

ALTERNATIVE LAND NEED SCENARIOS ASSESSMENT SUMMARY REPORT

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

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& Associates**
ECONOMISTS LTD.

**URBAN
STRATEGIES
INC .**

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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:

- 1. 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:

- a. 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;
- b. 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.

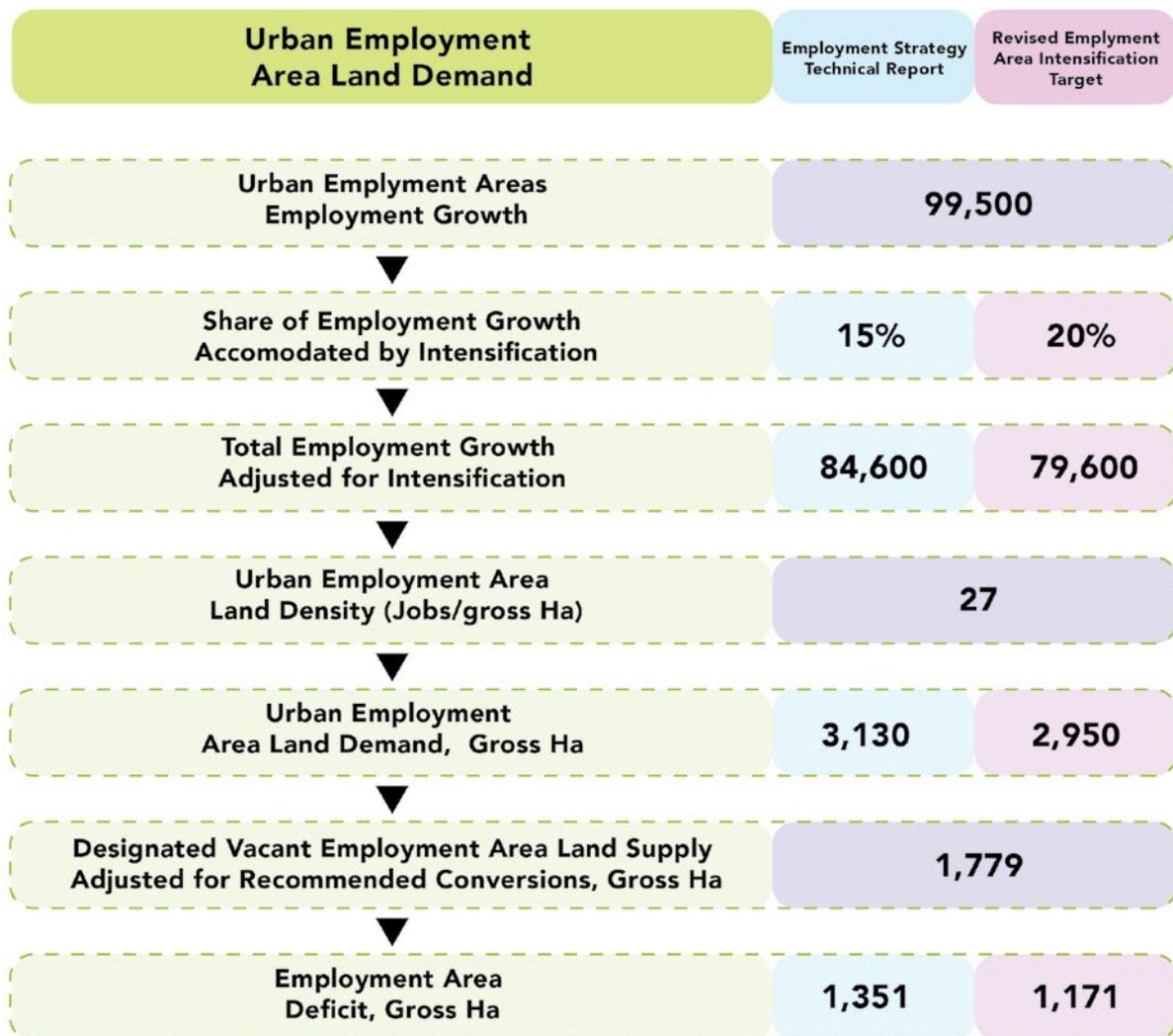


Figure 2-3-1: Employment Area Land Need Methodology Flow Chart

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.

