Plan targets (Score 3.59)
- 2. Scenario 4 Balancing the unit mix with an emphasis on high and medium-density housing, while achieving the minimum 50% intensification target (Score 3.53)
- 3. Scenario 3 Shifting the unit mix and adding low density intensification to Built-Up Areas (BUA) and Strategic Growth Areas (SGA) to achieve the minimum Growth Plan intensification target (Score 3.2)
- 4. Scenario 2 Primarily low-density housing, with increased share of medium and high-density housing (Score 2.67)
- 5. Scenario 1 Emphasis on low-density housing, not meeting the minimum Growth Plan intensification target (Score 2.05)

Which Employment Land Need Scenario aligns with your vision for Durham's Employment Areas over the next 30 years? (Question #13)

Survey participants were asked to select which of two Employment Land Need Scenarios aligned with their vision for Durham's Employment Areas over the next 30 years. Among the 64% of survey participants (377 persons) who responded to this question, Employment Land Need Scenario preferences were:

- 22% Employment Land Need Scenario 1
- 78% Employment Land Need Scenario 2

The final component of the survey asked participants to share any other thoughts or comments on the proposed land need scenarios (Question #14), and/or to attach any additional comments, images or files for consideration (Question #15). Approximately 31% of survey participants (182 persons) provided additional comments, and 29 documents were attached to the survey for consideration.



ALTERNATIVE LAND NEED SCENARIOS ASSESSMENT SUMMARY REPORT

Part of the Region of Durham Growth Management Study: Land Needs Assessment

March 2022





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1. Introduction and Context

Durham Region is undertaking a Growth Management Study (GMS) as part of Envision Durham, the Municipal Comprehensive Review (MCR) of the Regional Official Plan (ROP). This is a two-phase study to assess how to accommodate the Growth Plan for the Greater Golden Horseshoe forecast growth to 2051 of 1,300,000 people and 460,000 jobs in the Region of Durham. The first phase of the GMS is the preparation of a Land Needs Assessment (LNA) to quantify the amount of Settlement Area Boundary Expansion that will be required to accommodate future population and employment growth to the year 2051.

During the summer and early fall 2021, the GMS Project Team released four Technical Reports (the "Technical Reports") providing an analysis of the form of growth and resulting land needs in Durham. These four reports were presented for public comment and Planning and Economic Development Committee consideration:

 The Region-Wide Growth Analysis (released on July 2, 2021) presented region-wide population and employment forecasts, various trends in demographics, unit mix, housing prices, and built form. The Report included a forecast housing unit mix for new units to be built during 2021 to 2051 timeframe of 22% low density units, 31% medium density units, and 47% high density units.

- 2. The Housing Intensification Study Technical Report (released on September 3, 2021) evaluated the supply and demand for housing within the built-up area, including a detailed assessment of likely opportunities and supply potential for intensification¹ and associated population and employment accommodation. The Report recommended a regional intensification target of 50%.
- 3. The Employment Strategy Technical Report (released on September 24, 2021) provided an assessment of trends in employment and analyzed the current state of the region's Employment Areas, provided recommendations on Employment Area conversions, recommended an overall Employment Area density target of 26 jobs per hectare by 2051, and identified an additional Employment Area land need of 1,164 hectares.
- 4. The Community Area Land Needs Technical Report (released on October 1, 2021) evaluated the existing state, current trends, and long-term development potential of designated greenfield areas (i.e. lands within the urban area boundary that are outside of the built-up area). The Report provided a recommended overall designated greenfield areas density target of 64 people and jobs per hectare and an additional Community Area land need of 737 hectares.

¹ Intensification is defined as the development of a property, site or area within the Built Up Area at a higher density than currently exists.

Through the fall 2021, the Envision Durham process sought input and comments on the Technical Reports from stakeholders and the public. Correspondence from BILD, other development interests, certain area municipalities, and others, questioned whether the proposed housing mix contained in the draft Region Wide Growth Analysis was too heavily weighted towards high density forms of development, and did not adequately represent the market demand for low density housing (i.e. single detached dwellings). Other correspondence, including from individual members of the public, certain area municipal comments, and other organizations indicated that the draft LNA targets were either appropriate, or could be more aggressive to limit settlement area expansions by more heavily prioritizing the protection of farmland, mitigating climate change, and maximizing higher density intensification opportunities.

In response to comments received, Regional Planning staff agreed at the October 5, 2021 Planning and Economic Development Committee meeting to run modelling and assess a range of alternative land need scenarios. This report provides a summary of the land need scenarios, including 2 Employment Land need scenarios and 5 Community Area land need scenarios, and the resultant analysis and assessment of the scenario modelling outcomes.

Before the Scenario modelling and analysis was undertaken, adjustments were made to reflect the current context across the Region to create a refined baseline of existing settlement patterns and supply of urban land available for development (greenfield). Input from stakeholders and consultation has also informed the adjustments. These adjustments are as follows:

- Decisions made by Regional Council on December 22, 2021 regarding Employment Area conversion requests, including some additional sites that were endorsed for conversion, which resulted in increased Community Area Land supply;
- Revised base mapping to reflect updated natural heritage takeout layer in the DGA Community Area land need analysis, and a reclassification of select sites based on comments received which reduced the remaining developable vacant land supply; and
- c. Reassessment of the current active development applications and developable land area within Seaton.

The information contained in this report and the technical appendix are provided in order to allow for meaningful and informed feedback through the ongoing consultation process and engagement survey available at durham. ca/envisiondurham. Once input from this consultation is received, a Recommended Land Needs Scenario will be provided to the Region's Planning and Economic Development Committee in May 2022.

2. Employment Area Land Need Scenarios

2.1 Description

The Employment Strategy Technical Report identified an Employment Area forecast of 99,500 jobs, where 15% of employment growth is expected to be accommodated through the intensification of existing businesses and sites, with the remaining growth anticipated to occur on vacant employment lands at a density of 27 jobs per gross hectare.

In response to feedback on the Durham Region Employment Strategy Technical Report, an alternative Employment Area scenario has been defined and assessed. The alternative employment scenario examines an alternative Employment Area intensification target of 20%, compared to 15% reported in the Durham Region Employment Strategy Technical Report. **Employment Area intensification represents** opportunities to accommodate job growth on employment lands which are currently developed or underutilized through the expansion of existing businesses, severance of existing parcels with adequate frontage, or the redevelopment of existing uses to more employment-intensive operations.

The Durham Region Employment Strategy density target of 27 jobs per gross hectare for the region's vacant employment lands has been maintained in the alternative employment scenario. This is because recent trends in employment development show a strong market for more land extensive logistics and warehousing uses in Durham, which result in moderate employment densities. The Region has minimal ability to effectively influence higher densities on vacant lands and assuming a higher density beyond what has already been identified in the Employment Strategy is not recommended.

2.2 Methodology/Analysis

Based on an updated natural heritage system as well as Employment Area conversions endorsed by Durham Regional Council, the land needs calculation has been revised since the release of the Durham Region Employment Strategy Technical Report. Further to these changes, a potential higher number of forecast jobs occurring through intensification results in a greater utilization of Durham Region's existing Employment Area land base and infrastructure. Increasing employment densities on existing vacant and underutilized sites within Durham Region encourages the concentration of economic activity and reduces the amount of new land and infrastructure needed to promote job growth. As shown in the graphic on page 7, an increased intensification target of 20% in the alternative Employment scenario results in an overall reduction in vacant Employment Area land needed to accommodate forecast growth to 2051. With a 20% intensification target, the overall land need by 2051 would be reduced to 1,170 gross hectares compared to 1,350 hectares required with a 15% intensification target.

Historical building permit activity over the past decade indicates that approximately 20% of gross floor area (G.F.A.) development in Employment Areas has been achieved through expansions. This figure does not account for new building permits on lands which have been severed or redeveloped. Furthermore, there are ample opportunities across Durham Region's underutilized employment lands to accommodate job growth through intensification. For example, through a review of larger sized underutilized sites with high potential to accommodate intensification, it is estimated that approximately 10,000 jobs could be accommodated on just 25 of the larger underutilized parcels within Employment Areas. These parcels represent approximately one third of the total underutilized land area in Employment Areas across the Region.

2.3 Key Considerations

- Achieving a higher Employment Area intensification target of 20% results in a more efficient use of land and reduced Employment Area land need in Durham Region by 2051. A reduction in new land required to accommodate job growth has a lesser impact on the Region's agricultural lands and rural systems.
- Intensification of existing Employment Lands in proximity to major transit station areas (MTSAs) and other locations served by Regional Transit would complement the Region's priorities related to transit-oriented development (TOD) and economic competitiveness.
- The level of intensification achieved in Durham Region is largely left to the discretion of business owner choice and it is therefore difficult to predict future levels of intensification.
- If a higher intensification target of 20% does not materialize, it could potentially result in an insufficient amount of vacant Employment Area land available for development over the horizon of the Official Plan. It is noted, however, that there would be an opportunity to reassess intensification patterns during the next Municipal Comprehensive Review and re-evaluate whether additional employment land will be required through expansion.

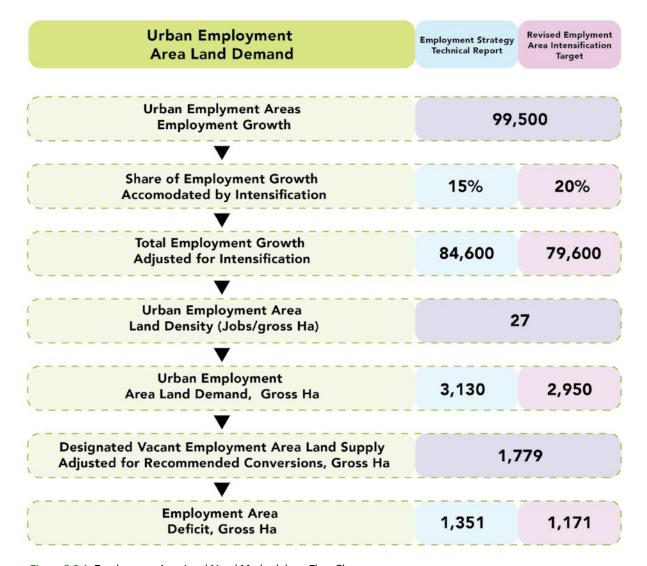


Figure 2-3-1: Employment Area Land Need Methodology Flow Chart

3. Community Area Land Need Scenarios

Five Community Area Land Need Scenarios have been framed to test a broader range of options for accommodating the 2051 forecast growth across the Region. The five Community Area Land Need Scenarios create a spectrum ranging from lowest density housing mix and highest land need to highest density housing mix and lowest land need. All scenarios accommodate the Growth Plan forecast for Durham Region to 2051. The key variables that have been adjusted across the scenarios include housing mix (regionally and by policy area), designated greenfield area (DGA) density targets, intensification targets, and future land need.

The five Community Area Land Need Scenarios are described on page 9 followed by a summary of the analysis and resultant growth patterns and an assessment of each Scenario. Each

Scenario has been defined by prioritizing one or more of the key variables noted above as the primary driver, with the other variables being resultant outcomes. For example, prioritizing a unit mix with a high share of low-density housing will result in a lower intensification and DGA density target, while producing a higher DGA Community Area land need. Conversely, prioritizing sustainability objectives including TOD and less need for settlement area boundary expansions will drive a unit mix with a higher share of medium and high-density units and result in a higher intensification target and DGA density target and a lower DGA Community Area land need. The following describes each of the scenarios and key drivers and their position on the Scenario spectrum.



Figure 3-1: Trends along the spectrum of scenarios

3.1 A Spectrum of Community Area Land Need Scenarios

Scenario 1: Emphasis on low-density housing, not meeting the minimum Growth Plan intensification target

This scenario implements the housing unit mix from the Growth Plan background technical report entitled: "Greater Golden Horseshoe: Growth Forecasts to 2051", prepared by Hemson Consulting, dated August 26, 2020. This scenario incorporates the highest proportion of low-density housing forms, which will result in the highest amount of additional Community Area land and the lowest intensification rate at 35%, well below the Growth Plan minimum.

Scenario 2: Primarily low-density housing, with increased share of medium and highdensity housing

Scenario 2 targets a higher intensification rate than Scenario 1, while maintaining a housing unit mix that is still predominantly oriented towards low- and medium-density housing. The resultant intensification rate is 45%, lower than the Growth Plan minimum. The unit mix paired with the lower intensification rate results in the second highest amount of additional Community Area land.

3. Scenario 3: Shifting the unit mix and adding low density intensification to BUA and SGAs to achieve the minimum Growth Plan intensification target

Scenario 3 aims to meet the Growth Plan minimum intensification target of 50%, while maintaining a high share of lowand medium-density housing forms. To accommodate increased levels of low- and medium-density housing forms in the BUA (to achieve the 50%), intensification within urban structure will limit higher density growth with Regional Centres and along Regional Corridors. Achieving this scenario would prove challenging, because a high number of low-density units would be required

within the BUA on sites that may otherwise be appropriate and desirable for more intensive forms of development, and through the redevelopment of larger lots in stable neighbourhoods. Furthermore, this Scenario will still result in a considerable amount of additional Community Area land need.

Scenario 4: Balancing the unit mix - with an emphasis on high and medium-density housing, while achieving the minimum 50% intensification target

Scenario 4 reflects the current pipeline development trend toward highdensity housing forms in the BUA, while accommodating a sufficient proportion of low- and medium-density forms in response to public and stakeholder comments. The result is a Scenario that achieves the minimum 50% intensification target, supports the growth of SGAs, and offers a market-based choice of housing options that is adjusted to a more balanced mix of built form in the region over the 30-year horizon. A moderate amount of new Community Area land is anticipated.

