



**Kitchener 2051: Growth Scenarios Study**

# **Growth Scenarios Study Report**

**Revision 0**

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## 1.0 Introduction

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### 1.1 Kitchener 2051

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The City of Kitchener is preparing a new Official Plan (OP) – known as Kitchener 2051. An OP is a document that shapes the way a city grows and develops. A Provincial law called the Planning Act sets out what an OP can do, including:

- Directing growth and change, mostly related to how land and buildings are used;
- Guiding decisions on land use, development, transportation, physical and community infrastructure, and more;
- Implementing the City’s vision, established through the Strategic Plan; and
- Providing direction for implementing tools like the Zoning By-law.

The existing City of Kitchener OP was adopted in 2014 and has positively shaped growth and development across the City over the last decade. A new OP is needed to respond to current and future conditions and trends. Kitchener is growing fast and facing city-building challenges like the housing crisis, pedestrian and cyclist deaths and injuries, inequity, climate change, social isolation and how to pay for aging infrastructure and city services. The City is also presented with opportunities like new mobility technologies, a young and highly skilled workforce, strong neighbourhoods and communities, a rich and diverse culture, and a growing desire for urban connection.

Kitchener 2051 presents an opportunity to tackle these issues head-on, ask big questions, and prepare for an uncertain future. It should reflect the City’s values and aspirations for what it can become – a thriving city that offers well-being, potential and quality of life, for everyone.

Kitchener 2051 will address conformity with Provincial policy and legislation and the Region of Waterloo Official Plan<sup>1</sup>, alongside recently completed plans for the City, such as Housing for All, Places & Spaces, and Cycling & Trails Master Plan, to set out a forward-thinking and contemporary city-wide policy framework.

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<sup>1</sup> Which is now the Official Plan of the City.

## 1.2 Growth Scenarios Study Overview

The Growth Scenarios Study (the “Study”) is a critical component of the broader Kitchener 2051 program. The Growth Scenarios Study will:

- Establish the framework and priority areas for growth within the City, including a plan to achieve the 60% intensification target established through Region of Waterloo Official Plan Amendment 6 (ROPA 6), which directs 60% of growth and development to existing built up areas;
- Establish a clear and transparent process to evaluate growth options, built on industry best practices (nationally and internationally);
- Be informed by other technical studies that are currently underway, including the Kitchener Utilities Clean Energy Strategy, Population and Employment Forecasts to 2051, and Non-Residential Technical Background Study;
- Identify a preferred composite growth scenario that can accommodate the amount and type of growth needed, while addressing the housing crisis, mitigating against climate change, and advancing equity;
- Analyze how each approach to growth performs in relation to transportation and infrastructure needs, as well as assess the municipal financial implications and long-term sustainability of growth;
- Be informed by community and collaborator input on a preferred composite growth scenario; and
- Identify policy tools that can be used to direct built form typologies in different locations across the City and guide growth and change within and outside of intensification areas.

The Growth Scenarios Study is being completed in three phases:

- **Phase 1: Background and Existing Conditions** provides an overview of the context for intensification and evaluation of the City’s existing urban structure;
- **Phase 2: Growth Scenarios Review** includes the review of city-developed approaches to growth, including transportation, water, wastewater and fiscal impact analysis, and the preparation of an evaluation framework; and
- **Phase 3: Evaluation and Preferred Composite Growth Scenario** which includes a peer review of the proposed urban structure/hierarchy of intensification areas, development of policy directions and a Growth Scenarios Study Report.

This report is being prepared as part of Phase 3 of the Study.

### 1.3 Purpose of Report

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The purpose of this report is to:

- Provide an overview of the approaches to growth that were developed and evaluated as part of the Growth Scenarios Study;
- Summarize the outcomes of the objectives-based evaluation framework;
- Provide an overview of the preferred composite growth scenario;
- Provide recommendations on the proposed urban structure elements; and
- Provide direction on policy measures which can be used to develop the OP.

### 1.4 Structure of Report

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This document is structured as follows:

- **Section 2.0** provides an overview of how the three approaches to growth were developed and evaluated, including details regarding the preferred composite growth scenario.
- **Section 3.0** provides a summary of the preliminary urban structure reflected in the preferred composite growth scenario and a series of high-level policy recommendations for making the preferred composite growth scenario a reality.

The following content is included in the appendices:

- **Appendix A:** Detailed tables listing the results of the evaluation exercise.

## 2.0 Growth Scenarios

### 2.1 Scenario Development

The City undertook a modelling exercise to evaluate different potential approaches to distributing housing and job growth. Three approaches to growth were developed as part of this exercise. Each approach to growth was developed using an initial set of base assumptions listed in **Table 2-1**.

**Table 2-1: List of preliminary objectives and assumptions used to develop the approaches to growth**

Preliminary Objectives	Base Assumptions
Support Kitchener's economy	<ul style="list-style-type: none"> <li>Protect existing and plan for new jobs by assuming 15% growth in jobs within Kitchener's employment areas.</li> <li>Foster economic development by supporting job growth outside of employment areas.</li> </ul>
Conserve and protect the Natural Heritage System	<ul style="list-style-type: none"> <li>Protect and enhance our natural areas including greenspaces and waterways, by carrying forward the natural heritage and floodway mapping.</li> </ul>
Be future focused	<ul style="list-style-type: none"> <li>Accommodate a future population of approximately 450,000 residents by 2051.</li> </ul>
Maintain growth within the existing Urban Area Boundary	<ul style="list-style-type: none"> <li>Growth to 2051 is planned within our existing urban area boundary.</li> <li>Plan for new and more compact greenfield development, primarily within Southwest Kitchener.</li> <li>Direct at least 60% of new growth to already built-up areas.</li> </ul>
Plan for change across the city	<ul style="list-style-type: none"> <li>Plan for change across the city's neighbourhoods in ways that support current and future residents by dispersing 5,000 units of future residential growth broadly throughout Kitchener's existing low-rise neighbourhoods.</li> </ul>

Preliminary Objectives	Base Assumptions
Greater integration of places, systems and networks	<ul style="list-style-type: none"> <li>• Plan for significant growth within our Major Transit Station Areas by carrying forward the Growing Together planning framework.</li> <li>• Connect more people and jobs to mobility networks such as transit and complete streets.</li> </ul>

Building off of the base assumptions that were consistent for all approaches to growth, the following scenarios were developed to identify choices around how the City grows:

- Approach 1: Supporting Transit;
- Approach 2: New Urban Centres; and
- Approach 3: Evolving Neighbourhoods.

Approach 1: Supporting Transit (depicted in **Figure 2-1**) included the following elements:

- Emphasizes growth generally within the City's existing Mixed-Use Nodes & Corridors structure from the 2014 Official Plan.
- Assumes updated development permissions within existing nodes and corridors to promote more housing supply and choice, support a variety of uses, and better match what is being built today.
- Continues to encourage low-density commercial properties to evolve over time into higher-density neighbourhood focal points.

This approach included the following trade-offs:

- Some change in several neighbourhoods.
- A larger number of small, less active community and public spaces.
- Moderate public transit and active transportation options serving several neighbourhoods.
- More neighbourhood retail at key intersections and along corridors.

Approach 2: New Urban Centres (depicted in **Figure 2-2**) included the following key elements:

- Focuses on growth within new urban centres, specifically:
  - Ottawa St. N. & River Rd. E.
  - Strasburg Rd. & Block Line Rd.
  - Highland Rd. W. & Fischer-Hallman Rd.
- Focal areas identified based on their capacity to grow, proximity to frequent transit (e.g., iXpress routes) and community infrastructure (parks, trails, schools, community centres, libraries).
- Examines growth in transit-supportive neighbourhoods on the periphery of MTSAs.

This approach included the following trade-offs:

- More change in a small number of neighbourhoods.
- A smaller number of large, more active community and public spaces.
- Higher frequency, better service of public transit and active transportation infrastructure serving a smaller geographic area.
- More neighbourhood retail in specific locations.

Approach 3: Evolving Neighbourhoods (depicted in **Figure 2-3**) included the following key elements:

- Enables more growth within neighbourhoods which fits comfortably with existing built form and without the need for substantial lot assembly. Examples include:
  - Allowing places of worship to develop with a mix of uses.
  - Small commercial plazas.
  - Wider and/or deeper residential lots that back onto parks, open spaces, natural areas, school grounds and other non-residential properties which provide greater opportunities to achieve built-form transition.

This approach included the following trade-offs:

- Less change, but spread across all neighbourhoods.
- Community and public spaces largely depend on evolution of sites with existing community infrastructure (e.g. places of worship).

- Lower public transit and active transportation service levels spread across all neighbourhoods.
- Some change to neighbourhood retail across all neighbourhoods.