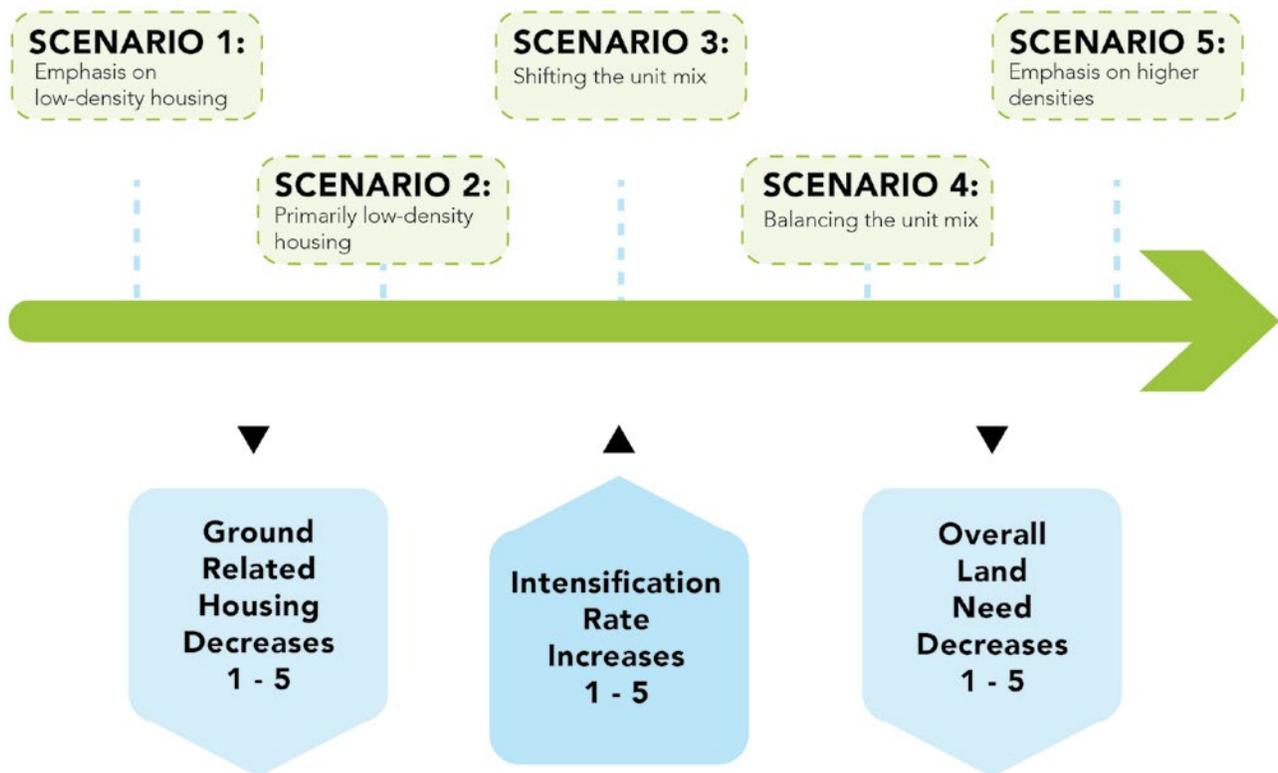


Figure 3-1: Trends along the spectrum of scenarios

3.1 A Spectrum of Community Area Land Need Scenarios

1. **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.

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

4. **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 high-density 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 through 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:

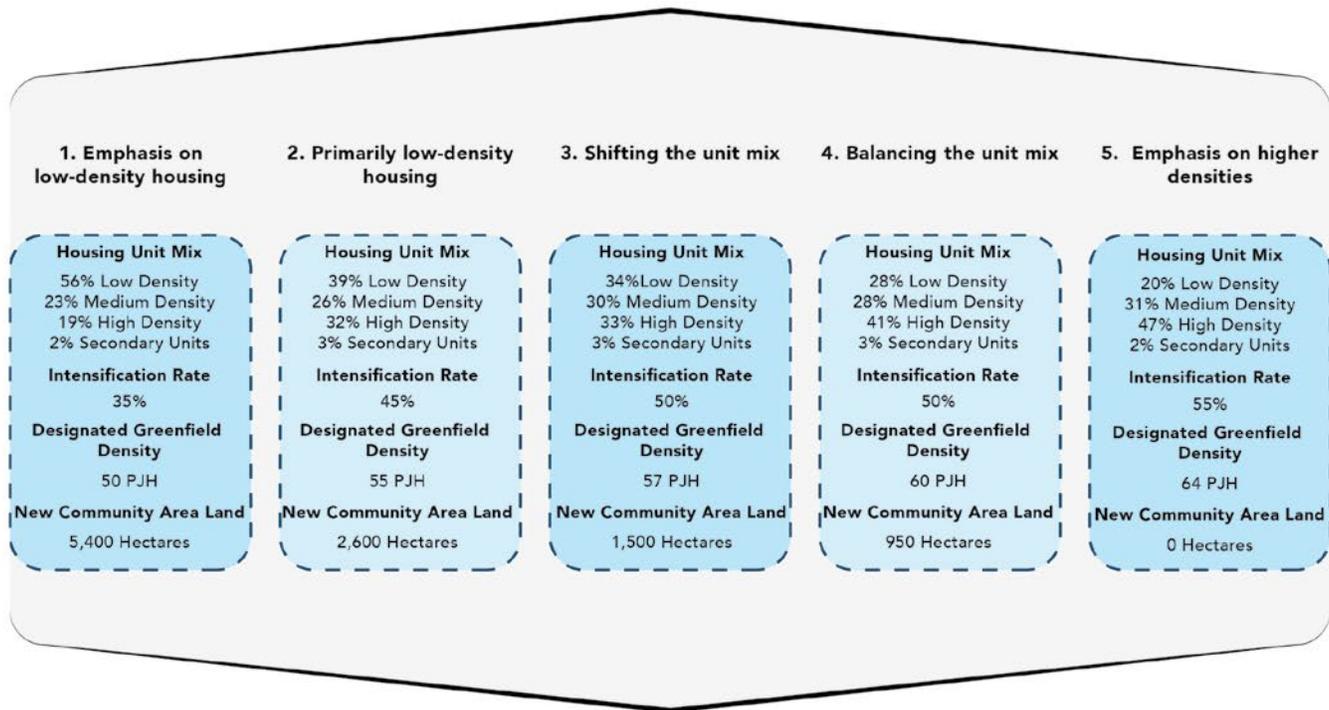
1. The key drivers from each Scenario were used to frame the analysis. An initial analysis of the Scenario was run against the forecast model and reviewed against the outcomes (housing mix, intensification rate, greenfield density, impact on planned regional structure, and additional land need). If needed, 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



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Figure 3-2-2: Alternative Scenarios development and assessment flow chart

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 used to measure and compare the scenarios:

Principle 1: **Achieving Targets**

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

Principle 2: **Housing Market Choice**

1. 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**

1. 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?