5. Scenario 5: Emphasis on higher densities and intensification beyond minimum Growth Plan targets

Scenario 5 seeks to achieve an intensification rate of 55%, primarily though medium- and high-density housing forms. The forecast unit mix in the DGA is expected to accommodate the greatest share of high-density housing compared to the previous four scenarios. Based on less overall housing growth forecast in the DGA and a dense housing mix, no additional Community Area Land is required. This represents a "no-urban-expansion" scenario.

3.2 Community Area Alternative Land Need Scenario Methodology

The Community Area Alternative Land Need Scenarios test a range of inputs and outcomes/implications for how growth can be accommodated across Durham Region. The draft LNA outcome from the Technical Reports represents a reference point, but each of the Five Scenarios has been defined and analysed distinct from this departure point. The following three key steps were undertaken in preparing the Scenario Analysis:

- The key drivers from each Scenario were used to frame the analysis. An initial analysis of the Scenario was run against the forecast model and reviewed against the outcomes (housing mix, intensification rate, greenfield density, impact on planned regional structure, and additional land need). If needed, adjustments were made to the Scenario to ensure each was coming as close as possible to conforming with Growth Plan policies and targets while complementing Regional priorities (i.e. MTSAs).
- 2. In order to achieve the Scenario drivers, in particular an increased proportion of low- and medium-density housing mix, some additional assumptions were made. More specifically, in order to accommodate complete communities in both the BUA and Greenfield areas, an increased amount of low- (single-detached, semi-detached, and duplexes) and medium-density (townhouse) housing units need to be accommodated in both the DGA and BUA policy areas. To achieve this in the BUA, some underutilized lands or soft sites were assumed to be developed as low and medium density rather than high density units, and intensification through lot splitting (larger sized single lots severed into two lots) also was assumed.

3. Secondary units, also referred to as Gentle Intensification in the Housing Intensification Technical Report, have been separated into their own density category for the assessment of the Five Scenarios. This reflects the unique form of intensification, where they are typically located in low-density unit types but are assigned a high-density people per unit assumption. Their low-density context yet high-density residency makes them sufficiently different for the purpose of the analysis. The assumption for the absolute number of secondary units in the region does not vary by scenario, though the proportion of these units does fluctuate due to the varying rates of other unit types.

Final outputs for each scenario varies in terms of housing mix by type (region wide and within the BUA and DGA), achievement of the Growth Plan intensification target, assumed DGA density, and the resulting land need to accommodate forecast growth to 2051. Once these outputs were obtained, an assessment was undertaken of each scenario.



Figure 3-2-1: Key Variables in the Land Needs Assessment are interrelated

Five Technical Reports + Land Needs Assessment (Fall 2021)

Housing Unit Mix 21% Low Density 31% Medium Density 48% High Density

Designated Greenfield Density 64 PJH

50%

Intensification Rate New Community Area Land 737 Hectares



Adjust for refined and new inputs to create new baseline

- Reflect Council adopted Conversion requests
- Update Natural Heritage System layers
- · Reassessed development condition in Seaton

1. Emphasis on low-density housing

2. Primarily low-density housing

3. Shifting the unit mix

4. Balancing the unit mix

5. Emphasis on higher densities

Housing Unit Mix

56% Low Density 23% Medium Density 19% High Density 2% Secondary Units

Intensification Rate **Designated Greenfield**

Density 50 PJH

New Community Area Land 5,400 Hectares

Housing Unit Mix

39% Low Density 26% Medium Density 32% High Density 3% Secondary Units

Intensification Rate Designated Greenfield

Density 55 PJH

Community Area Land 2,600 Hectares

Housing Unit Mix

34%Low Density 30% Medium Density 33% High Density 3% Secondary Units

Intensification Rate

Designated Greenfield Density 57 PJH

New Community Area Land 1,500 Hectares

Housing Unit Mix

28% Low Density 28% Medium Density 41% High Density 3% Secondary Units

Intensification Rate

Designated Greenfield Density 60 PJH

New Community Area Land 950 Hectares

Housing Unit Mix

20% Low Density 31% Medium Density 47% High Density 2% Secondary Units

Intensification Rate

Designated Greenfield

Density 64 PJH

New Community Area Land 0 Hectares

We are here

Assessment Framework

Five Principles

- 1. Achieving Targets
- 2. Housing Market Choice
- 3. Setting-up SGAs for success
- 4. Protecting Agricultural and Rural Systems, preparing for Cimate Change and achieving Sustainable Development
- 5. Competitive Economic and Employment Conditions



Achieves targets/ supports principle



Partially supports principle



Does not support principle



Recommended Scenario

3.3 Community Area Land Need Scenario Assessment Framework

To provide Regional Council, stakeholders and members of the public with additional information and context, each scenario was measured against an assessment framework. The Assessment Framework was developed by considering the key theme areas of Conformity with the Growth Plan, Regional Priorities, Future Forward Planning, and Regional Official Plan and Envision Durham Planning Objectives, all of which inform how growth in Durham should occur over the next 30 years. A review of existing policies and strategies under each theme was conducted, which resulted in the following principles and questions that were uses to measure and compare the scenarios:

Principle 1: Achieving Targets

 Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?

Principle 2: Housing Market Choice

- Does the scenario provide for the development of a fulsome range of housing types?
- 2. How does the scenario respond to market demand?

Principle 3: Setting up Strategic Growth Areas for Success

 Does the scenario support the ability of SGAs, including Urban Growth Centres, MTSAs, Regional Centres, and Regional Corridors, to achieve their planned function as higher density, mixed-use, and transit supportive urban communities?

Principle 4:

Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development

- 1. To what extent would the scenario negatively impact existing agricultural and rural areas?
- 2. Does the scenario provide efficient and sustainable development patterns, including transit-oriented development?
- 3. Does the scenario respond to the Region's Climate Change Emergency declaration?

Principle 5: Competitive Economic and Employment Conditions

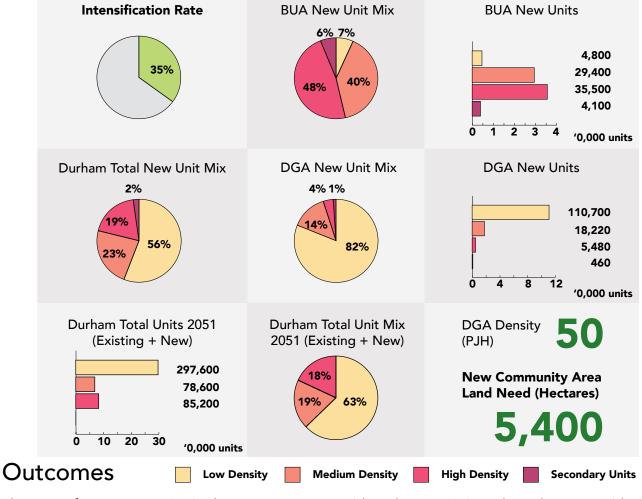
1. To what extent does the scenario capitalize on the Region's economic and sector strengths, including providing for appropriate Employment Area land to ensure Durham remains economically attractive and competitive over the long term?

The outcomes/implications from each scenario were then compared and ranked. The rankings, with the exception of Principle 1, were predominantly based on a qualitative assessment, recognizing the overlapping and subjective nature of the principles. Principle 1 is a quantitative assessment based on the 50% Intensification Rate, and minimum MTSA and UGC people and jobs per hectare densities required by the Growth Plan. The Scenario outcomes and assessment summaries are contained in the following section.

1 Emphasis on low-density housing, not meeting the minimum Growth Plan intensification target

Scenario 1 implements the housing mix established in the Greater Golden Horseshoe: Growth Forecasts to 2051 Technical Report, August 26, 2020 (Growth Plan Technical Report). The housing mix is based on a continuation of historical propensity trends for Durham Region to 2051. This Scenario explores the implications of a low-density focused growth scenario on the regional urban structure.

The high proportion (56%) of low density units has implications on all metrics, resulting in an intensification rate of 35%, which is lower than the Growth Plan minimum requirement of 50%. Given the low percentage of high-density units, this Scenario locates virtually all of the forecast high-density housing mix within the Built-up Area to best support the Strategic Growth Areas. The DGA Density meets the Growth Plan target but is lowest of all scenarios. The resultant land need is the greatest of all of the five scenarios.



The intensification rate is 35%. The BUA unit mix is 7% low-density, 40% medium-density, 48% high-density, and 6% secondary units. The BUA unit amounts are 4,800 low-density, 29,400 medium-density, 35,500 high-density, and 4,100 secondary units. The DGA density is 50 people and jobs per hectare. The DGA unit mix is 82% low-density, 14% medium-density, 4% high-density, and 1% secondary units. The DGA unit amounts are 110,700 low-density, 18,220 medium-density, 5,480 high density, and 460 secondary units. The total new unit mix is 56% low-density, 23% medium-density, 19% high-density, and 2% secondary units. The total new community area land need is 5,400 hectares.

Scenario 1 Assessment

Achieving Targets 50% intensification target not met. Minimum greenfield density of 50 p&j/ Does the scenario achieve the minimum targets of the ha met but is below the Category 1 Growth Plan, before advancing additional settlement area density (currently approved). MTSA and UGC minimum densities boundary expansion? difficult to meet Implementing the Growth Plan Technical Report forecasts results in an increased **Housing Market Choice** share of low-density housing types than are reported in the active development pipeline **Z** • Does the scenario provide for the development of a ful-Assumes future housing unit mix would be a flat line projection of historical patterns (based some range of housing types? on 2016). How does the scenario respond to market demand? Limited high-density options in DGA. Housing forms are generally Setting-up SGAs for success ground-oriented, leading to lowest intensification densities within the BUA. Does the scenario support the ability of SGAs, including Lowest level density development Urban Growth Centres, MTSAs, Regional Centres, and potential within the SGAs, challenging Regional Corridors, to achieve their planned function as their potential as mixed-use, transit higher density, mixed-use, and transit supportive urban supportive urban communities. communities? Requires the most new land, consuming **Protecting Agricultural and Rural** existing rural and agricultural land.

Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development

To what extent would the scenario negatively impact existing agricultural and rural areas?

Does the scenario provide efficient and sustainable development patterns, including transit-oriented development?

Does the scenario respond to the Region's Climate Change Emergency declaration?



Competitive Economic and Employment Conditions

To what extent does the scenario capitalize on the Region's economic and sector strengths, including providing for appropriate Employment Area land to ensure Durham remains economically attractive and competitive over the long term?



 Supply of low-density units encourages new families to move to Durham.

Predominance of low-density form

makes transit oriented redevelopment difficult and increases car-dependency

- Low-density form leads to increasing traffic congestion long-term.
- Car-dependent urban form is less physically and economically accessible.
- Low-density form, spread over a larger settlement area and related infrastructure is more costly to maintain in the longterm.

Key Considerations

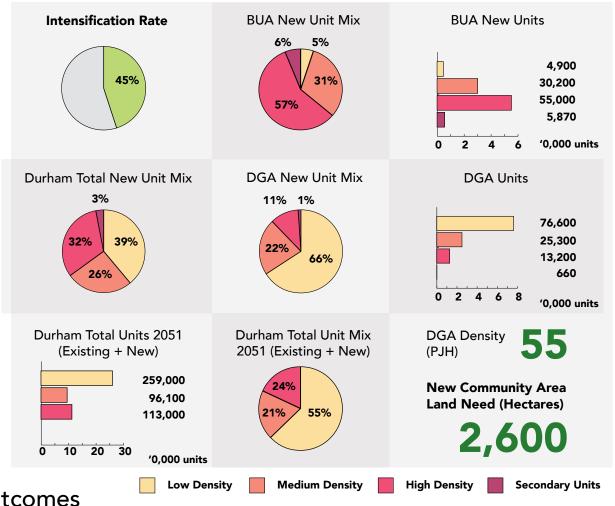
- Highest proportion of low-density housing forms across all policy areas.
- Strategic Growth Areas planned to achieve lowest level of density
- Development of urban structure as a compact, transit oriented places least supported.
- Highest relative land need of the Five Scenarios.

2 Primarily low-density housing, with increased share of medium and high-density housing

Scenario 2 represents a Region-wide housing mix forecast that continues to prioritize low- and medium-density housing, while achieving a higher intensification rate and providing a wider range of market options in the DGA than Scenario 1.

Based on supply opportunities within the BUA, as well as the housing demand by type, Scenario 2 can reasonably achieve an intensification target of 45% between 2022 and 2051.

Overall, there are fewer units being allocated into the DGA in Scenario 2, since an increased intensification target results in more units being provided in the BUA than in Scenario 1. These additional units are directed towards the Strategic Growth Areas (SGAs). The DGA is higher (55PJH) given the shift in the unit mix. In total, 2600 ha of new Community Area Land is needed to accommodate the forecast to 2051.



Outcomes

The intensification rate is 45%. The BUA unit mix is 5% low-density, 31% medium-density, 57% high-density, and 6% secondary units. The BUA unit amounts are 4,900 low-density, 30,200 medium-density, 55,000 high-density, and 5,870 secondary units. The DGA density is 55 people and jobs per hectare. The DGA unit mix is 66% low-density, 22% medium-density, 11% high-density, and 1% secondary units. The DGA unit amounts are 76,600 low-density, 25,300 medium-density, 13,200 high density, and 660 secondary units. The total new unit mix is 39% low-density, 26% medium-density, 32% high-density, and 3% secondary units. The total new community area land need is 2,600 hectares.

