

Our Plan Toronto: Land Needs Assessment

Date: June 20, 2022

To: Planning and Housing Committee

From: Chief Planner and Executive Director, City Planning

Wards: All

SUMMARY

This report summarizes the findings of the Land Needs Assessment, a component of the Municipal Comprehensive Review of the Official Plan with regards to A Place to Grow: the Provincial Growth Plan for the Greater Golden Horseshoe, 2020.

The Land Needs Assessment is a required study to determine the quantity of land required to accommodate forecasted growth to 2051. The work undertaken through the LNA is a critical component essential to informing the various components of the City's growth management and intensification strategy. The Land Needs Assessment study is undertaken to determine whether or not the municipality can accommodate the forecasted population growth, their housing needs and the land to accommodate that housing. The Land Needs Assessment study is also undertaken to determine whether or not the municipality can accommodate the forecasted employment growth, and to identify the amount of employment land required to achieve the objectives of the City's Official Plan and the objectives of the Growth Plan and the Provincial Policy Statement.

As part of the Land Needs Assessment ("LNA"), the Growth Plan population forecasts were translated into long-range projections of population by age and then into households by taking into account demographic factors and housing occupancy trends. The projected households were translated into demand for different types of housing at different points in time. To determine how much land is required for this housing, staff undertook a series of studies of housing potential across the city. The potential housing supply can be matched to the housing demand in each time period to identify the mix and range of housing required to accommodate the anticipated households.

It is noted that the policies of the Growth Plan represent minimum standards and within the framework of the Provincial policy-led planning system, decision-makers are encouraged to go beyond these minimum standards to address matters of importance, unless conflict arises with other policies of that Plan.

The Land Needs Assessment study conclusions are that there is more than sufficient potential housing in areas designated for residential development in the City of Toronto to accommodate the population growth anticipated by Schedule 3 of A Place to Grow, the Growth Plan for the Greater Golden Horseshoe, 2020, ("Growth Plan"). The potential housing supply in the city is more than double the amount of housing required

to accommodate the forecasted population growth between 2016 and 2051. The surplus potential housing stock after accommodating the population growth forecasted by the Growth Plan at 2051 is equivalent to almost forty years of potential housing supply.

This Study demonstrates long-term housing potential based on a citywide analysis of land and development opportunities. The Study also examines long-term housing demand and concludes that the city has more than enough development opportunities to build enough housing for the forecasted population growth. Yet there are short- and mid-term housing issues requiring concerted action now, related to affordability, construction, approvals, charges, interest rates and inflation. There remains a mismatch between the types of housing that people are seeking and the mix of housing types that are anticipated to be built in the short term. The City's has many initiatives underway to address these near-term housing issues.

The LNA determined where and how forecasted employment can be accommodated across the city, within the Employment Areas and Community Areas as described by the Province's Land Needs Assessment Methodology as well as the land use designations of the Official Plan. An analysis of regional economic trends contributed to an understanding of the municipal employment structure and the drivers of the city's employment change. The LNA produced a better understanding of the regional labour force, employment rates and the sectoral composition by place of work. Combined, these factors help to build detailed employment projections by industry at small-area geographies, enabling the calculation of employment densities and future land needs.

The Land Needs Assessment study conclusions are that the City of Toronto can accommodate the forecasted employment growth as per Schedule 3 of the Growth Plan in areas designated for growth by the Official Plan. Toronto needs to retain its currently designated Employment Areas in order to accommodate the forecasted employment growth, and that these lands will need to intensify to accommodate projected growth.

It is acknowledged that other recommendations regarding the Municipal Comprehensive Review of the Official Plan will speak to the evolving form of potential growth and how the population and employment growth manifest through various land use policies that may represent other approaches for accommodating change while sustaining and building infrastructure to achieve complete communities. What is important at this stage of the conformity exercise is that the City can demonstrate that there is more than adequate potential to accommodate the forecasted growth. Policy recommendations including how to optimize for inclusion, climate adaptation and efficient use of land, among other goals, are part of the MCR and ongoing policy updates.

RECOMMENDATIONS

The Chief Planner and Executive Director, City Planning recommends that:

1. Planning and Housing Committee receive this report for information as background to the Municipal Comprehensive Review of the Official Plan with regard for A Place to Grow: the Provincial Growth Plan for the Greater Golden Horseshoe (2020).

FINANCIAL IMPACT

The requirement to undertake and complete a Growth Plan conformity exercise and Municipal Comprehensive Review (MCR) by July 1, 2022 is legislated by the Places to Grow Act and Planning Act. The Land Needs Assessment is a component of the MCR.

City Planning confirms that there are no financial implications resulting from the recommendations included in the report in the current budget year or in future years.

DECISION HISTORY

At its meeting on October 15, 2019, Planning and Housing Committee considered a report from the Chief Planner and Executive Director, City Planning that described [requirements for the Growth Plan \(2019\) conformity exercise and Municipal Comprehensive Review](#). The Committee requested the Chief Planner to report on a work program and associated timing for the completion of the required Growth Plan conformity exercise in the first quarter of 2020.

On June 29, 2020, Council adopted a report on the [Growth Plan Conformity and Municipal Comprehensive Review \(MCR\) Work Plan](#). It directed the commencement of the City's next Municipal Comprehensive Review on August 4, 2020, and requested the Chief Planner and Executive Director, City Planning to receive written requests to convert lands designated Core Employment Areas or General Employment Areas for non-employment uses, pursuant to A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2019) policies 2.2.5.9 and 2.2.5.10.

On February 2, 2022, Council adopted a report on [Our Plan Toronto: Update on Growth Plan Conformity and Municipal Comprehensive Review](#), recommending that Council request the Minister of Municipal Affairs and Housing to exercise his legislative authority under Section 12(3) of the Places to Grow Act to set an alternative date of July 2023 by which the City of Toronto's Official Plan must complete its conformity with the Growth Plan for the Greater Golden Horseshoe.

At its meeting of April 27, 2022, Planning and Housing Committee adopted with amendments the report on [Our Plan Toronto: Draft Official Plan Employment Policies and Chapter 1 Directions for Consultation](#). The report observes that "Toronto is largely built-out and there is fierce competition for land for both residential and employment space. While the Growth Plan sets out growth forecasts for Toronto (+700,000 people and +450,000 jobs) for 2051, it is more important that the City's Official Plan articulates a shared vision of how the city will grow and evolve to 2051. The purpose of Our Plan Toronto is to satisfy Provincial MCR requirements and take the opportunity to engage Indigenous First Nations, Treaty Rights holders and communities, Torontonians, businesses, and stakeholders on the City's future."

Meanwhile, a parallel stream of planning research and monitoring work had been underway to support the ongoing implementation of the Official Plan and to inform the Municipal Comprehensive Review of the Official Plan to bring it into conformity with A Place to Grow, the Provincial Growth Plan for the Greater Golden Horseshoe.

On July 10, 2019, the Planning and Housing Committee adopted without amendment a report on [Housing Occupancy Trends 1996-2016](#), a research bulletin prepared in support of the Official Plan Review. The bulletin examined the influence of demographic, social and market trends on housing occupancy in Toronto between 1996 and 2016, including an in-depth analysis of the underlying factors that affect housing occupancy in the City of Toronto and its trends over time.

At its June 11, 2021 meeting, the Planning and Housing Committee adopted with amendments a report on [Right-Sizing Housing and Generational Turnover](#). This in-depth research [bulletin](#) examined housing suitability, affordability, right-sizing, turnover, and downsizing in Toronto. The bulletin estimated how much new housing stock may be needed in the future if recent trends continue, and how much additional population could be housed in older generations' dwellings when those dwellings turn over to younger generation households. The bulletin also estimated how much new housing stock may be needed in the future if recent trends continue from a demographic perspective.

At the meeting on June 28, 2021, Planning and Housing Committee adopted a report regarding the [Development Pipeline 2021](#). This latest bulletin in the annual series summarizes development activity in the city, as a moving window on the activity over the past five years. This bulletin summarizes all development projects with any development activity between January 1, 2016 and December 31, 2020. In total, 503,362 residential units and 12,853,823 million square metres of non-residential gross floor area had been proposed.

On November 25, 2021, Planning and Housing Committee adopted a report on [Neighbourhood Change and Intensification](#). This [bulletin](#) examined the characteristics and current intensification of lands designated as Neighbourhoods to better understand the broad diversity of neighbourhood types, densities and residential zoning categories and quantified potential changes that could occur with increased as-of-right permissions for ground-oriented units. The findings informed the Expanding Housing Options in Neighbourhoods initiative, an ongoing study exploring new policy approaches that could increase housing diversity in Neighbourhoods.

On May 31, 2022, the Planning and Housing Committee adopted a report regarding the [2021 Toronto Employment Survey](#). The bulletin reports on the, key findings and counts of employment from almost 70,000 business establishments in Toronto for 2021. This bulletin reports on the type and longevity of establishments and employment activity in Downtown, the Centres, Secondary Plan areas, Provincially Significant Employment Zones, and designated Employment Areas. The 2020 and 2021 bulletins included findings on the initial impacts of the COVID-19 pandemic and initial signs of economic recovery.

COMMENTS

Policy Context

Provincial Policy Statements and Provincial Plans, along with municipal official plans, provide a policy framework for planning and development in the Province. The Land

Needs Assessment study has been undertaken in accordance with these policies and plans. The policy context is discussed in detail in Attachment 1 and is summarized below.

Provincial Policy Statement

The Provincial Policy Statement (2020) (the "PPS") provides province-wide policy direction on land use planning and development to promote strong communities, a strong economy, and a clean and healthy environment. The PPS contains a series of policies intended to manage and direct land use to achieve efficient and resilient development and land use patterns.

- Policy 1.1.3.2 regarding settlement areas emphasizes the importance of achieving an efficient use of land and resources in both transit-supportive and freight-supportive contexts within Settlement Areas.
- Policy 1.3.1 directs that that planning authorities promote economic development competitiveness include planning for an appropriate mix and range of employment types, creating a diversified economic base, facilitating the conditions for economic investment, and policies that support the efficient use land for employment near supportive infrastructure.
- Policy 1.3.2 provides specific guidance with respect to Employment Areas that reinforce principles such as mitigating land use conflicts and leveraging infrastructure investments.
- Policies 1.3.2.4 states that "planning authorities may permit conversion of lands within employment areas to non-employment uses through a comprehensive review", and "only where it has been demonstrated that the land is not required for employment purposes over the long term". Policy 1.3.2.5 sets out specific conditions, including that: "(a) there is a need for the conversion and the land is not required for employment purposes over the long term".
- Policy 1.3.2.7 permits municipalities to plan beyond 25 years for the long-term protection of Employment Areas in cases where "an alternate time period has been established for specific areas of the Province as a result of a provincial planning exercise or a provincial plan", enabling the City to plan to 2051 as prescribed by the Growth Plan.
- Policy 1.4.1 requires planning for an appropriate range and mix of housing options and densities required to meet projected requirements of current and future residents of the regional market area, by maintaining the ability to accommodate residential growth for a minimum of 15 years. This is to be achieved through residential intensification and redevelopment and, if necessary, lands which are designated and available for residential development; and where new development is to occur, land with servicing capacity sufficient to provide at least a three-year supply of residential units available through lands suitably zoned to facilitate residential intensification and redevelopment, and land in draft approved and registered plans.

A Place to Grow: Growth Plan for the Greater Golden Horseshoe

The Growth Plan (2020) came into effect on August 28, 2020. "The Growth Plan" provides a strategic framework for managing growth and environmental protection in the Greater Golden Horseshoe (GGH) region, of which the City of Toronto is an integral part. Section 26 of the Planning Act requires all GGH municipalities to implement the policies of the Growth Plan through a Municipal Comprehensive Review ("MCR").

The Growth Plan requires municipalities to undertake integrated planning to manage forecasted growth to the 2051 planning horizon. In particular and relevant to the Our Plan Toronto process, the Growth Plan requires the City to:

- assess the quantity of land required to accommodate forecasted growth through the Land Needs Assessment;
- delineate MTSA boundaries and identify minimum density targets;
- prohibit residential land uses in employment areas and prohibit or limit other sensitive land uses in employment areas;
- establish size or scale thresholds for major retail uses;
- apply specific criteria for conversion of employment areas to non-employment uses;
- establish minimum density targets for all employment areas; and
- address compatibility issues between employment areas and non-employment areas.

The Growth Plan provides specific direction as it relates to the assessment of land needs, including:

- Policy 2.2.1.1. Population and employment forecasts contained in Schedule 3 or such higher forecasts as established by the applicable upper- or single-tier municipality through its municipal comprehensive review will be used for planning and managing growth in the GGH to the horizon of this Plan in accordance with the policies in subsection 5.2.4.
- Policy 2.2.1.2. Forecasted growth to the horizon of this Plan will be allocated based on the following: maintain at all times the ability to accommodate residential growth for a minimum of 15 years within settlement areas, growth will be focused in delineated built-up areas; strategic growth areas; locations with existing or planned transit, with a priority on higher order transit where it exists or is planned; and areas with existing or planned public service facilities;
- Policy 2.2.1.3. Upper- and single-tier municipalities will undertake integrated planning to manage forecasted growth to the horizon of this Plan, which will:...(e) be implemented through a municipal comprehensive review;
- Policy 2.2.1.5. The Minister will establish a methodology for assessing land needs to implement this Plan, including relevant assumptions and other direction as required. This methodology will be used by upper- and single-tier municipalities to assess the quantity of land required to accommodate forecasted growth to the horizon of this Plan.

- Policy 2.2.5 contains a series of policies aimed at efficiently using existing Employment Areas, ensuring land availability, minimizing land use conflicts, and concentrating intensive uses in proximity to supportive infrastructure. The importance of intensification is emphasized by Clause 2.2.5.13 which directs the creation of minimum density targets for all Employment Areas.
- Policy 2.2.5.6 states that Employment Areas are to be protected over the long term and conversions can only occur in the limited circumstances described in other policies.
- The Growth Plan policies regarding housing specifically address accommodating the forecasted growth, including: Policy 2.2.6.2 specifies that notwithstanding policy 1.4.1 of the PPS, 2020, ...municipalities will support the achievement of complete communities by:
 - a) planning to accommodate forecasted growth to the horizon of this Plan;
 - b) planning to achieve the minimum intensification and density targets in this Plan;
 - c) considering the range and mix of housing options and densities of the existing housing stock; and
 - d) planning to diversify their overall housing stock across the municipality.
- Policy 2.2.6.4 requires that municipalities will maintain at all times where development is to occur, land with servicing capacity sufficient to provide at least a three-year supply of residential units. This supply will include, and may exclusively consist of, lands suitably zoned for intensification and redevelopment.
- Policy 5.2.2.1 states that the Minister of Municipal Affairs and Housing will establish a Methodology for assessing land needs to implement the Growth Plan.

What is the Purpose of an LNA?

The Minister formally issued the final Land Needs Assessment Methodology ("LNA Methodology") on August 28, 2020. Upper- and single-tier municipalities in the Greater Golden Horseshoe are required to use the LNA Methodology in combination with the policies of the Growth Plan to assess the quantity of land required to accommodate forecasted growth. The LNA Methodology requires each upper- and single-tier municipality in the Greater Golden Horseshoe to consider land needs for two types of geographies:

- **Community Areas:** Areas where most of the housing required to accommodate the forecasted population will be located, as well as most population-related jobs, most office jobs and some employment land employment jobs. Community areas include delineated built-up areas and designated greenfield areas.
- **Employment Areas:** Areas where most of the employment land employment jobs are (i.e. employment in industrial-type buildings), as well as some office jobs and some population-related jobs, particularly those providing services to the employment area. Employment areas may be located in both delineated built-up areas and designated greenfield areas.

The Land Needs Assessment ("LNA") is a study undertaken by City staff that is intended to determine the land required to accommodate the forecasted population growth in a range and mix of housing that can accommodate households of different sizes in locations that provide transportation options and access to jobs and other amenities.

The LNA study determines the need for Employment Area land based on the number of jobs to be accommodated and the projected densities of those Employment Areas. The work undertaken through the LNA is essential to inform the various components of the City's intensification strategy and to identify the amount of Employment Areas required to achieve the objectives of the City's employment lands strategy as represented by the Official Plan and those of the Provincial Policy Statement.

The LNA provides a framework for assessing the various policy tests and directions under both the PPS and the Growth Plan. It enables an assessment as to whether or not the forecasted population can be accommodated in lands designated for residential development, for determining the need for employment area land to accommodate forecasted employment, and the quantified assessment of need for the conversion of the lands to accommodate either land need.

City Context

Population is on track with the Growth Plan Forecasts

The city's population is on track with the population forecasts in Schedule 3 of the Growth Plan for the Greater Golden Horseshoe. Based on Statistics Canada's [Annual Demographic Estimates for Subprovincial Areas](#), the actual population of Toronto has been slightly below the forecasts supporting the Growth Plan, but generally on track with the forecast trajectory over the long term.

"The Greater Golden Horseshoe: Growth Forecasts to 2051", the underlying technical forecast study ("Technical Report") to the Growth Plan was prepared by Hemson Consulting Ltd. and released in August 2020. The 2051 forecasts in the amended Growth Plan correspond to the Reference Scenario in the Technical Report. That Scenario has a 2016 population of 2,819,000 and a 2021 forecast population of 3,034,000. If the Reference Scenario is interpolated to 2020, the anticipated 2020 population is 2,991,000. According to Statistics Canada, the city's estimated actual population in 2020 of 2,990,856, is very close to the level anticipated by the forecasts supporting the Growth Plan.

The COVID-19 pandemic has impacted the city's population growth

The 2021 population estimate for Toronto by Statistics Canada is lower than the 2020 estimate. Whereas the forecasts supporting the Growth Plan anticipated a 2021 population (including undercoverage) of 3,034,000, the preliminary population estimate is 2,974,293, a difference of 59,707. This is about 1.6 years of population growth by comparison to the 2015-2020 period of 38,484 people per year on average. Estimates of the components of population growth indicate that there has been a year-over-year decrease in migration of 48,136 people, and international migration represents 81% of

the decline (see Attachment 2). With the ending of pandemic restrictions and increasing international travel, the population decline may be short-lived.

Employment growth is on track with the Growth Plan forecasts

The 2019 Growth Plan contained employment growth forecasts for the City of Toronto to 2041, and forecasted employment growth to reach 1,720,000 jobs by 2041. Schedule 3 of the Growth Plan was amended in 2020. A Place to Grow, the Provincial Growth Plan 2020 contains an employment forecast of 1,980,000 for the City of Toronto in 2051. This forecast was updated in 2020 based on the Technical Report by Hemson Consulting Ltd., released on August 26, 2020. Under the Reference Scenario, employment within Toronto was forecasted to grow to 1,979,000 by 2051. The forecasted rate of job growth is approximately 0.6% per annum.

From 2009 to 2019, the Toronto Employment Survey (TES) measured employment growth at a much higher rate of 2.0%, accelerating to 2.6% during the years 2016-2019. These high rates of growth would have led Toronto to reach the 2051 Growth Plan forecast sometime around 2030, at least 21 years before the forecast (see Table 1).

Table 1: Employment Forecast Scenarios, 2016-2051

Scenario	2016	2051	2016-2051	P.A.	PA % (CAGR)	Years
Growth Plan Reference	1,608,000	1,979,000	371,000	10,600	0.6%	35
	2009	2019	2009-2019			
TES 10 Years to 2019	1,293,190	1,569,800	276,610	27,661	2.0%	14
	2011	2021	2011-2021			
TES 10 Years to 2021	1,317,300	1,451,520	134,220	13,422	1.0%	28

Note: P.A. abbreviates per annum. CAGR abbreviates Compound Annual Growth Rate.

Source: Toronto Employment Survey 2021, research bulletin, Toronto City Planning, May 2022, available at: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2022.PH34.13>; Hemson Consulting Ltd., 2020, Greater Golden Horseshoe: Growth Forecasts to 2051 (Technical Report).

The COVID-19 pandemic has impacted the city's employment growth

The effects of the pandemic have slowed employment growth considerably. In 2021, the measured five-year and ten-year growth rates are much lower, at 0.15% and 1.0% respectively. Part of this effect may be a result of the reduced response rate of the Survey during 2020 and 2021 due to pandemic conditions. However, this more moderate growth rate would still lead Toronto to reach the 2051 Growth Plan Forecast sometime before 2044. This scenario would represent some degree of economic recovery going forward.

As noted in Hemson's 2020 Technical Report, the long-term economic impacts of the pandemic remain uncertain. While the report's authors assume a recovery period of approximately three years, they emphasize the unpredictability of potential outcomes and that specific industries, firms, and individuals may face prolonged challenges.

Indeed, pre-pandemic norms about how and where we work may be replaced with new norms that could impact Toronto's land use structure going forward.

Community Area Land Needs Assessment for Housing

Methodology Overview

The Land Needs Assessment study has been undertaken in parallel with other elements of the MCR. This study has as its starting point and context the growth management, intensification and employment land strategies established by the Official Plan, as amended from time to time. The Study methodology reflects the Provincial Land Needs Assessment Methodology. Some components of the Provincial methodology do not apply to the City of Toronto.

Community Area Land Needs Assessment Methodology for Population and Housing

In order to implement the Official Plan and to assess the city's land needs over the forecast horizon of the Growth Plan, projections of population and households by type of dwelling for small geographic areas were required. The methodology for the Community Area Land Needs for population and housing is displayed in Figure 1 while Figure 2 shows the principal geographic study areas of the sources of potential housing supply.

Population Forecasts and Projections (Component 1)

- A cohort-component model was constructed to project the population by single years of age and sex to 2051. The population forecast in Schedule 3 of the Growth Plan, and supporting forecasts in the Technical Report by Hemson Consulting Ltd, were used as control totals. (See Attachment 2 for the detailed methodology.)

Housing Demand (Component 2)

- The projected population is translated into projected household demand based on an analysis of household headship rates and the occupancy rates of different types of dwellings. This results in demand-driven projections of housing need. (See Attachment 3 for the detailed methodology.)
- The methodology addresses the many dimensions of the demand for housing via the research bulletin Housing Occupancy Trends 1996-2016. The research bulletin Right-Sizing Housing and Generational Turnover is our assessment of housing suitability, affordability and occupancy standards in order to identify housing needs for which to provide a "complete range of housing". Affordability in future, prices, interest rates and market dynamics were outside the scope of that Study.

Housing Supply (Component 4)

- A methodology was devised to identify potential housing supply, with a consistent series of dimensions of location, type, timing and magnitude. A key principle was to avoid overlapping sources and geographies such that every potential unit was counted only once.
- Potential housing supply was identified from a variety of sources including current development proposals that represent market-based demand, as well as remaining

residential potential within Official Plan growth management areas, major redevelopment opportunities, as-of-right construction and estimated demolitions.

- An integrated housing supply model was constructed, combining the various sources of potential supply. This included the location and estimated phasing of the potential units in each source. This was used to identify the distribution of potential housing across the city over time by type of dwelling.
- The potential supply has been matched to the projected total housing demand while accounting for the different occupancy rates of different types of dwellings.
- The existing housing stock represented by the occupied units in the base year are adjusted for estimated demolitions including those that may be required to realize the new supply.
- Potential housing is drawn from each source of supply into the supply stream in a given time period to accommodate the anticipated demand in that period. Units cannot be drawn into the supply before they become available, and available units not required in the time period in which they are anticipated are carried forward as potential supply in subsequent time periods. Thus, potential housing supply does not expire and is conserved over the forecast horizon.

Small-Area Projections

- Local occupancy rates by dwelling type are applied to the housing supply to determine the potential occupancy in small areas such as Census Tracts and Traffic Zones. Projected population in collective dwellings are included in the total demand.
- The sum of the population in potential occupied units and collective dwellings is compared back to the population forecast control totals, adjusted for Census undercoverage. The supply is further adjusted until the forecasted population has been fully accommodated in each time period.

Other Components

Some components of the Provincial methodology do not apply to the City of Toronto.

- Component 3 - Allocation of Housing Needs: As a single-tier municipality, there is no allocation of housing need to local municipalities.
- Component 4 - Housing Supply Potential by Policy Areas: There is only one policy area in Toronto, the Delineated Built-up Area. The residential potential for the city is entirely within Delineated Built-up Area. All growth is intensification. The City has no Designated Greenfield Areas and no Rural Areas.
- Component 5 - Community Area Jobs: This is addressed through the employment land needs assessment.
- Component 6 - Need for Additional Land: The City of Toronto is bounded by other municipalities and has no potential for additional land. The objective becomes to demonstrate that the forecasted growth, translated into housing demand by unit type over the forecast period, can be accommodated within the potential housing supply.

Time Frames

This LNA methodology enables the construction of a reasonable model of how, where and when the forecasted population could be accommodated within the city in accordance with Official Plan policies, over thirty-five years from 2016 to Growth Plan forecast horizon of 2051. The base year of the projections is 2016 given the available

Census data and as per the base year of the Hemson forecasts in the Technical Report supporting the Growth Plan.

Alternate Growth Scenarios

The LNA Methodology allows the consideration of alternate growth scenarios. Multiple scenarios were considered, including the Hemson 2020 Reference and High Forecasts from their Technical Report supporting the Growth Plan as amended in 2020. These are used as control totals in projecting the total population to be accommodated. It is important to note that household forecasts of the Technical Report are not part of Schedule 3 of the Growth Plan. The Ministry of Finance 2021 population projections were also considered as an alternate scenario. A "Maximum" scenario was constructed, representing the unlikely outcome in which all of the identified housing potential were realized within the Growth Plan forecast horizon.