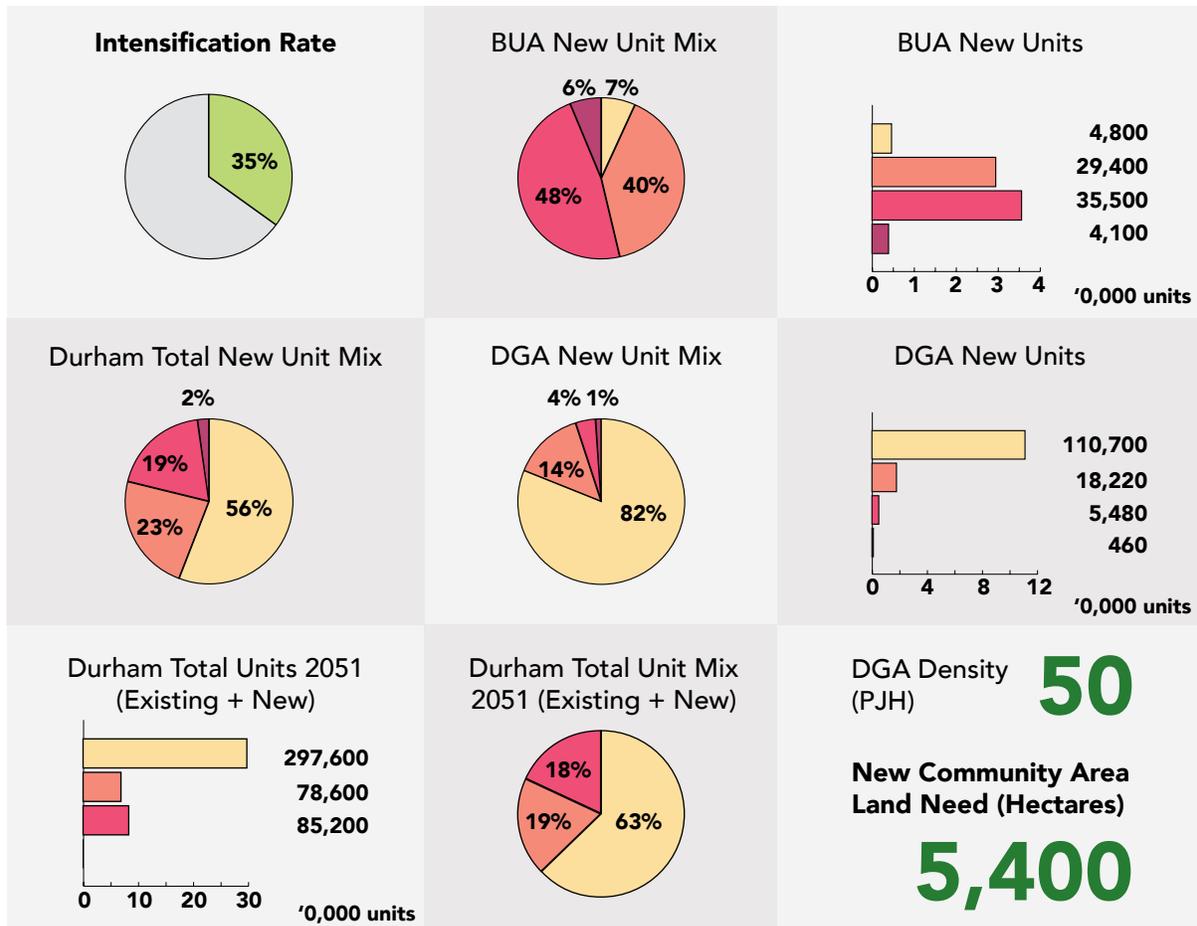
The outcomes/implications from each scenario were then compared and ranked. The rankings, with the exception of Principle 1, were predominantly based on a qualitative assessment, recognizing the overlapping and subjective nature of the principles. Principle 1 is a quantitative assessment based on the 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.

3.4 Community Area Land Need Scenario Outcomes

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.



Outcomes

■ Low Density
 ■ Medium Density
 ■ High Density
 ■ Secondary Units

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

<p>1. Achieving Targets</p> <p>Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?</p>	 <ul style="list-style-type: none"> • 50% intensification target not met. • Minimum greenfield density of 50 p&j/ha met but is below the Category 1 density (currently approved). • M TSA and UGC minimum densities difficult to meet
<p>2. Housing Market Choice</p> <p>Does the scenario provide for the development of a full-some range of housing types? How does the scenario respond to market demand?</p>	 <ul style="list-style-type: none"> • Implementing the Growth Plan Technical Report forecasts results in an increased share of low-density housing types than are reported in the active development pipeline • Assumes future housing unit mix would be a flat line projection of historical patterns (based on 2016). • Limited high-density options in DGA.
<p>3. Setting-up SGAs for success</p> <p>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?</p>	 <ul style="list-style-type: none"> • Housing forms are generally ground-oriented, leading to lowest intensification densities within the BUA. • Lowest level density development potential within the SGAs, challenging their potential as mixed-use, transit supportive urban communities.
<p>4. Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development</p> <p>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?</p>	 <ul style="list-style-type: none"> • Requires the most new land, consuming existing rural and agricultural land. • Predominance of low-density form makes transit oriented redevelopment difficult and increases car-dependency
<p>5. Competitive Economic and Employment Conditions</p> <p>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?</p>	 <ul style="list-style-type: none"> • Supply of low-density units encourages new families to move to Durham. • 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 long-term.

Key Considerations

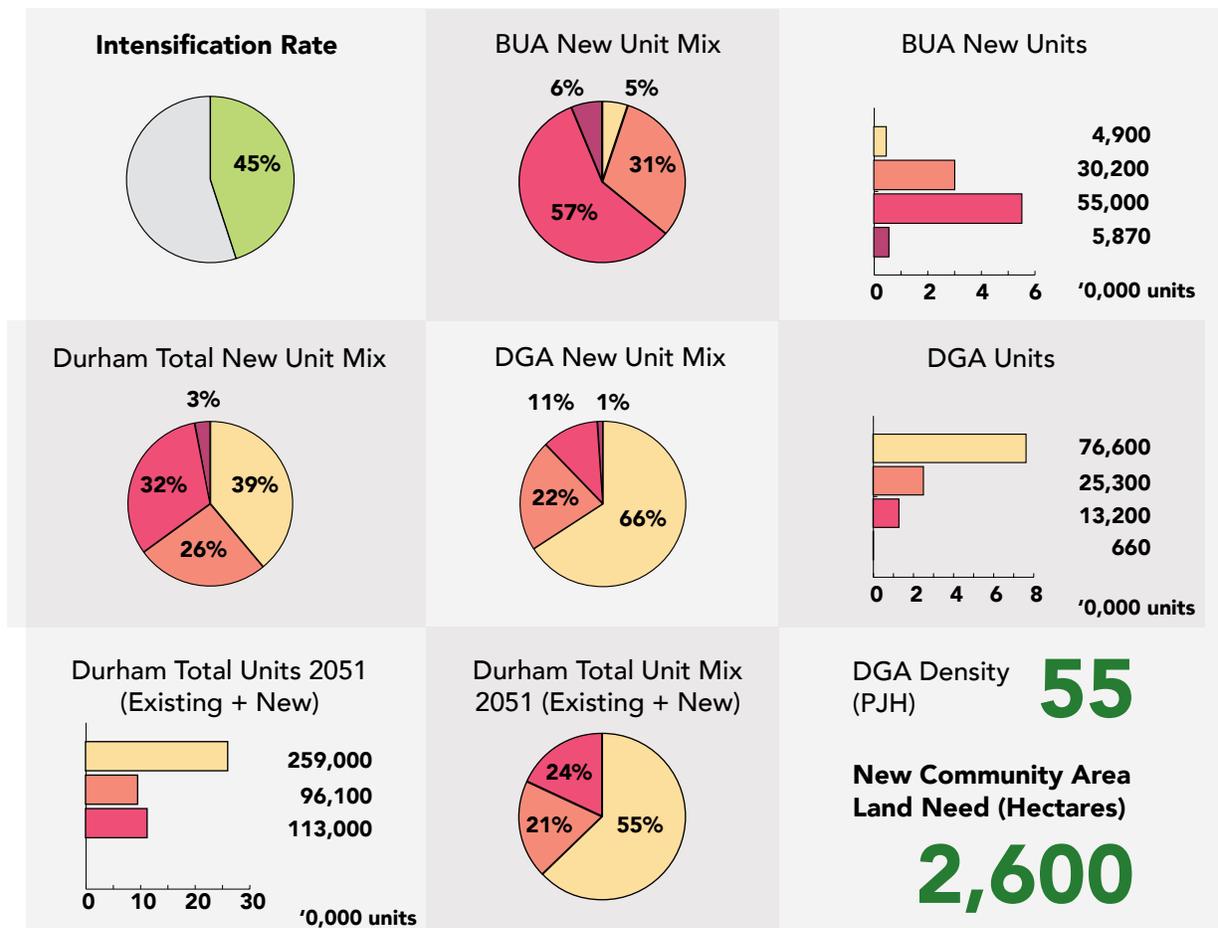
- Highest proportion of low-density housing forms across all policy areas.
- Strategic Growth Areas planned to achieve lowest level of density
- Development of urban structure as a compact, transit oriented places least supported.
- Highest relative land need of the Five Scenarios.