Scenario 2 Assessment

Achieving Targets

Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?



- 50% intensification target not met.
- Minimum greenfield density of 50 p&j/ ha met
- MTSA and UGC minimum densities can be met

Housing Market Choice

Does the scenario provide for the development of a fulsome range of housing types?

How does the scenario respond to market demand?



 The scenario provides a range of housing types and options in the BUA and a range of low- and mediumdensity housing options in the DGA, though likely provides less density in the DGA than there is demand, based on active development applications.

Setting-up SGAs for success

Does the scenario support the ability of SGAs, including Urban Growth Centres, MTSAs, Regional Centres, and Regional Corridors, to achieve their planned function as higher density, mixed-use, and transit supportive urban communities?



 Densities within Regional Centres are elevated to transit-supportive levels, but densities along Regional Corridors generally do not meet the same threshold.

Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development

To what extent would the scenario negatively impact existing agricultural and rural areas?

Does the scenario provide efficient and sustainable development patterns, including transit-oriented development?

Does the scenario respond to the Region's Climate Change Emergency declaration?



- Requires the second highest amount of new land, consuming existing rural and agricultural land.
- Lower density form unlikely to support viable transit options outside of MTSAs and UGCs
- Shift to medium density undermines transit supportive densities along Regional Corridors.

Competitive Economic and Employment Conditions

To what extent does the scenario capitalize on the Region's economic and sector strengths, including providing for appropriate Employment Area land to ensure Durham remains economically attractive and competitive over the long term?



- Supply of low-density units encourages new families to move to Durham.
- Shift to higher-density forms in BUA enables Regional Centres to emerge as economic centres.
- MTSAs are supported as growth centres, offering mobility choice and competitive advantage to new employment and residential uses

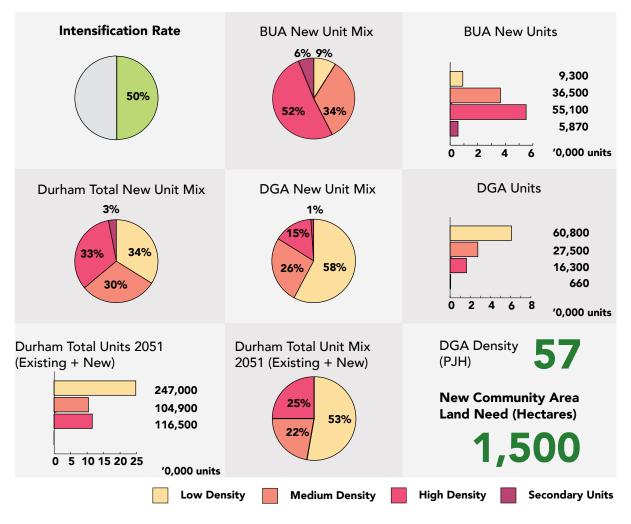
Key Considerations

- Shift towards market-based supply and higher density in DGA
- Regional Centres supported for growth although Regional Corridors growth potential is not optimized
- High relative new land need compared to Scenarios 3, 4 and 5

Shifting the unit mix and adding low density intensification to BUA and SGAs to achieve the minimum Growth Plan intensification target

This scenario meets the Growth Plan minimum intensification rate of 50%, but uses a high proportion of low-and medium-density housing forms in the unit mix. Low- and medium-density housing forms require large amounts of land compared to apartments and condominiums.

Meeting the 50% intensification figure with low- and medium-density housing forms required large areas within SGAs, including Regional Centres and Corridors, be planned for ground related housing. In addition, significant amounts of low density intensification within community areas is required, including within existing stable neighbourhoods. A higher DGA density is achieved, resulting in a lower Community Land Area need than the previous scenarios.



Outcomes

The intensification rate is 50%. The BUA unit mix is 6% low-density, 34% medium-density, 52% high-density, and 6% secondary units. The BUA unit amounts are 9,300 low-density, 36,500 medium-density, 55,100 high-density, and 5,870 secondary units. The DGA density is 57 people and jobs per hectare. The DGA unit mix is 58% low-density, 26% medium-density, 15% high-density, and 1% secondary units. The DGA unit amounts are 60,800 low-density, 27,500 medium-density, 16,300 high density, and 660 secondary units. The total new unit mix is 34% low-density, 30% medium-density, 33% high-density, and 3% secondary units. The total new community area land need is 1,500 hectares.

Scenario 3 Assessment

Achieving Targets

 Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?



- 50% intensification target met.
- Minimum greenfield density of 50 p&j/ ha met
- MTSA and UGC minimum densities can be met

Housing Market Choice

Does the scenario provide for the development of a fulsome range of housing types?

How does the scenario respond to market demand?



- The scenario provides a range of housing types and options in both the BUA and DGA.
- Higher levels of low and medium density provided in the BUA are accommodated by growth in stable neighbourhoods and lower densities in SGAs.

Setting-up SGAs for success

Does the scenario support the ability of SGAs, including Urban Growth Centres, MTSAs, Regional Centres, and Regional Corridors, to achieve their planned function as higher density, mixed-use, and transit supportive urban communities?



 Highest levels of low-and mediumdensity housing forms in BUA undermines SGA planned function and transit supportive objectives.

Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development

To what extent would the scenario negatively impact existing agricultural and rural areas?

Does the scenario provide efficient and sustainable development patterns, including transit-oriented development?

Does the scenario respond to the Region's Climate Change Emergency declaration?



- Requires additional land, consuming existing rural and agricultural land.
- Focus on low- and medium-density within BUA limits transit supportive development opportunities. Return on public transit investments undermined.

Competitive Economic and Employment Conditions

To what extent does the scenario capitalize on the Region's economic and sector strengths, including providing for appropriate Employment Area land to ensure Durham remains economically attractive and competitive over the long term?



- Supply of low-density units encourages new families to move to Durham.
- Focus on low-and medium-density forms within BUA limits long-term viability of SGAs due to limited population growth.

Key Considerations

- Scenario achieves intensification target using a balanced mix of housing forms
- Use of low- and medium-density housing forms in BUA and SGAs undermines transit oriented development objectives and regional urban structure by placing a high share of grade-related housing forms in SGAs
- Low- and medium-density housing units in Regional Centres unlikely to align with market conditions
- Assumes highest level of lot splitting/ intensification within Community Area lands including existing mature and stable neighbourhoods

4.

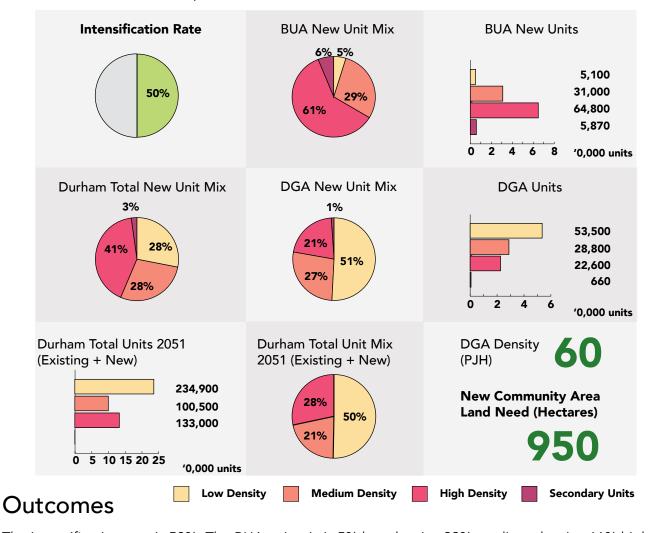
Balancing the unit mix

with an emphasis on high and medium-density housing, while achieving the minimum 50% intensification target

Scenario 4 builds from the approach of the Technical Reports with a preference for high-density housing forms in the BUA, but is adjusted to increase the proportion of low- and medium-density forms in response to public and stakeholder comments.

This mix is intended to reflect the rapidly growing population of Durham while preserving its capacity to house new and growing families with a range of housing types and affordable housing options compared to other Greater Toronto and Hamilton Area (GTHA) regions.

This Scenario achieves a focus on high-density units in Strategic Growth Areas (SGAs) with additional low- and medium-density housing forms along Regional Corridors. The higher DGA density of 60 PJH is achieved with approximately 50% low-density housing units. This scenario results in a lower Community Area land need than the three previous scenarios.



The intensification rate is 50%. The BUA unit mix is 5% low-density, 29% medium-density, 61% high-density, and 6% secondary units. The BUA unit amounts are 5,100 low-density, 31,000 medium-density, 64,800 high-density, and 5,870 secondary units. The DGA density is 60 people and jobs per hectare. The DGA unit mix is 51% low-density, 27% medium-density, 21% high-density, and 1% secondary units. The DGA unit amounts are 53,500 low-density, 28,800 medium-density, 22,600 high density, and 660 secondary units. The total new unit mix is 28% low-density, 28% medium-density, 41% high-density, and 3% secondary units. The total new community area land need is 950 hectares.

Scenario 4 Assessment

Achieving Targets

 Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?



- 50% intensification target met.
- Minimum greenfield density of 50 p&j/ ha met
- MTSA and UGC minimum densities can be met

Housing Market Choice

Does the scenario provide for the development of a fulsome range of housing types?

How does the scenario respond to market demand?



 Shift to housing form and choice creates balance between low, medium and high density, providing housing choice for a broad and changing demographic.

Setting-up SGAs for success

Does the scenario support the ability of SGAs, including Urban Growth Centres, MTSAs, Regional Centres, and Regional Corridors, to achieve their planned function as higher density, mixed-use, and transit supportive urban communities?



- Focus on higher-density forms supports the growth of the SGAs
- Proportion of medium density units in the SGAs does not optimize the growth potential in transit supportive areas

Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development

To what extent would the scenario negatively impact existing agricultural and rural areas?

Does the scenario provide efficient and sustainable development patterns, including transit-oriented development?

Does the scenario respond to the Region's Climate Change Emergency declaration?



- Requires additional land, consuming existing rural and agricultural land.
- Preference for compact housing forms supports transit oriented communities.
- Compact form can align with efficient building design and travel modes, reducing greenhouse gas emissions.

Competitive Economic and Employment Conditions

To what extent does the scenario capitalize on the Region's economic and sector strengths, including providing for appropriate Employment Area land to ensure Durham remains economically attractive and competitive over the long term?



- Supply of low- and medium-density forms in BUA attracts new families.
- Supply of high-density units in DGA supports new planned Centres.
- Higher-density focus in BUA supports planned urban structure.
- Transit oriented development limits future traffic congestion.

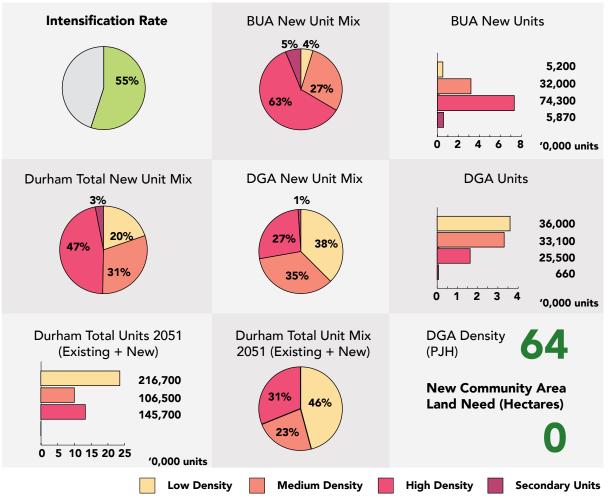
Key Considerations

- Scenario achieves intensification target using a balanced mix of housing forms in the DGA and a higher proportion of high-density housing forms in the BUA
- Supports compact, transit oriented communities and regional urban structure
- Moderate additional Community Area land required

5 Emphasis on higher densities and intensification beyond minimum Growth Plan targets

Scenario 5 tests the growth pattern required to exceed the minimum intensification target (55%) and require no new Community Land to accommodate the 2051 growth forecast. The Region-wide unit mix is established by meeting these requirements. The Built-up Area (BUA) is forecast to contain the highest amount of high-density housing units, and the DGA housing forecast results in a mix which is more oriented towards high-density units than reported in active development applications.

The resultant output is a DGA unit mix which provides the lowest proportion of low-density and greatest proportion of high-density units - a significant shift from past and recent development trends. The DGA density of 64 pjh is the highest overall DGA density by 2051 and results in a no expansion scenario.



Outcomes

The intensification rate is 55%. The BUA unit mix is 5% low-density, 27% medium-density, 63% high-density, and 5% secondary units. The BUA unit amounts are 5,200 low-density, 32,000 medium-density, 74,300 high-density, and 5,870 secondary units. The DGA density is 64 people and jobs per hectare. The DGA unit mix is 38% low-density, 35% medium-density, 27% high-density, and 1% secondary units. The DGA unit amounts are 36,000 low-density, 33,100 medium-density, 25,500 high density, and 660 secondary units. The total new unit mix is 20% low-density, 31% medium-density, 47% high-density, and 3% secondary units. No additional Community Area land is required.

Scenario 5 Assessment

Achieving Targets Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?



- 50% intensification target met.
- Minimum greenfield density of 50 p&j/ha exceed.
- MTSA and UGC minimum densities can be met
- Housing Market Choice
 Does the scenario provide for the development of a fulsome range of housing types?
 - How does the scenario respond to market demand?