Assembling the Development Potential

In order to assemble the development potential across the city, staff identified sites across the city with potential for residential, non-residential or mixed-use development. The information collected about the sites informs a number of models within the LNA, including the Opportunities Analysis, Downtown Growth Analysis, Centres and Midtown Potential and the Employment Projections. The sites include locations along the Avenues. In identifying these sites, the policy framework was taken into account e.g. existing Secondary Plans, Official Plan land-use designations, Site and Area Specific Policies, as well as other factors that could influence the scale and timing of development, including studies underway and impacts of the expanded transit network.

The staff analysis included identification of sites and information that included details about the size (units or GFA), built form (ground-related including buildings four storeys or fewer, mid-rise including buildings 5 to 11 storeys or high-rise including buildings twelve storeys or taller), and the estimated timeframe for build-out and full occupation of units associated with each site. Where information on the size was not known, other factors were considered, including appropriate Floor Space Index (FSI), height and lot coverage rates for each site. Staff estimated the potential on each site. In the case of estimating residential potential, additional inputs were also devised including medium unit size and median unit per hectare rates, based on a review of recent development trends. In estimating non-residential potential, staff provided their professional opinion on the estimated breakdown of total non-residential gross floor area by office, retail, industrial and institutional uses.

Potential Housing Supply

Context

As a part of the Municipal Comprehensive Review, an analysis was undertaken to determine whether or not the City of Toronto has sufficient housing capacity to accommodate the forecasted growth in occupied households anticipated by the Growth Plan. This potential was assessed within the context of the existing Official Plan land use designations and policies.

Figure 1: Land Needs Assessment Methodology - Community Area Land Needs Assessment

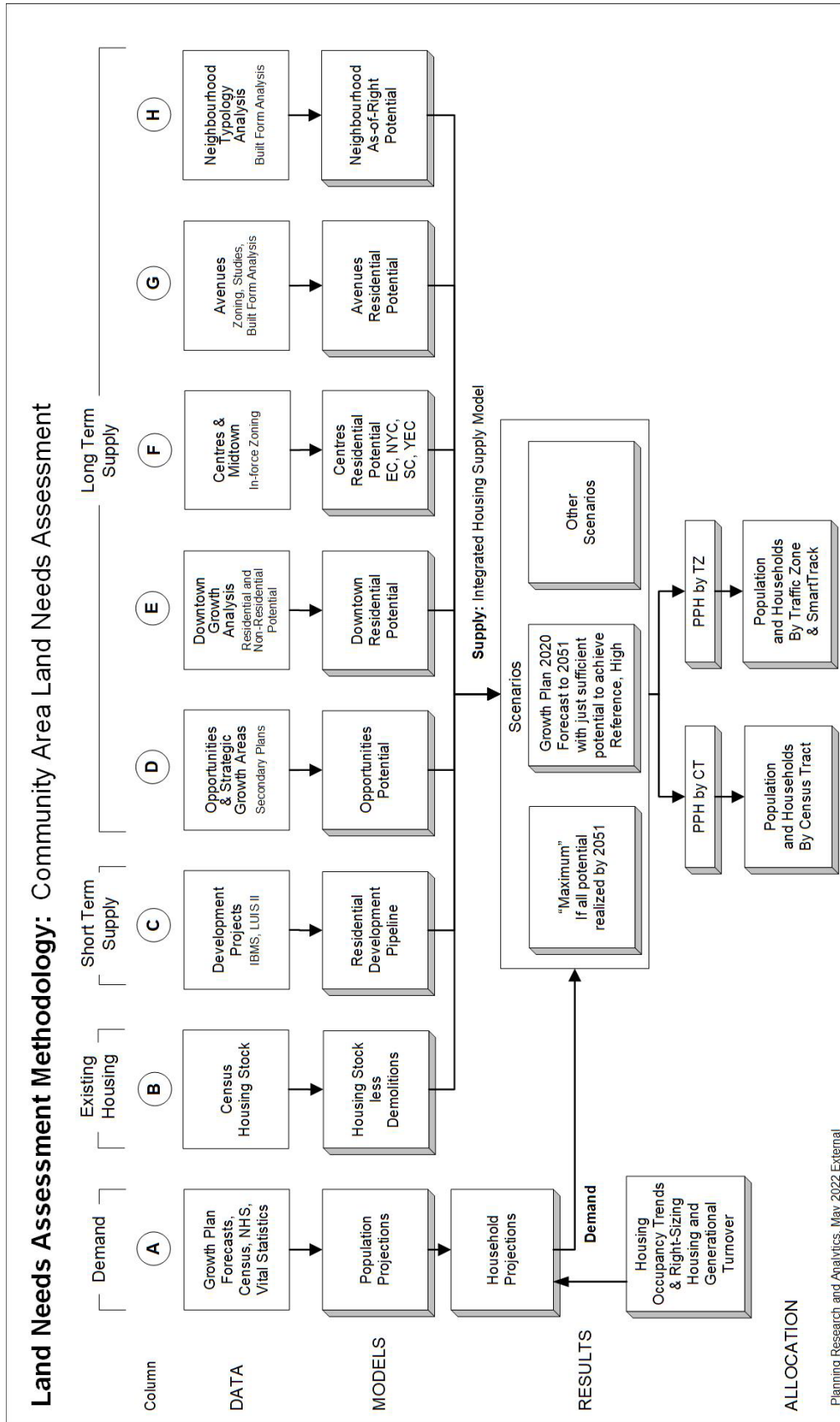
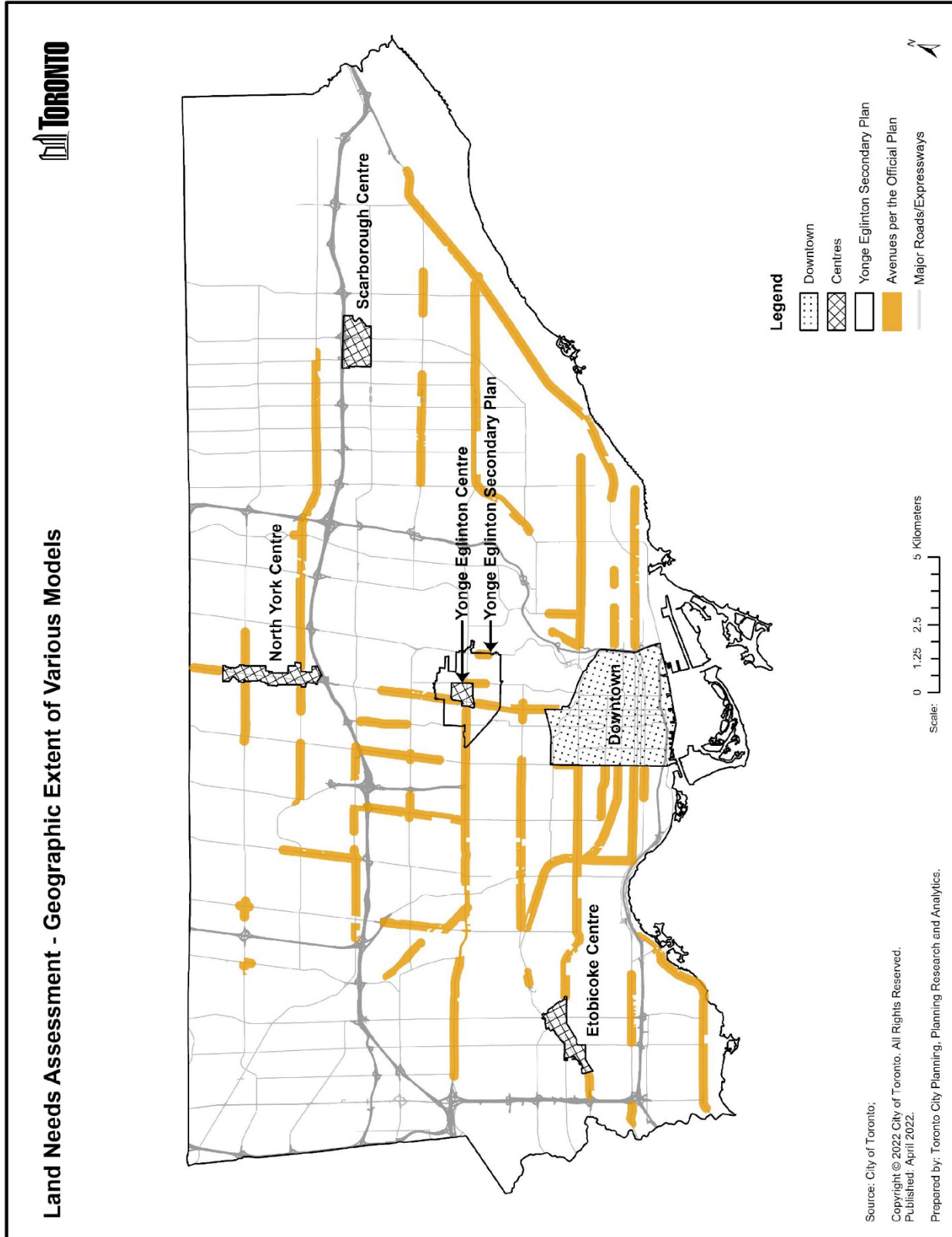


Figure 2: Map of LNA Model Study Areas



Toronto's Official Plan is the guide for development in the City over the next 35 years. Its central geographic theme is to direct growth to appropriate areas. It directs residential growth to Mixed Use Areas along arterial roads well served by public transit, protecting employment lands for employment uses. The Urban Structure Map of the Plan (see Figure 3) currently identifies areas most appropriate for residential intensification as Downtown, the Centres and Avenues. The Plan also identifies Secondary Plan areas requiring specialized growth management while they are undergoing major redevelopment and intensification. Potential housing supply was identified in the context of the Official Plan's policy directions, identifying opportunities for residential redevelopment and intensification. As noted in the summary of this report, future land use policy changes this MCR may further direct how change will manifest as the City evolves.

Sources of Supply

There are several sources of the supply of potential housing in the City. These represent distinct geographic areas with different land use characteristics, existing planning and building permissions and development potential. Residential potential throughout the City was identified in accordance with the growth management and land use policies of the Official Plan. There are several sources of the supply of potential housing in the City. These sources include the following:

- MCR Residential Development Pipeline
- Opportunities Analysis
- Downtown Growth Analysis
- Centres and Midtown Potential
- Avenues Residential Potential
- Neighbourhood Typology and Intensification Analysis.

Each source of supply was reviewed to determine its potential for generating and accommodating new housing in areas identified for growth by the Official Plan. These include the "pipeline" of recent residential development proposals received by the City and still considered active. Residential development proposals in designated Employment Areas were excluded, and other than that which may occur within Provincially-led proposals for Transit-Oriented Communities, designated Employment Areas were not included in the assessment of residential potential.

In order to build new units in a City characterized by redevelopment and intensification, usually some existing units are demolished. Residential demolitions were also estimated and applied against the 2016 Census housing stock and the residential potential in order to determine the net potential housing supply.

The various sources of potential housing supply were combined so that the residential development potential on a given site was counted only once. This analysis yielded a total residential potential of 1,198,728 units. After accounting for estimated demolitions that may be required to realize this potential, the net residential potential is 1,138,907 units. See Table 2.

Figure 3: Official Plan Urban Structure Map



Table 2: Potential Housing Supply

Source of Supply	Ground-Related units	Apartments in a Building of 5 or more storeys	Total	Share
MCR Pipeline - Built Projects ^{1,2}	5,468	86,102	91,570	8.0%
MCR Pipeline - Active Projects ^{1,3}	7,820	155,630	163,450	14.4%
MCR Pipeline - Under Review Projects ^{1,4}	5,194	244,753	249,947	21.9%
Opportunities Potential ⁵	14,764	380,685	395,449	34.7%
Downtown Residential Potential ⁶	1,139	119,243	120,382	10.6%
Centres Residential Potential ⁷	1,197	77,212	78,409	6.9%
Avenues Residential Potential ⁸	3,129	27,861	30,990	2.7%
Neighbourhood Intensification ⁹	68,531	0	68,531	6.0%
Estimated Demolitions ¹⁰	-55,835	-3,986	-59,821	- 5.3%
Net Potential Supply ¹¹	51,407	1,087,500	1,138,907	100.0%

Notes:

1) The MCR Pipeline includes all projects with any approval or construction activity from January 1, 2016 to June 30, 2021. The span of MCR Pipeline ensured that the entire intercensal period of May 10, 2016 to May 11, 2021 was included. The MCR Pipeline contains 2,229 development projects comprised of 539,449 residential units and 12.9 million square metres of non-residential gross floor area. Over 85% of the proposed residential development is in areas that the Official Plan has targeted for growth. Projects proposing residential units in designated Employment Areas were excluded from all parts of the MCR Development Pipeline, totaling 132 projects proposing 16,743 units. For more information, see Attachment 4.

2) Built Projects are those which became ready for occupancy and/or were completed between January 1, 2016 and June 30, 2021. Projects completed before 2016 Census Day, May 10, 2016, were also excluded, as these 95 projects proposing 17,817 units are deemed to have been captured by the 2016 Census.

3) Active projects are those which have received at least one Planning approval, and may have Building Permits applied for or issued, or for which construction has started, but which have not yet been built between January 1, 2016 and June 30, 2021.

4) Under Review projects are those which were received between January 1, 2016 and June 30, 2021 and have not yet been approved or refused, and those which are under appeal.

5) Development Opportunities include remaining residential potential in Secondary Plan areas, potential identified in areas designated for residential growth by the Official Plan, recent Ontario Land Tribunal Decisions, and Transit-Oriented Communities. Where Opportunities and Avenue sites overlap, Opportunity estimates are used. The Opportunities exclude Downtown, the Centres, and the Yonge-Eglinton Secondary Plan area. For more information, see Attachment 5.

6) Development potential in Downtown where sites had underutilized residential development potential relative to the Downtown Plan policy framework and planning guidelines. For more information, see Attachment 6.

7) Development potential in Etobicoke, North York and Scarborough Centres where sites had underutilized residential development potential relative to the in-force zoning. Yonge-Eglinton Centre potential was based on a development potential analysis for the Secondary Plan review, updated with the permissions established by the Secondary Plan as approved by the Minister of Municipal Affairs and Housing. For more information, see Attachment 7.

8) Residential development potential along the Avenues reflecting in-force zoning by-laws and Avenue Studies. After removing Avenues parcels with development projects that were recently built, active or under review, and those proposed within designated Employment Areas, the remaining residential potential totalled 60,881 units, less 29,891 units already accounted for within Opportunity sites. For more information, see Attachment 8.

9) Neighbourhood potential includes ground-related residential units in Neighbourhood land use areas designated by the Official Plan based on Building Permits completed 2016-2020 plus gentle intensification and allocated across the city based on an analysis of Neighbourhood typologies. Areas covered by the MCR Pipeline, Opportunities and Avenues were excluded. Neighbourhoods within MTSA were not analyzed and Building Permits within them are included as per their historical distribution. For more information, see Attachment 9.

10) Demolitions were estimated based on an analysis of Demolition Permits issued 2006-2020 against all housing stock with adjustments for the anticipated supply. For more information, see Attachment 4.

11) Potential unit totals differ from and are slightly lower than the totals appearing in the Appendices for each Source of Supply due to rounding throughout the modelling processes in order to calculate whole units and not partial units at each step.

Potential Supply of Ground-Related Housing

City Planning's recently published Right-Sizing Housing and Generational Turnover, examines housing suitability, right-sizing, turnover, and downsizing in Toronto. The bulletin estimates the aging of the generations, how each generation translates into households over time, and how many households there may be of each generation in the future. This in turn enables an estimate of how older generations might turn over their homes and when that may occur, and how much of the future demand for housing this turnover might offset. The results indicate that approximately 60% of the future increase in demand for housing can be fulfilled by the turnover of older generations' housing. The demand for apartments, units with up to two bedrooms, and owned units would be fulfilled by a combination of turnover plus new supply, assuming that historic completion levels remained stable. In contrast, future demand would not be fulfilled for single- or semi-detached houses, units with three or more bedrooms, or purpose-built rental units.

It is important to note that this was an analysis of demographic and housing characteristics to assess housing suitability, or how well various households fit in their dwellings. The analysis estimated the types of housing to be demanded by future households to live in housing that meets their needs, as well as the potential for the turnover of housing between generations to meet that demand. The Right-Sizing analysis does not assess affordability in future, and prices, interest rates and market operation are outside the scope of this bulletin. All scenarios are demographic exercises only: the analysis was based on the 2016 demographic trends in Toronto continued into the future, and the continued delivery of units to the market as it has been in the past. The purpose of this analysis was to set a baseline for the projections in the LNA Study, which do consider demographic and housing trends. The Right-Sizing analysis can be used in basic comparisons with the projections of the LNA Study.

The analysis determined that the growth in younger households seeking ground-related housing would be greater than the turnover of the existing ground-related homes by older generations. The increase in demand for single detached, semi-detached and townhouse units above the available stock was estimated at 150,221 units in the Low Unmet Demand Scenario. The LNA Study has identified a potential ground-related housing supply of 107,242 units in buildings with fewer than four units (excluding demolitions so as to be more comparable to the "Right-Sizing" analysis). If realized, this potential would leave a shortfall of 42,979 ground-related units demanded over the 35-year period to 2051, or just 3.6% of the total potential housing supply. This translates into an additional 1,228 ground-related units that would be required per annum to meet the anticipated demand. A shift in supply of just 3.9% of the potential supply of apartments in buildings of 5 or more storeys to ground-related units would be sufficient to meet the remaining demand by 2051.

The current supply of predominantly high-density condominium apartment units built since 2011 appeals to the demands of the regional housing market but may not match the demand anticipated for ground-related units, units with three or more bedrooms, and purpose-built rental units. The City is currently engaged in many initiatives to increase housing supply and options to address this mismatch including the Growing Up guidelines and Secondary Plan policies to encourage a diversified unit mix, as well as the supply of ground-related housing, including increasing permissions for laneway suites, garden suites, and multiplexes.

Implementation of the Expanding Housing Options in Neighbourhoods initiatives of the City Planning Division, including the Multiplex and Garden Suites studies, may contribute to the production of additional semi-detached, duplex, row, or low-rise apartment dwelling units. As these initiatives are implemented, the dwelling type breakdown in future Censuses may start to reflect a changing composition of ground-related housing in the city's low-rise neighbourhoods.

This research also found that there is additional population capacity within the 2016 housing stock. The analysis found that there are a significant number of existing dwellings occupied by older households and, because these households are at a later point in their lifecycle, the dwellings are not presently occupied to their fullest capacity. These dwellings could potentially accommodate more population if that stock turned over to younger and larger households over time. The capacity for an additional 16.1%

persons within older generations' housing stock could be realized, compared to the 2016 population. By 2051, it is estimated that almost all of the housing occupied by older generation households in 2016 will have turned over, thus potentially accommodating an additional 207,240 persons within the existing housing stock. The housing turnover would accommodate 25% of the forecasted population growth anticipated by the Growth Plan by 2051 within the existing housing stock. Consequently, in assessing Toronto's continuing population growth and housing needs, it has been demonstrated that not all future population growth needs to be accommodated in new housing, there is an existing capacity that is in addition to the sources of potential housing identified by the LNA.

Summary of Findings

The resulting population projections including the estimated undercount produce results consistent with the Hemson 2020 Reference Forecast at 2051 and at the intermediate forecast periods, and, consistent with the population forecast in Schedule 3 of A Place to Grow: the Provincial Growth Plan for the Greater Golden Horseshoe, 2020.

**Table 3: Components of Population Change
Hemson 2020 Reference Projection Scenario**

Year	Prior Population	Net Births	Deaths 5 Years of Age & Over	In-Migration	Out-migration	Migration Adjustment, Rounding	Final Population	Population with undercount	Forecast or Projection Control Total
2011							2,615,035	2,704,595	
2016	2,615,035	140,441	57,032	400,980	363,438	-4,441	2,731,545	2,819,370	2,819,000
2021	2,731,545	155,224	63,004	454,100	338,333	-17	2,939,515	3,034,030	3,034,000
2026	2,939,515	168,913	70,879	384,800	360,222	-12	3,062,115	3,160,570	3,160,500
2031	3,062,115	162,660	76,950	403,800	366,982	17	3,184,660	3,287,055	3,287,000
2036	3,184,660	152,996	84,039	394,800	377,512	-5	3,270,900	3,376,070	3,376,000
2041	3,270,900	148,006	92,342	416,300	385,759	15	3,357,120	3,465,060	3,465,000
2046	3,357,120	155,120	98,630	429,600	396,021	1	3,447,190	3,558,025	3,558,000
2051	3,447,190	169,037	103,774	434,900	410,023	-15	3,537,315	3,651,050	3,651,000

In order to achieve this population projection, potential housing from the various sources of supply were allocated into the supply stream for this scenario. Different allocations of the potential supply are possible in order to house the projected households.

To accommodate the population forecasted by the Growth Plan to 2051, only 47.3% of the total potential housing supply is required (see Table 4). The MCR Pipeline, in addition to as-of-right development activity in Neighbourhoods with gentle intensification that is exempted from Site Plan Control, is more than sufficient to accommodate the forecasted demand for housing to 2051 under the Hemson 2020 Reference forecast.

**Table 4: Supply Allocation
Hemson 2020 Reference Projection Scenario**

Hemson Reference Source of Supply	Used				Balance			
	Ground	Apt 5+	Total	Percent	Ground	Apt 5+	Total	Percent
Pipeline - Built	5,468	86,102	91,570	100.0%	0	0	0	0.0%
Pipeline - Active	7,820	155,630	163,450	100.0%	0	0	0	0.0%
Pipeline - Under Review	5,194	238,100	243,294	97.3%	0	6,653	6,653	2.7%
Opportunities	0	0	0	0.0%	14,764	380,685	395,449	100.0%
Downtown	0	0	0	0.0%	1,139	119,243	120,382	100.0%
Centres	0	0	0	0.0%	1,197	77,212	78,409	100.0%
Avenues	0	0	0	0.0%	3,129	27,861	30,990	100.0%
Neighbourhoods	68,531	0	68,531	100.0%	0	0	0	0.0%
Total Supply	87,013	479,832	566,845	47.3%	20,229	611,654	631,883	52.7%

Note: "Ground" means ground-related units; "Apt 5+" means apartments in buildings of 5 or more storeys.

This leaves a surplus of 52.7% of the potential housing supply or 631,883 units. At the average rate of housing completions over the last five years, May 2016 to April 2021, of 15,946 units per annum as reported by Canada Mortgage and Housing Corporation (CMHC), this is a surplus potential of 39.6 years of housing supply.

In this Scenario, the MCR Pipeline and Neighbourhoods development activity were included in the supply stream. The MCR Pipeline represents the short-term housing supply with development applications already filed, while the potential Neighbourhoods supply represents ongoing development activity with gentle intensification. Different allocations of the potential supply are possible, resulting in different spatial distributions of growth across the city.

Other Scenarios

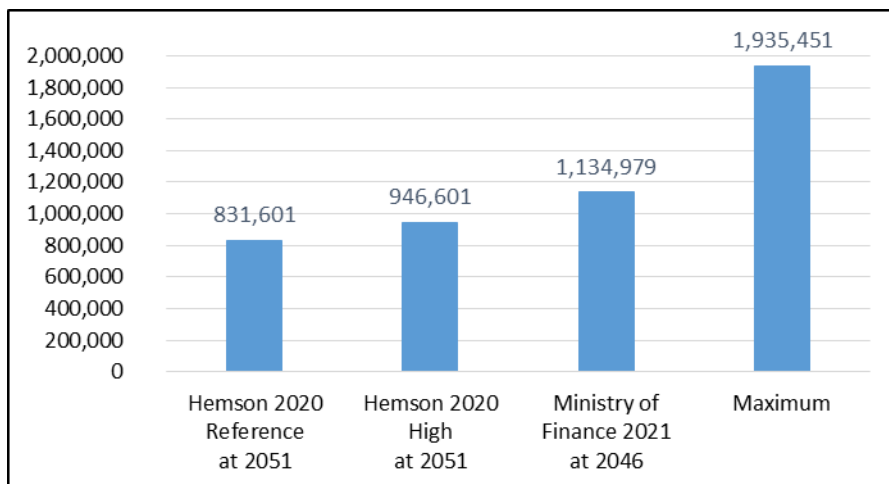
The Maximum Scenario represents the unlikely circumstance in which all of the net potential housing were realized by 2051. In part, this scenario calculates the potential population of the city if all of the potential housing were built. The city's projected population would be 4,754,850 people (see Table 5). This would represent growth of more than 1.9 million people after 2016 (see Figure 4). This would be the equivalent of adding the 2016 population of Montréal to Toronto.

Table 5: Population Growth Scenarios

Projection Scenario	Population	Growth vs. 2016	% Growth
2016 Population with undercount	2,819,399	0	0%
Hemson 2020 Reference at 2051	3,651,000	831,601	29%
Hemson 2020 High at 2051	3,766,000	946,601	34%
Ministry of Finance 2021 at 2046	3,954,378	1,134,979	40%
Maximum	4,754,850	1,935,451	69%

Notes: 2016 Population with undercount is the Final Post-censal Estimate of the city of Toronto's population per Statistics Canada's Annual Demographic Estimates for Subprovincial Areas, 2021. The 2016 population of Montréal was 1,942,044 not including undercoverage.