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.



■ Low Density
 ■ Medium Density
 ■ High Density
 ■ Secondary Units

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

<p>1. Achieving Targets</p> <p>Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?</p>	 <ul style="list-style-type: none"> • 50% intensification target not met. • Minimum greenfield density of 50 p&j/ha met • MTSA and UGC minimum densities can be met.
<p>2. Housing Market Choice</p> <p>Does the scenario provide for the development of a full-some range of housing types? How does the scenario respond to market demand?</p>	 <ul style="list-style-type: none"> • 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.
<p>3. Setting-up SGAs for success</p> <p>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?</p>	 <ul style="list-style-type: none"> • Densities within Regional Centres are elevated to transit-supportive levels, but densities along Regional Corridors generally do not meet the same threshold.
<p>4. Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development</p> <p>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?</p>	 <ul style="list-style-type: none"> • 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.
<p>5. Competitive Economic and Employment Conditions</p> <p>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?</p>	 <ul style="list-style-type: none"> • 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

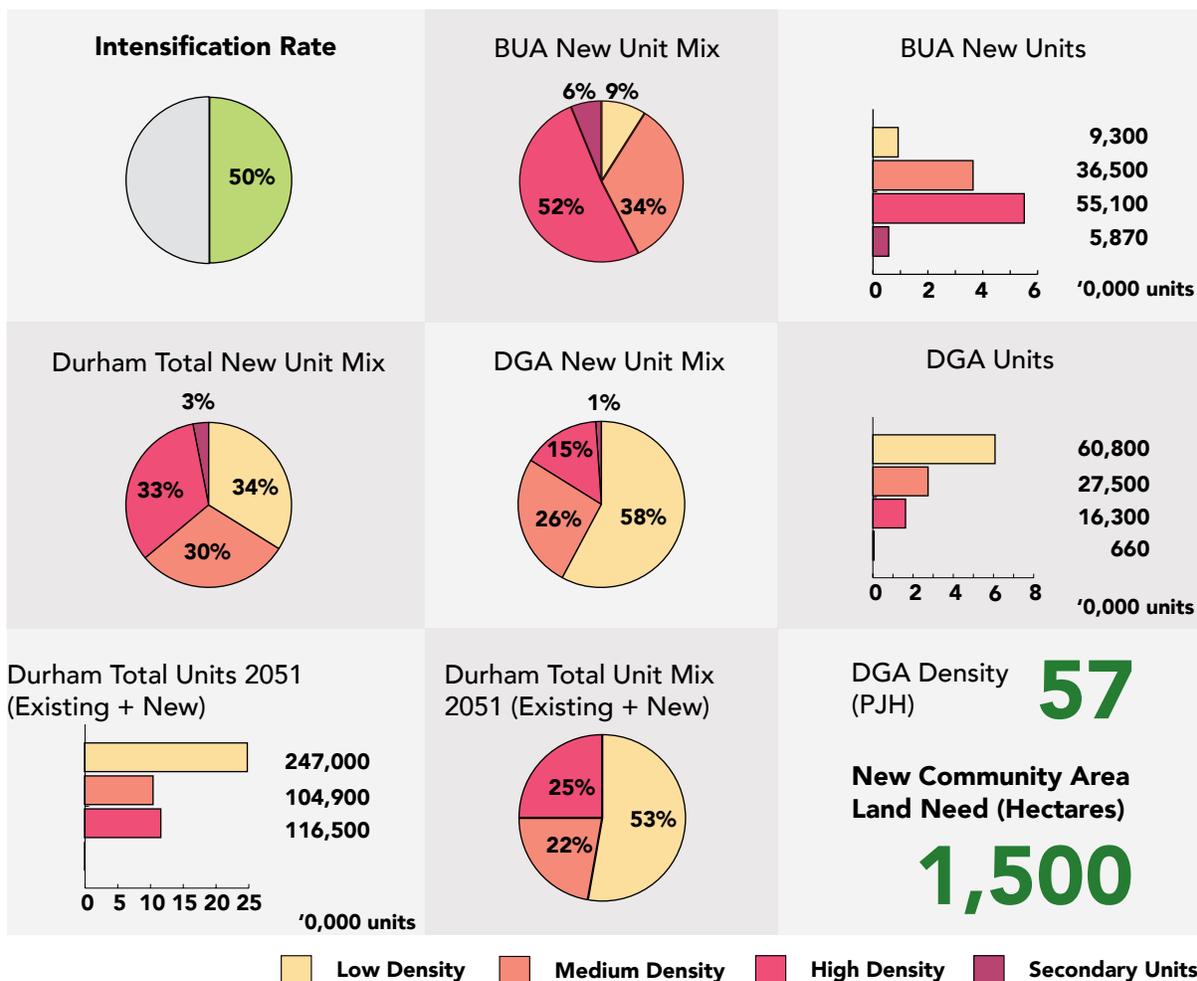
- Shift towards market-based supply and higher density in DGA
- Regional Centres supported for growth although Regional Corridors growth potential is not optimized
- High relative new land need compared to Scenarios 3, 4 and 5