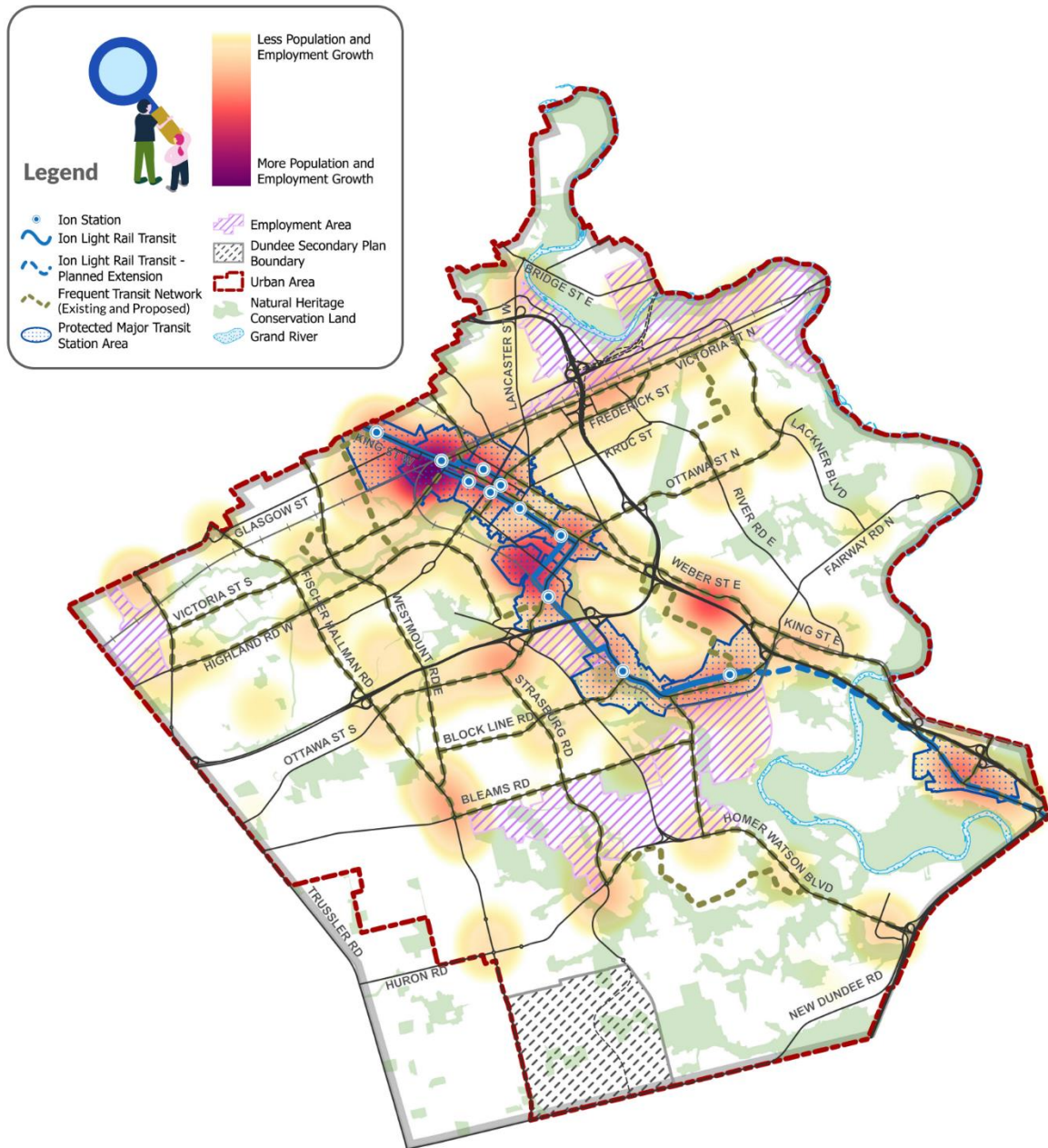


Figure 2-1: Map figure depicting layout of Approach 1

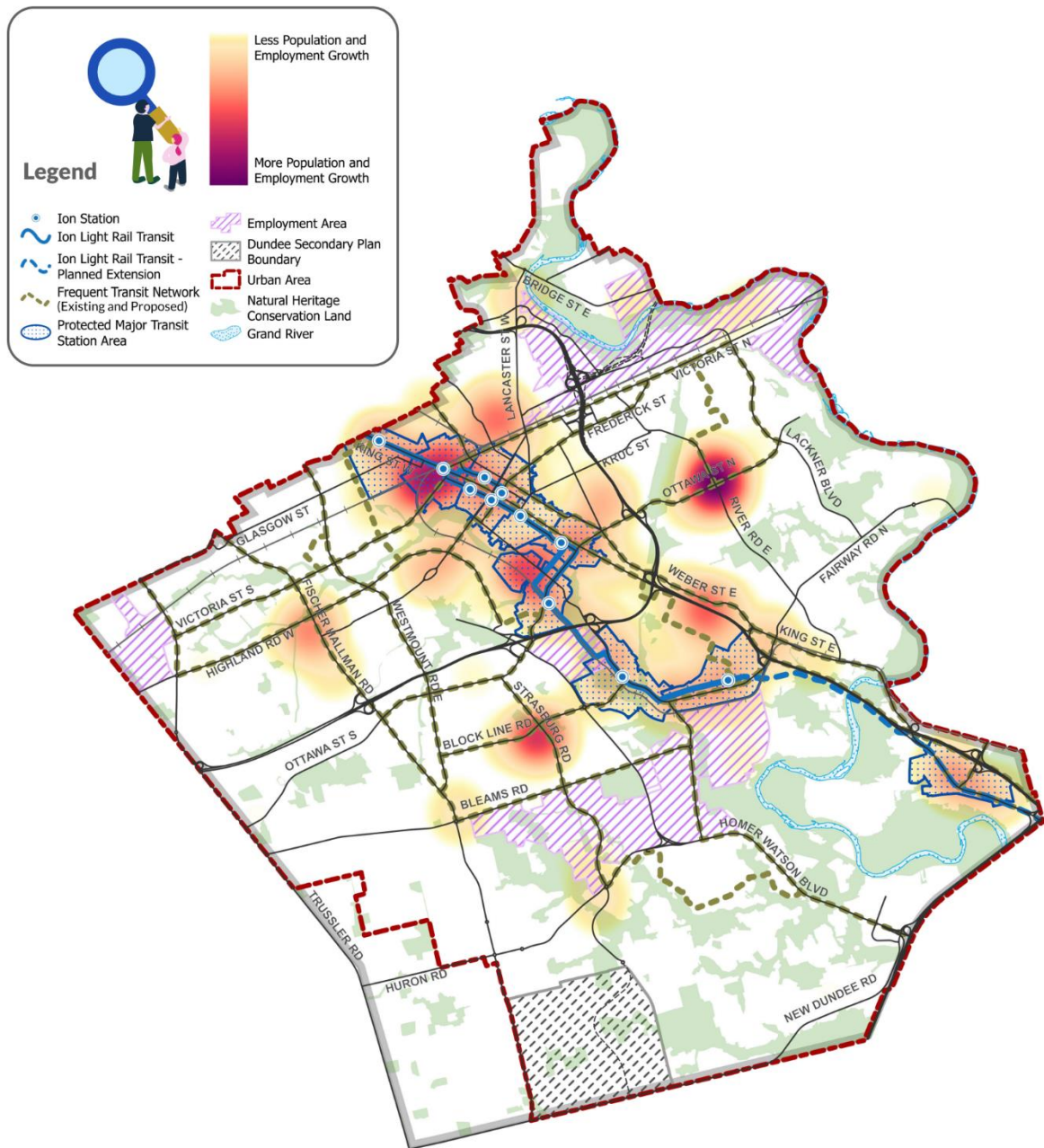


Figure 2-2: Map figure depicting layout of Approach 2

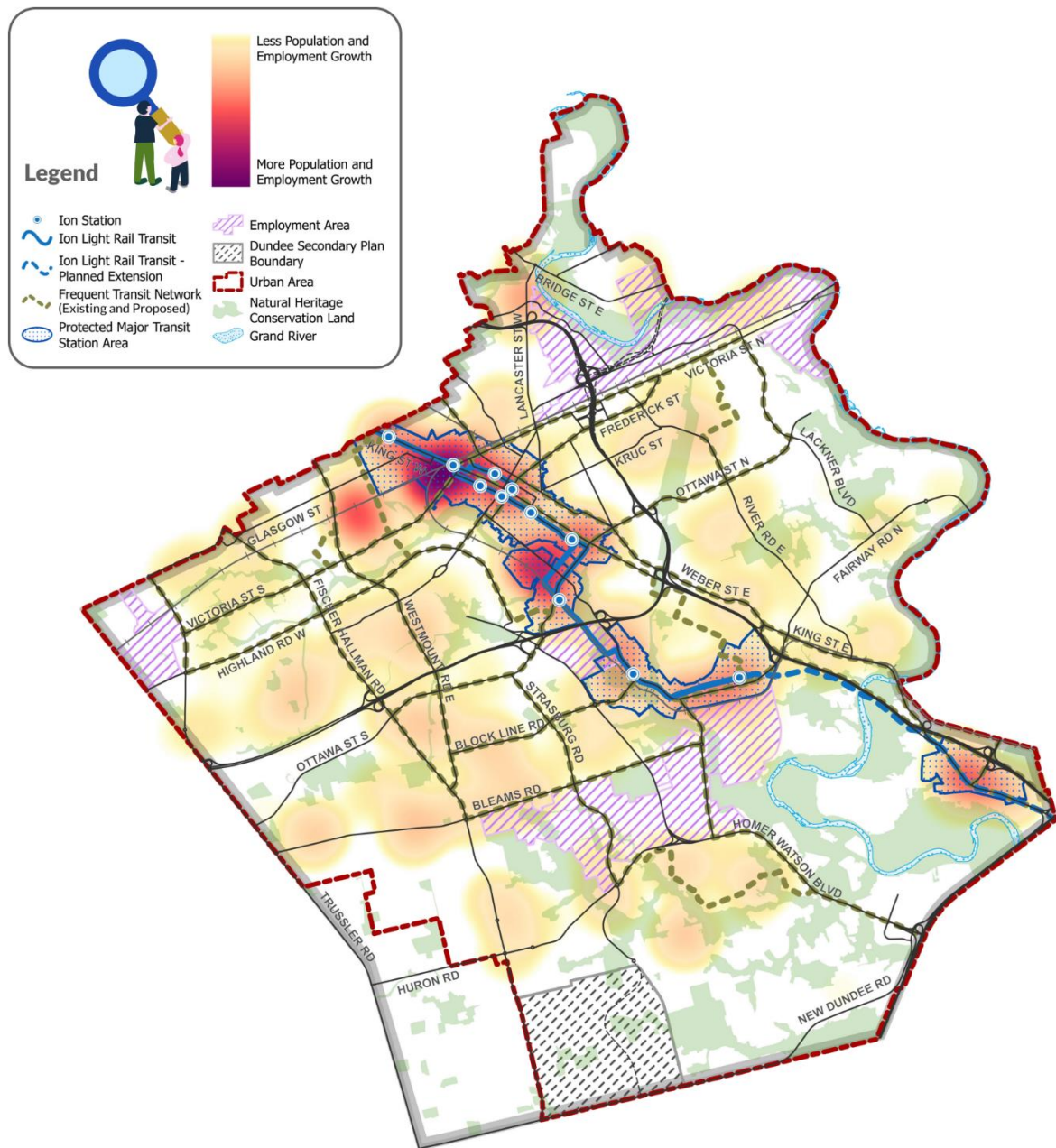


Figure 2-3: Map figure depicting layout of Approach 3

## 2.2 Evaluation Framework

The project team used an objectives-based framework to compare and evaluate the approaches to growth. An objectives-based framework starts with the desired outcome and examines how each approach to growth contributes to the objective. The most desirable factors in each scenario are identified and can then be combined into a preferred composite growth scenario.

The City defined a series of five objectives to reflect policy and community and stakeholder priorities. The finalized objectives represented refined versions of the assumptions used to develop the approaches to growth earlier on in the study process (see **Table 2-1**). The finalized objectives listed in **Figure 2-4** were then used to define specific evaluation criteria.

Objective 1: Support Kitchener's economy

Objective 2: Protect and enhance the Natural Heritage System

Objective 3: Be future focused

Objective 4: Plan for change across the city

Objective 5: Greater integration of places, systems and networks

**Figure 2-4: List of objectives used in the evaluation framework**

A total of thirty-three criteria were developed to align with the five objectives. The criteria were constructed to allow for evaluation of the degree to which each approach to growth achieved specific objectives relative to the other approaches.

The following sections offer a summary of the criteria used to evaluate each objective and the key findings from the evaluation exercise. Specific details relating to the measures associated with each of the criteria and the evaluation outputs can be found in **Appendix A**.

### 2.2.1 Objective 1: Support Kitchener's economy

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Objective 1 was defined as follows:

*Lands within the Regional Employment Area will remain protected for employment functions over the long-term. Growth scenarios will consider the opportunity for economic diversification outside of employment areas and how strategic locations can serve as economic hubs.*

The following criteria were used to evaluate alignment with this objective:

- Criterion 1-1: Protects or enhances the Regional Employment Areas (identified in the ROPA 6) and supports the longevity of these areas for continued job growth.
- Criterion 1-2: Enables job growth outside of defined employment areas to help the city adapt to the future of work.
- Criterion 1-3: Supports a better balance of jobs and housing across the City to reduce long distance and automobile-based commuting and greenhouse gas emissions.
- Criterion 1-4: Minimizes congestion on truck routes.

### 2.2.2 Objective 2: Protect and enhance the Natural Heritage System

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Objective 2 was defined as follows:

*The delineation of Kitchener's natural heritage system as shown in the 2014 OP will remain unchanged through Kitchener 2051. Through the growth scenarios, there may be opportunities to identify ways to increase connectivity (e.g., through utility and transportation rights-of-way) and make Kitchener's green spaces more accessible to residents.*

The following criteria were used to evaluate alignment with this objective:

- Criterion 2-1: Protects the City's ground water and surface water features, including significant ground water recharge areas.
- Criterion 2-2: Protects and preserves the urban tree canopy.

### 2.2.3 Objective 3: Be future focused

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Objective 3 was defined as follows:

*The growth scenarios should reflect a Kitchener of up to 450,000 residents by 2051 that serves as a strategic decision-making tool that provides benefits to the community.*

The following criteria were used to evaluate alignment with this objective:

- Criterion 3-1: Optimizes the use of existing and planned water/wastewater infrastructure.
- Criterion 3-2: Optimizes the use of existing and planned road infrastructure.
- Criterion 3-3: Reduces costs of new infrastructure.
- Criterion 3-4: Minimizes long term operations and maintenance costs.
- Criterion 3-5: Optimizes the use of existing and planned schools.
- Criterion 3-6: Optimizes the use of existing parks and sports fields.
- Criterion 3-7: Optimizes the use of existing and planned libraries and community centres.
- Criterion 3-8: Optimizes the use of existing and planned retail food uses.
- Criterion 3-9: Minimizes carbon emissions through support for a variety of built forms, compact growth and intensification.
- Criterion 3-10: Maximizes the energy efficiency associated with the built environment.
- Criterion 3-11: Maximizes energy efficiency associated with transportation activities.
- Criterion 3-12: Maximizes energy efficiency associated with building heating/cooling activities.
- Criterion 3-13: Provides an opportunity for alternate energy opportunities, such as district energy.
- Criterion 3-14: Addresses risk and vulnerability of the built environment to extreme weather and changing climate patterns, including heat, precipitation and flooding/property damage.
- Criterion 3-15: Influences household energy costs and vulnerability to energy system change.
- Criterion 3-16: Enables opportunities for renewable energy generation.