- Significant emphasis on high-density forms across the Region results in a DGA that potentially provides an oversupply of apartment units compared to active development applications.
- The highest level of intensification and high density units within the BUA are not likely to be absorbed even over the long term
- Setting-up SGAs for success

 Does the scenario support the ability of SGAs, including Urban Growth Centres, MTSAs, Regional Centres, and Regional Corridors, to achieve their planned function as higher density, mixed-use, and transit supportive urban communities?



 Focus on higher-density forms optimizes the planned growth of the SGAs across the Region.

Protecting Agricultural and Rural
Systems, preparing for Climate Change and Achieving Sustainable Development

To what extent would the scenario negatively impact existing agricultural and rural areas?

Does the scenario provide efficient and sustainable development patterns, including transit-oriented development?

Does the scenario respond to the Region's Climate Change Emergency declaration?



- Requires no new Community Area expansion.
- Focus on compact housing forms supports transit oriented communities.
- Compact form can align with efficient building design and travel modes, reducing greenhouse gas emissions.

Competitive Economic and Employment Conditions

To what extent does the scenario capitalize on the Region's economic and sector strengths, including providing for appropriate Employment Area land to ensure Durham remains economically attractive and competitive over the long term?



- Lack of market supply of low-and medium-density units in DGA limits growth of new families.
- Supply of high-density units in DGA supports new planned centres, but may not be absorbed by market demand
- Transit oriented development limits future traffic congestion.

Key Considerations

- Supports and optimizes regional urban structure and compact, transit oriented communities
- No additional Community Area land required
- Scenario exceeds intensification target as a result of focus on high-density housing forms in BUA
- Results in a DGA unit mix which is too oriented towards high-density housing forms and is not representative of DGA market demand.

4. Range of Land Need

The five scenarios result in a range of Land Need based on unit mix, DGA density and intensification rates. As the intensification target increases and the unit mix shifts more towards high-density dwellings, the total Community Area land need decreases. The range of land need for both Community Areas and Employment Areas is demonstrated in Figure 5-1 below. The Figure below illustrates the Community Area and Employment Land Need for each Scenario. The resulting land need ranges from 1,171 ha (Scenario 5 + Revised Employment Area Intensification Target) to 6,751 ha (Scenario

1 + Employment Strategy Technical Report). At the scale of Land Need of Scenario 1, with either employment scenario, there may not be sufficient land in the whitebelt to accommodate the forecast without putting lands that should be protected under pressure.

Summary Range of Total Regional New Land Need

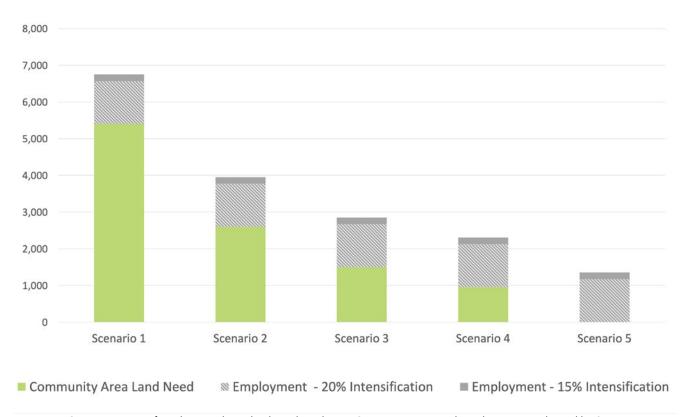


Figure 4-1: Summary range of total regional new land need combining Community Area and Employment Land Need by Scenario

5. Next Steps

The Region will be launching a public survey to solicit feedback on the Scenario modelling outcomes and assessment. The comment period for this report and the survey will close on April 14th, 2022. The Project Team will review the public feedback received and use this as input along with the Scenario Assessment to prepare a Recommended Land Need Scenario, including both Community Area and Employment Area land needs. A final recommendations package will be presented to the Planning and Economic Development Committee in May 2022. This package will contain recommendations on the Preferred Land Need Scenario, supporting technical figures and tables and other recommendations related to Phase 2 of the Growth Management Study. This presentation will represent the culmination of Phase One of the Envision Durham: Growth Management Study.

Following Regional Council's decision, the Growth Management Study will move into Phase 2 to determine Local Area Allocations and preferred locations for Settlement Area Boundary Expansion(s), which will focus on determining the share and form of growth attributed to the Area Municipalities. Phase 2 will culminate with a Regional Official Plan and demonstration of Growth Plan conformity.

The next steps and project schedule is outlined below:

- March 10 scenario modelling outcomes and assessment posted for public review.
 Response survey opens – visit <u>www.durham.</u> ca/envisiondurham
- March 24 Virtual Public Information Centre scheduled for 7pm. Notification of Public Information Centre will be advertised via local Newspapers, e-mailed to the Envision Durham interested parties list, social media channels and a public service announcement.
- April 14 response survey closes.
- May 3 Present the Preferred Land Need Scenario to Planning and Economic Development Committee.

Technical Appendix

Appendix A: Land Needs Calculation for Each Scenario

The following tables provide details on the land needs calculation for each Scenario. For additional details regarding the methodology, please refer to the Community Area Urban Land Needs Technical Report.

Figure A-1: Durham Region DGA Community Area Developable Land Supply

		Land Area
Total DGA Community Area Supply (Net of Growth Plan Take-Outs) (developable ha)	А	6,142
Total Employment Area Conversions (Net of Growth Plan Take-Outs) (developable ha)	В	308
Total DGA Community Area Supply (Including Employment Area Conversions), developable ha	C = A + B	6,450
Vacant Land Contingency (gross ha) (1.5%) ¹	D = C * 1.5%	97
Total DGA Community Area Supply (Including Employment Area Conversions and Land Contingency factor), developable ha	E = C - D	6,353

Source: Watson & Associates Economists Ltd., 2022.

¹ Land Contingency factor accounts for Employment Area conversions that may not redevelop during the planning horizon, as well as other DGA Community Area which may not develop by 2051.

Figure A-2: Scenario 1 – DGA Community Area Land Need Calculation, 2051

	Land Area (ha)	People and Jobs	People and Jobs Per Developable ha
Total Existing DGA	6,353		
Developed	1,496	71,950	48
Category 1 ¹	2,490	155,630	63
Category 2 ²	2,367	108,900	46
Forecast, 2019 to 2051	10,244	512,320	
Total DGA at 2051	11,740	584,270	50
Expansion Requirement	5,387	247,790	46

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review . The Category 1 density of 63 people and jobs per hectare is upwardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Figure A-3: Scenario 2 – DGA Community Area Land Need Calculation, 2051

	Land Area		People and Jobs Per
	(ha)	and Jobs	Developable ha
Total Existing DGA	6,353		
Developed	1,496	71,950	48
Category 1 ¹	2,490	155,630	63
Category 2 ²	2,367	127,840	54
Forecast, 2019 to 2051	7,471	424,610	
Total DGA at 2051	8,967	496,560	55
Expansion Requirement	2,614	141,140	54

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review . The Category 1 density of 63 people and jobs per hectare is upwardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Figure A-4: Scenario 3 – DGA Community Area Land Need Calculation, 2051

	Land Area (ha)	People and Jobs	People and Jobs Per Developable ha
Total Existing DGA	6,353		
Developed	1,496	71,950	48
Category 1 ¹	2,490	155,630	63
Category 2 ²	2,367	136,600	58
Forecast, 2019 to 2051	6,362	379,070	
Total DGA at 2051	7,858	451,020	57
Expansion Requirement	1,505	86,840	58

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review. The Category 1 density of 63 people and jobs per hectare is upw ardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Figure A-5: Scenario 4 – DGA Community Area Land Need Calculation, 2051

	Land Area (ha)	People and Jobs	People and Jobs Per Developable ha
Total Existing DGA	6,353		
Developed	1,496	71,950	48
Category 1 ¹	2,490	155,630	63
Category 2 ²	2,367	152,820	65
Forecast, 2019 to 2051	5,812	370,100	
Total DGA at 2051	7,308	442,050	60
Expansion Requirement	955	61,650	65

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review . The Category 1 density of 63 people and jobs per hectare is upwardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Figure A-6: Scenario 5 – DGA Community Area Land Need Calculation, 2051

	Land Area (ha)	People and Jobs	People and Jobs Per Developable ha
Total Existing DGA	6,353		
Developed	1,496	71,950	48
Category 1 ¹	2,490	155,630	63
Category 2 ²	2,367	177,560	75
Forecast, 2019 to 2051	4,760	325,890	
Total DGA at 2051	6,256	397,840	64
Expansion Requirement	- 97	- 7,300	75

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review. The Category 1 density of 63 people and jobs per hectare is upwardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Appendix B: Land Needs Calculation for Each Scenario

A housing propensity analysis by population age and housing structure type is a common approach used to assess future housing demand by structure type. This approach uses current Census data, in this case 2016 Statistics Canada Census data, as a starting point to derive housing propensity rates by structure type to the Durham Region population by age group. From this data, assumptions regarding shifting patterns in propensity are assumed for each growth scenario, to determine housing growth by structure type for each age group.

It is important to note that if propensities are flat-lined to derive future housing needs, this would result in an significant amount of low-density. It is not appropriate to flat-line propensity rates because there are a multitude of factors which influence them and their volatility, such as housing affordability and changing housing preferences (e.g. aging of the population which will put upward pressure on high-density units). The 2021 to 2051 housing forecast by age group (age of primary household maintainer) and housing type for all five residential growth scenarios is provided below.

75+ 44% 16% 40% 56,000 25,700 65-74 34,600 55-64 73% Age Group 42.500 45-54 66% 28% 41.300 35-44 52% 31% 17% 30% Under 25 19% **12%** 10.000 30.000 60.000 20 000 40 000 50 000 ■Low Density¹ ■Medium Density² ■High Density³

Total Housing Growth, 2021-2051

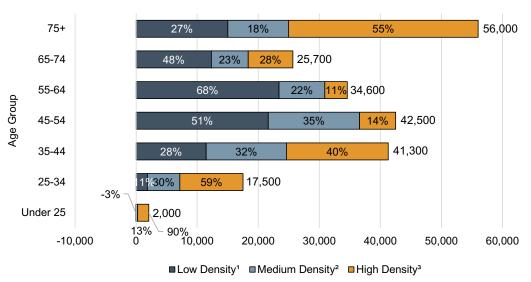
Figure B-1: Scenario 1: Growth Plan Background Report - Total Housing Forecast by Propensity and Type, 2021 to 2051

¹ Low density represents singles and semi-detached.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.

³ High density includes all apartments.

Figure B-2: Scenario 2: Higher Proportion of Low-Density Housing – Not Meeting Intensification Target – Total Housing Forecast by Propensity and Type, 2021 to 2051



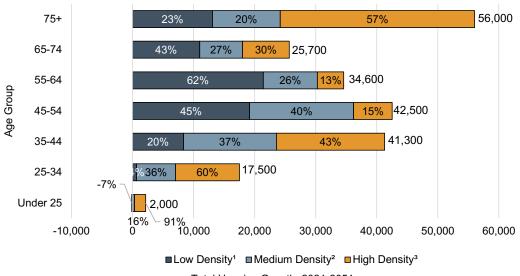
Total Housing Growth, 2021-2051

¹ Low density represents singles and semi-detached.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.

³ High density includes all apartments.

Figure B-3: Scenario 3: Higher Proportion of Low-Density – Testing Impact of Meeting Intensification Target– Total Housing Forecast by Propensity and Type, 2021 to 2051



Total Housing Growth, 2021-2051

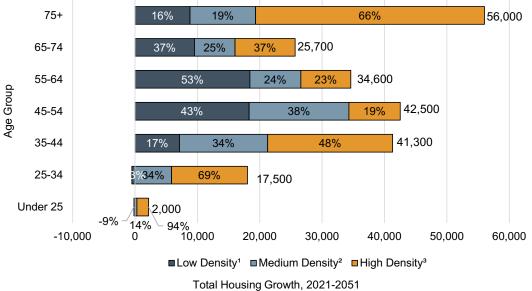
¹ Low density represents singles and semi-detached.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.

³ High density includes all apartments.

75+ 16% 19% 66% 56,000

Figure B-4: Scenario 4: Modified Mix Meeting Targets – Total Housing Forecast by Propensity and Type, 2021 to 2051

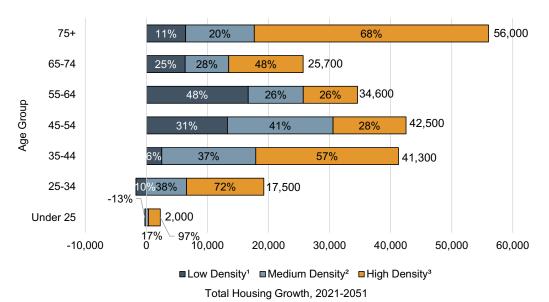


¹ Low density represents singles and semi-detached.

³ High density includes all apartments.
Source: Watson & Associates Economists Ltd., 2022.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.

Figure B-5: Scenario 5: Exceeding Targets – No Additional Land Need – Focus on Higher-Density – Total Housing Forecast by Propensity and Type, 2021 to 2051



¹ Low density represents singles and semi-detached.

³ High density includes all apartments.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.





Appendix A: Designated Greenfield Land Supply and Density Analysis

The following tables provide details on the land needs calculation for each Scenario. As mentioned in Section 1.2 of the Alternative Land Need Scenarios Assessment Summary Report, the DGA Community Area land supply and land needs calculations have been revised. The following tables are reflective of these revisions. Since the release of the March 2022 Alternative Land Needs Scenarios Assessment Summary Report, the density of the developed land area has been slightly adjusted. This adjustment has no impact on the land needs by 2051 for each scenario. Accordingly, this technical appendix replaces the appendix of the March 2022 Alternative Land Needs Scenarios Assessment Summary Report. For additional details regarding the land supply and land needs calculations, please refer to the Community Area Urban Land Needs Technical Report.