3. 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

<p>1. Achieving Targets</p> <p>Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?</p>	 <ul style="list-style-type: none"> • 50% intensification target met. • Minimum greenfield density of 50 p&j/ha met. • MTSAs and UGC minimum densities can be met
<p>2. Housing Market Choice</p> <p>Does the scenario provide for the development of a full-some range of housing types? How does the scenario respond to market demand?</p>	 <ul style="list-style-type: none"> • 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.
<p>3. Setting-up SGAs for success</p> <p>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?</p>	 <ul style="list-style-type: none"> • Highest levels of low-and medium-density housing forms in BUA undermines SGA planned function and transit supportive objectives.
<p>4. Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development</p> <p>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?</p>	 <ul style="list-style-type: none"> • 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.
<p>5. Competitive Economic and Employment Conditions</p> <p>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?</p>	 <ul style="list-style-type: none"> • 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

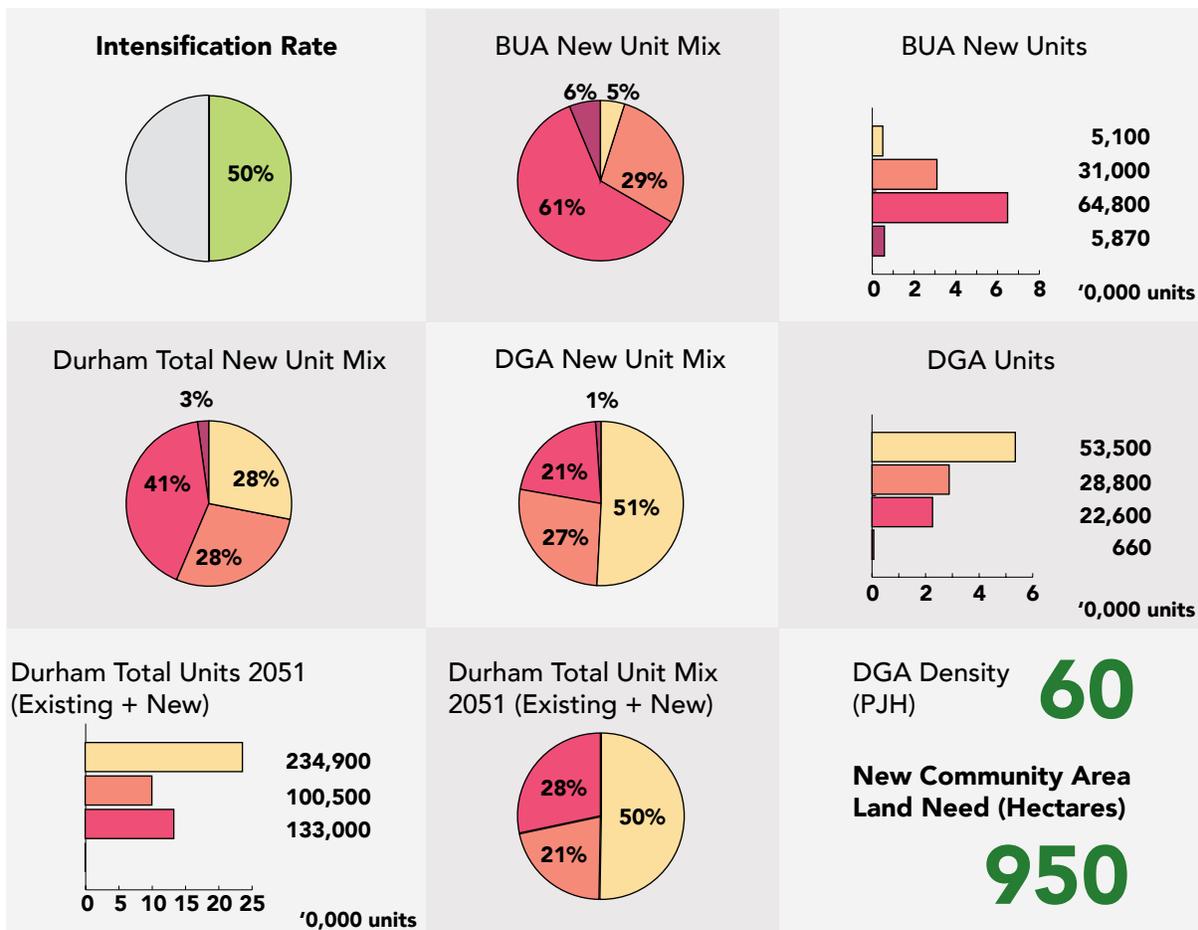
4. Balancing the unit mix

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.



■ Low Density
 ■ Medium Density
 ■ High Density
 ■ Secondary Units

Outcomes

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

<p>1. Achieving Targets</p> <p>Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?</p>	<ul style="list-style-type: none"> • 50% intensification target met. • Minimum greenfield density of 50 p&j/ha met. • MTSA and UGC minimum densities can be met
<p>2. Housing Market Choice</p> <p>Does the scenario provide for the development of a full-some range of housing types? How does the scenario respond to market demand?</p>	<ul style="list-style-type: none"> • Shift to housing form and choice creates balance between low, medium and high density, providing housing choice for a broad and changing demographic.
<p>3. Setting-up SGAs for success</p> <p>Does the scenario support the ability of SGAs, including Urban Growth Centres, MTSA, Regional Centres, and Regional Corridors, to achieve their planned function as higher density, mixed-use, and transit supportive urban communities?</p>	<ul style="list-style-type: none"> • 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
<p>4. Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development</p> <p>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?</p>	<ul style="list-style-type: none"> • 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.
<p>5. Competitive Economic and Employment Conditions</p> <p>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?</p>	<ul style="list-style-type: none"> • 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.