Figure 4: Projected Population Growth Versus 2016



The LNA Study analysis translates the various population growth scenarios into households and demand for housing across the city, fulfilled from the various sources of supply. The various forecasts and projections would require from 47.3% to 88.6% of the potential housing supply, all with surplus housing ranging from 8.6 to almost forty years of supply after 2051 (see Table 6 and Figure 5).

The Hemson 2020 High Scenario forecasts a population of 3,766,000 at 2051. This is 116,000 people higher than the Hemson Reference population forecast that is consistent with Schedule 3 of the Growth Plan 2020. To accommodate this higher forecast would require 633,798 units. This is an additional 66,953 units more than would be required for the Hemson 2020 Forecast and to accommodate the Growth Plan population forecast. Yet there would be a surplus of over 35 years of housing after 2051.

The Ministry of Finance projections are trending higher than the Hemson forecasts supporting the Growth Plan, differing by about 400,000 people at 2046. These two different sets of figures are exceedingly difficult to reconcile. Historically, City Planning's internal monitoring of past projections and the population estimates of Statistics Canada has shown that the City of Toronto's actual growth has more closely tracked to Hemson's forecasts than the projections of the Ministry of Finance (see Attachment 2 for more information).

In the unlikely circumstance that the Ministry of Finance 2021 projections might reflect the city's growth trajectory, scenarios based on these projections were also created. The "Ministry of Finance - Demand" scenario is based on the projected demand for housing and draws first from projects in the MCR Pipeline to accommodate the projected population. Insofar as more supply than is available from the MCR Pipeline and Neighbourhoods would be required to meet this scenario, the "Ministry of Finance - Supply" scenario was devised to draw from all sources of supply in proportion to their shares of the total supply. This has the effect of drawing in potential housing from other sites across city sooner than some development projects already under review. These scenarios would require 260,000 to 495,000 units above those required to accommodate the Growth Plan population, due to the larger number of smaller mid-

/high-rise apartment units required. In total, these scenarios would require 69.0% to 88.6% of the net potential supply. Nevertheless, the city has more than sufficient potential housing to accommodate the growth anticipated by even these projections, with a potential surplus of between 9 and 23 years of housing beyond 2051.

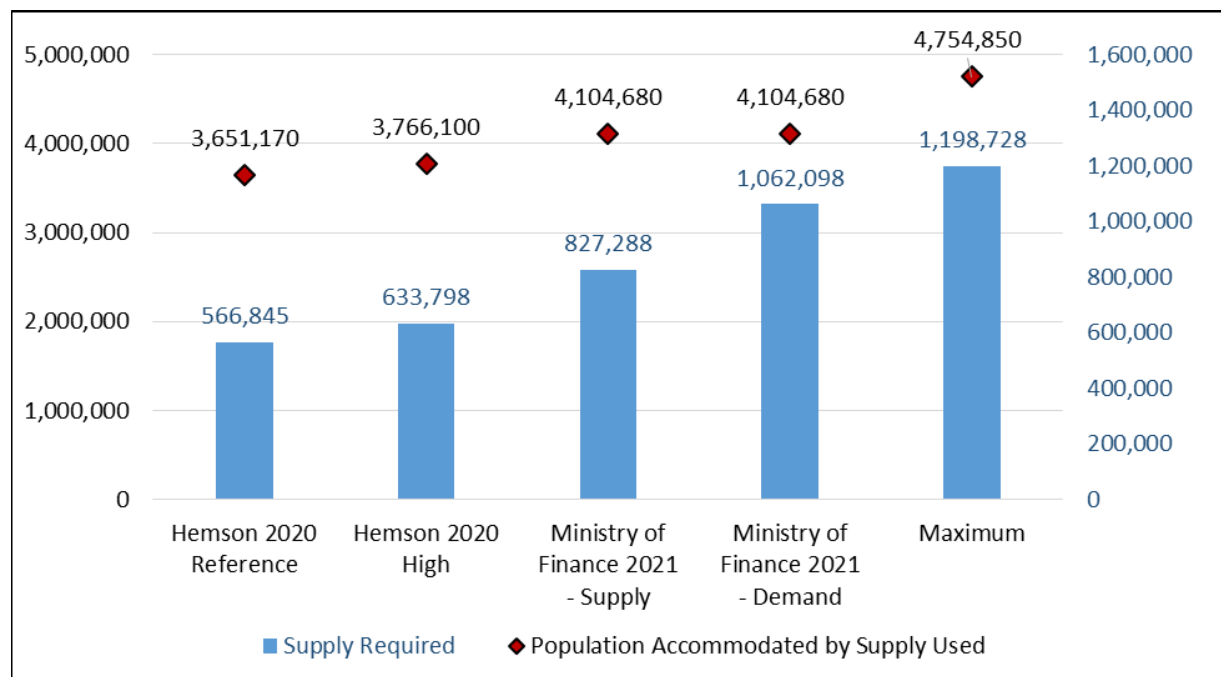
Table 6: Housing Supply Scenarios

Projection Scenario	Population at 2051	Population Accommodated by Supply Used	Supply Required ¹	Percent of Total Supply	Surplus Supply	Years of Surplus ⁴
Hemson 2020 Reference	3,651,000	3,651,170	566,845	47.3%	631,883	39.6
Hemson 2020 High	3,766,000	3,766,100	633,798	52.9%	564,930	35.4
Ministry of Finance 2021 - Supply ²	4,104,378	4,104,680	827,288	69.0%	371,440	23.3
Ministry of Finance 2021 - Demand ²	4,104,378	4,104,680	1,062,098	88.6%	136,630	8.6
Maximum ³	N/A	4,754,850	1,198,728	100.0%	0	0.0

Notes:

- 1) Estimated demolitions are accounted for separately to estimate the net supply available.
- 2) Ministry of Finance 2021 Projection at 2046 is 3,954,378. The projection was extrapolated to 2051 for comparison purposes.
- 3) Maximum Scenario represents the outcome if all of the potential supply were realized by 2051.
- 4) Years of surplus is estimated by dividing the Surplus Supply by the average rate of housing completions between May 2016 and April 2021 according to CMHC, at 15,946 units per annum.

Figure 5: Population at 2051 and Scenario Supply Required



Note: Ministry of Finance 2021 Projection at 2046 is 3,954,378. The projection was extrapolated to 2051 for comparison purposes.

The City of Toronto has more than sufficient potential housing to accommodate the population forecast of the Growth Plan and the Hemson 2020 Reference Forecast. Toronto has more than sufficient potential housing to accommodate the Hemson 2020 High Forecast and the Ministry of Finance 2021 projections. All scenarios result in a surplus of potential housing after 2051.

The higher forecasts and projections, if they were to be realized, would require study of their significant impacts on market supply and demand, infrastructure and services, and the retention and attraction of a skilled workforce in construction and throughout the economy. These are factors that will continue to shape and influence the pace of demand and supply. The City needs to plan for beneficial outcomes of growth and change, but the LNA Study demonstrates that the City needs to be strategic in its choices to pursue its many priorities: to support the achievement of complete communities designed to meet people's needs throughout their lifetime; to support a range and mix of housing options to serve all sizes, incomes and ages of households; to create a city that is diverse and inclusive; and to build a city that is resilient to the impacts of a changing climate.

Comparison with the Previous Assessment

The previous assessment of the City's housing potential was the Housing Potential Analysis (HPA), reported to Planning and Growth Management Committee on November 21, 2013 and subsequently updated in 2015 as background to the previous MCR and Official Plan Review, OPA 231. Staff findings were that no areas designated as an Employment Area needed to be converted to residential uses in order to achieve the population growth forecast of the in-force Growth Plan. The HPA compiled the development potential across the City from a similar set of sources of housing supply and identified a total potential of 680,625 units.

The LNA Study has identified a potential 1,198,728 units, an increase of 76% over the previous assessment. In general, the sources of supply have increased.

- The **MCR Pipeline** contains 539,449 residential units by comparison to the 2014 Pipeline with 191,926 units. This reflects enhanced development tracking as well as a very dynamic market.
- The potential housing in **Opportunities** is 62% greater than in 2016, equating to over 150,000 additional units. This is predominantly due to higher and denser built form developments as well as the longer time horizon of the Growth Plan.
- The **Downtown** Growth Analysis yielded a 45% increase in residential potential or 37,369 more units compared to the previous MCR exercise. At that time, the Downtown Plan was still under development. When the Downtown Plan came into force and effect in 2019, it provided a new framework for directing growth in Downtown. This framework includes providing more detailed direction on the density of development permitted in Mixed Use Areas 1-4; directing growth to occur near existing and planned transit stations; and encouraging the retention or increase of non-residential GFA. In addition, market changes and development trends have contributed to expand opportunities throughout Downtown.

- **The Centres** housing potential has increased overall by about 5,300 units, and specifically in the North York and Yonge-Eglinton Centres, despite significant development occurring in both of these areas since 2016. In all Centres, the average unit size has decreased since 2016, so that developments include more units in the same-sized building than they would have in 2016.
- The previous analysis of **the Avenues** yielded 97,158 units, and 50,273 units were not within an Opportunity Site. The current modelling resulted in about 20,000 fewer potential units. A smaller Avenues geography, exclusion of Employment Areas and recently developed sites, and refined modelling techniques are contributing factors.
- The addition of the **Neighbourhood** Typology and Intensification Analysis has identified 65,531 ground-related units that were not estimated in the previous assessment. This is poised to increase through subsequent analysis within MTSAs.

Other areas of change may begin to emerge more clearly in the urban structure as areas especially as Toronto's suburbs gradually transform with the addition of mixed use complete communities. Prospects for greater housing potential also exist due to market factors such as a diverse economy and strong demand, supported by Secondary Plans, implementing zoning, effective public policy and prudent infrastructure investments. The more challenging question is how the city ought to grow, and how to distribute growth across the entire city.

Employment Area Land Needs

Employment Projections

Small-area employment projections for the City of Toronto have been developed by staff through a work program spanning several years, multiple sub-projects, and consulting support from Hemson. The primary intent of these employment projections is to support the LNA process as part of the City of Toronto's Municipal Comprehensive Review, as well as to inform future long-range planning and infrastructure decision-making. As specified in the Land Needs Assessment Methodology for the Greater Golden Horseshoe (2020), this analysis must "forecast employment using Schedule 3 forecasts or alternate growth scenarios as a minimum as well as the North American Industry Classification System (NAICS) by usual Place of Work, no fixed workplace within the municipality and work at home".

Employment Trends Overview

As of mid-2022, the long-term impacts of the COVID-19 pandemic on the geospatial distribution and character of jobs within the Toronto region continues to be partially unknown. Recognizing the importance of taking a long-term view in response to major events, the 2020 Toronto Employment Survey bulletin included an analysis of Toronto's economy back to 1983, documenting the multiple phases of decline, recovery, and transition that have occurred. Throughout the 2010s, the city experienced an exceptionally high period of job growth until the onset of the COVID-19 pandemic. Although this rate of growth may not be experienced again in the near term, Toronto's role within Canada's broader economy, and its growing position as a leader in the technology sector, have placed it in a strong position to recover from the pandemic.

Hemson's Greater Golden Horseshoe: Growth Forecasts To 2051, August 2020 (Technical Report), describes how their forecasts assume growth returns to pre-pandemic levels within three years, but recognizes that major events have the potential for permanent societal changes. To gain a fuller understanding of employment trends, Hemson Consulting Ltd. ("Hemson") was retained to produce information on macro-level trends impacting employment projections and spatial allocations (see Attachment 10). This analysis was intended to help distinguish between short-term market shocks from long-term impacts related to the COVID-19 pandemic. A key finding of this research, and a trend reflected through the Toronto Employment Survey results, has been the relative resilience of Employment Areas throughout the pandemic.

As Toronto's largest employment sector by land use, the future of office space and work-from-home trends have the potential to have profound impacts on both major employment clusters, as well as the local economies within neighbourhoods. At present, many major employers have implemented a partial return-to-work model which has resulted in lower staff occupancy rates in existing office spaces as measured to a 2019 baseline. For the purposes of the employment projections described within this report, it is assumed that jobs that are assigned to an office location are recorded as having a usual Place of Work at that address, regardless of the number of days worked at-home or in-office. This methodology is consistent with the approach used by the annual Toronto Employment Survey. Given this change, for the purposes of infrastructure planning and estimating daytime population, additional future research will be required to better understand the permanence of current hybrid work models.

Employment Projections Context

The citywide figures included in this section are outputs from an internal Employment Projections Model that is structured around the following parameters:

- **Geography** - Traffic Zone (2016) level of detail which are comprised of 659 distinct areas that average less than 1 square km.
- **Timeline** - Estimates are developed for 2021, and projections span 5 year periods through to the year 2051.
- **Industry Classification** - North American Industry Classification System (NAICS) Canada 2017 Version 3.0 at a 2-digit level of detail.
- **Place of Work Status** - Usual Place of Work, No Fixed Place of Work, and Work at Home.

Employment Projections Inputs

The primary input into the Employment Projections Model are custom Census Place of Work tabulations produced for Ontario municipalities at the Traffic Zone level of analysis. These tabulations provide employment by Traffic Zone for both Place of Work and Place of Residence by industry classification. Additional inputs incorporated into the projections include:

- **Toronto Employment Survey** – The results of the annual survey help estimate employment growth by 2-digit NAICS from 2016 to 2021, prior to the release of the 2021 Place of Work Census results.

- **Canadian Occupational Projection System** – Annual Employment Projections by Industry. National employment projections by industry are inputted into a "shift share" model to estimate Toronto's relative growth through to 2028, based on past local employment changes versus the national average.
- **Floor Space per Worker Ratios** – Updated ratios were developed at a sub-sector basis by joining the results of the Development Pipeline and the Toronto Employment Survey. These ratios enable the conversion of gross floor area recorded in the Development Pipeline and Non-Residential Opportunities Consultation & Growth Potential analysis into employment estimates.
- **Development Pipeline** – The Development Pipeline includes projects that are listed as built, active, and under review for the period from January 1, 2016 to June 30, 2021. The net positive addition in non-residential gross floor area resulting from these projects is converted into employment estimates and used to inform growth from 2016 through to 2036.
- **Non-Residential Opportunities Consultation & Growth Potential Analysis** – City Planning staff were consulted about anticipated development opportunities that were not yet reflected in the Development Pipeline. Non-residential opportunities are converted into employment and applied as an additional input to inform growth from 2026 to 2051.
- **TOcore Projections** – As part of the Downtown Plan (TOcore) study, Hemson was retained to create policy recommendations and employment forecasts for the Downtown, South of Eastern, and Liberty Village areas through to 2041. The Low version of the forecasts were applied as an input.
- **Hemson Inputs** – Hemson was retained during the development of the Employment Projections Model to provide supporting background memos, clarify assumptions, and offer general guidance. This assistance also enabled the projected employment by land use category contained within the Technical Report to be converted into 2-digit NAICS.

Employment Projections Methodology

The methodology for the Employment Projections Model follows both a city-wide and Traffic Zone-level approach. See Figure 6. City-wide projections have been developed by 5-year periods to 2051, by 2-digit NAICS. These projections provide an overall pool of employment for the city of Toronto which was then subsequently distributed at smaller geographical areas.

In addition, a small-area "Maximum Potential Scenario" has been developed which aggregates all sources of growth at a Traffic Zone level. The relative magnitude, type, and location of future employment estimated through this process informs the distribution of the city-wide employment projections. The combination of these two approaches allows data inputs at a small area basis to inform growth trajectories, while at the same time ensuring city-wide totals are consistent with pre-established scenarios.

Work at Home employment is allocated at the Traffic Zone level by applying population growth rates from the Schedule 3 Reference Scenario to 2016 Work at Home employment reported at the Traffic Zone level. No Fixed Place of Work employment is allocated across Traffic Zones by comparing their relative concentration of Usual Place of Work and Work at Home employment, by industry, versus the citywide total.

Employment Projections Model Outputs

In the final step, the outputs from the Employment Projections Model are tabulated by summing: (A) Usual Place of Work, (B) Work at Home, and (C) No Fixed Place of Work by 2-digit NAICS, by 5-year period, by Traffic Zone. In effect, for every Traffic Zone within the city of Toronto, the outputs for each of three scenarios provide a projected total employment figure, comprised of additional detail about the industry and Place of Work status.

To allow for comparison, these outputs are also brought into conformity with the Land Use Category approach employed by Hemson's forecasts for the Growth Plan for the Greater Golden Horseshoe, 2020. This step is enabled through a concordance table generated by Hemson that allows for a Toronto-specific linkage between NAICS and Land Use Category. Through these steps, the projection outputs can be viewed by (a) Land Use Category, (b) Geographic Allocation, and (c) Place of Work Status, or through a combination of these variables.

Three projection scenarios have been developed including a Reference Scenario, Medium Scenario, and High Scenario. The Reference Scenario (Reference) conforms with the citywide 2051 employment tables contained within Schedule 3 of the Growth Plan. The Medium Scenario generally aligns with the High Scenario presented in the Technical Report, but with modifications to reflect the results of the 2021 Toronto Employment Survey and the Canadian Occupational Projection System: Annual Employment Projections by Industry. Both of these scenarios assume that Toronto's share of regional job growth will decline over the study period, as forecasted by Hemson. In contrast, the High Scenario is predicated on Toronto achieving a constant share of job growth in the Greater Toronto and Hamilton Area, 30% of total jobs, the average achieved from 1996 to 2016. See Table 7.

As described by Hemson in their report "[Future of Toronto Employment Areas and the Office Market](#)" (PHC 33.13), Section E, the City of Toronto "may want to consider adopting a higher employment forecast for 2051 than that shown in Schedule 3". In addition, planned and under construction major transit lines within the City of Toronto that integrate with the GO Transit network will provide further support to the city's future employment growth. Hemson cites pre-pandemic commuting patterns and planned GO Transit network investments as factors supporting Toronto potentially exceeding Schedule 3 forecasts. In addition, planned and under construction major transit lines within the City of Toronto that integrate with the GO Transit network will provide further support to the city's future employment growth.

Figure 6: Employment Area Land Needs Assessment

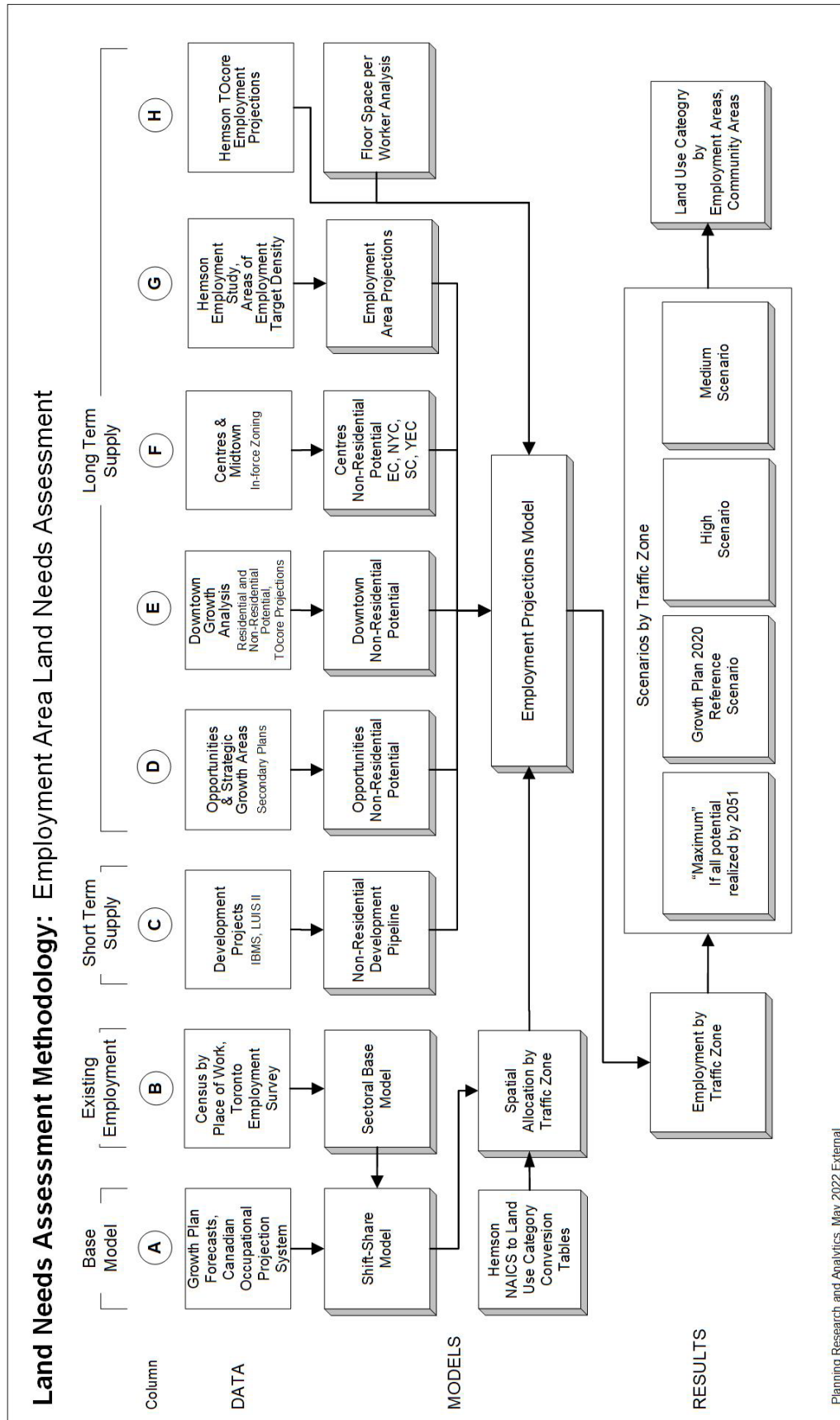


Table 7: Citywide Employment Projections

Projection Type	2016	2051 Reference	2051 Medium	2051 High
Land Use Category	1,607,800	1,978,800	2,080,400	2,179,000
Major Office	639,700	900,200	950,600	997,300
Population-Related	661,200	758,100	791,200	825,800
Employment Land	306,800	320,500	338,500	355,900
Geographic Allocation	1,607,800	1,978,800	2,080,400	2,179,000
Employment Area	410,700	465,200	491,300	516,300
Community Area	1,197,000	1,513,500	1,589,100	1,662,700
Place of Work Status	1,607,800	1,978,800	2,080,400	2,179,000
Usual Place of Work	1,342,400	1,654,800	1,748,400	1,834,900
Work At Home	101,300	131,200	131,200	131,200
No Fixed Place of Work	164,100	192,800	200,800	213,000

* Projections are preliminary and are subject to change as new information becomes available, including the results of the 2021 Census.

** Work At Home projections are a product of Hemson assumptions of employment by industry as a share of population. At this preliminary stage, Schedule 3 Reference Scenario population forecasts are being applied for Work at Home projections and may be updated as more detailed information becomes available.

The Medium Scenario and High Scenarios are reasonable and achievable growth trajectories that exceed the Reference Scenario. Under the Reference Scenario, employment in Toronto is projected to increase at an average of 10,600 jobs per year from 2016 to 2051, or an annualized growth rate of 0.6%. The Medium Scenario projects an addition of 13,500 jobs per year and a 0.7% annualized growth rate, while the High Scenario would require 16,320 jobs per year and a 0.9% annualized growth rate. In comparison, Toronto Employment Survey results for the decade prior to the onset of the COVID-19 pandemic (2009 to 2019) recorded total employment growing from 1,293,190 to 1,569,800, equivalent to 27,660 jobs per year and a 2.0% annualized growth rate. For the decade including the pandemic downturn, 2011 to 2021, total employment grew from 1,317,300 to 1,451,520, equivalent to 13,420 jobs per year and a 1.0% annualized growth rate.

In both the Medium Scenario, and the rate of growth observed from 2011 to 2021, an approximately equivalent number of jobs was added per year (+/- 13,500). As such, the Medium Scenario is considered to be the preferred Scenario of the three presented in this section as it aligns with a decade that experienced a full business cycle of growth and decline. However, all three Scenarios represent reasonable projections and within the realm of potential outcomes.

Further details on the Employment Projections methodology, as well as an estimate of employment growth in Provincially Significant Employment Zones (PSEZs), can be found in Attachment 10.

Employment Land Needs Assessment

The Land Needs Assessment Methodology for the Greater Golden Horseshoe (2020) describes the methodological steps upper- and single-tier municipalities must undertake to determine land needs for employment. In Section E of the report "[Future of Toronto Employment Areas and the Office Market](#)", Hemson observes:

"The Land Needs Assessment, as its name suggests, is specifically designed to analyze the need for any additional urban land through a settlement area boundary expansion to meet growth forecasts while meeting other policies such as rates of intensification, limiting rural development and achieving density targets in the Designated Greenfield Area. Toronto is the only single or upper-tier jurisdiction within the GGH that is all Built-Up Area with no rural land, no greenfield land and no possibility of expanding an urban boundary. While the exercise is of uncertain utility for the MCR, it remains a requirement of the Growth Plan."