- Criterion 3-17: Requires a shift in mode share beyond what is being planned for.

#### 2.2.4 Objective 4: Plan for change across the city

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Objective 4 was defined as follows:

*The growth scenarios will recognize that all areas of Kitchener are and will continue to change in different ways over the long-term, with a consistent population and employment forecast.*

The following criteria were used to evaluate alignment with this objective:

- Criterion 4-1: Supports the objective of enabling development of additional neighbourhood retail and grocery store uses.
- Criterion 4-2: Accommodates growth within the city's most situationally vulnerable areas.
- Criterion 4-3: Allocates new growth in the context of the City's Demographic (Inequity) Index classes.
- Criterion 4-4: Allocates new growth in the context of the City's CMHC (Proximity) Index classes.

#### 2.2.5 Objective 5: Greater integration of places, systems and networks

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Objective 5 was defined as follows:

*Provincial and Regional policy provides strong basis for connecting more people and jobs to mobility networks. The growth scenarios will consider how growth can be allocated and organized to support and leverage investment, operations, and services.*

The following criteria were used to evaluate alignment with this objective:

- Criterion 5-1: Allows for easy access to public transit.
- Criterion 5-2: Allows for growth to be efficiently serviced by expansions to the transit network.
- Criterion 5-3: Allows for easy access to places of work via public transit.
- Criterion 5-4: Allows for easy access to frequent public transit.
- Criterion 5-5: Maximizes access to active transportation routes.
- Criterion 5-6: Minimizes vehicle kilometres traveled.
- Criterion 5-7: Supports multi-modal access and connectivity outside of the City and to other regions.

- Criterion 5-8: Provides access to commercial areas.

### 2.2.6 Summary of Key Findings

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The evaluation exercise revealed that the three approaches to growth were very similar across most evaluation criteria and that all three approaches to growth generally met the objectives established. In most cases, there were minimal or negligible differences between scenarios. This was not surprising, as the three approaches to growth all contained several core elements and assumptions, as previously outlined in **Table 2-1**.

The instances where the evaluation results indicated substantial differences between the three approaches to growth can be summarized as follows:

- Protecting or enhancing Regional Employment Areas and supporting the longevity of these areas for continued job growth: Approach 2 and Approach 3 showed the greatest degree of alignment with the objective.
- Optimizing the use of existing and planned schools: Approach 2 showed the greatest degree of alignment with the objective.
- Optimizing the use of existing parks and sports fields: Approach 3 showed the greatest degree of alignment with the objective.
- Optimizing the use of existing and planned libraries and community centres: Approach 2 showed the greatest degree of alignment with the objective.
- Providing access to commercial areas: Approach 1 showed the greatest degree of alignment with the objective.

The instances where the evaluation results indicated notable or moderate differences between the three approaches to growth can be summarized as follows:

- Protecting the City's ground water and surface water features (including significant ground water recharge areas): Approach 2 showed the greatest degree of alignment with this objective.
- Optimizing the use of existing and planned water/wastewater infrastructure: Approach 1 and Approach 2 showed the greatest degree of alignment with this objective.
- Reducing the costs associated with new infrastructure: Approach 3 showed the greatest degree of alignment with this objective.

- Minimizing long term operations and maintenance costs: Approach 1 and Approach 2 showed the greatest degree of alignment with this objective.
- With respect to how new growth would be allocated in the context of the proximity to community assets, Approach 1 allocated the most amount of people and jobs in areas with the least proximity to community assets, while Approach 2 allocated the most amount of people and jobs in areas with the most proximity to community assets.<sup>2</sup>
- Allowing for easy access to public transit: Approach 1 showed the greatest degree of alignment with this objective.
- Providing access to commercial areas: Approach 1 showed the greatest degree of alignment with this objective.

Detailed evaluation results are included in tabular form in **Appendix A**.

### 2.3 Preferred Composite Growth Scenario

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Following the evaluation of each approach to growth, the project team held a workshop with City staff to review the results and define a preliminary preferred approach. City staff then integrated the stakeholder feedback collected earlier in the project alongside the evaluation results to define a preferred composite growth scenario.

Instead of being constrained to having to choose between the three approaches to growth, the team sought to combine the most desirable aspects of each approach into a single, preferred composite growth scenario. This approach to planning was taken in keeping with the objectives-based approach to evaluation.