Figure A-1: Durham Region, Total Designated Greenfield Area

Area Municipality	Total Gross DGA Land Area, ha	Total Non- Developable Take-outs	DGA Net of Take-Outs, ha	Gross Developable Employment Lands, ha ¹	Gross Developable Community Areas, ha
	А	В	C = A - B	D	E = C - D
Town of Ajax	1,093	277	816	279	537
Township of Brock	468	114	354	146	208
Municipality of Clarington	2,718	968	1,750	413	1,337
City of Oshawa	2,425	679	1,745	236	1,509
City of Pickering ²	3,028	1,726	1,303	359	944
Township of Scugog	422	105	318	171	147
Township of Uxbridge	153	54	99	0	99
Town of Whitby	2,925	992	1,933	573	1,360
Total Region of Durham DGA	13,232	4,914	8,318	2,176	6,142

¹ Gross Land Area in accordance with the Growth Plan, 2020 Developable Land Area

² The Pickering DGA is largely represented by the Seaton Community. Approximately five ha of developable land has been identified as part of the Duffin Heights Secondary Plan within the DGA. The Green River DGA Community Area lands are not considered developable and have been removed from the supply.

Figure A-2: Durham Region, DGA Community Area - Developed and Vacant

Area Municipality	Developed Community Area Lands, ha ¹	Vacant Community Area Lands, ha	Total Developable Community Area Lands, ha	% Developed	% Vacant
	Α	В	C = A + B	D = A / C	E = B / C
Town of Ajax	385	152	537	72%	28%
Township of Brock	19	189	208	9%	91%
Municipality of Clarington	350	987	1,337	26%	74%
City of Oshawa	453	1,057	1,509	30%	70%
City of Pickering	0	944	944	0%	100%
Township of Scugog	42	105	147	29%	71%
Township of Uxbridge ²	25	74	99	25%	75%
Town of Whitby	222	1,138	1,360	16%	84%
Total Region of Durham DGA	1,496	4,646	6,142	24%	76%

¹ A building footprint coverage threshold was used to determine the development status of plans. Plans with a threshold greater than 20% were classified as developed, while plans between 5% and 20% required a desktop review to determine development status. All plans categorized as developed may have the potential for further development where appropriate, which has not been recognized herein.

² Uxbridge lands include Special Study Area 5 and 6

Figure A-3: Durham Region, Vacant DGA Lands by Category, Hectares

Area Municipality	Total Approved, Draft Approved and Under Review (Category 1)	Remaining Vacant (Category 2)	Total Vacant DGA Community Areas	% Vacant Category 1	% Vacant Category 2
	Α	B = C - A	С	D = A / C	E = B / C
Town of Ajax	92	61	152	60%	40%
Township of Brock	85	105	189	45%	55%
Municipality of Clarington	416	571	987	42%	58%
City of Oshawa	574	482	1,057	54%	46%
City of Pickering	859	86	944	91%	9%
Township of Scugog	81	23	105	78%	22%
Township of Uxbridge ¹	10	64	74	13%	87%
Town of Whitby	373	765	1,138	33%	67%
Total Region of Durham DGA	2,490	2,157	4,646	54%	46%

¹ Uxbridge lands include Special Study Area 5 and 6

Figure A-4: Durham Region, Existing Density People and Jobs on Developed DGA Lands

Area Municipality	DGA Developed Land Area, Gross ha	Existing Population on Developed DGA Lands	Existing Jobs on Developed DGA Lands ¹	Existing Population and Jobs on Developed DGA Lands ¹	Existing People and Jobs Density (gross/ha)
	Α	Α	Α	В	C = B / A
Town of Ajax	385	21,934	2,887	24,821	65
Township of Brock	19	263	247	510	27
Municipality of Clarington	350	13,152	2,694	15,846	45
City of Oshawa	453	15,134	1,205	16,339	36
City of Pickering	0	0	0	0	0
Township of Scugog	42	886	218	1,104	26
Township of Uxbridge	25	516	112	628	25
Town of Whitby	222	10,453	835	11,288	51
Total Region of Durham DGA	1,496	62,338	8,198	70,536	47

¹ Jobs Captured are within Community Areas and not Employment Areas.

Figure A-5: Durham Region, Housing Units on Developed DGA Lands

Area Municipality	Singles/Semi- Detached	Townhouses	Apartments	Total
	А	В	С	D = A + B + C
Town of Ajax	4,869	824	8	5,701
Township of Brock	87	0	0	87
Municipality of Clarington	3,299	755	242	4,296
City of Oshawa	3,772	524	224	4,520
City of Pickering	0	0	0	0
Township of Scugog	290	2	0	292
Township of Uxbridge	98	69	0	167
Town of Whitby	2,491	552	1	3,044
Total Region of Durham DGA	14,906	2,726	475	18,107
Regional Unit Mix	82%	15%	3%	100%

Source: Derived from custom geocoded building permits from 2005 to 2018 by Watson & Associates Economists Ltd., 2022.

Figure A-6: Durham Region, Category 1 DGA People and Jobs Density

Area Municipality	Total Approved and Draft Approved (Category 1) Housing Units	Total Approved and Draft Approved (Category 1) Land, ha	Category 1 Population	Category 1 Employment	Category 1 People and Jobs	Category 1 People and Jobs/Gross ha	Category 1 Housing Units Per Gross ha
	Α	В	С	D	E = C + D	F = E / A	G = A / B
Town of Ajax	2,030	92	6,150	670	6,820	74	22
Township of Brock	810	85	2,390	490	2,880	34	10
Municipality of Clarington	5,640	416	16,130	1,930	18,060	43	14
City of Oshawa	9,960	574	27,390	6,470	33,860	59	17
City of Pickering ¹	19,190	859	55,320	15,270	70,590	82	22
Township of Scugog	390	81	1,120	120	1,240	15	5
Township of Uxbridge	140	10	380	60	440	46	14
Town of Whitby	6,030	373	18,290	3,450	21,740	58	16
Total Region of Durham DGA	44,190	2,490	127,170	28,460	155,630	63	18
Durham DGA Excluding Pickering ¹	25,000	1,631	71,850	13,190	85,040	52	15

¹ The Pickering DGA is largely represented by the Seaton Community. Approximately five ha of developable Category 2 land has been identified as part of the Duffin Heights Secondary Plan within the DGA.

Figure A-7: Durham Region, DGA People and Jobs Density (Developed, Approved and Draft Approved – Developed DGA Lands + Category 1 Lands)

Area Municipality	Total Housing Units	Total Land Area, Gross ha	Population	Employment	Population and Employment	Density: People and Jobs/Gross ha	Housing Units Per Gross ha
	А	В	С	С	С	D = C / B	E = A / B
Town of Ajax	7,732	476	28,081	3,555	31,636	66	16
Township of Brock	896	104	2,653	740	3,393	33	9
Municipality of Clarington	9,931	766	29,281	4,629	33,910	44	13
City of Oshawa	14,479	1,027	42,522	7,675	50,197	49	14
City of Pickering	19,190	860	55,320	15,270	70,590	82	22
Township of Scugog	677	124	2,001	338	2,339	19	5
Township of Uxbridge	303	34	897	173	1,070	31	9
Town of Whitby	9,073	596	28,738	4,286	33,024	55	15
Total Region of Durham DGA	62,280	3,990	189,490	36,670	226,160	57	16
Durham DGA Excluding Pickering ¹	43,090	3,130	134,170	21,400	155,570	50	14

¹ The Pickering DGA is largely represented by the Seaton Community. Approximately five ha of developable Category 2 land has been identified as part of the Duffin Heights Secondary Plan within the DGA

Figure A-8: Durham Region DGA Community Area Developable Land Supply

inguite A of Burnam Region Ben Community Area Bevelopasie Lana Supply					
		Land Area			
Total DGA Community Area Supply (Net of Growth Plan Take-Outs) (developable ha)	А	6,142			
Total Employment Area Conversions (Net of Growth Plan Take-Outs) (developable ha)	В	308			
Total DGA Community Area Supply (Including Employment Area Conversions), developable ha	C = A + B	6,450			
Vacant Land Contingency (gross ha) (1.5%) ¹	D = C * 1.5%	97			
Total DGA Community Area Supply (Including Employment Area Conversions and Land Contingency factor), developable ha	E = C - D	6,353			

¹ Land Contingency factor accounts for Employment Area conversions that may not redevelop during the planning horizon, as well as other DGA Community Area which may not develop by 2051.

Scenario 1: Emphasis on Low-Density Housing

Figure A-9: Durham Region, Scenario 1 DGA Community Area Population and Employment Forecast, 2019 to 2051

Location		DGA Community Area Total	Durham Region Total	Community Area Share of Regional Total
Pop	ulation	470,250	612,500	77%
ļ.	Major Office	2,900	28,900	10%
ner	Employment Lands Employment	0	82,400	0%
loyr	Rural	0	3,000	0%
Employment	Population-Related Employment	39,170	112,200	35%
Ē	Total Employment	42,070	226,500	19%
Total People and Jobs		512,320	839,000	61%

Source: Watson & Associates Economists Ltd., 2022.

Figure A-10: Durham Region, Scenario 1 DGA Community Area Population and Employment Forecast, 2019 to 2051

	. 0.0000, 2015 to 2001							
	Land Area (ha)	People and Jobs	People and Jobs Per Developable ha					
Total Existing DGA	6,353							
Developed	1,496	70,540	47					
Category 1 ¹	2,490	155,630	63					
Category 2 ²	2,367	108,900	46					
Forecast, 2019 to 2051	10,244	512,320						
Total DGA at 2051	11,740	582,860	50					
Expansion Requirement	5,387	247,790	46					

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review. The Category 1 density of 63 people and jobs per hectare is upwardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Scenario 2: Primarily Low-Density Housing

Figure A-11: Durham Region, Scenario 2 DGA Community Area Population and Employment Forecast, 2019 to 2051

Location		DGA Community Area Total	Durham Region Total	Community Area Share of Regional Total
Pop	ulation	389,280	612,500	64%
l ±	Major Office	2,900	28,900	10%
ner	Employment Lands Employment	0	82,400	0%
loyr	Rural	0	3,000	0%
Employment	Population-Related Employment	32,430	112,200	29%
ш	Total Employment	35,330	226,500	16%
Total People and Jobs		424,610	839,000	51%

Source: Watson & Associates Economists Ltd., 2022.

Figure A-12: Durham Region, Scenario 2 DGA Community Area Population and Employment Forecast, 2019 to 2051

	Land Area (ha)	People and Jobs	People and Jobs Per Developable ha
Total Existing DGA	6,353		
Developed	1,496	70,540	47
Category 1 ¹	2,490	155,630	63
Category 2 ²	2,367	127,840	54
Forecast, 2019 to 2051	7,471	424,610	
Total DGA at 2051	8,967	495,150	55
Expansion Requirement	2,614	141,140	54

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review. The Category 1 density of 63 people and jobs per hectare is upwardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Scenario 3: Shifting the Unit Mix

Figure A-13: Durham Region, Scenario 3 DGA Community Area Population and Employment Forecast, 2019 to 2051

Loca	ition	DGA Community Area Total	Durham Region Total	Community Area Share of Regional Total
Population		347,250	612,500	57%
<u>+</u>	Major Office	2,900	28,900	10%
ner	Employment Lands Employment	0	82,400	0%
oyr	Rural	0	3,000	0%
Employment	Population-Related Employment	28,920	112,200	26%
Total Employment		31,820	226,500	14%
Tota	al People and Jobs	379,070	839,000	45%

Source: Watson & Associates Economists Ltd., 2022.

Figure A-14: Durham Region, Scenario 3 DGA Community Area Population and Employment Forecast, 2019 to 2051

	Land Area (ha)	People and Jobs	People and Jobs Per Developable ha
Total Existing DGA	6,353		
Developed	1,496	70,540	47
Category 1 ¹	2,490	155,630	63
Category 2 ²	2,367	136,600	58
Forecast, 2019 to 2051	6,362	379,070	
Total DGA at 2051	7,858	449,610	57
Expansion Requirement	1,505	86,840	58

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review. The Category 1 density of 63 people and jobs per hectare is upwardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Scenario 4: Balancing the Unit Mix

Figure A-15: Durham Region, Scenario 4 DGA Community Area Population and Employment Forecast, 2019 to 2051

Loca	ition	DGA Community Area Total	Durham Region Total	Community Area Share of Regional Total
Population		338,960	612,500	55%
<u>+</u>	Major Office	2,900	28,900	10%
ner	Employment Lands Employment	0	82,400	0%
oyr	Rural	0	3,000	0%
Employment	Population-Related Employment	28,240	112,200	25%
Ш	Total Employment	31,140	226,500	14%
Tota	al People and Jobs	370,100	839,000	45%

Source: Watson & Associates Economists Ltd., 2022.