Given Toronto's inability to expand its Settlement Area boundary, all job growth must occur within existing Employment Areas and Community Areas. As such, Component 5 – Community Area Jobs, described within Section 2 of the Land Needs Assessment, does not apply to Toronto's Land Needs Assessment. Furthermore, all methodological steps contained within Section 3, Employment Area Land Needs Assessment, that relate to Settlement Area expansion and rural-based jobs will not apply. Therefore, all projected jobs for the City of Toronto are to be "allocated to Community Areas and Employment Areas within Settlement Areas". As Toronto has no designated greenfield areas, all Community Area jobs will occur within the delineated built-up area in a fully infill context. The Land Needs Assessment Methodology provides general guidance for the intensification of these areas along with a description of the associated benefits, but does not require further quantification of Community Area land needs.

Job growth in Community Areas is generally occurring within mixed-use buildings, or in stand-alone non-residential buildings located within a mixed-use context. This intensification is enabled through supportive Official Plan policies, zoning, and site plan approval that encourages or requires non-residential uses.

Employment Forecasts and Allocation

Following the applicable steps in the Land Needs Assessment Methodology, the process required for the City of Toronto is focused on Employment Areas, including their existing potential, opportunities for intensification, and the land needs associated with projected employment. Section 3, Component 1 and 2 of the Employment Area Land Needs Assessment methodology overview describes the procedural steps for forecasting and allocating Employment Area employment. Table 9 shows the sum of Usual Place of Work employment for Major Office, Population-Related employment, and Employment Lands within the City of Toronto's Employment Areas for 2016 and the three 2051 growth projections.

Table 8: Employment Area Projections by Employment Status

Employment Status and Area	2016	2051 Reference	2051 Medium	2051 High
Usual Place of Work	363,200	407,200	430,600	451,600
Major Office	91,400	129,800	137,200	143,800
Population-Related	11,400	13,200	13,900	14,600
Employment Land	260,400	264,200	279,500	293,200
No Fixed Place of Work	47,500	58,000	60,700	64,700
Major Office	10,500	13,900	14,600	15,500
Population-Related	600	700	700	800
Employment Land	36,400	43,400	45,400	48,400
Employment Area Total	410,700	465,200	491,300	516,300

Existing Employment Area Potential

Section 3, Component 3 of the Land Needs Assessment Methodology describes the process for determining employment potential on existing lands designated as Employment Areas. To estimate current and future potential, an inventory of Employment Area lands must be conducted including reviewing the densification and intensification capacity of built lands. This work was conducted by Hemson through their report "Future of Toronto Employment Areas and the Office Market".

By undertaking a vacant land supply analysis, Hemson identified an estimated 370 hectares of Employment Area land availability on 150 parcels. Of this, 150 hectares are unable to be redeveloped, leaving a net developable land capacity of 220 hectares on 80 parcels.

"This limited supply means that the Toronto's Employment Areas are effectively built out. The 220 hectares is less than the 3% long-term land vacancy considered normal in a fully built community. Some of these parcels will develop over time, while others will become vacant. This conclusion means that overall employment growth must occur within the existing building stock or through redevelopment." Page 82, Future of Toronto Employment Areas and the Office Market.

At present, Toronto's Employment Areas are estimated to contain 7,896 hectares of land. Of this, 5,750 hectares are Core Employment Areas and the remaining 2,146 hectares are General Employment Areas. With a combined employment of 410,700 in 2016, the resulting density is 52.0 jobs per hectare. In comparison, the report "Future of Toronto Employment Areas and the Office Market" identifies Areas of Employment that encompass designated Employment Areas, estimating their 2019 gross density at 45.0 jobs per hectare, and net density at 63.6 jobs per hectare. This divergence is attributable to Hemson's use of Toronto Employment Survey information rather than Census results, the use of a different timeframe, and a more encompassing methodology applied by Hemson to measure the land size of Areas of Employment. Despite this, Hemson's density target of 50.0 jobs per hectare, representing an aggregate employment intensification of 11% over 45.0 jobs per hectare, enables the calculation of future employment potential.

"A single target of 50 jobs per hectare measured across all of the city's lands designated Employment Areas is somewhat ambitious but achievable and takes into consideration growth forecasts while reflecting the market for land expansive employment development. This provides a quantifiable benchmark against which to measure the progress towards greater land use efficiency while recognizing that the city's diverse Areas of Employment must continue to provide for a range and mix of businesses and economic activities that operate at varying densities.

"Direction 18: The City should establish one Employment Area density target of 50 jobs per hectare calculated across all land designated Employment Areas city-wide."
Page 13, Future of Toronto Employment Areas and the Office Market.

If Toronto's Employment Areas were to achieve an 11% increase in density by the end of the Growth Plan period in 2051, the resulting density would reach 57.8 jobs per hectare from 52.0 jobs per hectare in 2016. Effectively, this increase in density would enable an additional 45,300 jobs to be accommodated within Employment Areas, or 456,000 jobs in total.

Need for Additional Land

Section 3, Component 4 of the Land Needs Assessment Methodology outlines the steps for calculating additional land needs for Employment Areas. Municipalities must estimate the number of jobs that can be accommodated within existing Employment Areas through intensification. Jobs that cannot be accommodated through this process are then used to inform additional Employment Area land requirements which would necessitate a Settlement Area expansion. Toronto's inability to expand its Settlement Area, however, means that all unaccommodated Employment Area jobs (as defined by the LNA Methodology) must occur through further intensification.

In Table 9, the estimated Employment Area capacity of 456,000 jobs (57.8 jobs per hectare) is subtracted from the 2051 employment projections. The net result is the unaccommodated Employment Area jobs after an 11% intensification rate, ranging from 9,200 in the Reference Scenario up to 60,300 in the High Scenario. To illustrate the conceptual additional land requirement, the unaccommodated Employment Area jobs was divided by the target density of 57.8 jobs per hectare. If Settlement Area expansion was possible, approximately 159 to 1,044 hectares of additional Employment Area land would be required.

Given the inability to add land to Employment Areas, an increase in density is required to accommodate projected employment growth. With a constant land area of 7,896 hectares, accommodating the Reference Scenario would require Employment Areas to achieve 58.9 jobs per hectare, a 13% intensification rate over 2016 levels. The High Scenario would require Employment Areas to accommodate 65.4 jobs per hectare, a 26% increase over 2016 levels. These calculations reflect approved conversions under the former MCR and Official Plan Amendment 231 that have occurred to-date and exclude outstanding conversion requests.

Table 9: Employment Area Projected Land and Density Requirements

Jobs, Land and Density	2051 Reference	2051 Medium	2051 High
Employment Area Capacity	456,000	456,000	456,000
Employment Area Projection	465,200	491,300	516,300
Unaccommodated Employment Area Jobs	9,200	35,300	60,300
Land Required with Constant Employment Area Density (57.8 Jobs per ha)			
Total Land Area (ha)	8,055	8,507	8,940
Land Shortfall	159	611	1,044
Density Required with Constant Employment Area Land (7,896 ha)			
Jobs per ha	58.9	62.2	65.4
Density Increase over 57.8 Jobs per ha	1.2	4.5	7.6
Required Intensification Rate (over 2016)	13%	20%	26%

These levels of intensification assumptions are reasonable if Toronto's Employment Areas continue to transition towards Major Office and Population-Related employment land uses. As noted within Section 3, Component 3 of the Land Needs Assessment Methodology, uses such as logistics and warehousing are more land-extensive with lower-employment densities in comparison to office and other employment uses. Likewise, Figure 46 of the report "Future of Toronto Employment Areas and the Office Market" shows that the existing gross employment density in the office-focused areas along the Don Valley Parkway are in the range of 80 to 299 jobs per hectare, while Liberty Village's Employment Area is in excess of 300 jobs per hectare. An expected transition towards Major Office and Population-Related employment sectors within Employment Areas is shown in the projections contained in Table 2 of that same report. In 2016 these land intensive sectors accounted for 28% of total jobs in Employment Areas, but by 2051 the share is projected to increase to 34% of total jobs. This trend will be supported, in part, by the ongoing investments in rapid transit expansion which will improve access to Employment Areas.

Employment Land jobs, such as manufacturing, logistics, and warehousing, are projected to remain stable and potentially increase from current levels. As Toronto's Employment Areas are already fully occupied and serving an integral role within the overall economy, an increase in Major Office and Population-Related employment does not supersede the continued importance of preserving existing Employment Areas for Employment Land jobs. The Employment Lands sector is a fundamental component of Toronto's ability to achieve a balanced and diversified economy. Furthermore, as shown through the above Land Needs Assessment calculations, Toronto is projected to have a shortage rather than an excess of Employment Areas. While this shortage can reasonably be overcome through density increases, it is evident through the Land Needs Assessment process that Toronto does not have surplus Employment Area capacity that can be justifiably converted to other uses for the purposes of accommodating future growth.

This conclusion corresponds with Direction 1 of Hemson's report "Future of Toronto Employment Areas and the Office Market", which states:

"The City should continue to protect and preserve all Employment Areas for ongoing industrial and other adaptive employment uses." Any conversion of Employment Lands that do occur "...should be limited to City-initiated official plan amendments, only for Employment Areas with excellent access to higher order transit, and the conversion direction should be to re-designate the site as Regeneration Area. The requisite planning study should secure a minimum amount of gross floor area (GFA) for employment uses, and ensure the continuation of the economic function of the lands and broader area, while at the same time achieving other city building objectives."

In the years ahead, Employment Areas will continue to serve a vital role in Toronto's economy as both a strategic and finite resource that enables the advancement of a multitude of city building and economic development objectives.

Summary

Section 4 of the Land Needs Assessment Methodology describes the implementation steps for municipalities following the quantification of land needs. While the analysis shows there is a need for additional Employment Areas, Toronto is unable to expand its Settlement Area boundary. Therefore, the 465,200 jobs projected for Employment Areas under the Reference Scenario (Schedule 3 consistent) will need to be accommodated within the City's currently designated lands. This would require a 13% intensification rate of Employment Areas, 2% more than implied by Hemson's recommended 50 jobs per hectare density target. In summary, the city of Toronto can accommodate the forecasted employment growth, as per Schedule 3 of the Growth Plan, and will require the retention of all lands currently designated as Employment Areas. The preservation of Employment Areas for the exclusive use of business and economic activities is a core principle in Section 2.2.4 of Toronto's Official Plan, and is an objective currently being consulted on through the Our Plan Toronto process.

Projected Major Office and Population-Related employment can be accommodated within existing Community Areas with further intensification through both stand-alone non-residential and mixed-use buildings. The intensification of Community Areas is supported through existing Official Plan policies and zoning by-laws that direct non-residential growth to areas targeted for intensification, including Urban Growth Centres and Major Transit Station Areas.

The primary findings of the Land Needs Assessment is that Toronto needs to retain its currently designated Employment Areas, and that these lands will need to intensify to accommodate projected growth. These outcomes are consistent with both the Provincial Policy Statement, 2020, and the Growth Plan for the Greater Golden Horseshoe, 2020.

The Land Needs Assessment is a key step in the Municipal Comprehensive Review process in ensuring conformity with the Growth Plan. The Employment Area Land Needs Assessment described in this report section was conducted in a manner consistent with the prescribed methodology issued by the Minister of Municipal Affairs and Housing on August 28, 2020.

Strategic Growth Areas

The Land Needs Assessment has regard for the requirements associated with Strategic Growth Areas ("SGAs") as defined by the Growth Plan. The SGAs are addressed in detail in Attachment 11.

Urban Growth Centres

The Provincial Growth Plan sets minimum gross density targets to be achieved by 2031 for Urban Growth Centres (UGC). The minimum gross density target is 400 residents and jobs combined per hectare for Downtown and for each Centre. Analysis indicates that Downtown and the Centres have intensified since 2016, as the Growth Plan directed. North York and Yonge Eglinton Centres are already well above the target density. If the density trends continue, it is likely that Downtown will exceed the UGC density target well before 2031.

Major Transit Station Areas

The Provincial Growth Plan defines a Major Transit Station Area as the area[s] generally within a 500 to 800 metre radius of a transit station, representing about a 10-minute walk. To satisfy the Growth Plan (2019) requirements, the City is required to individually delineate the each MTSA boundary and to demonstrate that each MTSA is planned for the minimum density target for residents and jobs established for it.

Within the City of Toronto, there are currently 141 proposed MTSA. Each MTSA is subject to a density target across the area as a whole, ranging from 150 to 200 people and jobs per hectare. A subset of the MTSA will be identified as Protected Major Transit Station Areas (PMTSA), which are the areas within which the Province allows municipalities to implement Inclusionary Zoning.

About 23% of all MTSA (32 MTSA) are anticipated to meet their draft minimum density targets based on a full build-out of the MCR Pipeline when that growth potential is added to 2016 base-year densities. When the potential population from the LNA's Opportunity sites and potential jobs from the employment projections are considered in addition to the build-out of the MCR Pipeline, over two-thirds (67%) of all MTSA or 94 MTSA are estimated to be on track to meet their draft minimum density target. Many of the MTSA delineations will involve further study, and while the proposed zoning may support the minimum density targets, greater growth may occur.

Conclusions

Land Needs Assessment Regarding Population and Housing

There is more than sufficient potential housing supply in Toronto to accommodate anticipated population growth to 2051.

- There is more than sufficient potential housing in areas designated for residential development in the City of Toronto to accommodate the population growth anticipated by Schedule 3 of A Place to Grow, the Growth Plan for the Greater Golden Horseshoe (2020).

- The potential housing supply in the city is more than double the amount of housing required to accommodate the forecasted population growth between 2016 and 2051.
- The surplus potential housing stock after accommodating the population growth forecasted by the Growth Plan at 2051 is equivalent to almost forty years of potential housing supply.
- To accommodate the population forecasted by the Growth Plan to 2051, less than half of the total potential housing supply is required. The MCR Pipeline of development projects, in addition to as-of-right development activity in Neighbourhoods with gentle intensification, is more than sufficient to accommodate the forecasted demand for housing to 2051 as per the Hemson 2020 Reference forecast and the Growth Plan 2020.
- Over 85% of the proposed residential development in the MCR Pipeline is in areas that the Official Plan has targeted for growth, such as Downtown and Central Waterfront, the Centres, the Avenues and other Mixed Use areas and Regeneration Areas.
- Not all development proposals are approved, and not all approved projects are built. In any case, no one development proposal needs to be approved to accommodate the forecasted population growth to 2051.
- Not all of the forecasted population growth needs to be accommodated in new housing stock: one quarter of the population growth forecasted by the Growth Plan can be accommodated through the generational turnover of the housing stock that existed in 2016.
- There is more than sufficient potential housing to accommodate the population projected by the Ministry of Finance population projections for the City of Toronto, if that trajectory of growth were to occur.
- There is no need to convert any designated Employment Areas to other uses to accommodate the population growth forecasted by the Growth Plan.

Land Needs Assessment Regarding Employment

Employment was growing faster than the forecasts to 2020. The shift in the city's economic structure nevertheless requires the retention of designated Employment Areas.

- The City of Toronto can accommodate the forecasted employment growth as per Schedule 3 of the Growth Plan in areas designated for growth by the Official Plan.
- Toronto needs to retain its designated Employment Areas in order to accommodate the forecasted employment growth, and these lands will need to intensify to accommodate projected growth.

Observations

The Growth Plan forecasts represent minimum forecasts of the potential growth of the city. The growth management, intensification and employment strategies of the Official Plan will work together to support the achievement of these forecasts. Greater growth may occur, guided by Secondary Plans and local planning studies.

There is a broad range of trends and considerations in managing the city's growth and change, including affordability, inclusion, immigration, economic competitiveness and climate change which require aligned strategies. While the LNA Study demonstrates that the forecasted growth can be accommodated, it highlights the challenges of planning for "complete communities" and providing "a complete range of housing" for a diverse and changing population. The results highlight the need for strategic thinking. The LNA Study is based on existing land use planning and policy frameworks, and involves an analysis of future opportunities that will change over the forecast horizon. The Study creates a degree of certainty within a dynamic and evolving context, by providing a basis for future planning and development with the foreknowledge that the city can accommodate the forecasted growth through an evolving pattern of land use. This continual growth, evolution and renewal will be guided by the Official Plan, area studies and through the review and discussion of planning applications.

Next Steps

This LNA Study involved extensive consultation and advanced analytical methods. This was made possible by continual business process improvements in tracking development activity and land use through the City Planning Division's Land Use Information System II. Investment in business solutions, geospatial analytical tools, data visualization technology and online mapping platforms, coupled with the expertise of staff, have enabled a superior planning research and analysis capability to support the review of planning applications, area planning studies and citywide policy analysis.

The outcomes of the Land Needs Assessment study are clear: Toronto has more than sufficient residential potential to achieve the forecasted population growth, and, the city needs to retain its designated Employment Areas to accommodate the forecasted employment growth anticipated by the Growth Plan. Nevertheless, some of the findings are preliminary and will continue to be studied. Individual model outcomes may evolve with further analysis. Projection scenarios and small-area projections will be refined to support the City's infrastructure planning programmes, and to enable the ongoing coordination of land use, transportation and infrastructure planning.

In accordance with Council direction as per [PH30.6 Our Plan Toronto: Update on Growth Plan Conformity and Municipal Comprehensive Review](#), work will continue to further refine the Land Needs Assessment study in parallel with the ongoing work on the Municipal Comprehensive Review into 2023.

Future work will include the consideration of the additional residential potential that may result from conversion request sites. The text accompanying Direction 1 of Hemson's report "Future of Toronto Employment Areas and the Office Market" observes that "unique opportunities may arise where important city-building objectives cannot be achieved within the Employment Area designation, and may warrant a conversion to

permit a broader mix of uses. These types of conversions should be limited to City-initiated official plan amendments..." page 132. Land use conversions recommended for approval by Council will be assessed to identify any additional residential potential that would potentially increase the citywide housing supply over the Growth Plan forecast horizon. This work would include an assessment of the potential impacts of the conversion on neighbouring employment uses. Planning for the realization of complete communities aligned with the growing transit network and which include affordable housing will be part of this work.

The annual Development Pipeline bulletin will be expanded, to explore the timing of the realization of development proposals. Additional reporting will include the overall durations of the development approvals and construction processes, including the elapsed time since first Planning approval until construction is completed.

Neighbourhood change and intensification will undergo further research to inform the Expanding Housing Options in Neighbourhoods initiative. City Planning will continue to monitor trends in as-of-right housing completions and intensification through Building Permits. This research will serve to study the evolution of neighbourhoods and how they can play a role in serving goals around housing diversity and inclusion, regional growth management and adapting the city to climate change.

The Official Plan asks, "What kind of city will Toronto be in the 21st century?" The challenge posed by this question is ever present, since the city itself is ever changing. An ongoing challenge is to manage the distribution of growth, to provide long-range growth management that creates certainty to enable new housing and job opportunities. The growth management, intensification and employment land strategies must work together to achieve the vision of the Official Plan and the objectives of Provincial policy.

Our vitality as a city is revealed in our collective striving to achieve the vision of the Plan in "creating an attractive and safe city that evokes pride, passion and a sense of belonging - a city where people of all ages and abilities can enjoy a good quality of life". As the city changes, the Official Plan must also evolve. Future work will include a review of the vision of the Official Plan, its urban structure and growth management framework. The Official Plan will continue to manage the distribution of growth into future decades while anticipating the necessary services and infrastructure to support people and their families, communities and their institutions, businesses and their workers, and the natural and built environments in which we all abide, that make our city a desirable place to live.

We have a place to grow, and the space to grow. We have the opportunity to choose the city we want to be, the place that we want to create for ourselves and for others, to bring into being a city for all, for family, friends and community, for the Indigenous Peoples and all those who have followed, and for all those who are to come. This is our plan, Toronto.

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Attachment 1: Provincial Policy Context

Policy Context

Provincial Policy Statements and Provincial Plans, along with municipal official plans, provide a policy framework for planning and development in the Province.

Provincial Policy Statement

The Provincial Policy Statement (2020) (the "PPS") provides province-wide policy direction on land use planning and development to promote strong communities, a strong economy, and a clean and healthy environment. The PPS recognizes and acknowledges the official plan as an important document for implementing the policies within the PPS. Policy 4.6 of the PPS states that, "The official plan is the most important vehicle for implementation of this Provincial Policy Statement. Comprehensive, integrated and long-term planning is best achieved through official plans."

The PPS provides specific direction as it relates to the assessment of land needs, including:

- 1.3.2.4. Planning authorities may permit conversion of lands within employment areas to non-employment uses through a comprehensive review, only where it has been demonstrated that the land is not required for employment purposes over the long term and that there is a need for the conversion.
- 1.4.1. To provide for an appropriate range and mix of housing options and densities required to meet projected requirements of current and future residents of the regional market area, planning authorities shall: maintain at all times the ability to accommodate residential growth for a minimum of 15 years through residential intensification and redevelopment and, if necessary, lands which are designated and available for residential development; and maintain at all times where new development is to occur, land with servicing capacity sufficient to provide at least a three-year supply of residential units available through lands suitably zoned to facilitate residential intensification and redevelopment, and land in draft approved and registered plans.

A Place to Grow: Growth Plan for the Greater Golden Horseshoe

The Growth Plan (2020) came into effect on August 28, 2020. The Growth Plan provides a strategic framework for managing growth and environmental protection in the Greater Golden Horseshoe (GGH) region, of which the City is an integral part. Section 26 of the Planning Act requires all GGH municipalities to implement the policies of the Growth Plan through a Municipal Comprehensive Review ("MCR").

The Growth Plan builds on the policy foundation of the PPS and provides more specific land use planning policies to address issues facing the GGH region. The policies of the Growth Plan take precedence over the policies of the PPS to the extent of any conflict, except where the relevant legislation provides otherwise. In accordance with Section 3 of the Planning Act. All decisions of Council in the exercise of any authority that affects a planning matter shall conform with the Growth Plan.

The Growth Plan requires municipalities to undertake integrated planning to manage forecasted growth to the 2051 planning horizon. In particular and relevant to the Our Plan Toronto process, the Growth Plan requires the City to:

- assess the quantity of land required to accommodate forecasted growth through the Land Needs Assessment;
- delineate MTSA boundaries and identify minimum density targets;
- prohibit residential land uses in employment areas and prohibit or limit other sensitive land uses in employment areas;
- establish size or scale thresholds for major retail uses;
- apply specific criteria for conversion of employment areas to non-employment uses;
- establish minimum density targets for all employment areas; and
- address compatibility issues between Employment Areas and non-employment areas.

The Growth Plan provides specific direction as it relates to the assessment of land needs, including:

- 2.2.1.1. Population and employment forecasts contained in Schedule 3 or such higher forecasts as established by the applicable upper- or single-tier municipality through its municipal comprehensive review will be used for planning and managing growth in the GGH to the horizon of this Plan in accordance with the policies in subsection 5.2.4.
- 2.2.1.2. Forecasted growth to the horizon of this Plan will be allocated based on the following: maintain at all times the ability to accommodate residential growth for a minimum of 15 years within settlement areas, growth will be focused in delineated built-up areas; strategic growth areas; locations with existing or planned transit, with a priority on higher order transit where it exists or is planned; and areas with existing or planned public service facilities;
- 2.2.1.3. Upper- and single-tier municipalities will undertake integrated planning to manage forecasted growth to the horizon of this Plan, which will:
 - e) be implemented through a municipal comprehensive review and, where applicable,
- 2.2.1.5. The Minister will establish a methodology for assessing land needs to implement this Plan, including relevant assumptions and other direction as required. This methodology will be used by upper- and single-tier municipalities to assess the quantity of land required to accommodate forecasted growth to the horizon of this Plan.

The Growth Plan sets specific policies regarding employment, including:

- 2.2.5.1. Economic development and competitiveness in the GGH will be promoted by:
 - a) making more efficient use of existing employment areas and vacant and underutilized employment lands and increasing employment densities;
 - b) ensuring the availability of sufficient land, in appropriate locations, for a variety of employment to accommodate forecasted employment growth to the horizon of this Plan;

- c) planning to better connect areas with high employment densities to transit; and
- d) integrating and aligning land use planning and economic development goals and strategies to retain and attract investment and employment.
- 2.2.5.6. Upper- and single-tier municipalities, in consultation with lower-tier municipalities, will designate all employment areas in official plans and protect them for appropriate employment uses over the long-term. For greater certainty, employment area designations may be incorporated into upper- and single-tier official plans by amendment at any time in advance of the next municipal comprehensive review.
- 2.2.5.8. The development of sensitive land uses, major retail uses or major office uses will, in accordance with provincial guidelines, avoid, or where avoidance is not possible, minimize and mitigate adverse impacts on industrial, manufacturing or other uses that are particularly vulnerable to encroachment.
- 2.2.5.9. The conversion of lands within employment areas to non-employment uses may be permitted only through a municipal comprehensive review where it is demonstrated that:
 - a) there is a need for the conversion;
 - b) the lands are not required over the horizon of this Plan for the employment purposes for which they are designated;
 - c) the municipality will maintain sufficient employment lands to accommodate forecasted employment growth to the horizon of this Plan;
 - d) the proposed uses would not adversely affect the overall viability of the employment area or the achievement of the minimum intensification and density targets in this Plan, as well as the other policies of this Plan; and
 - e) there are existing or planned infrastructure and public service facilities to accommodate the proposed uses.
- 2.2.5.12. The Minister may identify provincially significant employment zones and may provide specific direction for planning in those areas to be implemented through appropriate official plan policies and designations and economic development strategies.
- 2.2.5.13. Upper- and single-tier municipalities, in consultation with lower-tier municipalities, will establish minimum density targets for all employment areas within settlement areas that:
 - a) are measured in jobs per hectare;
 - b) reflect the current and anticipated type and scale of employment that characterizes the employment area to which the target applies;
 - c) reflects opportunities for the intensification of employment areas on sites that support active transportation and are served by existing or planned transit; and
 - d) will be implemented through official plan policies and designations and zoning by-laws.