The preferred composite growth scenario draws on components found across all three approaches to growth. It carries forward the following key elements from the original approaches to growth:

- Elements of Approach 2 (“New Urban Centres Approach”) that sees growth and change being directed to transit-supportive neighbourhoods on the periphery of Kitchener’s Major Transit Station Areas. These areas are generally within

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<sup>2</sup> This refers to a variation of the Proximity Measures Database developed by Statistics Canada and the Canada Mortgage and Housing Corporation. Refer to **Appendix A** for details of how this criterion was constructed. Further details are included in the *Population and Employment Forecast Update and Housing Needs Assessment Report* prepared by Watson and Dillon as part of the Kitchener 2051 project.

Kitchener’s central neighbourhoods north and west of the expressway and in growing main streets already seeing new mixed-use development, such as near Weber Street East and Franklin Street North. They are also generally located close to important community features such as parks, trails, frequent transit routes (e.g., iXpress routes), schools, community centres and libraries.

- New “urban centres” identified in Approach 2 (“New Urban Centres Approach”) are also proposed to be carried forward in the preferred composite growth scenario. These new urban centres are located near the following intersections:
  - Highland Road West and Fisher Hallman Boulevard;
  - Strasburg Road and Block Line Road;
  - Ottawa Street North and River Road; and
  - In the Dundee Secondary Plan Area.
- Elements of Approach 1 (“Supporting Transit Approach”) were carried forward in the form of additional growth and change being directed along Ottawa Street North and Ottawa Street South, Highland Road West, Weber Street East, Fisher Hallman Boulevard, and along Homer Watson Blvd near Pioneer Park Plaza, and around Conestoga College’s Doon campus.

The overall configuration of the preferred composite growth scenario is depicted in **Figure 2-5**.

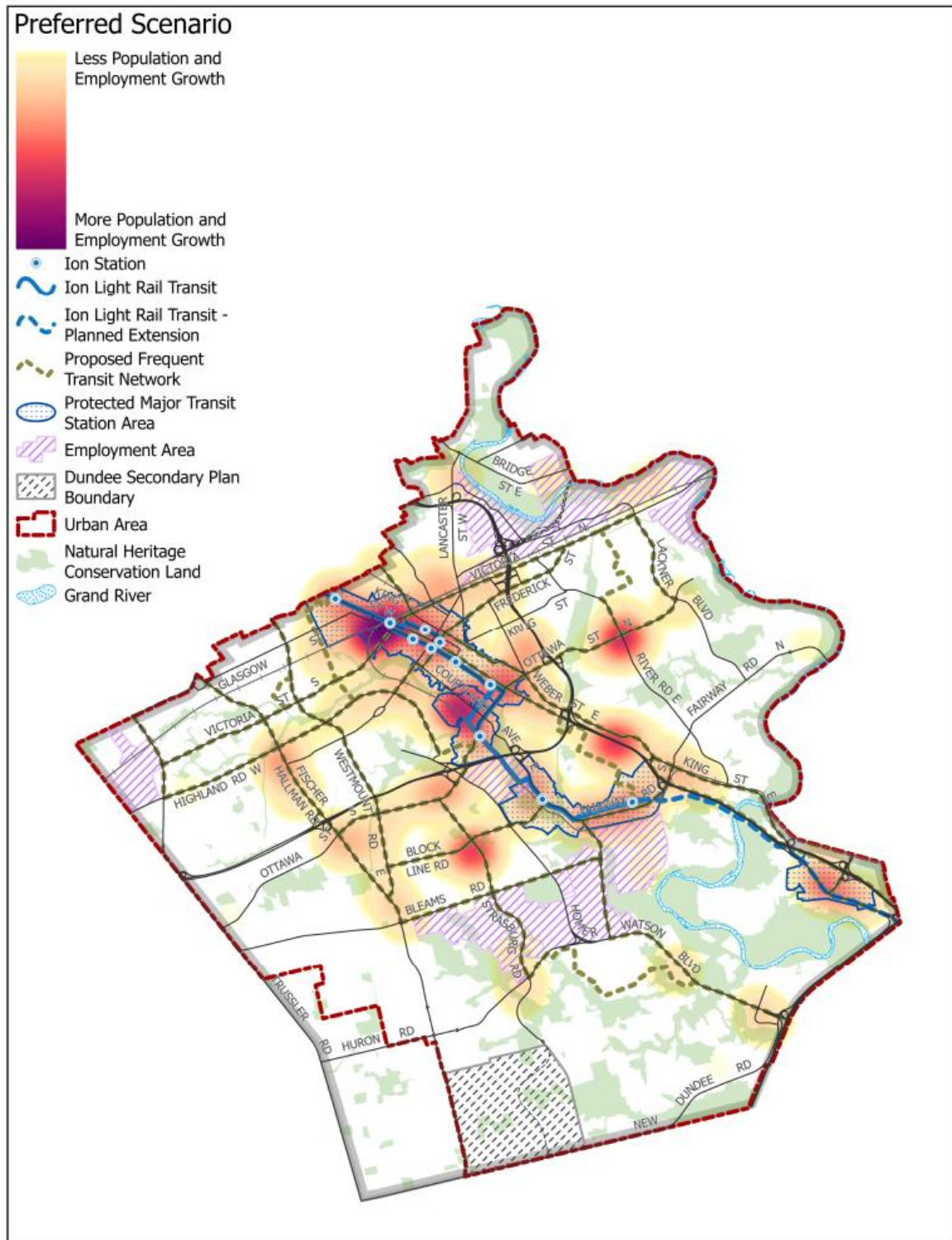


Figure 2-5: Map figure depicting layout of the preferred composite growth scenario

## 3.0 Preliminary City Structure and Policy Directions

### 3.1 Preliminary City Structure

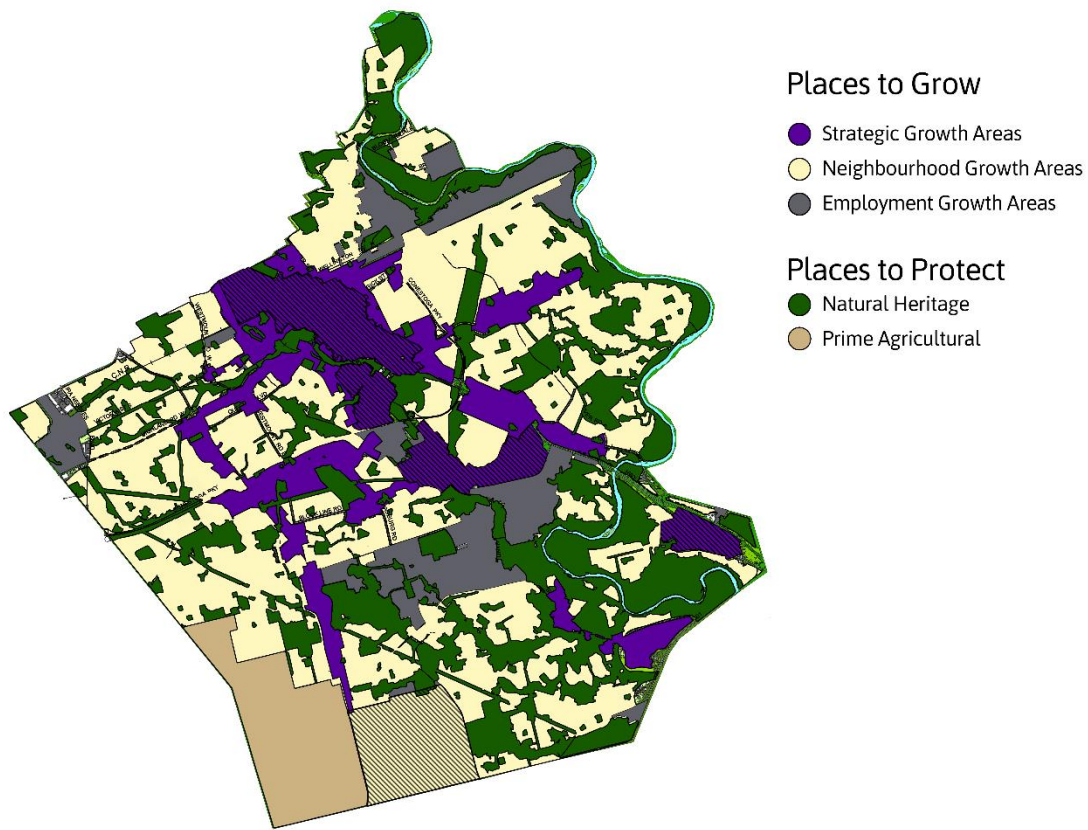
The preferred composite growth scenario includes a number of city structure elements that define priority areas to grow and protect, as depicted on **Figure 3-1**.

The *Places to grow* hierarchy includes the following urban structure elements:

- **Strategic Growth Areas:** this includes the City's 10 PMTSAs as well as refined Intensification Areas where most of the planned growth is intended to be focussed.
- **Employment Growth Areas:** this is where the majority of industrial and logistics employment growth is intended to be accommodated and is comprised of typical industrial uses.
- **Neighbourhood Growth Areas:** this is comprised of lands within the settlement area where a range of residential, institutional, commercial, and parks and open space uses will be permitted. will contribute to creating vibrant communities at the neighbourhood level. Historic employment lands that do not fit within the definition of "employment lands" in the PPS (also referred to as "Innovation Employment") will accommodate a broad range on non-residential uses to support complete communities in neighbourhoods.