Figure A-16: Durham Region, Scenario 4 DGA Community Area Population and Employment Forecast, 2019 to 2051

	Land Area (ha)	People and Jobs	People and Jobs Per Developable ha
Total Existing DGA	6,353		
Developed	1,496	70,540	47
Category 1 ¹	2,490	155,630	63
Category 2 ²	2,367	152,820	65
Forecast, 2019 to 2051	5,812	370,100	
Total DGA at 2051	7,308	440,640	60
Expansion Requirement	955	61,650	65

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review . The Category 1 density of 63 people and jobs per hectare is upwardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Scenario 5: Emphasis on Higher Densities

Figure A-17: Durham Region, Scenario 5 DGA Community Area Population and Employment Forecast, 2019 to 2051

Loca	ation	DGA Community Area Total	Durham Region Total	Community Area Share of Regional Total
Population		298,150	612,500	49%
ن ا	Major Office	2,900	28,900	10%
ner	Employment Lands Employment	0	82,400	0%
loyr	Rural	0	3,000	0%
Employment	Population-Related Employment	24,840	112,200	22%
E	Total Employment	27,740	226,500	12%
Tota	al People and Jobs	325,890	839,000	39%

Source: Watson & Associates Economists Ltd., 2022.

Figure A-18: Durham Region, Scenario 5 DGA Community Area Population and Employment Forecast, 2019 to 2051

	Land Area (ha)	People and Jobs	People and Jobs Per Developable ha
Total Existing DGA	6,353		
Developed	1,496	70,540	47
Category 1 ¹	2,490	155,630	63
Category 2 ²	2,367	177,560	75
Forecast, 2019 to 2051	4,760	325,890	
Total DGA at 2051	6,256	396,430	63
Expansion Requirement	- 97	- 7,300	75

¹ Category 1 - Approved (registered but unbuilt or in the process of being built out), Draft Approved and Applications Under Review . The Category 1 density of 63 people and jobs per hectare is upwardly affected by a density of 83 within the Seaton Community Area.

² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

Appendix B: Housing Propensity Forecast for each Scenario, 2021 to 2051

A housing propensity analysis by population age and housing structure type is a common approach used to assess future housing demand by structure type. This approach uses current Census data, in this case 2016 Statistics Canada Census data, to derive housing propensity rates by structure type to the Durham Region population by age group. The 2021 to 2051 housing forecast by age group (age of primary household maintainer) and housing type for all five residential growth scenarios.

75+ 44% 16% 40% 56,000 25,700 65-74 65% 17% 34,600 55-64 73% 17% Age Group 42,500 45-54 66% 28% 41,300 31% 35-44 52% 17% 17,500 25-34 35% 30% 2,000 Under 25 19% -/12% 69% 10.000 40.000 20.000 30.000 50.000 60.000 ■ Medium Density²
■ High Density³

Total Housing Growth, 2021-2051

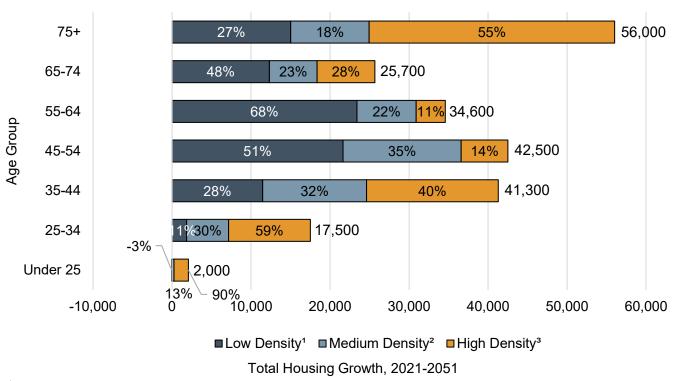
Figure B-1: Scenario 1: Growth Plan Background Report – Total Housing Forecast by Propensity and Type, 2021 to 2051

¹ Low density represents singles and semi-detached.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.

³ High density includes all apartments.

Figure B-2: Scenario 2: Higher Proportion of Low-Density Housing – Not Meeting Intensification Target – Total Housing Forecast by Propensity and Type, 2021 to 2051

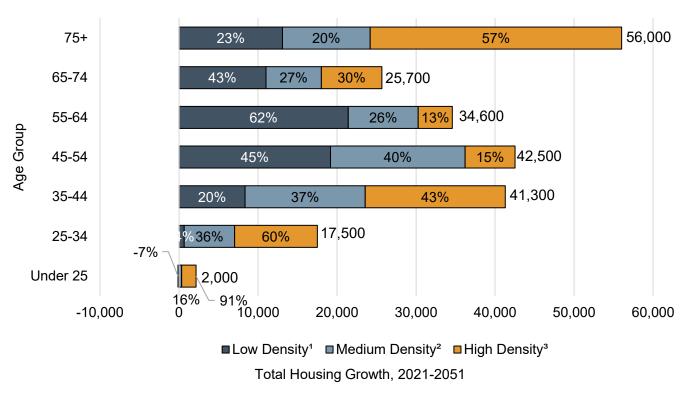


¹ Low density represents singles and semi-detached.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.

³ High density includes all apartments.

Figure B-3: Scenario 3: Higher Proportion of Low-Density – Testing Impact of Meeting Intensification Target – Total Housing Forecast by Propensity and Type, 2021 to 2051



¹ Low density represents singles and semi-detached.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.

³ High density includes all apartments.

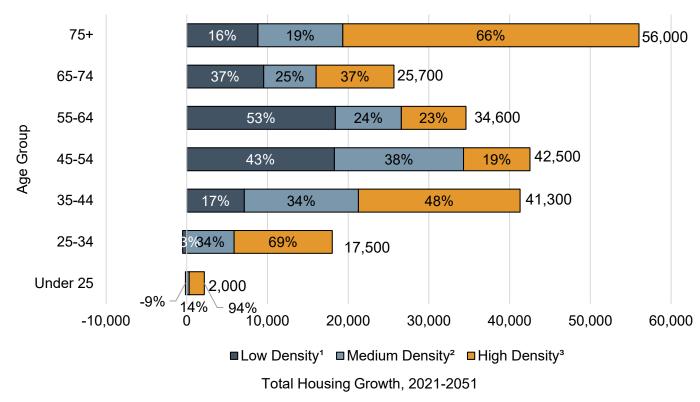


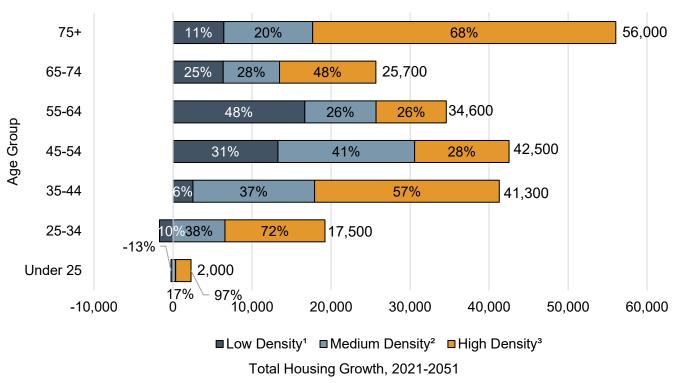
Figure B-4: Scenario 4: Modified Mix Meeting Targets – Total Housing Forecast by Propensity and Type, 2021 to 2051

¹ Low density represents singles and semi-detached.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.

³ High density includes all apartments.

Figure B-5: Scenario 5: Exceeding Targets – No Additional Land Need – Focus on Higher-Density – Total Housing Forecast by Propensity and Type, 2021 to 2051



¹ Low density represents singles and semi-detached.

² Medium density includes townhouses (including back-to-back and stacked townhouses) and duplexes.

³ High density includes all apartments.

Appendix C: Intensification Analysis Density Precedents Research

Municipality	Application ID	Address	Туре	Storeys	Lot Area	Lot Area	# of Units	Residential Density:	Lot	Lot	GFA	FSI (non-	Year
					(meters/m)	(hectars/ha)	(residential)	units/ha (non- standardized)	Coverage (m2)	Coverage (%)		standardized)	Built
Oshawa	NA - built	100 Bond St. E.	High Rise	9	4164	0.42	239	573.97	551	0.45	8030	1.74	2017
Oshawa	S-O-2016-03	135 Bruce Street (Block 2	High Rise	9	9060	0.906	285	314.57	3642	0.40	29500	2.93	TBD
Oshawa	S-O-2016-03	135 Bruce Street (Block 3) - 1	High Rise	8	8460	0.846	278	328.61	2600	0.31	18720	2.21	TBD
Oshawa	S-O-2016-03	135 Bruce Street (Block 4)	High Rise	8	11770	1.177	155	131.69	3000	0.25	21600	1.84	TBD
Oshawa	S-O-2016-03	135 Bruce Street (Block 5.1)	High Rise	8	3100	0.31	210	677.42	1800	0.58	12960	4.18	TBD
Oshawa	Z-2019-01	137 and 141 Simcoe Street North and 10 to 24	High Rise	9	2453	0.25	101	411.74	1200	0.49	9720	3.96	TBD
Clarington	SPA2017-0020	1475 Hwy 2	High Rise	10	44651	4.47	464	103.92	2500	0.10	22500	0.50	TBD
Pickering	S04/14	1485 Whites Rd, 1473 Whites Rd, 1475 Whites Rd	High Rise	12	11098	1.11	227	204.54	2750	0.30	29700	2.68	TBD
Oshawa	NA - built	161 Athol Street East	High Rise	9	2161	0.22	185	856.09	989	0.46	8011	3.71	TBD
Ajax	Z6/18	27, 29, 31 Harwood Ave S	High Rise	10	5100	0.51	130	254.90	2500	0.49	12143	2.38	TBD
Oshawa	Z-2018-02	35-45 Division Street	High Rise	11	1647	0.16	100	607.16	1020	0.62	10098	6.13	TBD
Whitby	NA - built	3800 Brock St N (Village of Taunton Mills)	High Rise	8	12303	1.23	184	149.56	1500	0.23	14445	1.17	2008+
Oshawa	S-O-2016-03	135 Bruce Street (Block 1)	High Rise	13	26010	2.601	1200	461.36	8200	0.32	95940	3.69	TBD
Pickering	NA - built	1245 Bayly St (San Fransisco by the Bay)	Low rise - Stacked and/or B2B		2231	0.22	22	98.61	1200	0.54	3240	1.45	2019
Oshawa	S-O-2016-03	135 Bruce Street (Block 3) - 2	Low rise - Stacked and/or B2B		8460	0.846	18	21.28	1300	0.15	3510	0.41	TBD
Oshawa	S-O-2016-03	135 Bruce Street (Block 5.2)	Low rise - Stacked and/or B2B		3350	0.335	20	59.70	1200	0.36	3240	0.97	TBD
Oshawa	S-O-2016-03	135 Bruce Street (Block 6)	Low rise - Stacked and/or B2B		13490	1.349	76	56.34	4170	0.31	11259	0.83	TBD
Pickering	NA - built	1464-1466 Whites Rd	Low rise - Stacked and/or B2B		6550	0.66	92	140.46	2640	0.40	9504	1.45	2019
Pickering	NA - built	1531 Kingston Rd	Low rise - Stacked and/or B2B		9950	1.00	136	136.68	4000	0.40	14400	1.45	2019
Clarington	NA - built	1595 Green Rd	Low rise - Stacked and/or B2B		25725	2.57	112	43.54	9000	0.35	24300	0.94	TBD
Ajax	Z1/19	593 Taunton Road East	Low rise - Stacked and/or B2B		8400	0.84	96	114.29	2000	0.24	5400	0.64	TBD
Ajax	NA - built	NE corner, Kingston Rd @ Chapman Dr.	Low rise - Stacked and/or B2B		4885	0.49	51	104.40	1871	0.38	5052	1.03	2015
Whitby	NA - built	Pallock Hill Way	Low rise - Stacked and/or B2B		8164	0.8164	64	78.39294463	3000	0.37	8100	0.99	2018
Pickering	NA - built	1725 Pure Springs Blvd	Low rise - TH	3	5647	0.56	40	70.83	2000	0.35	5400	0.96	2013
Clarington	SPA2017-0047	415 Mill Street South and 403 Robert Street East	Low rise - TH	3	3836	0.38	22	57.35	1200	0.31	3240	17070	TBD
Whitby	NA - built	Jerseyville Way	Low rise - TH	2	12370	1.24	38	30.72	3569	0.29	6424	0.52	2018
Ajax Oshawa	NA - built NA - built	Quarry Lane (SE corner, Taunton Rd. @ Harwood	Low rise - TH Low rise - TH	3	23500 34232	2.35	90	38.30 59.89	8227 9000	0.35	22213 32400	0.95	2016
	100000000000000000000000000000000000000	Simcoe St. N. northwest of Britannia (U.C. Towns)		3	12000	1.20	51	42.50	6000	0.50	02.100	1.35	
Pickering	NA - built	SW corner, Liverpool Rd @ Glenanna Rd	Low rise - TH	2	9975		27	27.07	3500	0.35	16200		2014
Ajax Clarington	NA - built SPA2016-0003	SW corner, Taunton Rd. @ Harwood Ave. 109 King Ave. E	Low rise - TH Mid rise	6	4394	0.44	40	91.03	2643	0.60	6300 14272	0.63 3.25	2017
Whitby	TBD - Unbuilt	1606 Charles St	Mid rise	5	2000	0.44	30	150	1500	0.75	6750	3.38	TBD
Whitby	TBD - Unbuilt	1606 Charles St	Mid rise	5	2000	0.2	30	150	1500	0.75	6750	3.38	TBD
Whitby	TBD - Unbuilt	1606 Charles St	Mid rise	5	2000	0.2	30	150	1500	0.75	6750	3.38	TBD
Whitby	TBD - Unbuilt	1606 Charles St	Mid rise	5	2000	0.2	30	150	1500	0.75	6750	3.38	TBD
Whitby	TBD - Unbuilt	1606 Charles St	Mid rise	5	2000	0.2	30	150	1500	0.75	6750	3.38	TBD
Oshawa	NA - built	1645 Simcoe St. N Student Housing	Mid rise	3	1574	0.16	15	95.30	866	0.55	2338	1.49	2016
Scugog	NA - built	171 Shanly St. (The Bayview)	Mid rise	5	5114	0.51	49	95.82	1265	0.25	5693	1.11	2010
Clarington	NA - built	21 Brookhouse Dr	Mid rise	4	7806	0.78	78	99.92	2131	0.27	7672	0.98	2018
Uxbridge	NA - built	22 James Hill Ct	Mid rise	3	7500	0.75	48	64.00	2456	0.33	6631	0.88	2018
Whitby	TBD - Unbuilt	500 Dundas St E	Mid rise	6	2962	0.30	59	199.19	1082	0.37	5411	1.83	TBD
Clarington	NA - built	80 Aspen Springs	Mid rise	4	25554	2.56	256	100.18	5384	0.21	18460	0.72	2018
Aiax	TBD - Unbuilt	Kingston Rd / Elizabeth St	Mid rise	4	1066	0.11	36	337.71	800	0.75	2880	2.70	TBD
Whitby	NA - built	North side, Winchester west of Baldwin	Low rise - Stacked and/or B2B	4	6028	0.60	72	119.44	3196	0.53	11506	1.91	2013
Pickering	NA - built	1215 Bayly St (San Francisco by the Bay 1)	Tower	15	3750	0.38	235	626.67	1350	0.36	18225	4.86	2011
Pickering	NA - built	1245 Bayly St (San Fransisco by the Bay 2)	Tower	23	2500	0.25	169	676.00	1000	0.40	20700	8.28	2017
Pickering	NA - built	1255 Bayly St (San Fransisco by the Bay 3)	Tower	26	6175.00	0.62	263	425.91	1250	0.20	29250	4.74	2019
Whitby	TBD - Unbuilt	1606 Charles St	Tower	18	2000	0.2	200	1000	1500	0.75	24300	12.15	TBD
Ajax	NA - built	73 Bayly St. W. (Tower A)	Tower	25	4600	0.46	272	591.30	900	0.41	27158	5.90	2016
Ajax	SP3/19	73 Bayly St. W. (Tower B)	Tower	25	4241	0.42	308	726.24	1750	0.41	23967	5.65	TBD
Ajax	SP3/19	73 Bayly St. W. (Tower C)	Tower	23	4213	0.42	325	771.42	2000	0.47	25560	6.07	TBD
Ajax	SP3/19	73 Bayly St. W. (Tower D)	Tower	19	4102	0.41	225	548.51	2000	0.49	17850	4.35	TBD
Oshawa	SPA-2015-08	80 Bond St E	Tower	18	3930	0.39	370	941.48	1200	0.76	19440	4.95	TBD
Ajax	SPA-2018-31	Windsfields Farm Dr W and Simcoe St N	Tower	25	14067	1.41	479	340.51	2000	0.14	45000	3.20	TBD
Oshawa	S-0-2004-04	Regional Road 4 and Clearbrook Drive	Low-density	2	392424.28	39.24	664	16.92					2004
Clarington	18T-87021	Liberty Street North and Bons Avenue	Low-density	2	162046.13	16.20	316	19.50					
Whitby	Built	Greenfield Crescent	Low-density	1	26422	2.64	68	25.74					
Whitby	Built	Oceanpearl Crescent	Low-density	1	49448	4.94	108	21.84					
Clarington	Built	Montague Avenue	Low-density	1	28068	2.81	54	19.24					
Whitby	Built	Robideau Place	Low-density	1	8841	0.88	24	27.15					