The Growth Plan policies regarding housing specifically address accommodating the forecasted growth, including:

- 2.2.6.2. Notwithstanding policy 1.4.1 of the PPS, 2020, in implementing policy 2.2.6.1, municipalities will support the achievement of complete communities by:
 - a) planning to accommodate forecasted growth to the horizon of this Plan;
 - b) planning to achieve the minimum intensification and density targets in this Plan;
 - c) considering the range and mix of housing options and densities of the existing

housing stock; and

d) planning to diversify their overall housing stock across the municipality.

- 2.2.6.4. Municipalities will maintain at all times where development is to occur, land with servicing capacity sufficient to provide at least a three-year supply of residential units. This supply will include, and may exclusively consist of, lands suitably zoned for intensification and redevelopment.

5.2.2 Supplementary Direction

- 5.2.2.1. To implement this Plan, the Minister will, in collaboration with other Ministers of the Crown where appropriate, identify, establish, or update the following:
 - a) the delineated built boundary;
 - b) the size and location of the urban growth centres;
 - c) a standard methodology for land needs assessment; and
 - d) provincially significant employment zones.

5.2.4 Growth Forecasts

- 5.2.4.1. All references to forecasted growth to the horizon of this Plan are references to the population and employment forecasts in Schedule 3 or such higher forecasts as are established by the applicable upper- or single-tier municipality through its municipal comprehensive review.
- 5.2.4.2. All upper- and single-tier municipalities will, at a minimum, through a municipal comprehensive review, apply the forecasts in Schedule 3 or such higher forecasts as are established by the applicable upper- or single-tier municipality through its municipal comprehensive review for planning and managing growth to the horizon of this Plan.
- 5.2.4.3. The population and employment forecasts and plan horizon contained in the applicable upper- or single-tier official plan that is approved and in effect as of August 28, 2020 will apply to all planning matters in that municipality, including lower-tier planning matters where applicable, until the upper- or single-tier municipality has applied the forecasts in Schedule 3 in accordance with policy 5.2.4.2 and those forecasts are approved and in effect in the upper- or single-tier official plan.
- 5.2.4.5. Within delineated built-up areas, municipalities may plan for development beyond the horizon of this Plan for strategic growth areas that are delineated in official plans and subject to minimum density targets, provided that: integrated planning for infrastructure and public service facilities would ensure that the development does not exceed existing or planned capacity; the type and scale of built form for the development would be contextually appropriate; and the development would support the achievement of complete communities, including a diverse mix of land uses and sufficient open space.
- 5.2.4.6. Outside of a municipal comprehensive review, the forecasts in Schedule 3 cannot be applied on a site-specific scale as the basis for approving or refusing proposals for development that would otherwise conform with all the policies of this Plan.
- 5.2.4.7. The Minister will review the forecasts contained in Schedule 3 at least every five years in consultation with municipalities, and may revise the schedule, where appropriate.

- 5.2.4.8. Higher forecasts established by upper- and single-tier municipalities through their municipal comprehensive reviews will not apply to Provincial ministries and agencies.

5.2.5 Targets

- 5.2.5.1. The minimum intensification and density targets in this Plan, including any alternative targets that have been permitted by the Minister, are minimum standards and municipalities are encouraged to go beyond these minimum targets, where appropriate, except where doing so would conflict with any policy of this Plan, the PPS or any other provincial plan.
- 5.2.5.2. The minimum intensification and density targets in this Plan or established pursuant to this Plan will be identified in upper- and single tier official plans. Any changes to the targets established pursuant to this Plan may only be implemented through a municipal comprehensive review.
- 5.2.5.3. For the purposes of implementing the minimum intensification and density targets in this Plan, upper- and single-tier municipalities will, through a municipal comprehensive review, delineate the following in their official plans, where applicable: delineated built-up areas; urban growth centres; major transit station areas; other strategic growth areas for which a minimum density target will be established; and excess lands.
- 5.2.5.4. Except as provided in policy 2.2.7.3, the minimum intensification and density targets in this Plan will be measured across all lands within the relevant area, including any lands that are subject to more than one target.
- 5.2.5.5. For each applicable delineated area, the minimum density targets in this Plan are to be implemented through: single-tier official plan policies that identify the minimum density targets and, through secondary planning or other initiatives, establish permitted uses within the delineated area and identify densities, heights, and other elements of site design; zoning all lands in a manner that would implement the official plan policies; and the use of any applicable legislative and regulatory tools that may establish area or site-specific minimum densities, heights, and other elements of site design.

Schedule 3: Distribution of Population and Employment for the Greater Golden Horseshoe to 2051

Region	Population 2051	Employment 2051
City of Toronto	3,650,000	1,980,000

Attachment 2: Population Projections

Overview

Population projections were constructed in order to translate the population forecast of the Growth Plan into an age structure of the city's population. This result was used in a subsequent step along with household headship and occupancy rates to project the demand for different types of housing. To accomplish this, a cohort-component model was developed to project the population of Toronto by single years of age and sex. This accounts for births, deaths and migration based on past trends. The projection timeframe is thirty-five years, from 2016 to 2051. The projection time period is five years, to coincide with Census periods. The demographic projections were adjusted to correspond to the Growth Plan population forecast as well as other scenarios. The estimated Census net undercount was included.

Context

Growth Plan Forecasts

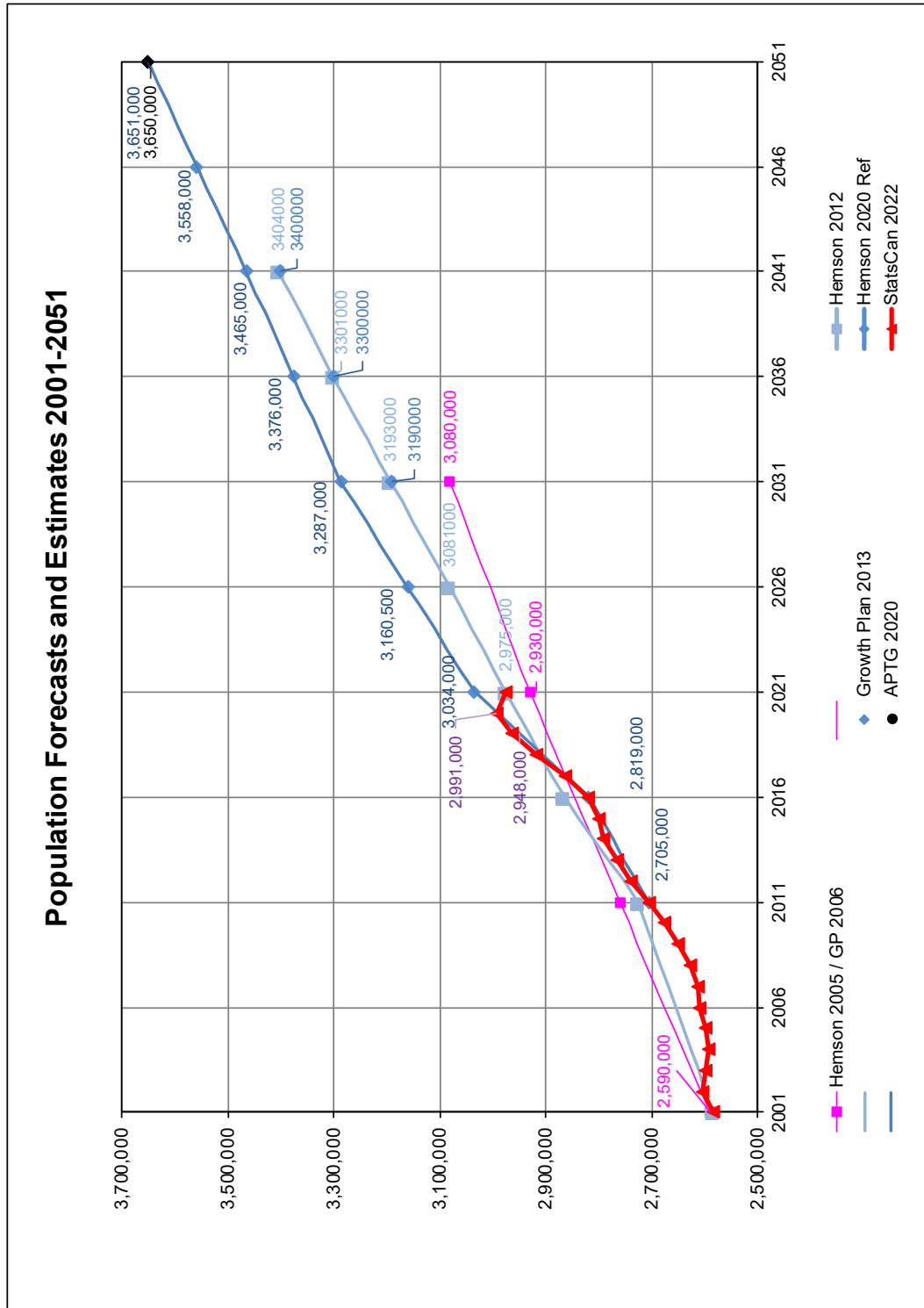
It is important to understand Toronto's growth in the context of its population and employment. A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2019) was brought into effect on May 16, 2019 by the Province. It manages growth and development throughout the region that stretches around Lake Ontario from Niagara Falls to Peterborough, with Toronto at its centre. On August 28, 2020, the Province released the amended A Place to Grow. The amended Growth Plan eliminates the 2031 and 2041 forecast years, replacing them with forecasts at 2051.

The Places to Grow Act requires that municipalities have regard for Provincial Plans. The various versions of the Provincial Growth Plan for the Greater Golden Horseshoe have required municipalities to use the population and employment forecasts in Schedule 3 for the purpose of planning and managing growth to the horizon of the Plan. The underlying technical background studies take into account demographic trends, long-run economic factors, and expert opinion regarding long-range trends in land use and the distribution of economic activity and sectoral trends across the broader region. These studies have produced figures for the single and upper-tier municipalities for Census years i.e. every five years. The forecasts in Schedule 3 of the Growth Plan include the forecast horizon, enabling each municipality to plan and monitor its own trajectory to those forecasts. Thus their growth may be above or below the Hemson forecasts but still on track to the long-range forecast horizon in Schedule 3, thirty-five years beyond the forecast base year. These are forecasts, not projections, in that they explicitly involve judgement on changes in demographic trends, the structure of the economy, and land use patterns.

Population is on track with the Growth Plan Forecasts

The city's population was on track with the population forecasts in A Place to Grow: Growth Plan for the Greater Golden Horseshoe (GGH) for 2020. Based on Statistics Canada's [Annual Demographic Estimates for Subprovincial Areas](#), the actual population of Toronto has been slightly below the forecasts supporting the Growth Plan, but generally on track with the forecast trajectory over the long term.

Figure 2.1: Toronto Forecasted Population, Hemson 2020 Reference Scenario, 2016-2051



Sources: Statistics Canada, *Annual Demographic Estimates and Annual Demographic Statistics*; Hemson Consulting Ltd 2005, 2012 and 2020; Ontario Ministry of Public Infrastructure Renewal, *Growth Plan for the Greater Golden Horseshoe, 2006*; Ontario Ministry of Infrastructure, *Growth Plan for the Greater Golden Horseshoe, 2006, Office Consolidation 2013*; Ontario Ministry of Municipal Affairs and Housing, *A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2020*.
 Prepared by: Toronto City Planning, Planning Research and Analytics, 2021

The underlying technical forecast study to Amendment 1 was prepared by Hemson Consulting Ltd. and released in August 2020. The 2051 forecasts in the amended Growth Plan correspond to the Reference Scenario in the 2020 technical forecast study. That Scenario has a 2016 population of 2,819,000 and a 2021 forecast population of 3,034,000. If the Reference Scenario is interpolated to 2020, the anticipated 2020 population is 2,991,000. According to Statistics Canada, the city's estimated actual population in 2020 of 2,990,856, is very close to the level anticipated by the forecasts supporting the Growth Plan.

Although Statistics Canada makes a great effort to count every person, in each Census a notable number of people are left out for a variety of reasons. For example, people may be travelling, some dwellings are hard to find, and some people simply refuse to participate. Statistics Canada takes this into account and for each Census estimates a net 'undercoverage' rate for the urban region, the Toronto Census Metropolitan Area (CMA), but not for the city. The 2016 rate for the Toronto CMA was 4.25% ± 0.42%. When this error rate is applied to the city of Toronto population, this is an error of +/- 11,841 people. Toronto's latest population estimate is well within this error range of the interpolated Growth Plan forecast. Consequently the City's population is on track with the forecasts supporting A Place to Grow as amended.

Impacts of the COVID-19 Pandemic

The COVID-19 pandemic has impacted the city's population growth.

The 2021 population estimate for Toronto by Statistics Canada is lower than the 2020 estimate. Whereas the forecasts supporting the Growth Plan anticipated a 2021 population (including undercoverage) of 3,034,000, the preliminary population estimate is 2,974,293, a difference of 59,707. This is about 1.6 years of population growth by comparison to the 2015-2020 period of 38,484 people per year on average.

The city of Toronto's population growth is largely driven by international migration, and this has been impacted by the COVID-19 pandemic. This is not a "slowing of growth". Hemson Consulting Ltd., which prepared the forecasts supporting A Place to Grow, anticipated that the fundamental growth patterns of the region would reassert themselves in three years' time. That prognostication will no doubt also be impacted by how many waves of infection there may be versus the progress of national vaccination programs and other governmental measures.

In January 2022, Statistics Canada released its Annual Demographic Estimates for Subprovincial Areas (ADE). This includes population estimates for the city of Toronto of 2,990,856 people in 2020 and 2,974,293 people as of July 1, 2021. These preliminary estimates are based on the 2016 Census plus adjustments for recent migration and Census undercounting. These estimates will be revised by Statistics Canada in later years utilizing the 2021 Census results.

Using the ADE, the estimated net undercoverage rate for the city in 2016 was 3.12% whereas for 2021 it may have almost doubled, to 6.05%. Although Statistics Canada makes a great effort to count every person, in each Census a notable number of people are left out for a variety of reasons. Insofar as the number of private occupied

households increased by 4.3% but population only by 2.3% while the estimated net undercoverage has doubled suggests that 2021 Census may have undercounted the City's population. According to the ADE, the city's population declined by 16,563 people or by 0.6% between 2020 and 2021. By comparison, the city grew by 27,627 people between 2019 and 2020, and no doubt most of that growth occurred before the pandemic impacts starting March 2020.

The ADE includes estimates of the Components of Population Growth, from July 1, 2020 to July 1, 2021. See Table 2.1a and 2.1b. Between July 1, 2020 and July 1, 2021, net international migration (Immigrants, Emigrants, Returning Emigrants and Net Temporary Emigration) decreased by 17,128 people combined while net interprovincial migration and intraprovincial migration decreased by 9,031 people. But the largest year-over-year decline is in Net Non-Permanent Residents, down by 22,074. Non-Permanent Residents (NPRs) are persons who are lawfully in Canada on a temporary basis under the authority of a temporary resident permit, along with members of their family living with them. NPRs include foreign workers, foreign students, refugee claimants and other temporary residents. Of the total year-over-year net change of -48,136 people, domestic migration represents only 19% of the decline, whereas international migration represents 81% of the decline. With the ending of pandemic restrictions and increasing international travel, the population decline may be short-lived.

There are many factors at play affecting the city's population counts. Insofar as we are in the midst of the pandemic's impacts, as well as the accelerated trend to work from home, partial lockdowns, economic restructuring and supply chain problems, it is difficult at this time to determine how much of the many changes occurring are temporary shocks or growing trends.

Table 2.1a: Components of Population Growth, 2016-2021, Toronto Census Division

Year	2016 / 2017	2017 / 2018	2018 / 2019	2019 / 2020	2020 / 2021
Births	30,151	30,035	29,470	29,191	28,438
Deaths	17,858	18,409	18,365	20,062	20,912
Immigrants	36,779	51,955	52,765	48,983	41,501
Emigrants	7,943	7,013	6,738	5,794	4,711
Returning Emigrants	5,560	5,389	5,324	8,075	1,252
Net Temporary Emigration	4,141	4,362	4,343	2,702	962
Net Interprovincial migration	5,490	3,544	2,199	1,914	-2,317
Net Intraprovincial migration	-30,124	-31,526	-33,134	-35,584	-40,384
Net Non-Permanent Residents	25,349	25,641	18,135	3,606	-18,468

Source: Statistics Canada, Annual Demographic Estimates: Subprovincial Areas, 2016-2021, Catalogue No. 91-214-X.

Table 2.1b: Comparison of Components of Population Growth between Years, 2016-2021, Toronto Census Division

Year	17/18 vs 16/17	18/19 vs 17/18	19/20 vs 18/19	20/21 vs 19/20
Births	-116	-565	-279	-753
Deaths	551	-44	1,697	850
Immigrants	15,176	810	-3,782	-7,482
Emigrants	-930	-275	-944	-1,083
Returning Emigrants	-171	-65	2,751	-6,823
Net Temporary Emigration	221	-19	-1,641	-1,740
Net Interprovincial migration	-1,946	-1,345	-285	-4,231
Net Intraprovincial migration	-1,402	-1,608	-2,450	-4,800
Net Non-Permanent Residents	292	-7,506	-14,529	-22,074

Source: Statistics Canada, Annual Demographic Estimates: Subprovincial Areas, 2016-2021, Catalogue No. 91-214-X.

Notes

1 Period from July 1 to June 30.

2 The estimates for births are preliminary for 2020/2021, updated for 2019/2020 and final up to 2018/2019. Preliminary and updated estimates of births were produced by Demography Division, Statistics Canada (see definitions, data sources and methods record number [3601](http://www.statcan.gc.ca/imdb-bmdi/3601-eng.htm) and [3608](http://www.statcan.gc.ca/imdb-bmdi/3608-eng.htm)). Final data were produced by Health Statistics Division Statistics Canada (see definitions data sources and methods record number [3231](http://www.statcan.gc.ca/imdb-bmdi/3231-eng.htm)).

Methodology

For the City of Toronto's long-range planning purposes, population and household projections have been prepared as part of the Planning Act reviews and Municipal Comprehensive Reviews of the Official Plan with respect to the Provincial Growth Plan for the Greater Golden Horseshoe, as amended.

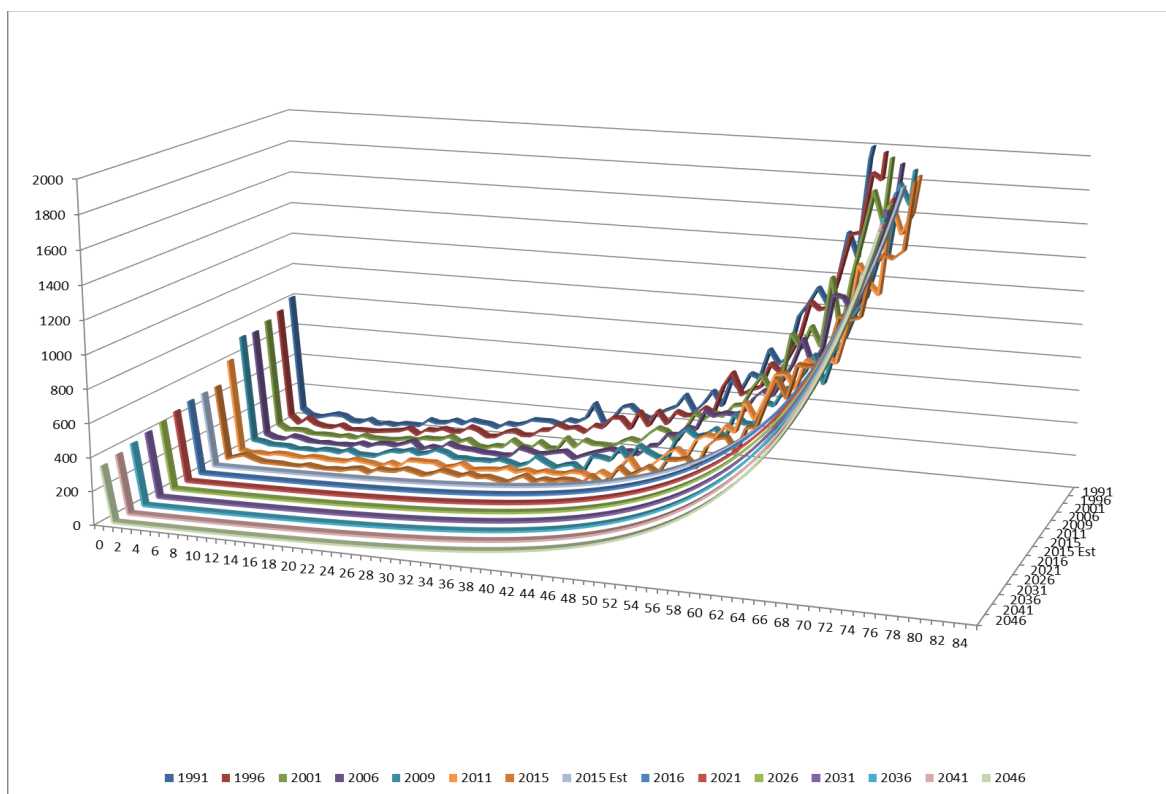
Utilizing the population forecasts in Schedule 3 of the Growth Plan, the supporting technical background studies by Hemson Consulting Limited, and Census of Population data from Statistics Canada for the base year, the regional population forecasts are used as control totals in a cohort-component model to project the City's population by single years of age to the forecast horizon. The projected population is translated into households based on the age distribution of the city's primary household maintainers. In turn, Census information about the dwelling types occupied by primary household maintainers enables the projected population to be translated into a projected demand for different types of dwellings over time.

A cohort-component model was developed to project the population of Toronto by single years of age and sex from 2016 to 2051. This accounts for births, deaths and migration based on past trends. International outmigration was estimated using the "residual migration" method. The projection time frame is thirty-five years, from 1996 to 2031. The projection time period is five years, to coincide with the Census of Population. Multiple scenarios were constructed, using different forecasts and projections as control totals in each period.

Cohort-component models project the number of people of one age group in successive time periods. This depends on knowing how many people in the previous time period are younger, and thus who age and survive to this older group. In the youngest age group, the new members are the surviving births and these must also be projected.

Net natural increase is the sum of births minus deaths. Information on births and deaths for various years were obtained from IntelliHealth Ontario via the Epidemiology and Data Analytics unit of Toronto Public Health. These were converted into 1-year and 5-year mortality rates for the specific year and smoothed using curve-fitting analysis to produce mortality rates and trends applicable over the projection horizon. For example, the age specific mortality rates for males are shown in Figure 2.2.

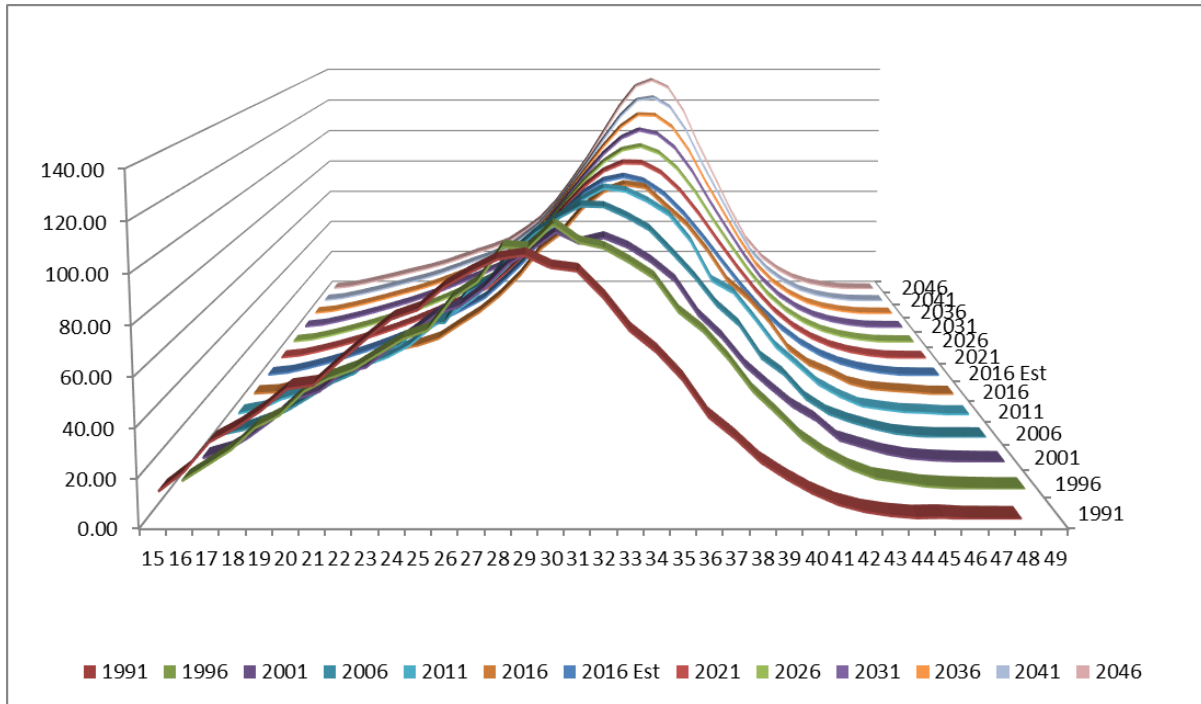
Figure 2.2: Age Specific Mortality Rates (Males) - Actual to 2015 and Projected to 2046



In general, population cohorts are multiplied by their respective survivorship rates to yield a surviving population in subsequent time periods. Age-specific survivorship rates were created, representing the proportion of the population remaining after the mortality rate is applied. This is used to determine how many people of a given age survive into the next projection period. Age-specific 5-year survivorship rates are applied to all age cohorts.