The *Places to Protect* hierarchy includes the following broad urban structure elements:

- **Natural Heritage:** this reflects the boundaries of the natural heritage system and is intended to support the City's biodiversity and be protected for the long term.
- **Protected Agricultural:** this is comprised of prime agriculture lands and other rural lands and is intended to be protected for agricultural uses for the long term.



**Figure 3-1: Preliminary Urban Structure**

## 3.2 Policy Directions

This section offers a high-level overview of recommended policy directions relating to the following specific topics:

- Achieving intensification targets;
- Enabling complete communities;
- Missing middle housing; and
- Opportunities for enhanced monitoring and evaluation.

### 3.2.1 Achieving Intensification Targets

A sizeable portion of the planned future growth envisioned in the preferred scenario will be directed to the Strategic Growth Areas, which are comprised of PMTSAs and other designated intensification areas. While the PMTSAs are intended to accommodate the

highest levels of growth in close proximity to ION stations, the intensification areas have been identified to align with Grand River Transit's (GRT) existing and planned frequent transit routes, as illustrated in the 2025 GRT Business Plan, and provide broader options for a cluster of amenities throughout different quadrants of the city. Achieving broader intensification goals requires that other intensification areas—such as those along major corridors and in mixed-use nodes—also develop at an appropriate urban scale.

The City should consider the following key directions when crafting policies and implementing by-laws intended to facilitate achieving intensification targets on which the preferred composite growth scenario is premised:

- **Establish a Minimum Density Target:** Establish a minimum density target of 100 people and jobs per hectare or greater for all new development and redevelopment within the designated Intensification Areas outside of the PMTSAs. This will also require updating the corresponding implementing by-law to align.
- **Facilitate a Broader Range of Uses, Heights, and Densities:** To support the minimum density target and encourage a wider range of housing types, the OP must enable a greater scale and mix of development than may be currently permitted. This includes policies that permit a broad range of residential, commercial, office, and institutional uses. This should be achieved by regulating development through objective built form standards (e.g., building height, massing, setbacks, etc.) rather than floor space ratio, with a focus on enabling mid-rise forms and permitting a broad mix of uses. This will require updating the corresponding land use provisions in the implementing by-law to align.
- **Identify the Need for Area-specific Planning and update land use regulations to implement the OP policies for intensification in priority areas:** A "one-size-fits-all" policy approach may not be suitable for all strategic growth areas. Certain areas, such as those with complex land assembly challenges or significant public realm opportunities, may benefit from a more detailed, area-specific planning process to facilitate intensification. While the City has already gone through extensive area-specific planning for PMTSAs, a number of new areas have been identified as Intensification Areas within the new OP framework and would benefit from further area-specific planning. For lands that are newly identified Intensification Areas, or those that have had permissions for some time but have

not had the market uptick, the City should assess whether some degree of City-led area-specific planning is warranted. In addition, the City should update the land use regulations that implement the priority areas for intensification; this could include updating the City's zoning by-law or through the preparation of a community planning permit by-law to support a streamlined development approval process.

### 3.2.2 Enabling Complete Communities

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The new OP will need to integrate the policy direction included in ROPA 6 regarding the creation of complete communities. This concept refers to compact, well-connected places where people can meet their daily needs for goods, services and employment by methods of active transportation, and where other needs can be met by using direct, frequent and convenient transit.

This kind of development pattern requires neighbourhoods to be designed with a diverse mix of land uses, to provide a full range of housing to accommodate a range of incomes and household sizes. This requires sufficient population and employment density such that a broad range of services can be supported.

To implement the complete community concept, the new OP must include a comprehensive suite of integrated policy measures. The City should consider the following key elements when crafting the related policy framework:

- Recalibrate land use permissions to permit a fine-grained mix of daily-need uses (e.g., small-scale retail, services) within residential land use designations.
- Facilitate gentle intensification by removing regulatory barriers to a full range of "missing middle" housing types in all residential areas. This could include carrying forward existing permissions for "missing middle housing" (e.g., duplexes, triplexes, fourplexes, stacked and back-to-back townhouses) and additional residential units (up to three per lot for single detached, semi-detached, or street-townhouse dwellings) across residential designations.
- Mandate active, pedestrian-oriented ground floors and a mix of uses for new developments within all Strategic Growth Areas, including PMTSAs and other designated Intensification Areas.

- Prioritize active transportation (walking, cycling) and public transit in transportation planning frameworks. This could include integrating new measures or otherwise carrying forward existing measures such as modernizing parking standards to emphasize parking maximums over minimums in transit-served areas and emphasizing the importance of transportation demand management (TDM) measures for new development.
- Require highly connected street and pathway networks in new development and seek opportunities to improve connectivity in existing areas.
- Incorporate policies that target the co-location of public services (e.g., libraries, childcare, community centres) and recreation assets (e.g., parks, playgrounds or open space) near residential uses. This could include some form of quantifiable standard to guide site selection (e.g., within 400 metres).
- Integrate policies that support local food systems to increase access to healthy, local and affordable food. This could include carrying forward existing permissions for community gardens and farmers' markets within residential designations.

### 3.2.3 Missing Middle Housing

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The new OP will need to continue to integrate and carry forward the policy direction included in ROPA 6 regarding “missing middle housing”. This concept refers to development typified by multiple unit housing, such as multiplexes, stacked townhouses, apartments, and other low-rise housing options. The intent is to facilitate “gentle density” and the provision of a diverse range and mix of housing options across the city, especially in areas well-supported by transit and with strong access to amenities. Such policies are a direct complement to those which support development of complete communities.

The successful integration of missing middle housing requires a policy framework that moves beyond simply permitting new housing types to actively enabling their construction. That framework must be grounded in the practical realities of market demand and financial feasibility. The City should consider the following key elements when crafting the related policy framework:

- **Establish Broad Permissions:** Carry forward permissions for a range of gentle density housing forms - including duplexes, triplexes, and semi-detached

dwellings or denser forms of development - within all areas designated as Neighbourhoods. A key point here is that while higher-density forms of intensification may be directed to certain areas, gentle density should be reflected across all neighbourhood areas as a means of supporting growth in an appropriate manner.

- **Guide Intensification to Secondary Streets:** Identify secondary and collector streets within Neighbourhoods as appropriate locations for a greater scale of missing middle housing (alongside the more general approach of seeing gentle density reflected across all neighbourhood areas). Explicitly permit more intensive building types, such as fourplexes, stacked townhouses, and small-scale, low-rise walk-up apartments, on lots fronting onto these streets. This approach should be viewed as an extension of the previous bullet point regarding the establishment of broad permissions for gentle density housing forms.
- **Revise Parking Standards:** Review the existing parking zones framework in alignment with the updated urban structure and reduce or eliminate minimum parking requirements for projects near transit in priority intensification areas, particularly for missing middle housing typologies.
- **Develop Context-Sensitive and Flexible Built Form Policies:** Direct the creation of objective and clear built form standards that regulate the physical configuration of missing middle development. These policies should focus on massing and other built form elements (e.g., building height, setbacks, and landscape design) to see that new development is compatible with its surrounding context without being unduly restrictive. The policies should allow for flexibility to respond to diverse market needs and household types.
- **Modernize Lot Requirements:** Review and update implementing by-laws to identify and remove restrictive minimum lot size and frontage requirements that may preclude the development of multiplexes on existing urban lots.
- **Streamline Development Approvals:** Continue to build on the successes of the Development Services review and include policies that support the creation of a streamlined and predictable development approvals process for missing middle housing projects, which are often smaller in scale and complexity than high-rise development.
- **Enable Financial Incentives:** Consider ways to establish a policy framework that enables the use of financial tools to stimulate the creation of missing middle and

affordable housing. This could include Development Charge exemptions or deferrals for certain unit types or affordable housing projects, or other approaches recommended by the City's *Enabling Missing Middle and Affordable Housing Feasibility Study*.

### 3.2.4 Enhanced Monitoring and Evaluation

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While the City already has a robust approach to monitoring a variety of growth indicators (e.g., the *Kitchener Growth Monitoring Strategy* and *Kitchener Growth Monitoring Plan*), there are opportunities to enhance this approach by including certain social planning indicators. The intent would be to measure growth in terms of equity, access, and community well-being. Examples include the following themes or specific indicators:

- **Community Characteristics Index:** This index could be used to monitor and evaluate policy outcomes at the neighbourhood level. This would help in taking a targeted approach to addressing housing issues.
- **Housing Equity and Affordability:** A key risk to monitor is displacement and renovations due to rising housing costs, particularly in areas near the ION system and in the Downtown.
- **Accessible Housing:** Monitoring the growth of accessible housing supply and engaging with people with lived experience to confirm the adequacy of these units for occupant needs.

Further details and recommendations are included in the *Population and Employment Forecast Update and Housing Needs Assessment Report* prepared by Watson and Dillon as part of the Kitchener 2051 project.

## Appendix A

### Evaluation Matrix



# Kitchener 2051 Growth Scenarios Evaluation Framework

## 1 Reference Information

### 1.1 Growth Scenario – Core Assumptions

The purpose of the Core Assumptions is to communicate the technical foundations that form each scenario. These core assumptions are fixed factors in determining how we grow to 2051 and help communicate the bounds of influence in Phase 3 engagement. The Growth Scenarios Background Memo, prepared by Dillon Consulting, serves as the foundation for determining these core assumptions.