Averages													
		Average Storeys	Average Lot Area (hectars/ha)	Average # of Units (residential)	Average Residential Density: Units/Ha	Max Residential Density: Units/Ha	Min Reside Density: U		RANGE - Residential Density: Units/Ha	Average FSI	Max FSI	Min FSI	RANGE - FS
Tower	•	22	0.50	285	665	1000			340 - 1000	6.0	12.2	2.2	3.2 - 12.2
High Rise		10							103 - 856	2.9			0.4 - 6.1
Mid rise		5							64 - 337	2.3			0.6 - 3.4
Low rise - Stacked ar	nd/or B2B	3					-		. 21 - 140	1.1			0.4 - 1.5
Low rise - TH		3							27 - 70	0.9			0.5 - 1.4
	Average	Resider	ntial Density	: Units/Ha					Ave	erage FSI			
700 665 600 —							6.0	6.0					
500							5.0						
400	390	0					4.0						
300 ———							3.0		2.9	2.3			
200			141				2.0				1.1		
100				88	47		1.0				1.1		0.9
0 Tower	High F	Rise	Mid rise	Low rise - Stacked	d Low rise - TH		0.0	Tower	High Rise	Mid rise	Low rise - S		ow rise - TH



ALTERNATIVE GROWTH SCENARIOS RECOMMENDATIONS

Part of the Region of Durham Growth Management Study: Land Needs Analysis

April, 2022





Introduction

Durham Region is undertaking a Growth Management Study (GMS) as part of Envision Durham, the Municipal Comprehensive Review (MCR) of the Regional Official Plan (ROP). This is a two-phase study to assess how to accommodate the Growth Plan for the Greater Golden Horseshoe forecast growth to 2051 of 1,300,000 people and 460,000 jobs in the Region of Durham. The first phase of the GMS is the preparation of a Land Needs Assessment (LNA) to quantify the amount of land that will be required to accommodate future population and employment growth to the year 2051.

During the summer and early fall 2021, the GMS Project Team released four Technical Reports (the "Technical Reports") providing an analysis of the form of growth and resulting land needs in Durham. These four reports were presented for public comment and Planning and Economic Development Committee consideration:

- 1. The Region-Wide Growth Analysis
- 2. The Housing Intensification Study Technical Report
- 3. The Employment Strategy Technical Report
- 4. The Community Area Land Needs Technical Report

How the Number of Units Across the Alternative Community Area Scenarios were Determined

Forecast trends in population age structure provide important insights with respect to future housing needs based on forecast trends in average household occupancy. Total housing needs for Durham Region are generated from a population forecast by major age group using a headship rate forecast. A headship rate is defined as the number of primary household maintainers or heads of households by major population age group (i.e.: cohort). Average headship rates do not tend to vary significantly over time by major age group; however, the number of maintainers per household varies by population age group. For example, the ratio of household maintainers per total housing occupants is higher on average for households occupied by older cohorts (i.e.: 55+ years of age) as opposed to households occupied by adults 29 to 54 years of age.

The headship rate forecast provides insight into the number of total households that will be required in Durham Region by 2051 to accommodate the population forecast. This headship rate analysis implicitly examines the family structures that will exist in Durham by 2051. Understanding the family types in Durham Region by 2051 is an important starting point because it informs the total households required by 2051, regardless of housing structure type. The total number of households by 2051 does not change based on the housing structure type, because that would assume a different family structure in Durham Region by 2051. For example, a family would not decide to buy two apartment units instead of one single-detached home under a planning policy objective to deliver more high-density housing to Durham Region. Arriving at a higher total number of households by 2051 in Durham Region, for example, would require a different age structure forecast in Durham Region which would assume less families are migrating into Durham and are instead being replaced by older age cohorts (i.e.: 55+ years of age) and non-families (typically younger age-groups). Upon determining the Region's total housing needs, demographic and socio-economic factors related to housing affordability, location, and lifestyle will dictate which type of housing unit by dwelling type that family or non-family household will occupy.

It is important to recognize that there will also be a turnover of existing dwellings within Durham Region, as a result of the aging of the existing population. While Scenario 4 has an incremental housing unit forecast of 28% low density, 28% medium density, 41% high density, and 3% secondary units, there are a significant amount of existing ground-oriented units within Durham Region that will become available for sale over the next 30 years. By 2051, it is expected that the housing units within Durham Region will be distributed by 50% low density, 22% medium density, and 28% high density. This distribution of housing by 2051 provides a range of housing options for all family and non-family types.

Alternative Scenarios Context and Development

The Land Need Assessment based on the four Technical Reports resulted in the following outcomes

- Meeting the Growth Plan minimum intensification rate of 50%;
- A designated greenfield area density target of 64 people and jobs per hectare;
- 737 new hectares of Community Area land; and
- 1,164 hectares area of Employment Area land.

Following the release of the four Technical Reports and a period for public consultation, planning staff agreed at the October 5th, 2021 Planning and Economic Development Committee meeting to run modelling and assess a range of alternative land need scenarios.

Alternative Land Need Scenarios were developed for Community Area Land Need (5 scenarios) and Employment Area Land Need (2 Scenarios). Each Scenario accommodates the Growth Plan forecast of 1,300,000 people and 460,000 jobs across Durham Region by 2051.

The Community Area Land Need Scenarios are intended to explore a broader range of strategies to accommodate 2051 forecast growth across the Region. The five Community Area Land Need Scenarios create a spectrum ranging from lowest density housing mix and highest land need to highest density housing mix to lowest land need. All scenarios accommodate the Growth Plan forecast for Durham Region to 2051. In doing so, key variables across the scenarios include housing mix (regionally and by policy area), greenfield density targets, intensification targets and future land need.

The Employment Strategy Technical Report identified an Employment Area forecast of 99,500 jobs, where 15% of employment growth is expected to be accommodated through the intensification of existing businesses and sites. Employment Area Land Need Scenario 2 examines a higher Employment Area intensification target of 20%. Accounting for additional Council-endorsed Employment Area conversions as well as an updated natural heritage system dataset, adjustments to the land needs calculations have been made since the release of the four technical reports. These updates result in an overall land need of 1,170 gross hectares with a 20% intensification target compared to 1,350 hectares required with a 15% intensification target.

In March 2022, the Alternative Land Need Scenario Assessment Summary Report was released for public review and consultation, which included: a description of the intent of the alternative land need scenarios, description of the five (5) Community Area scenarios and two (2) Employment Area scenarios, outcomes from scenarios analysis, the assessment framework and assessment results for the 5 Community Area scenarios. The final recommendation was to be determined once the Region undertook an engagement process and received feedback from stakeholders and the general public.

From March 10th to April 14th, the Region and the consultant team engaged stakeholders and the community through a variety of avenues:

- Meeting with key stakeholders directly including BILD, Provincial staff, and through early engagement with the Area Municipal Working Group
- Circulation and notification to a variety of stakeholders
- Presented at the Durham Region Roundtable on Climate Change
- Hosted a Public Information Centre (PIC), which included live polling and a Question and Answer (Q&A) component
- Launched a survey to collect feedback on the alternative land need scenarios

This Memorandum considers the input from the engagement, and on the basis of the Assessment Framework outcomes, recommends Scenario 4 as the Community Area land need scenario and Employment Area Scenario 2, which assumes that 20% of Employment Area job growth will be accommodated through intensification.

It is recommended that the Region use Community Area Land Need Scenario 4 and Employment Area Land Need Scenario 2 as the Preferred Scenario to proceed to Phase 2 of the Growth Management Study. In Phase 2, the Study will provide recommendations on where within the Region this new urban land should be located and also provide the allocation of population and job growth by area municipality.

Engagement Feedback

Since the release of the Assessment Report, the Region of Durham has been actively seeking feedback on the public and stakeholder opinion regarding the structure and outcome of the alternative scenarios modelling and the assessment results.

Staff and the consultant team met with stakeholders for technical discussions regarding the structure, assumptions and outcomes as contained in the Assessment Report. Feedback from these meetings informed the review process and ultimate recommendation.

Staff and the consultant team launched a survey based on the alternative scenarios on March 10th to coincide with the release of the Alternative Land Need Scenarios Assessment Summary Report. This survey was hosted online until April 14th. The survey included ranked choice, weighted response, and open response questions.

On March 24th, staff and the consultant team hosted a virtual Public Information Session (PIC) from 7:00 PM to 8:45 PM. The PIC included a presentation from Region staff and the Consultant Team, focusing on the context, process and outcomes from the Alternative Land Need Scenarios Assessment Summary Report. The presentation included live polls and was followed by a Q&A session with upvoted questions from attendees. Following the PIC, attendees were forwarded the link to the Survey.

Through this process several key themes arose and have been considered in the recommendations found in this Memorandum. These themes include:

- Preventing and adapting to climate change
- Protecting the natural environment supporting a connected wildlife system

- Assessment Framework Principle 4 was too broad and needed to be split into sub-categories for further analysis
- Preserving food security and local food production through limited urban expansion
- Benefits of high-density housing: more affordable, efficient, and sustainable
- Alternatives to detached homes for families, and range of tenures
- Efficient use of public resources / keeping taxes low
- Demand for detached homes
- Post-pandemic employment conditions

During the PIC Question and Answer period, and through the survey, numerous attendees/survey responders identified Principle 4 as important but reflecting multiple priorities. It was questioned whether the independent thoughts in Principle 4 should be expanded into sub-components and assessed independently of one another. This has been reflected in the revised assessment framework further below.

Survey respondents were asked to identify gaps in the principles that were applied in the assessment framework. Many responses focused on the efficient use of municipal resources/tax dollars and infrastructure services. In this regard, the Growth Plan states:

"The policies of the Plan regarding how land is developed, resources are managed and protected, and public dollars are investment are based on the following principles:

Prioritize *intensification* and higher densities in *strategic growth areas* to make efficient use of land and *infrastructure* and support transit viability."