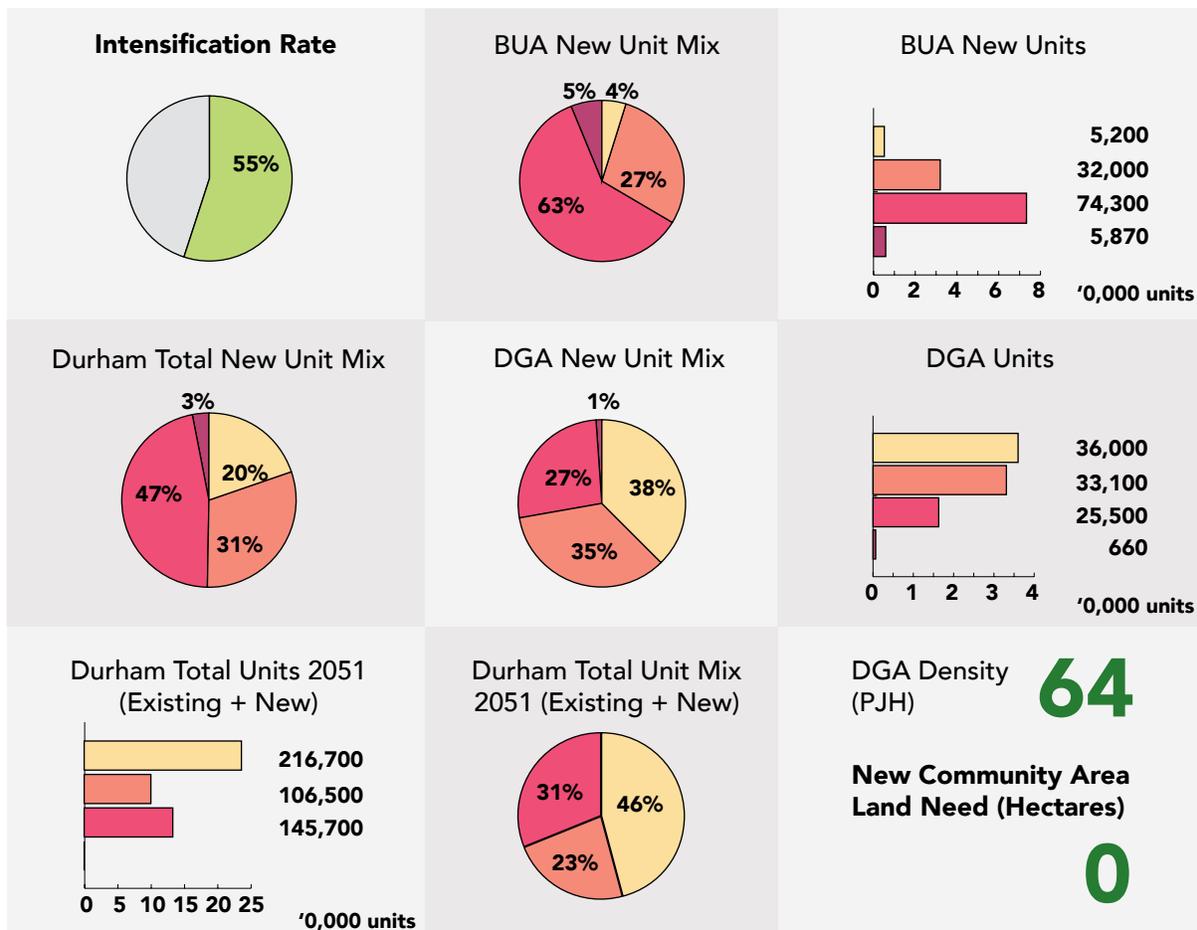
Key Considerations

- 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.



Low Density
 Medium Density
 High Density
 Secondary Units

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

<p>1. Achieving Targets</p> <p>Does the scenario achieve the minimum targets of the Growth Plan, before advancing additional settlement area boundary expansion?</p>	<ul style="list-style-type: none"> 50% intensification target met. Minimum greenfield density of 50 p&j/ha exceed. MTSA and UGC minimum densities can be met
<p>2. Housing Market Choice</p> <p>Does the scenario provide for the development of a full-some range of housing types? How does the scenario respond to market demand?</p>	<ul style="list-style-type: none"> 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
<p>3. Setting-up SGAs for success</p> <p>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?</p>	<ul style="list-style-type: none"> Focus on higher-density forms optimizes the planned growth of the SGAs across the Region.
<p>4. Protecting Agricultural and Rural Systems, preparing for Climate Change and Achieving Sustainable Development</p> <p>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?</p>	<ul style="list-style-type: none"> 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.
<p>5. Competitive Economic and Employment Conditions</p> <p>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?</p>	<ul style="list-style-type: none"> 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