Objective	Description	Supporting Isometric Map	Public Facing Description
<b>Support Kitchener’s economy.</b>	Lands within the Regional Employment Area will remain protected for employment functions over the long-term. Growth scenarios will consider the opportunity for economic diversification outside of employment areas and how strategic locations can serve as economic hubs.	Protected Employment Areas	<b>Kitchener 2051 will...</b> <ul style="list-style-type: none"><li>• Protect existing and plan for new jobs.</li><li>• Foster economic development.</li></ul>
<b>Protect and enhance the Natural Heritage System.</b>	The delineation of Kitchener’s natural heritage system as shown in the 2014 OP will remain unchanged through Kitchener 2051. Through the growth scenarios, there may be opportunities to identify ways to increase connectivity (e.g., through utility and transportation rights-of-way) and make Kitchener’s green spaces more accessible to residents.	Natural Heritage System / Grand River / Countryside	<b>Kitchener 2051 will...</b> <ul style="list-style-type: none"><li>• Protect and enhance our natural areas including greenspaces and waterways.</li></ul>
<b>Be future focused.</b>	The growth scenarios should reflect a Kitchener of up to 450,000 residents by 2051 that serves as a strategic growth management tool that provides benefits to the community.	City Boundary	<b>Kitchener 2051 will...</b> <ul style="list-style-type: none"><li>• Reflect community priorities and help the City make decisions which benefit the community as we grow to be city of 450,000 residents by 2051.</li></ul>
<b>Maintain growth within the existing urban area boundary.</b>	The urban area boundary will remain consistent and unchanged from that approved through ROPA 6 across all scenarios.	Urban Area Boundary / Countryside Line Designated Greenfield Area (?)	<b>Kitchener 2051 will...</b> <ul style="list-style-type: none"><li>• Contain growth within our current urban boundary which supports our long-term financial stability and sustainable growth patterns.</li><li>• Plan for new and more dense greenfield development, primarily within Southwest Kitchener.</li><li>• Direct at least 60% of new growth to already built-up areas.</li></ul>
<b>Greater integration of places, systems, and networks.</b>	Provincial and Regional policy provides strong basis for connecting more people and jobs to mobility networks. The growth scenarios will consider how growth can be allocated and organized to support and leverage investment, operations, and services.	ION / Frequent Transit Network / Expressway Major Transit Station Areas	<b>Kitchener 2051 will...</b> <ul style="list-style-type: none"><li>• Plan for significant growth within our Major Transit Station Areas by carrying forward the Growing Together planning framework.</li><li>• Connect more people and jobs to mobility networks such as transit and complete streets</li></ul>
<b>Plan for change across the city.</b>	The growth scenarios will recognize that all areas of Kitchener are and will continue to change in different ways over the long-term.	Neighbourhoods (or Built-Up Area)	<b>Kitchener 2051 will...</b> <ul style="list-style-type: none"><li>• Plan for change across the city’s neighbourhoods in ways that support current and future residents.</li></ul>

Objective	Description	Supporting Isometric Map	Public Facing Description
		<b>Growth Scenarios Composite</b> <ol style="list-style-type: none"> <li><b>Nodes &amp; Corridors</b></li> <li><b>Supporting Transit (Urban Centres + Expanded MTSAs)</b></li> <li><b>Evolving Neighbourhoods</b></li> </ol>	

### 1.2 Community Values Based on Engagement

	Community Value	Description
Indigenous Perspectives	Affordability	Affordability and the rising cost of living are major challenges. Kitchener 2051 is an opportunity to plan a city where everyone, regardless of income, can live, work, and play.
	Access & Inclusion	It is important to provide equitable access throughout Kitchener’s neighbourhoods to public spaces, parks, shops, jobs, and community facilities & programs. Kitchener 2051 is an opportunity to provide access to these places for all.
	Thoughtful & Resilient Growth	Where and how we grow requires careful balancing of trade-offs, with a focus on the future. Kitchener 2051 should reflect how city building topics, like housing, transportation, climate, and an aging population, are connected.
	Mutual Care & Belonging	Imagine a city where everyone prospers, and no one is left behind. Kitchener 2051 should continue to build a city for everyone where, together, we take care of the world around us – and each other.
	Safe & Sustainable Mobility Options	Where we live, work, and play and the distance in between has significant impacts on how we move around the city. Kitchener 2051 should focus on providing safe and sustainable ways to get around for pedestrians, cyclists, transit users, and drivers throughout the city & beyond.

1.3 Community Parameters

The purpose of the community parameters is to frame a series of parameters which will form the basis of community engagement as part of the growth scenarios evaluation – facilitating conversations with the community about trade-offs, opportunities, or questions about how and where Kitchener will grow in the future. The community parameters are not intended to lead someone towards a ‘preferred scenario’ but rather to understand the community’s priorities that the Project Team will consider in developing a preferred composite scenario and weighting of technical evaluation criteria.

- It is important that I have access to shops and services that serve my neighbourhood, like places to buy groceries or grab a coffee, within a short walk, roll, or bike ride from home.
- It is important that I be able to live in my neighbourhood throughout different stages of life.
- It is important that I live near transit routes that come frequently enough to not have to check a schedule during the week.
- It is important that I live near trails with year-round access.
- It is important that I have park or natural area within a short walk from home.
- It is important that we find ways to add new trees as we grow.
- It is important that every neighbourhood include spaces to work, shop, gather, and build community.
- It is important that there are places throughout the city beyond Downtown where I can enjoy community events and local arts and culture.
- It is important that there are good job opportunities within a short walk, roll, bike, or transit ride from home.

2 Evaluation Parameters & Criteria

2.1 Objective 1: Support Kitchener’s economy

2.1.1 Objective description

Lands within the Regional Employment Area will remain protected for employment functions over the long-term. Growth scenarios will consider the opportunity for economic diversification outside of employment areas and how strategic locations can serve as economic hubs.

2.1.2 Evaluation Criteria

Criteria ID	Criteria The degree to which the approach to growth...	What will be measured	Scoring / Outcomes			
			Approach 1	Approach 2	Approach 3	Summary
1-1	Protects or enhances the Regional Employment Areas (identified in the ROPA 6) and supports the longevity of these areas for continued job growth	<ul style="list-style-type: none"><li>• # and % of population planned within 300 m of the Regional Employment Area (intended to address land use compatibility)</li></ul>	16,148 people	3,060 people	3,181 people	<ul style="list-style-type: none"><li>• Substantial differences between approaches</li><li>• Approach 2 and Approach 3 are most preferred</li><li>• Approach 1 is least preferred</li></ul>
1-2	Enables job growth outside of defined employment areas to help the city adapt to the future of work	<ul style="list-style-type: none"><li>• # of jobs located outside of Regional Employment Lands (identified in ROPA 6)</li></ul>	19,578	19,765	17,965	<ul style="list-style-type: none"><li>• Minimal differences between approaches</li><li>• Approach 1 and Approach 2 are most preferred</li><li>• Approach 3 is least preferred</li></ul>
1-3	Supports a better balance of jobs and housing across the City to reduce long distance and automobile-based commuting and greenhouse gas emissions	<ul style="list-style-type: none"><li>• % of population within 30 minutes of trip time via transit to lands designated for employment uses</li></ul>	64.9%	66.1%	63.7%	<ul style="list-style-type: none"><li>• Minimal differences between approaches</li><li>• Approach 2 is most preferred</li><li>• Approach 3 is least preferred</li></ul>

Criteria ID	Criteria The degree to which the approach to growth...	What will be measured	Scoring / Outcomes			
			Approach 1	Approach 2	Approach 3	Summary
1-4	Minimizes congestion on truck routes	<ul style="list-style-type: none"> <li>Increased vehicle volume versus capacity (V/C) on truck routes (based on transportation model)</li> </ul>	Most population and employment adjacent to truck routes	Middle population and employment adjacent to truck routes	Least population and employment adjacent to truck routes	<ul style="list-style-type: none"> <li>Minimal differences between approaches</li> <li>Approach 2 is most preferred</li> </ul>

2.2 Objective 2: Protect and enhance the Natural Heritage System

2.2.1 Objective description

The delineation of Kitchener’s natural heritage system as shown in the 2014 OP will remain unchanged through Kitchener 2051. Through the growth scenarios, there may be opportunities to identify ways to increase connectivity (e.g., through utility and transportation rights-of-way) and make Kitchener’s green spaces more accessible to residents.

2.2.2 Evaluation Criteria

Criteria ID	Criteria The degree to which the approach to growth...	What will be measured	Scoring / Outcomes			
			Approach 1	Approach 2	Approach 3	Summary
2-1	Protects the City’s ground water and surface water features, including significant ground water recharge areas	<ul style="list-style-type: none"><li># and % of population and employment growth within each Wellhead Protection Sensitivity Area (WPSA) and Surface Water Intake Protection Zones</li></ul>	<b>Surface Water Intake Protection Zones</b> 3,123 residents 1,298 jobs  <b>Wellhead Protection Sensitivity Area (WPSA) Zone</b> Zone 1: Zone 2: Zone 3: 174 people Zone 4: 6,116 people; 2,699 jobs Zone 5: 423 people; 359 jobs Zone 6: Zone 7: 7,104 people; 2,006 jobs Zone 8: 23,709 people; 7,343 jobs	<b>Surface Water Intake Protection Zones</b> 2,079 residents 806 jobs  <b>Wellhead Protection Sensitivity Area (WPSA) Zone</b> Zone 1: Zone 2: Zone 3: Zone 4: 420 jobs Zone 5: Zone 6: Zone 7: 7,853 people; 2,836 jobs Zone 8: 34,226 people; 11,329 jobs	<b>Surface Water Intake Protection Zones</b> 1,870 residents 1,094 jobs  <b>Wellhead Protection Sensitivity Area (WPSA) Zone</b> Zone 1: 2,749 people; 735 jobs Zone 2: 2,905 people; 1,227 jobs Zone 3: Zone 4: 6,853 people; 2,211 jobs Zone 5: 2,793 people; 737 jobs Zone 6: Zone 7: 8,296 people; 2,563 jobs Zone 8: 21,898people; 4,188 jobs	<ul style="list-style-type: none"><li>Notable differences between results</li><li>Approach 2 is most preferred</li><li>Approach 1 is least preferred</li></ul>
2-2	Protects and preserves the urban tree canopy	<ul style="list-style-type: none"><li>Total area of forest canopy</li></ul>	Results not available	Results not available	Results not available	Results not available

2.5 Objective 3: Be future focused

2.5.1 Objective description

The growth scenarios should reflect a Kitchener of up to 450,000 residents by 2051 that serves as a strategic decision-making tool that provides benefits to the community.