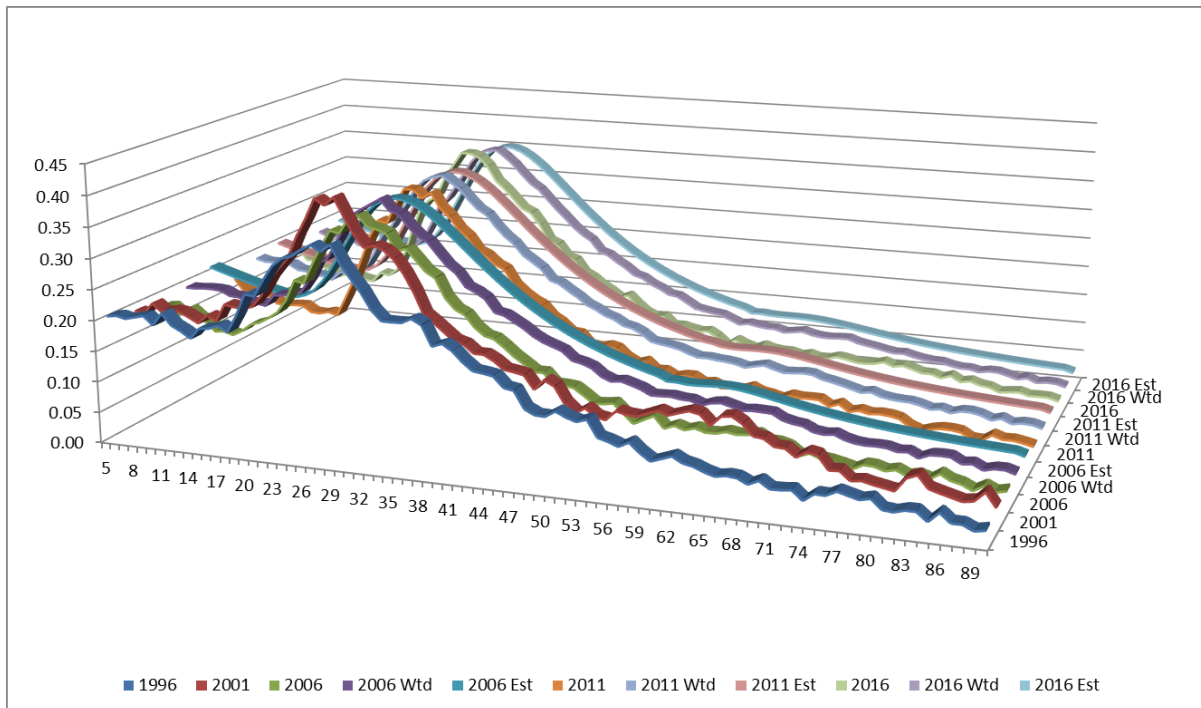
The cohorts of the female population of childbearing age are multiplied by the respective fertility rates to yield numbers of live births. A smoothed curve was estimated for 2016 and projected to 2046. These are multiplied by 1-year survivorship rates to calculate net natural increase for those 0 to 4 years of age. Age specific fertility rates are shown in Figure 2.3.

Figure 2.3: Age Specific Fertility Rates - Actual to 2016 and Projected to 2046



International in-migration, interprovincial migration and intraprovincial migration were calculated from Census information. International outmigration was estimated using the “residual migration” method. Net migration is the difference between the population surviving into the next time period and the target total population in the reference period. A smoothed curve was estimated for 2016; see Figure 2.4.

Figure 2.4: Migration Rates - Actual and Estimated 1996-2016



To arrive at a base migration rate, net migration for each age cohort is first estimated by comparing the difference between the 2011 population projected via natural increase and the 2016 actual counts for population and migration. In-migration from other parts of Canada and other parts of the world is captured by the Census, as is outmigration to other parts of the province and the country. The Census cannot capture international emigration which instead is inferred as the difference between the two sets of actuals. International emigration is the difference between the 2011 population projected via natural increase and the 2016 actual counts, less net migration. Once estimated, an out-migration rate is calculated for single years of age and used for the projection period. For each age cohort, out-migration is the surviving population of the cohort 5 years younger in the prior time period multiplied by the 2011-2016 out-migration rate.

For each projection period, the additional variable in projecting migration is the population target in each projection year. The international emigration that must be inferred occurs at the same time as the positive net migration necessary to achieve the Reference Forecast total for each projection period. The difference between the aggregate cohort-component results based on known values and the forecast is the scenario-related migration, the net migration required to meet the forecast totals. The out-migration for each year of age is adjusted by the ratio of these two population totals, after adjusting for undercoverage.

Results

The resulting population projections show the evolving age structure of the population, which will in turn contribute to an evolving demand for different types of housing. The emphasis on in-migration and the overall aging of the population results in change in demand for different types of dwellings over time. See Table 2.3 and Figure 2.5.

The resulting population projections including the estimated undercount produce results consistent with the Hemson 2020 Reference Forecast at 2051 and at the intermediate forecast periods, and, consistent with the population forecast in Schedule 3 of A Place to Grow: the Provincial Growth Plan for the Greater Golden Horseshoe, 2020. See Table 2.4.

**Table 2.4: Components of Population Change
Hemson 2020 Reference Projection Scenario**

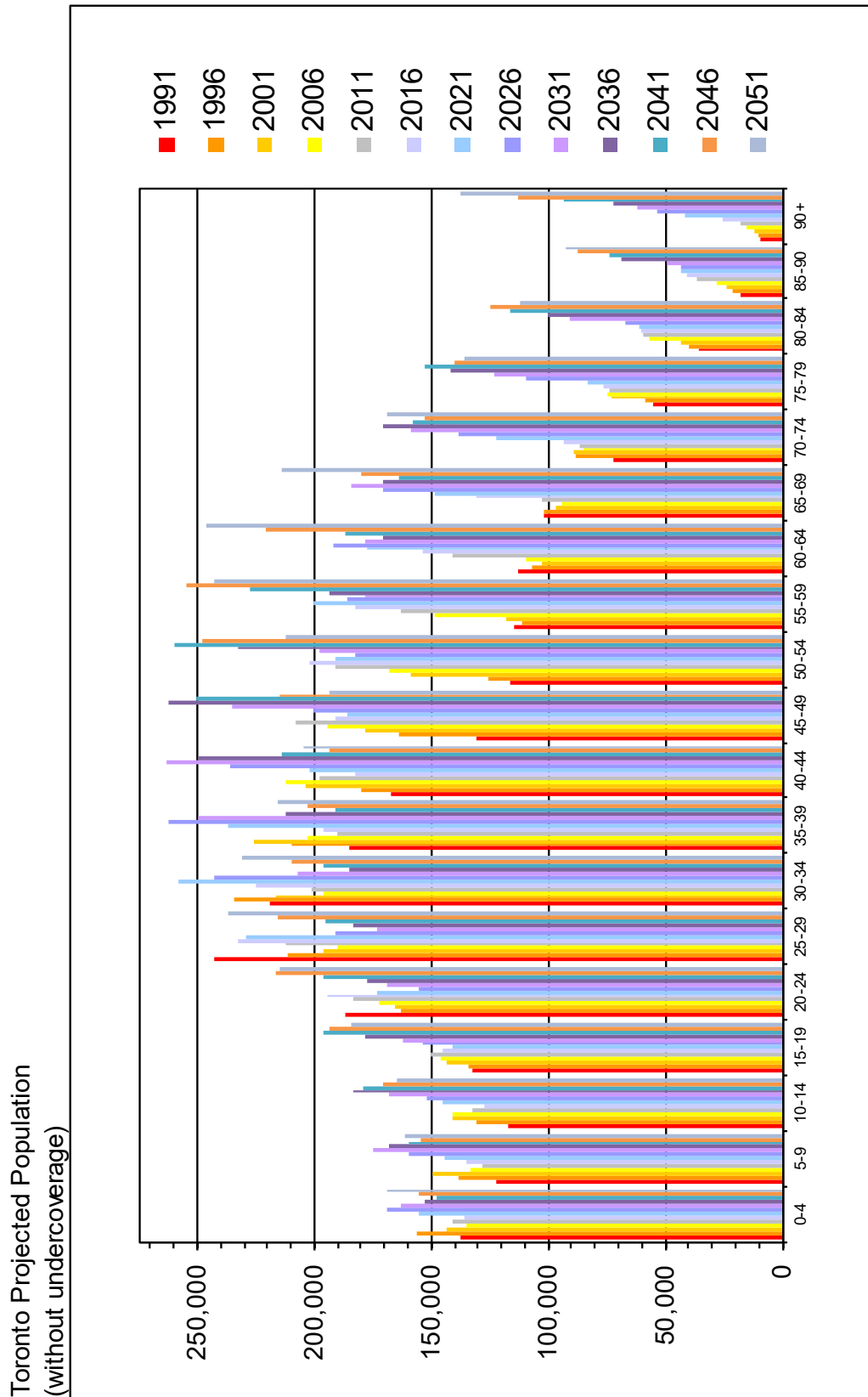
Year	Prior Population	Net Births	Deaths 5 Years of Age & Over	In-Migration	Out-migration	Migration Adjustment, Rounding	Final Population	Population with undercount	Forecast or Projection Control Total
2011							2,615,035	2,704,595	
2016	2,615,035	140,441	57,032	400,980	363,438	-4,441	2,731,545	2,819,370	2,819,000
2021	2,731,545	155,224	63,004	454,100	338,333	-17	2,939,515	3,034,030	3,034,000
2026	2,939,515	168,913	70,879	384,800	360,222	-12	3,062,115	3,160,570	3,160,500
2031	3,062,115	162,660	76,950	403,800	366,982	17	3,184,660	3,287,055	3,287,000
2036	3,184,660	152,996	84,039	394,800	377,512	-5	3,270,900	3,376,070	3,376,000
2041	3,270,900	148,006	92,342	416,300	385,759	15	3,357,120	3,465,060	3,465,000
2046	3,357,120	155,120	98,630	429,600	396,021	1	3,447,190	3,558,025	3,558,000
2051	3,447,190	169,037	103,774	434,900	410,023	-15	3,537,315	3,651,050	3,651,000

Table 2.3: Toronto Projected Population, Hemson 2020 Reference Scenario, 2016-2051

Scenario	Hemson 2020 Reference												
Toronto Projected Population (without undercoverage)	1991	1996	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
0-4	137,680	156,300	143,505	134,980	140,510	136,000	155,225	168,925	162,670	152,995	148,015	155,120	169,035
5-9	122,360	138,070	149,630	133,590	128,075	135,025	144,610	159,215	174,565	168,115	159,585	154,575	160,995
10-14	117,080	131,115	140,665	141,040	132,290	127,115	145,500	151,995	168,025	183,595	179,290	170,855	164,880
15-19	132,050	133,730	143,275	146,200	150,045	145,520	140,760	153,730	162,175	178,035	195,865	193,220	184,160
20-24	186,980	162,870	165,135	172,445	183,450	194,740	173,285	155,245	168,845	177,210	196,040	216,380	214,885
25-29	243,120	211,720	196,460	190,255	211,835	232,950	228,900	190,850	172,815	183,220	195,180	215,895	237,205
30-34	219,285	234,605	216,540	195,670	201,170	224,580	258,240	242,675	207,000	184,960	196,435	209,875	230,615
35-39	184,650	209,555	226,040	203,020	190,390	196,310	236,475	262,010	249,515	211,910	191,100	202,625	215,750
40-44	167,610	179,910	203,835	212,605	197,405	182,390	201,660	235,785	263,085	249,800	213,930	193,405	204,240
45-49	130,620	164,215	178,360	193,980	207,630	190,920	185,625	200,180	235,360	261,945	250,105	214,580	193,575
50-54	116,015	125,550	159,105	168,450	191,295	202,400	191,140	182,295	197,695	232,175	259,335	247,740	212,075
55-59	114,500	110,770	117,985	148,125	162,545	182,810	199,905	185,715	178,030	193,150	227,845	254,665	242,645
60-64	112,730	107,175	103,110	109,445	140,965	153,855	177,675	191,565	177,915	170,565	186,420	220,645	246,205
65-69	101,685	102,145	96,415	93,840	102,450	130,550	148,940	170,230	183,970	170,270	164,115	180,120	213,465
70-74	72,020	88,290	88,740	85,170	86,185	93,600	122,470	138,140	158,545	170,975	157,820	152,840	168,775
75-79	55,170	58,315	72,985	74,910	74,215	76,150	83,175	109,410	122,845	141,415	152,460	139,690	136,180
80-84	35,245	39,685	43,415	56,455	59,620	60,625	60,855	67,060	90,490	99,935	116,305	124,755	112,350
85-90	18,000	21,130	24,045	28,090	36,920	40,810	43,375	43,300	49,025	68,345	73,625	87,365	92,865
90+	8,970	10,320	12,210	15,020	18,040	25,195	41,700	53,790	62,090	72,285	93,650	112,840	137,415
Total	2,275,770	2,385,470	2,481,455	2,503,290	2,615,035	2,731,545	2,939,515	3,062,115	3,184,660	3,270,900	3,357,120	3,447,190	3,537,315

* Census Actuals; all other numbers are projected.
 Source: Statistics Canada, Census of Population; Toronto City Planning, Planning Research and Analytics

Figure 2.5: Toronto Projected Population, Hemson 2020 Reference Scenario, 2016-2051



* Census Actuals; all other numbers are projected.
 Source: Statistics Canada, Census of Population; Toronto City Planning, Planning Research and Analytics

Similar projections were created with respect to the Hemson 2020 High Scenario forecasting 3,766,000 people at 2051 and the 2021 Ministry of Finance projections anticipating a 2046 Toronto population of 3,954,378 people.

Subsequent work results in small-area population and household projections, by Census Tract and Traffic Zone. These projections are used in the review of planning applications, in long-range land use planning and policy development, in transportation infrastructure and service planning, in water infrastructure management and capital planning, in estimating development charges, and in parks, recreation and community services and facilities planning.

Comparison with Forecasts and Projections

The Growth Plan forecasts are used as the basis of long-range land use planning and growth management as required by the Places to Grow Act. The Ministry of Finance projections tend to be used by Divisions and agencies which receive Provincial funding for their programmes e.g. for health-related programme delivery. These projections are produced annually for the Province as a whole and for 49 Counties and Regions. These are primarily demographic projections and do not explicitly account for economic trends nor land use planning.

The Growth Plan Forecasts and the Ministry of Finance Projections differ significantly; see Figure 2.6. The orange line (and others) up to 2020 are the latest population estimates of Statistics Canada. The three purple lines are Ministry of Finance Projections (middle – 2018, top – 2019 draft, bottom – 2021 Spring). The blue line ending at 2031 was the first Growth Plan forecast circa 2006. The forecast supporting the Growth Plans of 2013, 2017 and 2019 is the light blue line ending at 2041. The population forecast of A Place to Grow, 2020 is the black box at 2051; the dark blue line is from the supporting technical background study by Hemson Consulting Ltd.

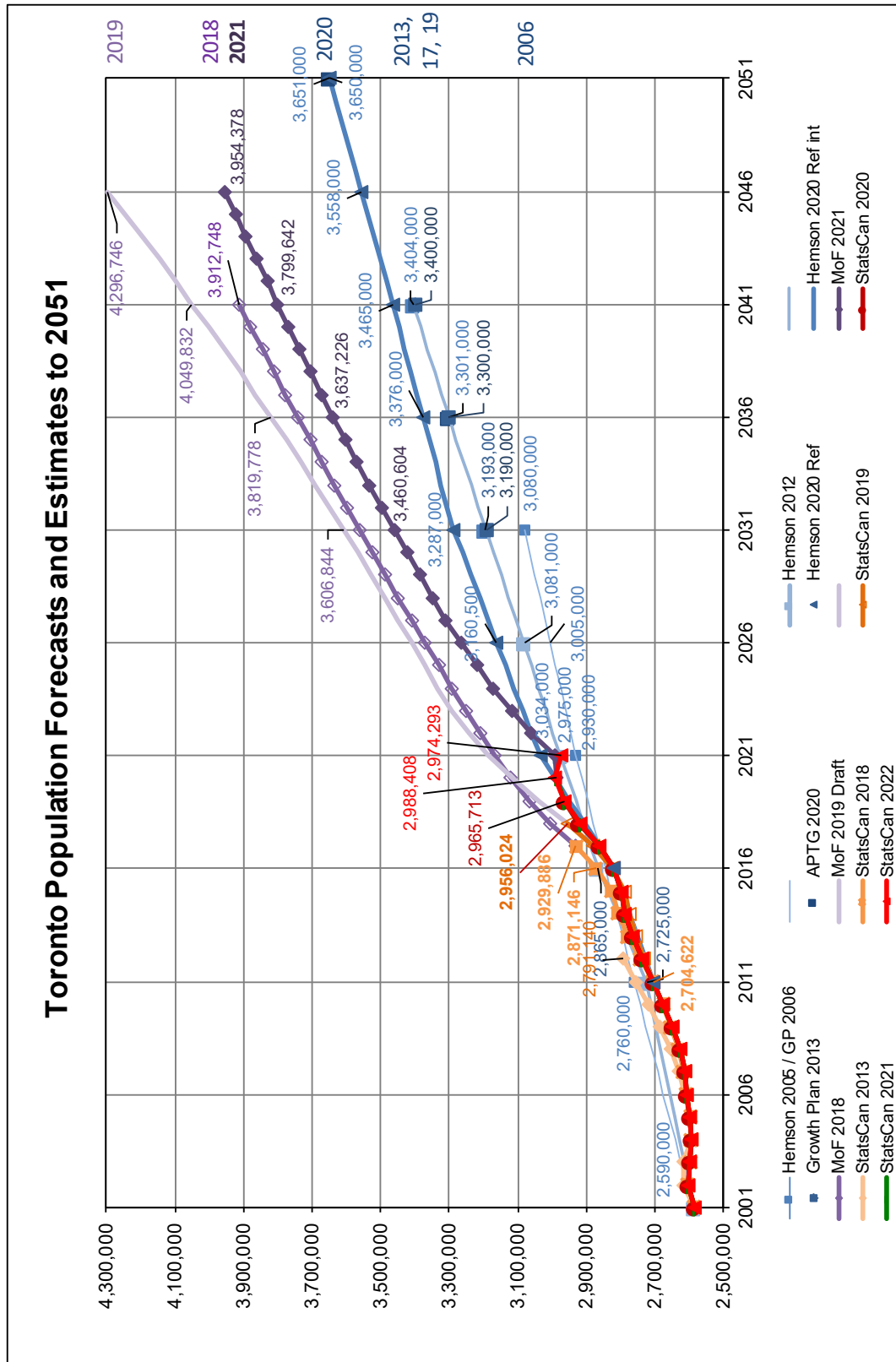
The Ministry of Finance projections change significantly from one year to the next, and, these projections are consistently higher and are trending higher than the Growth Plan forecasts, differing by about 400,000 people at 2046. These two different sets of figures are exceedingly difficult to reconcile. Historically, City Planning's internal monitoring of past projections and the population estimates of Statistics Canada has shown that actual growth achieved has more closely tracked Hemson's forecasts than the projections of the Ministry of Finance.

The Ministry of Finance projections are based on demographic trends and do not account for land use policy decisions, land constraints and historic levels of housing completions. As noted by Hemson Consulting in the technical background report supporting the Growth Plan forecasts, "[t]he key difference is that the Ministry of Finance projections assume that population growth will reflect recent migration trends and the continuing evolution of long-term fertility and mortality patterns. They do not explicitly account for long-term structural changes in the economy, housing market demand, and Provincial policies, plans, and investment that seek to influence the form and location of development in the GGH" (p. 24).

The Ministry of Finance projections are updated annually, enabling the use Statistics Canada's latest Annual Demographic Estimates of Subprovincial Areas as their starting point for each municipality, and including updated vital statistics on total fertility and mortality, as well as information on immigration and inter- and intraprovincial migration. Statistics Canada's estimates are revised annually, including estimates for previous years, resulting in significant changes in these values from one year to the next. The total fertility rates can also change each year, resulting in different projected trajectories. The documentation indicates that high and low scenarios of the underlying factors are considered in creating these projections. The projections and considerations are summarized on the Ministry's website.

The City is not legislated to undertake land use planning to achieve or to accommodate the growth represented by the Ministry of Finance Projections, nor the other household projection scenarios aside from the City's Reference Scenario. Their inclusion here demonstrates that City staff have considered a range of scenarios in the Land Needs Assessment.

Figure 2.6: Toronto Population Forecasts and Projections to 2051



Sources: Statistics Canada, *Annual Demographic Estimates and Annual Demographic Statistics*; Hemson Consulting Ltd 2005, 2012, 2020.
 Ontario Ministry of Public Infrastructure Renewal, *Growth Plan for the Greater Golden Horseshoe, 2006*;
 Ontario Ministry of Infrastructure, *Growth Plan for the Greater Golden Horseshoe, 2006, Office Consolidation 2013*;
 Ontario Ministry of Municipal Affairs and Housing, *A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2020*.
 Prepared by: Toronto City Planning, Planning Research and Analytics, July 2021

Attachment 3: Household Projections

Overview

In order to determine whether or not there was sufficient residential potential to accommodate the forecasted growth in the City, household projections were developed to represent the demand for housing. Along with the analysis of the City's residential potential, this enabled the construction of a reasonable model of how and when the forecasted population could be accommodated within the City in accordance with Official Plan policies, over the thirty-five years from 2016 to 2051.

Context

The Growth Plan states that the Minister of Municipal Affairs and Housing will establish a Methodology for assessing land needs to implement the Growth Plan. The Minister formally issued the final Land Needs Assessment Methodology (LNA Methodology) on August 28, 2020 in accordance with policy 5.2.2.1 (c) of the Growth Plan. Upper- and single-tier municipalities in the Greater Golden Horseshoe are required to use the LNA Methodology in combination with the policies of the Growth Plan to assess the quantity of land required to accommodate forecasted growth.

The LNA Methodology provides guidance to upper- and single-tier municipalities in the Greater Golden Horseshoe on calculating Housing Need as one of the components of the Land Needs Assessment. Per the LNA Methodology, the Housing Need calculation should entail the following:

- "Through the use of household formation rates and propensities to occupy particular dwelling types, the population forecast is converted into a forecast of households by type of dwelling.
- The number of households by dwelling type in the base year is subtracted, yielding forecasted household growth by dwelling type to the Plan horizon.
- Household growth by type is adjusted for many factors, including but not limited to:
 - the units added since the land needs assessment base year;
 - the replacement of units that will be lost (e.g. demolitions, other uses);
 - changes in the level of vacancies;
 - market contingency factors; and
 - other mitigating factors.
- The end result is the forecast of total housing need by dwelling type."

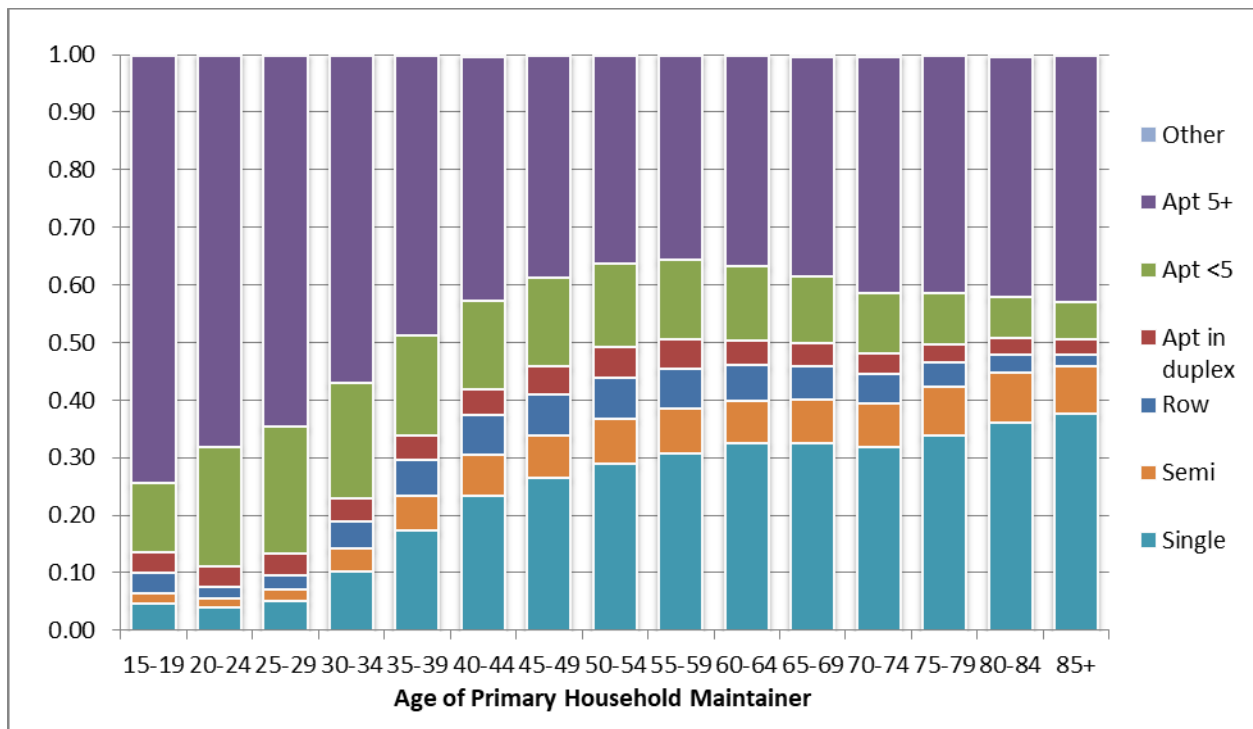
The following sections describes the methodology and the results of the City of Toronto's assessment of Housing Need, presented as Household Projections.