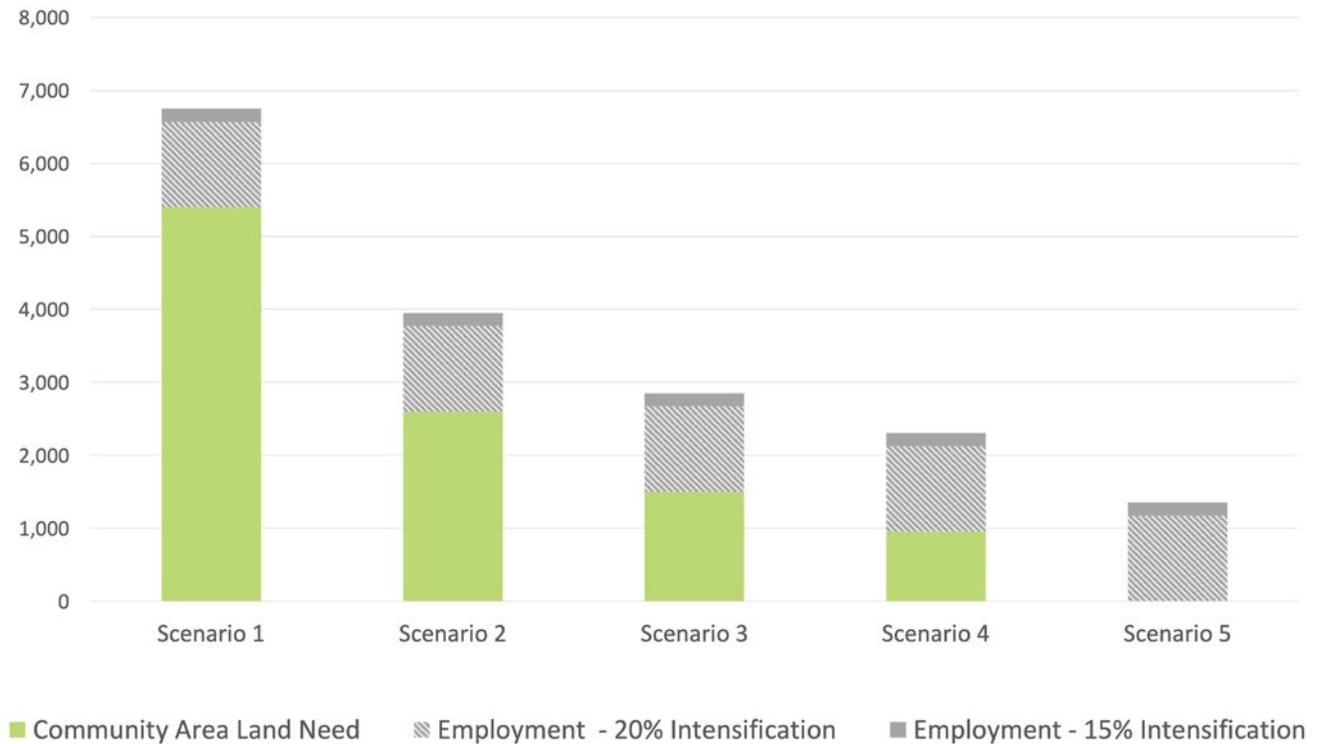


Figure 4-1: Summary range of total regional new land need combining Community Area and Employment Land Need by Scenario

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 www.durham.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)	A	6,142
Total Employment Area Conversions (Net of Growth Plan Take-Outs) (developable ha)	B	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

Source: Watson & Associates Economists Ltd., 2022.

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 (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	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

Source: Watson & Associates Economists Ltd., 2022.

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

Source: Watson & Associates Economists Ltd., 2022.

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-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

Source: Watson & Associates Economists Ltd., 2022.

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 w ithin 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

Source: Watson & Associates Economists Ltd., 2022.

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.

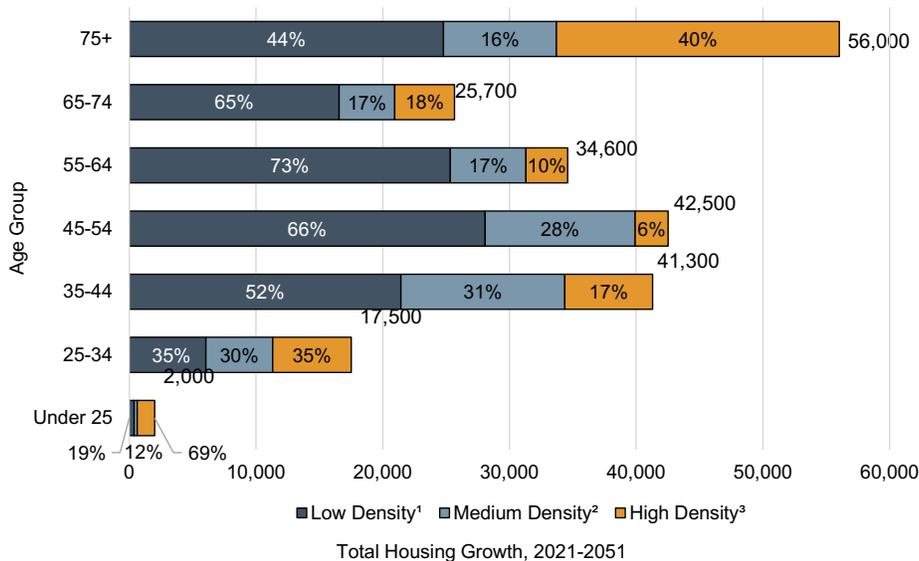
² Category 2 - Remaining Vacant DGA Lands: includes all lands outside of Category 1 that could become available for Community Area development.

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.

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



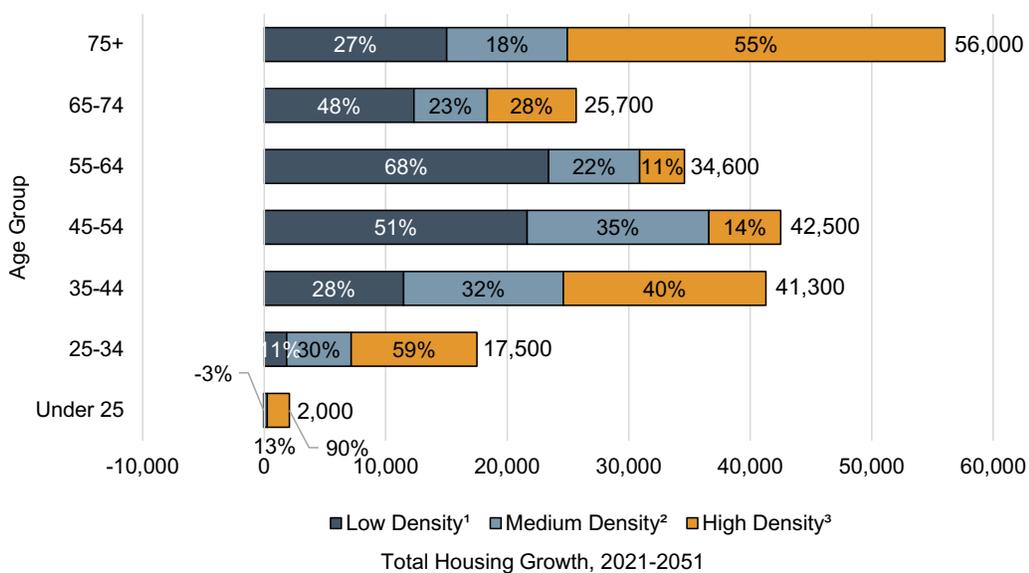
¹ Low density represents singles and semi-detached.

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

³ High density includes all apartments.