2.5.2 Evaluation Criteria

Criteria ID	Criteria The degree to which the approach to growth...	What will be measured	Scoring / Outcomes			
			Approach 1	Approach 2	Approach 3	Summary
3-1	Optimizes the use of existing and planned water/wastewater infrastructure	<ul style="list-style-type: none"><li>• % of new residential units and jobs that are within areas with existing and planned infrastructure (water, wastewater capacity)<ul style="list-style-type: none"><li>○ Per capita demand</li><li>○ Max day demand peaking factor</li><li>○ Servicing Criteria<ul style="list-style-type: none"><li>▪ Pressure</li><li>▪ Headloss</li><li>▪ Fire Flow</li></ul></li></ul></li></ul>	Water: 98%  Wastewater: 100%	Water: 98%  Wastewater: 100%	Water: 91%  Wastewater: 100%	<p>Water:</p> <ul style="list-style-type: none"><li>• This is the % of scenario-specific growth that that has available pressure and fire flow within the preferred range under existing and planned infrastructure conditions.</li><li>• Moderate differences between approaches</li><li>• Approach 1 and Approach 2 most preferred</li></ul> <p>Wastewater:</p> <ul style="list-style-type: none"><li>• The % of scenario-specific making use of planned interventions in the ISAN-MP 2024. Growth values provided for this study were lower than what was used in ISAN-MP.</li><li>• No differences between approaches</li></ul>
3-2	Optimizes the use of existing and planned road infrastructure	<ul style="list-style-type: none"><li>• Average road utilization factor based on vehicle kilometres traveled</li></ul>	0.400	0.396	0.404	<ul style="list-style-type: none"><li>• Minimal differences between each growth scenario, and each scenario operates well given V/C of 0.4</li></ul>
3-3	Reduces costs of new infrastructure	<ul style="list-style-type: none"><li>• Total order of magnitude cost of new infrastructure required to support growth (transportation, water and wastewater)</li></ul>	Water: 1.0  Wastewater: 1.0	Water: 1.7  Wastewater: 1.0	Water: 3.0  Wastewater: 1.0	<p>Water:</p> <ul style="list-style-type: none"><li>• Relative cost of local watermain upgrades required to meet fire flow at scenario-specific growth buildings.</li><li>• Notable differences between approaches</li><li>• Approach 3 is least costly, Approach 1 is most costly</li></ul> <p>Wastewater:</p> <ul style="list-style-type: none"><li>• No upgrades needed on all approaches, beyond what was proposed in ISAN-MP. Planned upgrades CB-6 and CB-7 of the ISAN-MP are no longer required</li><li>• No differences between approaches</li></ul>

Criteria ID	Criteria The degree to which the approach to growth...	What will be measured	Scoring / Outcomes			
			Approach 1	Approach 2	Approach 3	Summary
3-4	Minimizes long term operations and maintenance costs	<ul style="list-style-type: none"> <li>Any known operational issues associated with servicing needs to accommodate growth</li> <li>Estimated operation and maintenance costs for bus service</li> </ul>	Increased service for corridors  \$766.9M	Increased rapid transit  \$767.0M	Increased local service  \$758.0M	<ul style="list-style-type: none"> <li>Moderate differences between approaches</li> <li>Approach 1 and Approach 2 are preferred</li> </ul>
3-5	Optimizes the use of existing and planned schools	<ul style="list-style-type: none"> <li># and % of population within 800 metres of existing elementary and high schools; and</li> <li># and % of population within 400 metres of existing elementary and high schools</li> </ul>	<b>800m</b> 49,132 people  <b>400m</b> 16,807 people	<b>800m</b> 54,601 people  <b>400m</b> 30,197 people	<b>800m</b> 49,888 people  <b>400m</b> 27,328 people	<ul style="list-style-type: none"> <li>Moderate differences between results at 800m distance</li> <li>Substantial differences at 400m distance</li> <li>Approach 2 is most preferred</li> <li>Approach 1 is least preferred</li> </ul>
3-6	Optimizes the use of existing parks and sports fields	<ul style="list-style-type: none"> <li>% of population within 800 metres of existing parks and sports fields; and</li> <li>% of population within 400 metres of existing parks and sports fields</li> </ul>	<b>800m</b> 55,798 people  <b>400m</b> 40,054 people	<b>800m</b> 55,979 people  <b>400m</b> 50,413 people	<b>800m</b> 56,272 people  <b>400m</b> 51,564 people	<ul style="list-style-type: none"> <li>Minimal differences between results at 800m distance</li> <li>Substantial differences at 400m distance</li> <li>Approach 3 is most preferred</li> <li>Approach 1 and Approach 2 are least preferred</li> </ul>
3-7	Optimizes the use of existing and planned libraries and community centres	<ul style="list-style-type: none"> <li>% of population within 2.5 kilometres of existing and planned libraries and community centres; and</li> <li>% of population within 1.25 kilometres of existing and planned libraries and community centres</li> </ul>	<b>2.5km</b> 53,876 people  <b>1.25km</b> 39,435 people	<b>2.5km</b> 55,979 people  <b>1.25km</b> 55,520 people	<b>2.5km</b> 54,942 people  <b>1.25km</b> 41,245 people	<ul style="list-style-type: none"> <li>Minimal differences between results at 2.5km distance</li> <li>Substantial differences at 1.25km distance</li> <li>Approach 2 is most preferred</li> <li>Approach 1 is least preferred</li> </ul>
3-8	Optimizes the use of existing and planned retail food uses	<ul style="list-style-type: none"> <li>% of population within 800 metres of existing and planned retail food stores</li> </ul>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>
3-9	Minimizes carbon emissions through support for a variety of built forms, compact growth and intensification	<ul style="list-style-type: none"> <li>Overall GHG emissions (units of measurement to be confirmed)</li> <li>GHG emissions per capita (units of measurement to be confirmed)</li> </ul>	Total: 424.1 Tonne CO2e Per Capita: 1.0 Tonne CO2e/person	Total: 422.0 Tonne CO2e Per Capita: 1.0 Tonne CO2e/person	Total: 421.1 Tonne CO2e Per Capita: 1.0 Tonne CO2e/person	<ul style="list-style-type: none"> <li>Negligible differences between approaches</li> </ul>
3-10	Maximizes the energy efficiency associated with the built environment	<ul style="list-style-type: none"> <li>Energy consumption per capita</li> </ul>	37.2 GJ/Person	37.1 GJ/Person	37.0 GJ/Person	<ul style="list-style-type: none"> <li>Negligible differences between approaches</li> </ul>
3-11	Maximizes energy efficiency associated with transportation activities	<ul style="list-style-type: none"> <li>Energy consumption for transportation per capita</li> </ul>	Total (all fuel types): 1.5 Tonne CO2e	Total (all fuel types): 1.48 Tonne CO2e	Total (all fuel types): 1.5 Tonne CO2e	<ul style="list-style-type: none"> <li>Negligible differences between approaches</li> </ul>
3-12	Maximizes energy efficiency associated with building heating/cooling activities	<ul style="list-style-type: none"> <li>Energy consumption for heating and cooling per capita</li> </ul>	1190.32 GJ (thousands)	1173.16 GJ (thousands)	1182.52 GJ (thousands)	<ul style="list-style-type: none"> <li>Negligible differences between approaches</li> </ul>

Criteria ID	Criteria The degree to which the approach to growth...	What will be measured	Scoring / Outcomes			
			Approach 1	Approach 2	Approach 3	Summary
3-13	Provides an opportunity for alternate energy opportunities, such as district energy	<ul style="list-style-type: none"> <li>Share of new dwellings which achieve a given threshold for viability of district energy (based on energy/heating densities)</li> </ul>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>
3-14	Addresses risk and vulnerability of the built environment to extreme weather and changing climate patterns, including heat, precipitation and flooding/property damage	<ul style="list-style-type: none"> <li>Total impermeable surface area</li> </ul>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>
3-15	Influences household energy costs and vulnerability to energy system change	<ul style="list-style-type: none"> <li>Energy costs per household</li> </ul>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>
3-16	Enables opportunities for renewable energy generation	<ul style="list-style-type: none"> <li># of dwellings in proximity to waste heat or potential geothermal locations</li> <li># of jobs in proximity to waste heat or potential geothermal locations</li> </ul>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>	<i>Results not available</i>
3-17	Requires a shift in mode share beyond what is being planned for	<ul style="list-style-type: none"> <li>Delta between scenario mode share vs. mode share being planned for in existing transportation plans</li> </ul>	Auto: 37.1%, Transit: 52.0% Active Transportation: 10.9%	Auto: 36.9% Transit: 52.1% Active Transportation: 11.0%	Auto: 37.6% Transit: 51.5% Active Transportation: 10.9%	<ul style="list-style-type: none"> <li>Negligible differences between approaches</li> </ul>

2.5.3 Other commentary

2.5.3.1 CIMA+

There are areas of the system which are supplied by single non-redundant watermains. The following scenario specific growth is in these areas:

- 1% of scenario 1
- 0% of scenario 2
- 2% of scenario 3

2.5.3.2 Watson

Regarding assessment and tax revenue, any potential differences between the growth scenarios in assumed tax revenues would be nominal due to the population and employment forecast being almost the same for each scenario.