While the Scenario Assessment scope did not analyze the effect on taxation and finances, using resources (land and existing infrastructure) efficiently can minimize the need for urban expansion, linear extension of infrastructure and resultant increased operations and maintenance costs. In response to the engagement responses and to reflect the direction from the Growth Plan, "the efficient use of land and infrastructure" has been added as an assessment Principle in the revised scenario assessment.

Revised Scenario Assessment

The scenarios were reassessed using the expanded and new principles identified below. The ultimate recommendation is described on page 16.

- 1. Achieving Targets
 - a. Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?
- 2. Housing Market Choice
 - a. Does the scenario provide for the development of a fulsome range of housing types?
 - b. How does the scenario respond to market demand?
- 3. Setting up Strategic Growth Areas for Success
 - a. Does the scenario support the ability of SGAs, including Urban Growth Centres, MTSAs, Regional Centres, and Regional Corridors, to achieve their planned function as higher density, mixed-use, and transit supportive urban communities?
- 4. Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development

- a. *New assessed independently To what extent would the scenario negatively impact existing agricultural and rural areas?
- b. *New assessed independently Does the scenario provide efficient and sustainable development patterns, including transit-oriented development?
- c. *New assessed independently Does the scenario respond to the Region's Climate Change Emergency declaration?
- 5. Competitive Economic and Employment Conditions
 - a. To what extent does the scenario capitalize on the Region's economic and sector strengths, including providing for appropriate Employment Area land to ensure Durham remains economically attractive and competitive over the long term?
- 6. *New The efficient use of land and infrastructure
 - a. To what degree does the scenario provide for the efficient use of land and infrastructure?

The revised scenario assessment, informed by public and stakeholder feedback, has been applied to the Community Area Land Need Scenarios. The assessment outcome and noted key considerations are summarized below:

Scenario 1: Emphasis on low-density housing, not meeting the minimum Growth Plan intensification target

Scenario 1: Revised Assessment Summary Principle Assessment							
	Achieving Targets	 50% intensification target not met Minimum greenfield density of 50 p&j/ha met but is below the density of currently approved projects 	Ranking				
	Housing Market Choice	 Would result in more-low density housing units than are in active development pipeline Assumes housing unit mix would be based on flat line projection of current housing propensities 					
	Setting up SGAs for success	 Lowest intensification density within the BUA; lowest development potential within SGAs – not achieving their potential 					
	Protecting Agricultural and Rural Systems	 Requires the highest amount of new land, consuming existing rural and agricultural land Negative impact on local food production system 					
	Responding to Climate Change	 Low-density housing forms tend to be cardependent, leading to increased vehicle related CO2 emissions from vehicle production and use Lower density reduces the ability to decrease GHG emissions and provide active transportation networks 					
	Achieving Sustainable Development including transit- oriented development	 Low-density housing forms are more reliant on auto dependency and are less efficient for transit service Low-density neighbourhoods, depending on their design, are more dispersed and less connected limiting active transportation and transit-oriented development opportunities 					
	Competitive Economic and Employment Conditions	 Supply of low-density housing units appeals to families Low-density form and associated car dependency leads to traffic congestion long-term 					
	The efficient use of land and infrastructure	 Low-density urban form creates a larger infrastructure and service network per capita Less efficient use of existing land and services – greatest increase in new linear services required 					

- Last place selection among survey responses.
- Highest proportion of low-density housing forms across all policy areas
- Strategic Growth Areas planned to achieve lowest level of density
- Development of urban structure as a compact, transit-oriented places least supported

- Highest relative Community Area land need of the Five Scenarios
- Largest impact on food production system negative outcome for food security
- Lowest densities minimize opportunities to decrease GHG emissions
- Costlier to maintain in the long-term due to outward extension of infrastructure and service grid

Scenario 2 Primarily low-density housing, with increased share of medium and high-density housing

Scenario 2: Revised Assess		
Principle	Assessment	Ranking
Achieving Targets	 50% intensification target not met Minimum greenfield density of 50 p&j/ha met but is below the density of currently approved projects 	
2. Housing Market Choice	 The scenario provides a range of housing types and options in the BUA and a range of low- and medium-density housing options in the DGA, though likely provides less density in the DGA than there is demand, based on active development applications 	
3. Setting up SGAs for success	Densities within Regional Centres are elevated to transit-supportive levels, but densities along Regional Corridors generally do not meet the same threshold	
4.a. Protecting Agricultural and Rural Systems	 Requires the second highest amount of new land, consuming existing rural and agricultural land Negative impact on local food production system 	
4.b. Responding to Climate Change	 Compared to Scenario 1, higher densities in SGAs reduce car dependency Lower densities outside SGAs leads to car dependency Lower density reduces the ability to decrease GHG emissions and provide efficient active transportation networks 	
4.c. Achieving Sustainable Development including transit- oriented development	 Lower density forms unlikely to support transit use outside SGAs within BUA DGA density for new communities less likely to support transit use 	
5. Competitive Economic and Employment Conditions	 Supply of low-density units encourages new families to move to Durham Higher densities in SGAs supports their growth as economic centres 	
6. The efficient use of land and infrastructure	 Low-density urban form outside SGAs creates a larger service network per capita Transit investments in major centres supported with moderate ridership resultant from proximal higher-density 	

- Fourth place selection among survey responders.
- Shift toward market-based supply and higher density in the DGA (55 PJH density)

- Scenario does not achieve Growth Plan intensification target (achieves 45%).
- Regional Centres supported for growth although Regional Corridors growth potential is not optimized given lower numbers of medium and high-density units.
- Higher relative new land need (Community land area need of 2600 ha) compared to Scenarios 3, 4 and 5
- Higher long-term cost of service and infrastructure maintenance given extent of DGA lands needed.

Scenario 3: Shifting the unit mix and adding low density intensification to BUA and SGAs to achieve the minimum Growth Plan intensification target

Princi	ple	Assessment	Ranking
	Achieving Targets	 50% intensification target met Minimum greenfield density of 50 p&j/ha met 	
	Housing Market Choice	 The scenario provides a range of housing types and options in the DGA and BUA High amount of growth required in stable neighbourhoods 	
	Setting up SGAs for success	High portion of medium and low- and medium- density housing in SGA undermines planned function and transit supportive density	
A	Protecting Agricultural and Rural Systems	 Requires the third highest amount of new land, consuming existing rural and agricultural land Negative impact on local food production system 	
	Responding to Climate Change	 Limited supply of high-density housing outside SGAs leads to vehicle dependency Lower density reduces the ability to decrease GHG emissions 	
S E ii	Achieving Sustainable Development ncluding transit- priented development	Higher proportion of low- and medium-density within BUA reduces transit supportive development opportunities.	
E	ompetitive Economic and Employment Conditions	 Supply of low-density units encourages new families to move to Durham Limited economic development in SGAs due to lower overall density of housing 	
la	The efficient use of and and nd nfrastructure	 Low-density urban form outside major centres creates a larger service network per capita Lower density housing may limit ridership for Transit investments in major centres 	

- Third place selection among survey responders.
- Scenario achieves Growth Plan 50% intensification target by incorporating a balanced mix of housing forms resulting in an increased portion of low-density housing in the BUA compared to all other scenarios.
- Use of low- and medium-density housing forms in BUA and SGAs undermines transit-oriented development objectives and regional urban structure by placing a high share of grade-related housing forms in SGAs

- Low- and medium-density housing units in Regional Centres unlikely to align with market conditions.
- Assumes highest level of lot splitting and intensification within BUA including existing mature and stable neighbourhoods.
- Higher new land need (Community land area need of 1500 ha) compared to Scenarios 4 and 5.

Scenario 4: Balancing the unit mix with an emphasis on high and medium-density housing, while achieving the minimum 50% intensification target

Scenario 4: Revised Assess Principle	Assessment	Ranking
Achieving Targets	50% intensification target met Minimum greenfield density of 50 p&j/ha exceeded	Kalikilig
2. Housing Market Choice	The scenario provides a range of housing types and options in the DGA and BUA	
3. Setting up SGAs for success	SGAs, including Centres and Corridors supported with medium and high-density to achieve viable community densities	
4.a. Protecting Agricultural and Rural Systems	 Requires Community Area expansion, though less than Scenarios 1, 2 and 3 Negative impact on local food production system, though less than Scenarios 1, 2 and 3 	
4.b. Responding to Climate Change	 The mix of housing focuses on medium and high density within the BUA, while providing for a range of all housing types in the DGA. The mix can support walkable, transit-oriented communities. Shift toward higher density increases potential to decrease GHG emissions 	
4.c. Achieving Sustainable Development including transit- oriented development	Shift to higher density housing forms supports walkability, complete and transit-oriented communities	
5. Competitive Economic and Employment Conditions	 Mix of housing supply appeals to a range of new residents and growing families Supply of housing in BUA supports growth and intensification of existing communities 	
6. The efficient use of land and infrastructure	 Higher densities in BUA supports transit infrastructure investments Higher proportion of high-density housing forms in DGA encourages efficient use of infrastructure in new communities 	

- Second place selection among survey responders.
- Scenario achieves Growth Plan intensification target of 50% using a balanced mix of housing forms in the DGA and a higher proportion of high-density housing forms in the BUA.
- Supports compact, transit-oriented communities and SGAs in regional urban structure.
- Higher Community Area land need required (950 ha) than Scenario 5.

Scenario 5: Emphasis on Higher Densities and intensification beyond the minimum Growth Plan targets

Scenario 5: Revised Assessment Summary			
Principle	Assessment	Ranking	
Achieving Targets	 50 % intensification target exceed Minimum greenfield density of 50 p&j/ha exceeded 		
2. Housing Market Choice	 The supply of high-density housing may not be absorbed by the market by 2051 DGA unit mix not representative of DGA market demand 		
3. Setting up SGAs for success	SGAs, including Centres and Corridors supported with medium and high-density to achieve viable community densities		
4.a. Protecting Agricultural and Rural Systems	 Requires no Community Area land need. Existing DGA can supply enough land for new communities 		
4.b. Responding to Climate Change	 The mix of housing focuses on high density within the BUA, while providing for low-, medium-, and high-density in the DGA. The mix can support walkable, transit-oriented communities. Increased density optimizes potential to decrease GHG emissions and provide active transportation networks (reduced energy need) 		
4.c. Achieving Sustainable Development including transit- oriented development	 Shift to higher density housing forms supports walkability, complete and transit-oriented communities Density within DGA high enough to support complete community and nodes of transit-oriented development 		
5. Competitive Economic and Employment Conditions	 Mix of new units likely least appealing to growing families. Supply of housing in BUA supports growth and intensification of existing communities 		
6. The efficient use of land and infrastructure	 Higher densities in BUA supports transit infrastructure investments Higher-densities in DGA encourages efficient use of infrastructure in new communities 		

- First place selection survey responders
- Supports and optimizes regional urban structure and compact, transit-oriented communities
- No additional Community Area land required
- Scenario exceeds Growth Plan intensification target (55%) as a result of focus on high-density housing forms in BUA

- Results in a DGA unit mix which is too oriented towards high-density housing forms and is not representative of DGA market demand.
- Highest level of densities provides greatest opportunity to decrease GHG emissions.
- No new Community Land Area need. New Employment Land Need is still required.

Recommendations

Based on the refined Scenario Assessment, informed by consideration of community input through the engagement process, the consultant team recommends Scenario 4 to establish Community Area Land Need across Durham. This recommendation considers the following:

- Findings of the Scenario Assessment Framework which indicate that Scenario 4 ranks most positively across the 6 Principles
- Balancing the Region's priorities of housing choice, increasing sustainable development patterns, climate resilience and economic competitiveness
- Planning for a range of housing types that are aligned with changing demographics and future forward housing propensities in Durham Region by 2051
- Optimizing intensification potential in MTSAs, Regional Centres and Corridors while aligning high density-housing supply with anticipated demand
- Planning for increased but achievable densities in DGA/new communities
- Minimizing new Community Area land need required

In terms of the Employment Scenarios, Employment Area Scenario 2 with a 20% intensification target for Durham Region is recommended. Based on historical building permit activity over the past decade as well as ample opportunities across Durham Region's underutilized employment lands to accommodate job growth through intensification, a 20% intensification target appears achievable in Durham Region. While intensification is largely left to the discretion of individual landowners, this increased intensification target will lessen the need for urban expansion to accommodate long-term employment growth. Critical to this intensification target is to monitor employment growth and employment land absorption over the next decade, at which point the intensification target and corresponding employment land need can be reassessed through the next Durham Region Municipal Comprehensive Review.

On this basis, combining Alternate Community Land Need Scenario 4 and the Employment Land Need Scenario 2 with 20% employment intensification target, the region-wide land need area, housing mix and minimum targets would be:

- 950 ha Community Area land need
- 1171 ha of Employment Area land need
- 2121 ha total additional urban area land need to accommodate growth forecast to 2051
- Minimum 50% intensification rate
- Durham Total New Housing Unit Mix: 28% Low-Density; 28% Medium-Density; 41% High-Density; 3% secondary units
- Durham Total Unit Mix at 2051 (Existing + New): 50% Low-Density; 21% Medium-Density; 28% high-Density
- Minimum overall density target of 60 PJH for Designated Greenfield Areas
- Employment Area land density of 27 jobs per gross hectare by 2051

The consultant team recommends this Land Need Assessment be used as the basis, region-wide, to conclude Phase 1 of the Land Need Assessment. Phase 2 of the Growth Management Study would use

this as a starting point to assess where and how this new land need would be accommodated and to determine growth allocations within area municipalities.				