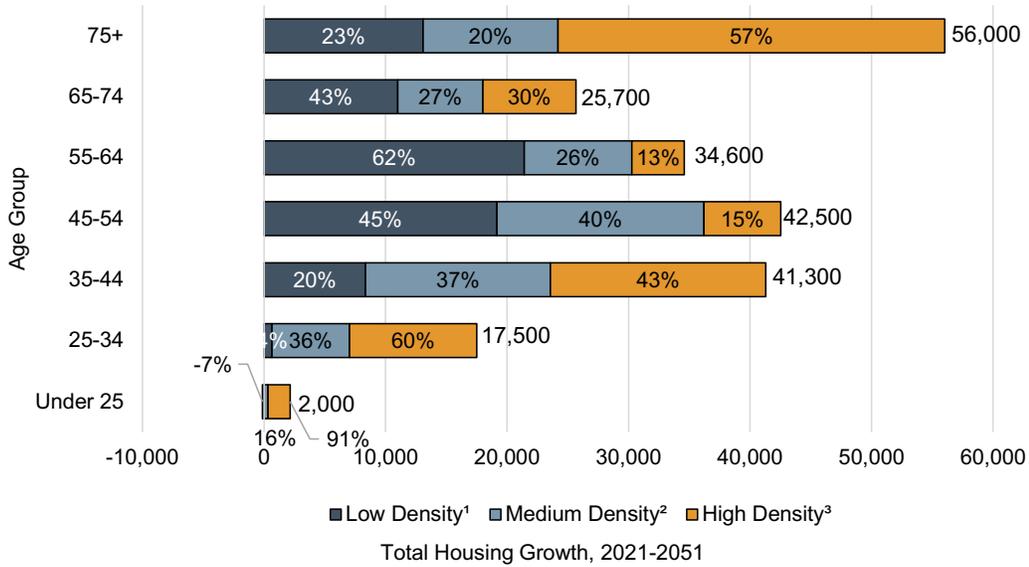
Source: Watson & Associates Economists Ltd., 2022.

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.
 Source: Watson & Associates Economists Ltd., 2022.

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



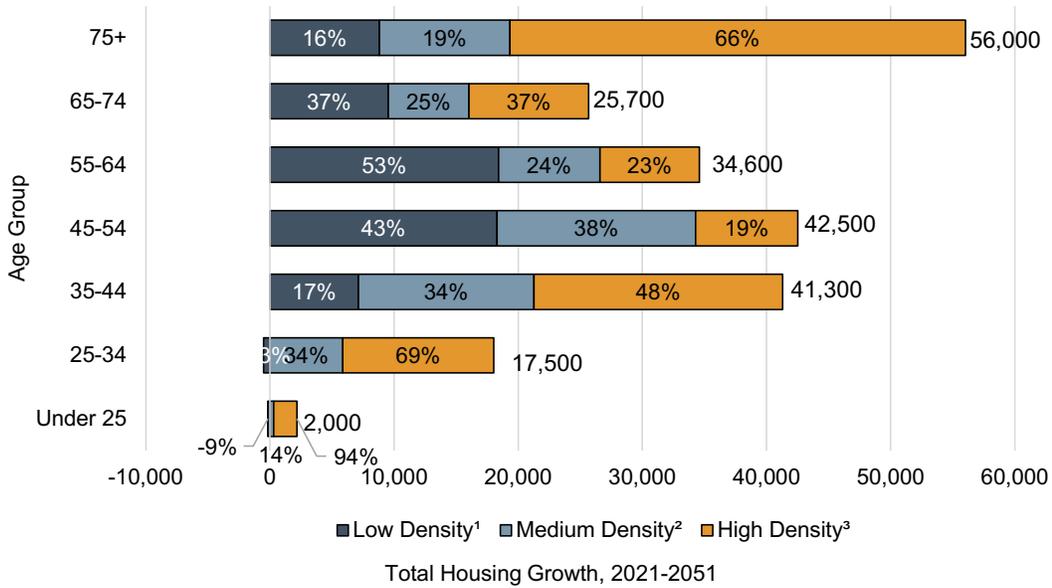
¹ Low density represents singles and semi-detached.

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

³ High density includes all apartments.

Source: Watson & Associates Economists Ltd., 2022.

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



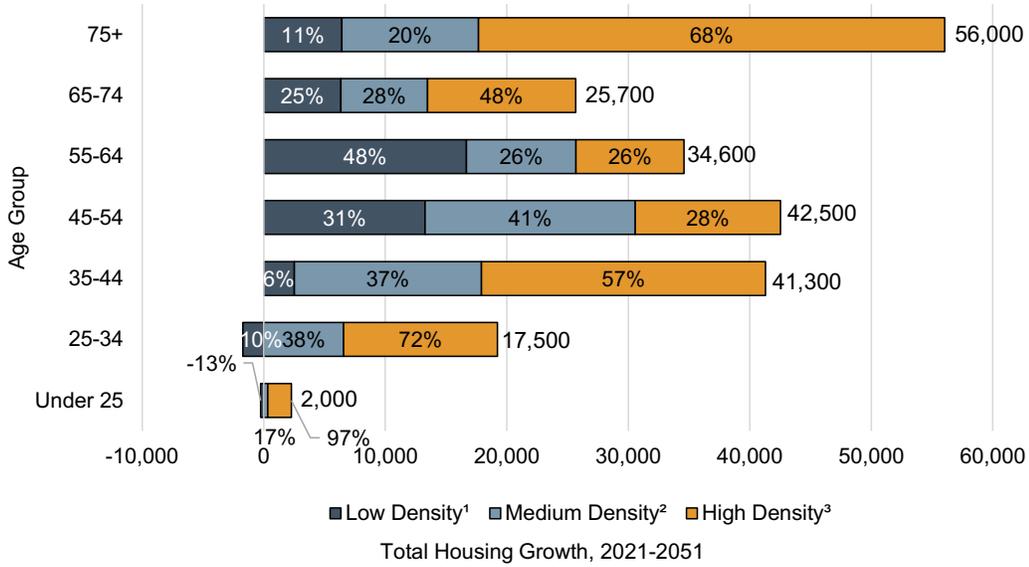
¹ Low density represents singles and semi-detached.

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

³ High density includes all apartments.

Source: Watson & Associates Economists Ltd., 2022.

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.

Source: Watson & Associates Economists Ltd., 2022.