Regarding capital and lifecycle costs for infrastructure, the differences between the growth scenarios are nominal.

Regarding operating costs and revenues, the operating costs for each growth scenario can be assumed to be the same due to the capital needs being the same across each scenario (acknowledging minor differences in costs for water infrastructure).

Overall, it should be assumed that each of the three growth scenarios will have the same relative financial impact on the City.

2.6 Objective 4: Plan for change across the city

2.6.1 Objective description

The growth scenarios will recognize that all areas of Kitchener are and will continue to change in different ways over the long-term, with a consistent population and employment forecast.

2.6.2 Evaluation Criteria

Criteria ID	Criteria The degree to which the approach to growth...	What will be measured	Scoring / Outcomes			
			Approach 1	Approach 2	Approach 3	Summary
4-1	Supports the objective of enabling development of additional neighbourhood retail and grocery store uses.	<ul style="list-style-type: none"><li>• % of total land area with a density of at least 75 persons and jobs per hectare<ul style="list-style-type: none"><li>○ Based on Census Dissemination Area (CDA) mapping</li><li>○ Existing Census Data; Proposed Scenario densities; and cumulative existing + scenario</li></ul></li></ul>	88 out of 321 CDAs have a density of at least 75 ppj/ha	82 out of 321 CDAs have a density of at least 75 ppj/ha	86 out of 321 CDAs have a density of at least 75 ppj/ha	<ul style="list-style-type: none"><li>• Minimal differences between approaches</li><li>• Approach 1 is most preferred</li></ul>
4-2	Accommodates growth within the city's most situationally vulnerable areas.	<ul style="list-style-type: none"><li>• % of population within areas classified as falling within quintile 4 and quintile 5 of the “Situational Vulnerability” dimension using the Canadian Index of Multiple Deprivation: Ontario data from 2021</li></ul>	Results not available	Results not available	Results not available	Results not available
4-3	[Understand where each of the scenarios allocates new growth in the context of the City’s Demographic (Inequity) Index classes.	<ul style="list-style-type: none"><li>• % and # of population within each Class of the Demographic (Inequity) Index using the data compiled by Dillon Consulting as part of the Social Planning Chapter Figure 11-4: Demographic Inequities In Kitchener.</li></ul>	<b>CUMULATIVE</b>  Class 1: 16% @ 95k people and jobs  Class 2: 20% @ 119k people and jobs  Class 3: 18% @ 106k people and jobs  Class 4: 21% @ 124k people and jobs  Class 5: 25% @ 149k people and jobs   Class 1 + Class 2 = 36%  Class 4 + Class 5 = 46%	<b>CUMULATIVE</b>  Class 1: 16% @ 96k people and jobs  Class 2: 21% @ 123k people and jobs  Class 3: 16% @ 95k people and jobs  Class 4: 21% @ 126k people and jobs  Class 5: 26% @ 152k people and jobs   Class 1 + Class 2 = 37%  Class 4 + Class 5 = 47%	<b>CUMULATIVE</b>  Class 1: 17% @ 102k people and jobs  Class 2: 21% @ 122k people and jobs  Class 3: 18% @ 106k people and jobs  Class 4: 20% @ 119k people and jobs  Class 5: 24% @ 143k people and jobs   Class 1 + Class 2 = 38%  Class 4 + Class 5 = 44%	<ul style="list-style-type: none"><li>• Minimal differences between approaches.</li><li>• Approach 2 has the most amount of people and jobs in areas with the most inequity.</li><li>• Approach 3 has the most amount of people and jobs in areas with the least inequity.</li></ul>

Criteria ID	Criteria The degree to which the approach to growth...	What will be measured	Scoring / Outcomes			
			Approach 1	Approach 2	Approach 3	Summary
4-4	[Understand where each of the scenarios allocates new growth in the context of the City's CMHC (Proximity) Index classes.	<ul style="list-style-type: none"> <li>% and # of population within each Class of the CMHC (Proximity) Index using the data compiled by Dillon Consulting as part of the Social Planning Chapter Figure 11-5: Proximity Index for Kitchener.</li> <li>Measures proximity to the following types of community assets: <ul style="list-style-type: none"> <li>employment</li> <li>transit</li> <li>childcare centres</li> <li>grocery stores</li> <li>health services (including hospitals)</li> <li>libraries</li> <li>pharmacies</li> <li>primary and secondary schools</li> <li>municipal parks</li> </ul> </li> </ul>	<p>Class 1: 36% @ 213k people and jobs</p> <p>Class 2: 15% @ 90k people and jobs</p> <p>Class 3: 12% @ 73k people and jobs</p> <p>Class 4: 15% @ 86k people and jobs</p> <p>Class 5: 22% @ 132k people and jobs</p> <p>Class 1 + Class 2 = 51%</p> <p>Class 4 + Class 5 = 37%</p>	<p>Class 1: 32% @ 189k people and jobs</p> <p>Class 2: 14% @ 84k people and jobs</p> <p>Class 3: 12% @ 71k people and jobs</p> <p>Class 4: 17% @ 99k people and jobs</p> <p>Class 5: 25% @ 149k people and jobs</p> <p>Class 1 + Class 2 = 46%</p> <p>Class 4 + Class 5 = 42%</p>	<p>Class 1: 36% @ 211k people and jobs</p> <p>Class 2: 15% @ 86k people and jobs</p> <p>Class 3: 14% @ 82k people and jobs</p> <p>Class 4: 15% @ 87k people and jobs</p> <p>Class 5: 21% @ 125k people and jobs</p> <p>Class 1 + Class 2 = 50%</p> <p>Class 4 + Class 5 = 36%</p>	<ul style="list-style-type: none"> <li>Moderate differences between approaches</li> <li>Approach 1 has the most amount of people and jobs in areas with the least proximity to community assets.</li> <li>Approach 2 has the most amount of people and jobs in areas with the most proximity to community assets.</li> </ul>

2.7 Objective 5: Greater integration of places, systems, and networks

2.7.1 Objective description

Provincial and Regional policy provides strong basis for connecting more people and jobs to mobility networks. The growth scenarios will consider how growth can be allocated and organized to support and leverage investment, operations, and services.

2.7.2 Evaluation Criteria

Criteria ID	Criteria The degree to which the growth scenario...	What will be measured	Scoring / Outcomes			
			Approach 1	Approach 2	Approach 3	Summary
5-1	Allows for easy access to public transit	<ul style="list-style-type: none"><li>% of population within 400 metres of transit stop</li></ul>	97.6%	91.2%	90.8%	<ul style="list-style-type: none"><li>Moderate differences between approaches</li><li>Approach 1 is most preferred</li><li>Approach 3 is least preferred</li></ul>
5-2	Allows for growth to be efficiently serviced by expansions to the transit network	<ul style="list-style-type: none"><li>% of population growth that is above 80 people and jobs/ha density</li><li>% of population and employment growth within 500 metres of the Regional Intensification Corridor</li></ul>	11.63%	13.60%	10.48%	<ul style="list-style-type: none"><li>Minimal differences between approaches</li><li>Approach 2 is most preferred</li><li>Approach 3 is least preferred</li></ul>
5-3	Allows for easy access to places of work via public transit	<ul style="list-style-type: none"><li>% of jobs within 400 metres of transit stop</li></ul>	97.5%	96.6%	96.5%	<ul style="list-style-type: none"><li>Negligible differences between approaches</li></ul>
5-4	Allows for easy access to frequent public transit	<ul style="list-style-type: none"><li>% of population within 500 metres of frequent transit service stops</li></ul>	76%	76%	72%	<ul style="list-style-type: none"><li>Minimal differences between approaches</li><li>Approach 1 and Approach 2 are most preferred</li><li>Approach 3 is least preferred</li></ul>
5-5	Maximizes access to active transportation routes	<ul style="list-style-type: none"><li>% of population within 200 metres of the spine trail network identified in the All Ages and Abilities network in the CTMP</li></ul>	56.9%	54.8%	50.6%	<ul style="list-style-type: none"><li>Minimal differences between approaches</li><li>Approach 1 is most preferred</li><li>Approach 3 is least preferred</li></ul>
5-6	Minimizes vehicle kilometres traveled	<ul style="list-style-type: none"><li># of vehicle kilometres traveled on different kinds of roads</li><li># of vehicle kilometres traveled based on average speed (GHG)</li></ul>	Moderate VKT (185,098 veh-km)	Least VKT (183,475 veh-km)	Most VKT (187,629 veh-km)	<ul style="list-style-type: none"><li>Minimal differences between approaches</li><li>Approach 2 is most preferred</li><li>Approach 3 is least preferred</li></ul>
5-7	Supports multi-modal access and connectivity outside of the City and to other regions	<ul style="list-style-type: none"><li>% population and employment growth within 800 metres of the GO station</li></ul>	8.12%	8.62%	7.89%	<ul style="list-style-type: none"><li>Negligible differences between approaches</li></ul>
5-8	Provides access to commercial areas	<ul style="list-style-type: none"><li>% of population growth within 500 metres of a commercial node</li></ul>	44,096 people	39,197 people	28,867 people	<ul style="list-style-type: none"><li>Substantial differences between approaches</li><li>Approach 1 is most preferred</li></ul>