Methodology

Housing occupancy statistics and trends over the past twenty years based on Statistics Canada data were used to convert the projected population into projected city-wide demand for housing by dwelling type for each five-year period to 2051. For example, Figure 3.1 shows the 2016 propensity of households led by a Primary Household Maintainer of a given age to occupy a type of dwelling. Research into these trends is

documented in [Housing Occupancy Trends 1996-2016](#), received by the Planning and Housing Committee of Council on December 10, 2019.

Figure 3.1: Toronto Housing Headship Rates by Dwelling Type, 2016



Source: Statistics Canada, 2016 Census, Custom Tabulation
 Prepared by: Toronto City Planning, Planning Research and Analytics

Dwelling Types

The Land Needs Assessment Methodology for the Greater Golden Horseshoe 2020 (LNA Methodology) specifies that dwelling types should be grouped into the following:

- Single/semi-detached houses;
- Row houses: all forms of townhomes except for back-to-back townhouses;
- Apartments, which may be subdivided into:
 - Low-rise apartments: dwelling unit attached to other dwelling units including back-to-back townhouses, commercial units or other non-residential space in a building that has less than five storeys;
 - High-rise apartments: dwelling unit in a building which has five or more storeys; and,
- Other dwellings: All others.

To match the guidance in the LNA Methodology as closely as possible, households were projected by five different dwelling types:

- Single-detached and semi-detached houses,
- Row Houses,

- Apartments or flats in duplexes, and other dwelling types,
- Apartments in buildings with fewer than five storeys, and
- Apartments in buildings with five or more storeys.

These dwelling type groupings are based on Statistics Canada's structural type of dwellings categories in the Census. The Census is the most comprehensive source of housing occupancy data available.

The dwelling type groupings used in the City's household projections do not completely match those identified in the LNA Methodology because Statistics Canada's structural type of dwellings categories do not completely match those identified in the LNA Methodology. The LNA Methodology indicates that row houses should include all forms of townhomes except for back-to-back townhouses, whereas Statistics Canada classifies back-to-back townhouses as row houses. Additionally, rather than classifying stacked townhouses as row houses, Statistics Canada classifies them either as apartments or flats in duplexes or as apartments in buildings with fewer than five storeys, depending on whether there is only one dwelling above another, or more than one dwelling above another. Lastly, the apartments or flats in duplexes and other dwelling types grouping of the household projections excludes moveable dwellings, because there are very few of these in Toronto which causes their occupancy rates to vary widely from Census year to Census year. Including them may have skewed the results. Therefore the household projections' dwelling type groupings are very similar to the LNA Methodology's categories, but not an exact match.

The household projections' dwelling type groupings also differ from the categories in Hemson's technical background study regarding the regional forecasts. In that document, Hemson forecasts households into four categories: singles and semis, rows, accessory units, and apartments. Hemson's singles and semis category includes movable dwellings and existing houses where an accessory unit has been added, which Hemson estimated by adding half of the Census's apartments or flats in a duplex category. Hemson's accessory units category equals the other half of the Census's apartments or flats in a duplex category. Upon consultation with Statistics Canada, staff found that the Census may classify secondary suites as apartments or flats in a duplex, as semi-detached houses, or as apartments in buildings with fewer than five storeys. As such, the City did not attempt to separate the Census's dwelling types into accessory units. Hemson also combined apartments in buildings with fewer than five storeys and apartments in buildings with five or more storeys into one category, apartments. In the City's household projections, these categories were kept separate as they have different occupancy trends historically, including average persons per household.

As Hemson notes, their "housing forecast does not replicate/predict the housing mix that would be determined through each municipality's APTG [A Place to Grow] conformity work. Planned housing mixes will continue to be decided by municipalities through their local planning processes."¹

¹ Hemson Consulting Ltd. Greater Golden Horseshoe: Growth Forecasts to 2051. August 26, 2022. Accessed on May 6, 2022 from <https://www.hemson.com/wp-content/uploads/2020/08/HEMSON-GGH-Growth-Outlook-Report-26Aug20.pdf>.

Scenarios

Five different household projection scenarios were modelled. These scenarios included:

- Hemson Reference Household Projections Scenario: This scenario is based on the Reference Scenario Population Forecast that informed the 2020 technical background study regarding the regional forecasts by Hemson.
- City Reference Scenario: This scenario is based on the City's Reference Population Projection Scenario, which constitutes the population projections created by City Planning staff but which uses Hemson's Reference Scenario Population Forecasts as control totals.
- Hemson High Household Projections Scenario: This scenario is based on the High Scenario Population Forecast that informed the 2020 technical background study regarding the regional forecasts by Hemson.
- City High Scenario: This scenario is based on the City High Population Projection Scenario, which constitutes population projections created by City Planning staff but which uses Hemson's High Scenario Population Forecasts as control totals.
- Ministry of Finance Scenario: This scenario is based on the Ministry of Finance's Spring 2021 Population Projections for the Toronto Census Division to 2046, extrapolated by staff to 2051.

Results

Detailed Results by Scenario and by Five Dwelling Types

In recent years, the bulk of the City's new housing supply is apartments in buildings of five or more storeys. These units tend to have smaller household sizes on average, as reported by the Census. Further, the average number of persons per household in apartments in buildings of five or more storeys has declined over time, in part reflecting the trend toward smaller units. Thus given the City's potential housing supply, additional dwelling units are required to accommodate the same forecasted population. Taking these factors into account, a total of 1,622,105 units are projected to be required by 2051 in the City Reference Scenario to accommodate the forecasted population to 2051, as per the population forecasts supporting the Growth Plan as amended in 2020. The results of the City's household projections by scenario are presented in Table 3.1 below.

Table 3.1: Households by Projection Scenario and Five Dwelling Types, 2051

Scenario	Singles & Semis	Rows	Duplexes & Other	Apartments in Buildings with Fewer than 5 Storeys	Apartments in Buildings with 5 or More Storeys	Total
City Reference	379,245	77,240	61,590	204,015	900,015	1,622,105
City High	382,880	78,725	62,675	207,735	939,460	1,671,475
Hemson Reference	383,125	78,830	62,745	207,980	942,110	1,674,790
Hemson High	386,405	80,175	63,725	211,345	977,730	1,719,380
Ministry of Finance	400,020	85,745	67,780	225,275	1,125,445	1,904,265

The projected scenarios range from the City's Reference Scenario (1,622,105 households) to the Ministry of Finance Scenario (1,904,265). The other scenarios presented here show the same general pattern by dwelling type with their magnitudes falling between the City's Reference and the Ministry of Finance Scenarios. The Ministry of Finance Scenario is based on the Ministry of Finance's 2021 population projections extrapolated to 2051 (4,104,000 people), which are notably higher than Hemson's Reference Scenario population forecasts at 2051 (3,651,000 people). Historically, City Planning's internal monitoring of past projections and the population estimates of Statistics Canada has shown that actual growth achieved has more closely tracked Hemson's forecasts than the projections of the Ministry of Finance. The Ministry of Finance projections are annually updated and project population into the future based on demographic trends without taking into regard policy decisions, land constraints and historic levels of housing completions. The City is not legislated to plan to achieve or to accommodate the growth represented by the Ministry of Finance Projections, nor the other household projection scenarios aside from the City Reference Scenario; however, their inclusion here demonstrates that City staff have considered a range of scenarios in the Land Needs Assessment.

The City Reference Scenario corresponds to the population forecast in Schedule 3 of the Growth Plan and satisfies the requirement under Subsection 5.2.4.2 of the Growth Plan to apply the forecasts in Schedule 3 through its Municipal Comprehensive Review for planning and managing growth to the horizon of the Growth Plan.

Table 3.2 shows the change in households between 2016 and 2051 by the five dwelling types for each household projection scenario. The vast majority of the increase in households is anticipated to be in apartments in buildings with five or more storeys (406,880 households in the City Reference Scenario). More modest gains are anticipated in apartments in buildings with fewer than five storeys (38,365 households) and in single- and semi-detached houses (37,500 households). Households in rows and in duplexes and other units are anticipated to have the smallest increase (by 15,365 and 11,170 households, respectively).

Table 3.2: Change in Households by Projection Scenario and Five Dwelling Types, 2016-2051

Scenario	Singles & Semis	Rows	Duplexes & Other	Apartments in Buildings with Fewer than 5 Storeys	Apartments in Buildings with 5 or More Storeys	Total
City Reference	37,500	15,365	11,170	38,365	406,880	509,280
City High	41,135	16,850	12,255	42,085	446,325	558,650
Hemson Reference	41,380	16,955	12,325	42,330	448,975	561,965
Hemson High	44,660	18,300	13,305	45,695	484,595	606,555
Ministry of Finance	58,275	23,870	17,360	59,625	632,310	791,440

Toronto is entirely within the delineated built boundary as identified by the Minister of Municipal Affairs and Housing (with the exception of the Rouge Valley which lies within the Greenbelt area per Ontario Regulation 59/05) therefore, all of the projected

household demand is contained within the delineated built boundary and thus within the delineated built-up area.

Comparison with Hemson and the Right-Sizing Bulletin by Two Dwelling Types

Table 3.3 and 3.4 present the same results, condensed into two dwelling types for comparability with the dwelling types published in Hemson's Reference Scenario Household Forecasts as published in the 2020 technical background study regarding the regional forecasts. These tables include four comparators, including Hemson's Reference Scenario Household Forecasts and the three household estimate scenarios from the City's research bulletin, [Right-Sizing Housing and Generational Turnover](#) ("Right-Sizing bulletin"), adopted with amendments by the Planning and Housing Committee of Council on June 11, 2021.

The City Reference Scenario projects more households (1,622,105) than the number that was forecast by Hemson (1,543,789). Given the city's decreasing average number of Person Per Household, and given that the majority of recent construction in the city has been in the form of apartments in buildings with five or more storeys, the City Household Projection scenarios all anticipate that more units both in the form of houseform units and apartments will be needed to house the population by 2051, compared with Hemson's Reference Scenario Household Forecasts.

While the city is largely built out, some of the future new houseform construction may consist of garden suites, laneway suites, secondary suites, row/townhomes, and multiplexes. The City is working to expand opportunities for such "missing middle" housing forms in Toronto through the Expanding Housing Options in Neighbourhoods (EHON) initiative including garden suites, laneway suites and multiplex dwelling types. The Neighbourhood Change and Intensification bulletin explored a range of scenarios, and concluded that gentle intensification within the existing zoning could accommodate an estimated 115,000 people. Other scenarios had higher yields, up to 573,000 people. At the average of 3.13 persons per household in all ground-related dwellings built 1996 to 2016 per the 2016 Census, these scenarios could represent a range of 36,700 to 183,100 dwellings. These magnitudes suggest that the number of projected houseform households in the City Reference Scenario and in Hemson Reference Household Forecast may be achievable. As Hemson notes, their "housing forecast does not replicate/predict the housing mix that would be determined through each municipality's APTG conformity work. Planned housing mixes will continue to be decided by municipalities through their local planning processes."²

The Right-Sizing bulletin estimated how much new housing stock may be needed in the future if recent housing completion and demographic trends continue. That analysis identified shortfalls between demand and supply for housing with certain characteristics (including single- and semi-detached houses), and that such shortfalls could be overcome with increases in the annual supply of those types of dwellings. As a result, the number of single and semi-detached households estimated in the Right-Sizing

² Hemson Consulting Ltd. Greater Golden Horseshoe: Growth Forecasts to 2051. August 26, 202. Accessed on May 6, 2022 from <https://www.hemson.com/wp-content/uploads/2020/08/HEMSON-GGH-Growth-Outlook-Report-26Aug20.pdf>.

bulletin scenarios are larger than those in either Hemson's forecast scenarios or the City Household Projections. The Right-Sizing bulletin's household estimates represent the shift in dwelling types from apartments to houseform units that might be needed to meet the future demand for housing, whereas the City Household Projections consider the likelihood of future construction by dwelling type based on recent construction trends. The total number of dwellings estimated in the Right-Sizing bulletin in 2051 (1,465,066 to 1,625,061) is comparable to the City Reference Household Projections Scenario (1,622,105).

Table 3.3: Households by Projection Scenario and Two Dwelling Types, 2051

Projection Scenario or Comparator	Scenario	Houseform	Apartments	Total
Household Projection Scenarios	City Reference	518,075	1,104,030	1,622,105
	City High	524,280	1,147,195	1,671,475
	Hemson Reference	524,700	1,150,090	1,674,790
	Hemson High	530,305	1,189,075	1,719,380
	Ministry of Finance	553,545	1,350,720	1,904,265
Comparators	Hemson Reference Household Forecasts	509,392	1,034,398	1,543,789
	Right-Sizing Base Scenario	615,564	849,502	1,465,066
	Right-Sizing Low Unmet Demand Scenario	638,857	888,422	1,527,279
	Right-Sizing High Unmet Demand Scenario	643,439	981,621	1,625,061

Notes: Apartments includes apartments in buildings with fewer than five storeys and apartments in buildings with five or more storeys. Houseform dwelling types include all other dwelling types. While the numbers for the Hemson Reference Household Forecasts presented here are not rounded, they represent the same values as those presented in "Greater Golden Horseshoe: Growth Forecasts to 2051".

In the City Reference Scenario, 509,280 units are projected to be required after 2016 (see Table 3.4) to accommodate the forecasted population to 2051, as per the population forecasts supporting the Growth Plan as amended in 2020. According to Hemson's 2020 forecasts supporting the Growth Plan as amended in 2020, an additional 430,864 households are anticipated between 2016 and 2051. The City is not legislated to meet the Ministry of Finance Projections, nor the other population projection scenarios aside from the Growth Plan forecast as has been incorporated into City Reference Scenario; however, their inclusion here demonstrates that City staff are considering a range of scenarios in the Land Needs Assessment. The City Reference Scenario satisfies the City requirement under 5.2.4.2 of the Growth Plan to establish a forecast through its Municipal Comprehensive Review for planning and managing growth to the horizon of the Growth Plan. Therefore, the potential demand for housing by 2051 ranges from 430,864 households as forecast by Hemson Consulting Ltd in 2020, up to 509,280 units based on the City's Reference household projections, using the Growth Plan population forecasts as control totals.

Table 3.4: Change in Households by Projection Scenario and Five Dwelling Types, 2016-2051

Projection Scenario or Comparator	Scenario	Houseform	Apartments	Total
Household Projection Scenarios	City Reference	64,035	445,245	509,280
	City High	70,240	488,410	558,650
	Hemson Reference	70,660	491,305	561,965
	Hemson High	76,265	530,290	606,555
	Ministry of Finance	99,505	691,935	791,440
Comparators	Hemson Reference Household Forecasts	58,097	372,768	430,864
	Right-Sizing Base Scenario	161,524	190,717	352,241
	Right-Sizing Low Unmet Demand Scenario	184,817	229,637	414,454
	Right-Sizing High Unmet Demand Scenario	189,399	322,836	512,236

Note: Apartments includes apartments in buildings with fewer than five storeys and apartments in buildings with five or more storeys. Houseform dwelling types include all other dwelling types. While the numbers for the Hemson Reference Household Forecasts presented here are not rounded, they represent the same values as those presented in Greater Golden Horseshoe: Growth Forecasts to 2051.

Attachment 4: Census Housing Stock, the Development Pipeline and Demolition Permits

Census Housing Stock

The forecasts in Schedule 3 of A Place to Grow, the Provincial Growth Plan for the Greater Golden Horseshoe (2020) are supported by the forecasts prepared by [Hemson Consulting Ltd.](#) for the Province in their report Greater Golden Horseshoe: Growth Forecasts to 2051, available at <https://www.hemson.com/wp-content/uploads/2020/08/HEMSON-GGH-Growth-Outlook-Report-26Aug20.pdf>. The base year of these forecasts is 2016. Consequently, the City projections use the counts of occupied private dwellings by structural type from the 2016 Census to represent the City's housing stock in 2016, as the base year for its projections.

Historically, Toronto's supply of low density, ground-related housing was built to accommodate growing couples with children, while mid/high-rise apartments were developed to accommodate smaller, often lower income, households. Toronto's housing stock has continued to evolve to now provide a wide range of dwelling types. This is evident in the evolution and continued occupation of its historic stock, gradual redevelopment and intensification throughout the city as well as the more recent building trend of predominately condominium mid/high-rise units that constitute the bulk of the recent housing supply. In 2016, there were 557,920 houses and low-rise units, 61,875 row/townhouses and 493,135 mid/high-rise apartment units in buildings of 5 or more storeys. All dwelling types have increased since 1996.

Prior to the 2006 Census, Statistics Canada classified single- and semi-detached dwelling structures that contained apartments as either single-detached or semi-detached structures. In 2006, Statistics Canada classified ground-related dwellings with apartments as apartments or flats in duplexes or units in apartments with less than 5 storeys. Approximately 53,000 ground-related units were reclassified. Due to this reclassification and the long-range assessment of development potential, in this Study the Census structural types are collapsed into two categories: units in apartment buildings of 5 or more storeys, and ground-related dwellings that includes all other structure types.

For more information on the housing stock and its change over time, see Housing Occupancy Trends 1996-2006, available at https://www.toronto.ca/wp-content/uploads/2019/11/9895-CityPlanning_HousingOccupancyTrends_1996to2016.pdf.

The Development Pipeline

Overview

The City of Toronto's most recent Development Pipeline consists of all development projects in the City of Toronto with any development activity in a five-year window between January 1, 2016 and December 31, 2020. A development project is the collection of Planning and Building Permit Applications having to do with a single site. Development activity refers to progress at any stage of the approvals and development processes, including: Planning application submission, review and approval; Building Permit application and issuance, construction, occupancy, and completion. Projects are

categorized into three general statuses, based on the stage of the development approvals and construction process they reached during the pipeline window.

- **Built** projects are those which became ready for occupancy and/ or were completed during the period.
- **Active** projects are those which have received at least one Planning approval but which have not yet been built.
- **Under Review** projects are those which have not yet been approved or refused, and those which are under appeal.

The most recent Pipeline is profiled in the Development Pipeline 2021 Bulletin, available from <https://www.toronto.ca/city-government/data-research-maps/research-reports/planning-development/development-pipeline/>. The map of the Development Pipeline shown in Figure 4.1 indicates the location of the residential projects; Figure 4.2 shows the non-residential development projects.

Context

For the Land Needs Assessment, a five-and-a-half year Pipeline ("MCR Pipeline") was used, ranging from January 1, 2016 to December 31, 2020, plus any additional development proposals received in the six months to June 30, 2021. The span of this MCR Pipeline ensured that the entire intercensal period of May 10, 2016 to May 11, 2021 was included.

Results

The MCR Pipeline contains 2,229 development projects comprised of 539,449 residential units and 12.9 million m² of non-residential gross floor area. Over 85% of the proposed residential development is in areas that the Official Plan has targeted for growth, such as Downtown and the Central Waterfront, the Centres, and the Avenues, which are shown on Figure 3. The Pipeline is a conservative measure of the near-term housing supply in that it does not capture all new units. Building Permits for new buildings of four dwelling units or less are exempted from Site Plan Control and thus do not require a planning application and are therefore not included in the Pipeline.

Table 4.1: Proposed Projects in City of Toronto by Status

Geography	Built	Active	Under Review	Total in Pipeline	% of Total
City of Toronto	683	768	778	2,229	100.0
Growth Areas	398	464	521	1,383	62.0
Downtown and Central Waterfront	146	177	157	480	21.5
Centres	34	31	45	110	4.9
Avenues	144	183	229	556	24.9
Other Mixed Use Areas	74	73	90	237	10.6
All Other Areas	285	304	257	846	38.0

Source: City of Toronto, City Planning: Land Use Information System II. Development projects with activity between January 1, 2016 and June 30, 2021. Built projects are those which became ready for occupancy and/or were completed. Active projects are those which have their first Planning approval, for which Building Permits have been applied or have been issued, and/or those which are under

construction. Projects under review are those which have not yet been approved or refused and those which are under appeal.

Table 4.2: Proposed Residential Units in City of Toronto by Status

Geography	Built	Active	Under Review	Total in Pipeline	% of Total	% of Growth Areas
City of Toronto	109,617	166,182	263,650	539,449	100.0	N/A
Growth Areas	96,233	145,088	219,538	460,859	85.4	100.0
Downtown and Central Waterfront	47,260	64,030	51,545	162,835	30.2	35.3
Centres	11,944	15,538	27,632	55,114	10.2	12.0
Avenues	22,256	32,432	77,756	132,444	24.6	28.7
Other Mixed Use Areas	14,773	33,088	62,605	110,466	20.5	24.0
All Other Areas	13,384	21,094	44,112	78,590	14.6	N/A

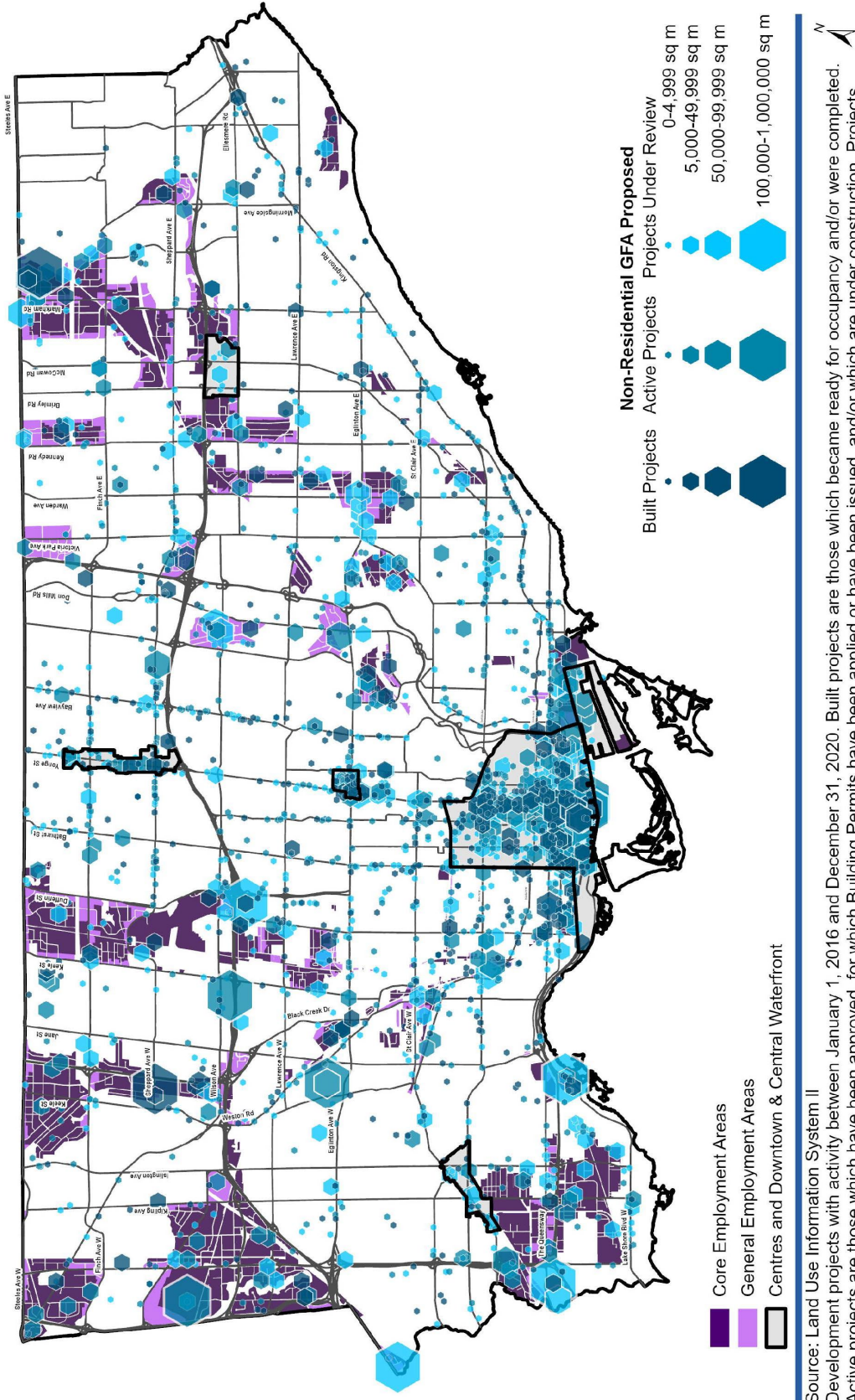
Source: City of Toronto, City Planning: Land Use Information System II. Proposed residential units in development projects with activity between January 1, 2016 and June 30, 2021. Built projects are those which became ready for occupancy and/or were completed. Active projects are those which have their first Planning approval, for which Building Permits have been applied or have been issued, and/or those which are under construction. Projects under review are those which have not yet been approved or refused and those which are under appeal.

Table 4.3: Proposed Non-Residential GFA (m2) in City of Toronto by Status

Geography	Built	Active	Under Review	Total in Pipeline	% of Total	% of Growth Areas
City of Toronto	3,027,040	5,192,692	4,680,376	12,900,108	100.0	N/A
Growth Areas	1,848,752	2,693,341	3,174,234	7,716,327	59.8	100.0
Downtown and Central Waterfront	1,335,817	2,018,018	1,633,749	4,987,584	38.7	64.6
Centres	82,269	135,001	235,592	452,862	3.5	5.9
Avenues	212,086	240,362	618,791	1,071,239	8.3	13.9
Other Mixed Use Areas	218,580	299,960	686,103	1,204,643	9.3	15.6
All Other Areas	1,178,288	2,499,351	1,506,142	5,183,781	40.2	N/A

Source: City of Toronto, City Planning: Land Use Information System II. Proposed non-residential GFA in development projects with activity between January 1, 2016 and June 30, 2021. Built projects are those which became ready for occupancy and/or were completed. Active projects are those which have their first Planning approval, for which Building Permits have been applied or have been issued, and/or those which are under construction. Projects under review are those which have not yet been approved or refused and those which are under appeal.

Figure 4.2: City of Toronto Proposed Non-Residential Development



Source: Land Use Information System II
 Development projects with activity between January 1, 2016 and December 31, 2020. Built projects are those which became ready for occupancy and/or were completed.
 Active projects are those which have been approved, for which Building Permits have been applied or have been issued, and/or which are under construction. Projects
 under review are those which have not yet been approved or refused and those which are under appeal.

Prepared by: Toronto City Planning Division, Planning Research and Analytics - June 2021

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Not all proposed projects are approved, and not all approved projects are built. For example, the full MCR Pipeline includes 29 projects proposing 16,743 residential units in designated Employment Areas. These projects were not included in the assessment of future housing supply as they are not in areas intended for residential growth based on the current and in-force Official Plan land use designations. The MCR Pipeline outside of designated Employment Areas totals 1,508 residential projects and 522,706 units. Of these, 17,721 units in 65 projects had been built by Census Day, May 10, 2016. The net total potential housing in the Pipeline after Census Day is 504,985 proposed units.

Housing Growth is on Track with the Growth Plan Forecasts

Toronto's housing growth is also on track with the household forecasts supporting A Place to Grow as amended in 2020. The recent pace of development activity is such that the City may achieve the Growth Plan population forecasts before 2051. The [Development Pipeline 2021 bulletin](#), was presented to the Planning and Housing Committee of Council on June 28, 2021 and [was adopted without amendment](#). The bulletin reports on development projects with approval or construction activity over the five-year period from 2016 to 2020. This is older and shorter than the time horizon of the MCR Pipeline which was designed to correspond to the Census period. The summary findings of the bulletin are outlined below, providing intermediate tracking on progress toward accommodating the population growth forecasted by Growth Plan.

The Growth Plan as amended is supported by the Technical Report by Hemson Consulting Ltd also completed in 2020. The Reference Forecast of that report translates the forecasted population into households and anticipates that 495,800 households need to be accommodated over the forty-year period from 2011 to 2051. The Reference forecast anticipates that 430,900 households need to be accommodated after the forecast base year of 2016 to the 2051 horizon, thirty-five years later.

Table 4.4: Growth Plan Forecast versus Development Pipeline

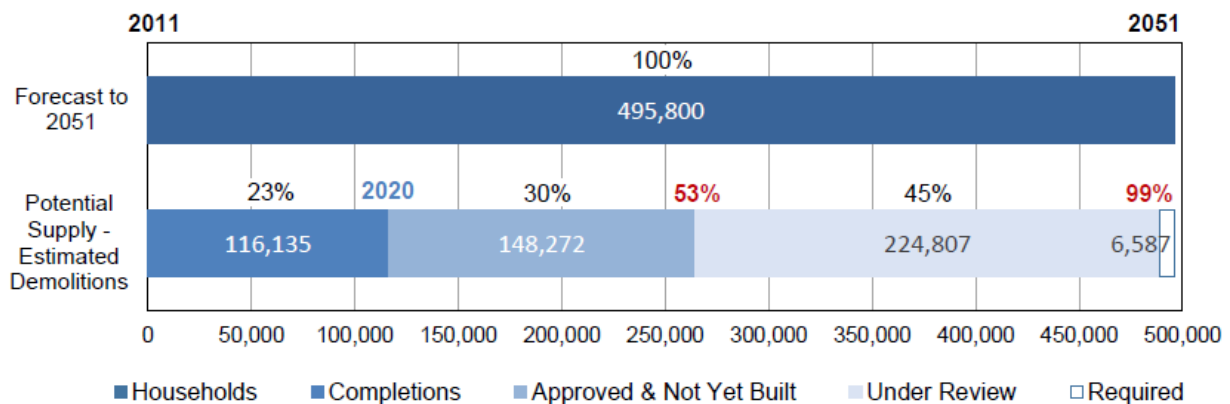
		Potential Supply (Units)	%	Potential Supply Less Estimated Demolitions	%
Hemson Forecast	2011 - 2051	495,800	100.0	495,800	100.0
CMHC Completions	2011 - 2020	127,481	25.7	116,135	23.4
Active Units	2016 - 2020	162,757	32.8	148,272	29.9
Under Review Units	2016 - 2020	246,769	49.8	224,807	45.3
Total Units		537,007	108.3	489,213	98.7
Additional Potential / Shortfall		41,207	8.3	-6,587	-1.3

Sources: City of Toronto, City Planning Division: Integrated Business Management System; Land Use Information System II; Canada Mortgage and Housing Corporation: Housing Now, GTA Edition tables.

Based on development projects with activity between January 1, 2016 and December 31, 2020 less estimated demolitions using a demolition rate of 8.9% based on Demolition Permits issued 2005-2020 versus CMHC Completions over the same period. Active projects are those which have been approved, for which Building Permits have been applied or have been issued, and/or those which are under construction, but are not yet built. Projects Under Review are those which have not yet been approved or refused and those which are under appeal.

Just nine years into the forty-year forecast period, Toronto has seen built or proposed almost enough potential housing less estimated demolitions to accommodate the forecasted growth to 2051. CMHC reports that 127,481 units were completed between May 2011 and April 2020 for a net total of 116,135 units. The Development Pipeline contains 162,757 units in projects with their first Planning approval but not yet built. If realized, the estimated net new supply would be 148,272 units. Together this is 53% of the net units required to accommodate the forecasted growth over forty years. A further 246,769 units are in development projects still under review for an estimated added net supply of 224,807 units or a further 45% of the forecasted growth. Together this represents almost 99% of the units required to accommodate the forecasted household growth to 2051 (see Figure 4.3).

Figure 4.3: Growth Plan Forecast versus the Development Pipeline 2021



Sources: City of Toronto, City Planning : Integrated Business Management System; Land Use Information System II; Canada Mortgage and Housing Corporation: Housing Now, GTA Edition tables.

Based on development projects with activity between January 1, 2016 and December 31, 2020 less estimated demolitions using a demolition rate of 8.9% based on Demolition Permits issued 2005-2020 versus CMHC Completions over the same period. Built projects are those which became ready for occupancy and/or were completed. Active projects are those which have been approved, for which Building Permits have been applied or have been issued, and/or those which are under construction, but are not yet built. Projects under review are those which have not yet been approved or refused and those which are under appeal.

The demolition rate employed in this analysis is uniformly applied to all structural types. About 88.4% of the demolitions over the 2005-2020 period were for ground-related units succeeded for other ground-related units on the same site, whereas the large majority of the City's housing supply is in the form of mid-rise and high-rise apartment units. The application of a uniform demolition rate overestimates the numbers of units to be demolished to realize the potential supply. The net potential housing supply in the pipeline is in fact larger than estimated.

In addition, over the five years from 2016 to 2020, Council has approved more residential units than were built. City Council approved an average of 28,170 residential units per year between 2016 and 2020, while 15,303 units on average were built annually. This is a surplus of 12,867 units on average or 84% of the average annual production through the Pipeline. This surplus helps to ensure a steady supply of approved housing will be available for construction and eventual occupancy.

Not all submitted proposals are approved, and not all approved projects are built. However, given these trends, Toronto is well on its way to housing the population forecasted by A Place to Grow as amended.

Comparison with the 2016 MCR Analysis

Previous versions of the Pipeline before 2016 are not directly comparable. Prior to 2016, Pipelines reported on all projects received within a five-year period. This includes the Pipeline that informed the City's previous MCR exercise, which consisted of 1,645 development projects proposing 148,242 residential units and just under 4.25 million m² of non-residential gross floor area. Under that older methodology, an increasing number of projects still progressing through the development approvals process fell outside of the Pipeline window. Over time projects have become larger and more complex and subsequently require a longer review and construction process. Consequently, in 2016, the Development Pipeline was enhanced to identify projects with any approval or construction activity within the five-year timeframe, to provide a more fulsome representation of near-term housing supply in the city.

The MCR pipeline consists of a five-and-a-half-year window as opposed to the five-year window used in the previous MCR analysis. As a result, the Pipeline used to inform the current MCR contains more development activity than the Pipeline informing the previous MCR, due to its expanded timeframe and improved methodology.

Demolition Permits

Demolition permits are typically issued upon the approval of a building permit for the development that will replace the current use. Analyzing demolitions and calculating demolition rates helps to provide a suitable proxy for current redevelopment and construction trends.

There were 5,645 residential Demolition Permits issued containing 7,952 units between January 1, 2016 and December 31, 2020 within the city. These permits were analyzed by year and type showing that the number of units demolished each year was relatively stable with the exception of 2020 in which there were slightly fewer permits issued. On average, 1,129 units were demolished per year. By comparing the number of permits with the number of units completed (as recorded by the Canadian Mortgage and Housing Corporation) over the same time period, an overall demolition rate of 8.9% was calculated. Analysis also showed that 86.6% of the units being demolished are ground-related.

The net supply of housing to accommodate the forecasted additional households is the sum of the proposed new units less those that will be demolished to make way for new buildings through redevelopment and intensification. The number of "net new" proposed units, the proposed units less the units demolished to realize them, can be estimated using Demolition Permits. This as-of-right construction, or development below the Site Plan Control threshold, does not require a Site Plan application and is not captured by the Development Pipeline. Therefore an additional analysis was undertaken to look at only those Demolition Permits that were within a Site Area. This way one could compare the total units demolished to the total proposed units in the Development Pipeline. This showed that 85.3% of the permits are one-for-one replacements and the apartment unit demolition rate is 0.7%.

The overall demolition rate of 8.9% was applied against the existing housing stock, instead of the supply, for the very reason that the large majority of the demolitions were

in fact one-for-one replacements i.e. the demolitions were largely not for intensification but for replacement of existing units. Thus the 8.9% is actually an over-representation of the actual demolitions of the new supply captured by Planning approvals while under-estimating the as-of-right demolitions. By incorporating demolition permits back to 2006 the effective demolition rate was determined to be 1.30% ground-related stock and 0.12% of apartments in buildings of 5 or more storeys. These rates were applied to the existing 2016 housing stock based on the 2016 Census plus the new supply in each five-year period.

Attachment 5: Opportunities Analysis

Overview

The Opportunities Analysis estimates the potential housing (units) that could be developed on sites across the city, excluding Downtown, the Centres and Midtown. Midtown in this context refers to the Yonge-Eglinton Secondary Plan area as shown on the map in Figure 5.1. Potential along the Avenues is included. In total, potential for almost 400,000 units has been identified through the consultation with Community Planners described earlier.

Context

The residential estimates were intended to be conservative, consistent with the existing policy framework of the Official Plan, the Growth Plan and the Provincial Policy Statement. The estimates are designed to capture potential above what is proposed or approved by a formal development project. This avoids double-counting development potential already captured by proposals in the Development Pipeline. Residential potential on lands designated as Core or General Employment were generally excluded, except to accommodate the Province's intentions to develop a number of Transit-Oriented Communities, some of which will require conversions.

Methodology

For each Opportunity Site with residential potential, the number and type of units, ground-related, mid-rise or high-rise, have been estimated over the study period (2021 to 2051, and beyond). These estimates are based on the information provided by Community Planners in the consultation process. A range of inputs for each site were recommended by Community Planners, including the number of units or residential GFA anticipated on the site when a reasonable degree of confidence could be attributed to these metrics. If units or gross floor area details were not yet known, planners provided other information about the site such as appropriate Floor Space Index (FSI), heights and lot coverages based on their professional opinion of what represents good planning and appropriate built form for the site. Staff then estimated the potential on the site using these measures, alongside other more standardised measures relating to unit sizes and unit per hectare ratios (based on a review of development trends). Community Planners also provided an estimation of the unit mix or built form of the potential development, as well as indicating when the site is most likely to be developed. The residential potential for each of the 783 sites was estimated using this approach and the totals combine to represent an overall potential of close to 400,000 units.

Results

The 783 Opportunity Sites are shown in Figure 5.1. Overall, 395,747 units of potential housing is identified in the Opportunity Analysis. Over a third of this residential potential is identified along the Avenues (141,945 units). Avenues Residential Potential estimates were superseded when overlapped by Opportunity sites. Of the total Opportunities potential, 48% of the units are expected to be in the form of mid-rise projects (5-11 storeys) and 48% in the form of high-rise projects (12 or more storeys). The remaining 4% of units are expected to be in the form of ground-related housing.

Figure 5.1: Map of Residential Opportunity Catalogue Sites

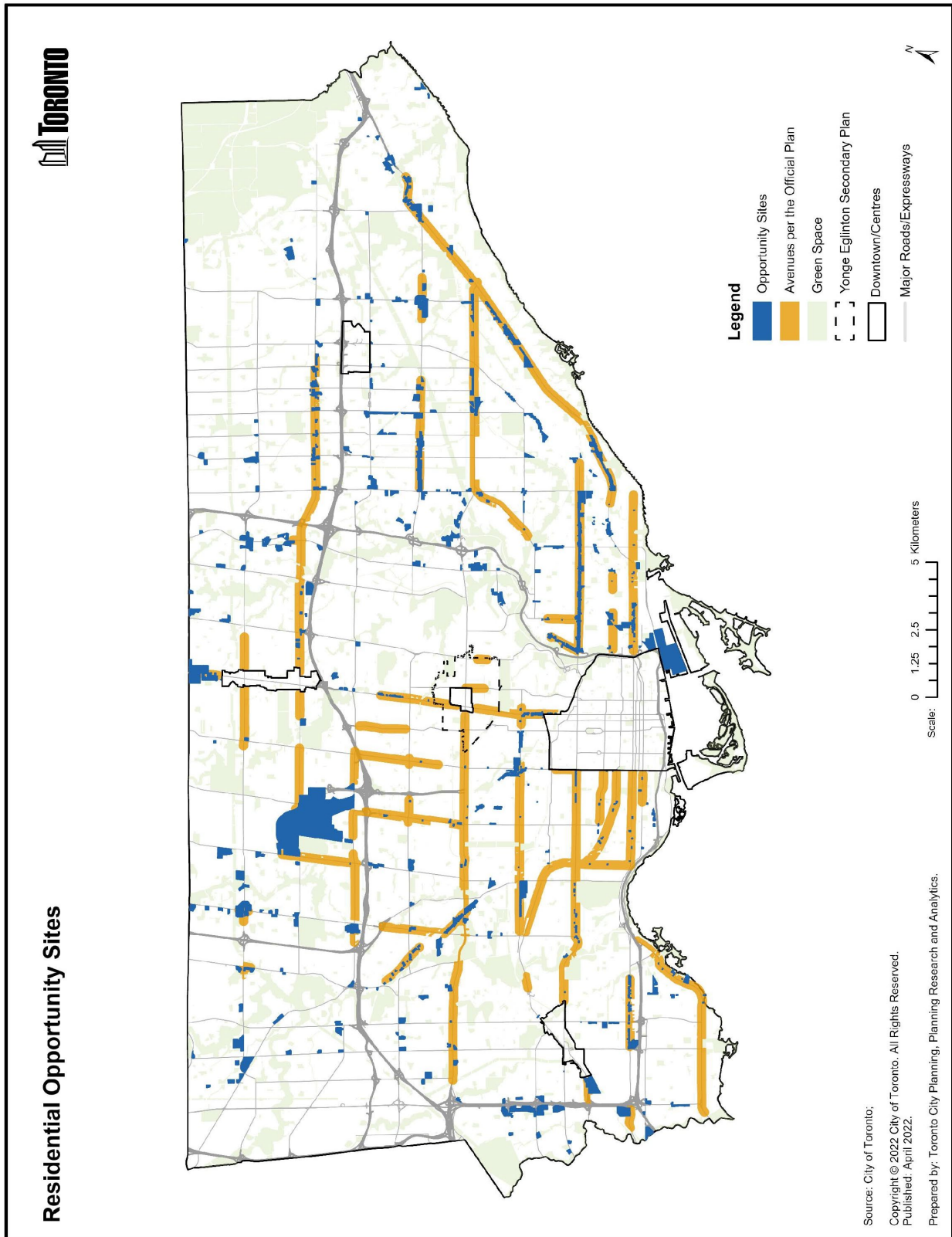


Table 5.1 Opportunity Units Summary

Category	Opportunity Units not in Avenues	Opportunity Units in Avenues	Total
Potential Before MCR Pipeline	258,743	144,327	403,070
Total Net Positive Units	253,802	141,945	395,747
Built Form Total	141,945	253,802	395,747
Ground (0 - 4 storeys)	4,296	10,536	14,832
Mid-rise (5 - 11 storeys)	76,919	114,140	191,059
High-rise (12+ storeys)	60,730	129,126	189,856
Phasing Total	141,945	253,802	395,747
Short (2021-2026)	8,096	18,225	26,321
Medium (2026-2031)	36,868	68,098	104,966
Long (2031-2041)	55,655	86,481	142,136
Extra (2041-2051)	41,326	80,998	122,324

Note: Total Net Positive Units is the remaining total after the units proposed in MCR Pipeline projects on Opportunities sites have been accounted for.

Comparison with the 2016 MCR Analysis

The potential housing identified in 2022 is 62% greater than a similar exercise undertaken in 2016, equating to over 150,000 additional units. There are assorted reasons for this difference, though predominantly the difference is attributed to higher and denser built form development when compared to what was anticipated in 2016.

Furthermore, sites that were not considered the last time are now included. This occurs due to changes in the policy framework that now trigger their inclusion, such as new or revised Secondary Plans. Additionally, the site may have become vacant in recent years, or is increasingly considered under-utilized when compared to trends in development activity. In this respect, the scope of what Community Planners now consider to be an Opportunity appears to have broadened to include more sites that are currently in active use. This is in contrast to the past exercise where the focus was centered more on sites that were evidently underutilized, such as vacant lots. The Community Planners identified some Opportunity Sites that have an active use if they believed that the site may be developed further (through infill or intensification), or re-developed in its entirety.

More than before, Community Planners are also considering the longer-range potential by identifying a higher proportion of sites that could develop in the later years of the study period. This may reflect an expectation that while no formal enquiries have been received to date, planners expect that at some point this site will re-develop. The longer term viewpoint may also reflect the increased complexity of projects, as the ready supply of vacant sites diminishes. Even with a wider-spread timeframe, the number of units estimated for the short and medium terms (i.e. the first ten-year window combined) are higher than what was identified before, again attributed to the general trend of higher and denser built forms on these sites that envisaged in the past. Finally, some of

the previously identified Opportunity Sites were not developed in the period between the 2016 analysis and the current one, and their potential has carried forward. Again, these retained Opportunity Sites tend to reflect more development potential now than in the past, totalling over 60,000 units in this exercise compared to 37,600 units previously.

Attachment 6: Downtown Growth Analysis

Overview

The Downtown Growth Analysis estimates the residential and non-residential development potential within Downtown.

Context

Downtown is bounded by Lake Ontario to the south, Bathurst Street to the west, the mid-town rail corridor and Rosedale Valley Road to the north and the Don River to the east. Its development is guided by section 2.2.1 of the Official Plan and by the [Downtown Plan](#), a Secondary Plan of the Official Plan. The boundaries of Downtown and Mixed Use Areas 1-4 are shown on the map in Figure 6.1.

Downtown is the heart of the City and the largest employment centre in the regional economy. There were about 530,000 jobs in the Downtown Secondary Plan Area in 2020. Downtown is home to the seat of the Provincial Government as well as a growing number of residents, nearly 230,000 in 2016. Downtown also has significant potential for accommodating new development. This potential is in the form of the redevelopment of surface parking areas and vacant land parcels, plus additional potential on already developed sites. Development Potential was identified by Community Planners via the process described above.

Methodology

The Downtown Growth Analysis was calculated separately from Opportunities in other parts of the city using Downtown-specific parameters. The Downtown Growth Analysis also represents development over and above development proposed in the Development Pipeline. Thus there is no double-counting of development potential, and the estimated potential is a conservative estimate of the total potential in Downtown.

To estimate residential and non-residential development potential in Downtown, coverage, density, height and residential/non-residential breakdown information was determined based on information provided by Community Planners and on parameters based on recent development trends broken down by the different Mixed Use Areas in the Downtown Plan. Potential was assumed to align with what is currently permitted in the Official Plan and in the Downtown Plan.

Residential gross floor area (GFA) was determined in consultation with the Community Planner; when they could not identify a residential GFA, it was calculated based on parameters involving the residential/non-residential breakdown, non-residential GFA, height, FSI and/or coverage, depending on the characteristics of the site. The residential GFA was divided up proportionally into the different types of dwellings anticipated on the site. To calculate residential unit potential, the amount of residential GFA allocated to each dwelling type was then divided by the average unit size for that dwelling type. The average unit sizes were derived from recent development trends in the different Mixed Use Areas of the Downtown Plan.

Non-residential GFA was determined in consultation with the Community Planner; when they could not identify a non-residential GFA, it was calculated based on parameters involving the residential/non-residential breakdown, residential GFA, height, FSI and/or coverage, depending on the characteristics of the site. It was generally assumed that existing non-residential GFA would be retained or replaced in any new development, yielding a conservative estimate of net-new non-residential potential.

To obtain the breakdown of non-residential GFA into more specific categories, the non-residential potential was largely considered to be institutional where indicated by the Planner, in Institutional Areas, and in the Health Sciences District where the land was owned by a large institution. Otherwise, it was generally assumed that the ground floor would consist of retail uses and that any remaining non-residential GFA would consist of office uses.

Results

The Downtown Plan sets out the land use planning framework for Downtown. For example, the Plan's Mixed Use Areas are shown in Figure 6.1. The number of potential net-new residential units on Downtown parcels is estimated at 120,813 units. This includes 1,183 ground-related units (units in buildings 4 storeys or shorter), 13,982 mid-rise apartments (units in buildings 5-11 storeys tall) units, and 105,647 high-rise apartments (units in buildings 12 storeys or taller).

The amount of potential net-new non-residential GFA on Downtown parcels is estimated at 2,475,124 m². This includes 513,095 m² of office, 218,011 m² of retail, and 1,744,017 m² of institutional and other GFA.

Comparison with the 2016 MCR Analysis

The 2022 Downtown Growth Analysis yielded an increase of 37,369 units compared to the previous MCR exercise. In 2016, City Planning staff calculated a residential potential of 83,444 units for Downtown. In the previous MCR exercise, the Downtown Plan was still under development. When the Downtown Plan came into force and effect in 2019, it provided a new framework for directing growth Downtown. This framework includes providing more detailed direction on the density of development permitted in Mixed Use Areas 1-4; directing growth to occur near existing and planned transit stations; and encouraging the retention or increase of non-residential GFA, particularly in the Financial District, Health Sciences District, Bloor-Bay Office Corridor, King-Parliament and King-Spadina. The current Downtown Growth Analysis was guided by that new framework.

Additionally, in the previous MCR, parcels with certain characteristics were not considered to have development potential. Market changes and development trends have contributed to expanded opportunities throughout Downtown. Examples include innovated building designs that incorporate heritage features into new development, residential apartments proposed on top of existing office towers, the redevelopment (including replacement) of rental apartment buildings, and parcels containing two separate development projects (redeveloping separate parts of the parcel). As a result, in the current analysis, more parcels were included in the analysis if residential or non-

residential potential was identified on them. Two exceptions are for parcels containing condominiums, as it was assumed that it would be difficult to redevelop such lands, and parcels with development projects where it was determined that there was no additional development potential on-site. As a result, the current Downtown Growth Analysis yielded a higher amount of residential potential than did the previous exercise.

Figure 6.1: Downtown Plan Mixed Use Areas



The Downtown non-residential development potential is not directly comparable to the previous MCR. In 2016, City Planning calculated employment projections using a different methodology that was not based on non-residential GFA potential. As a result, there is no previous non-residential GFA number to which to compare it.

Attachment 7: Centres and Midtown Potential

Overview

This section sets out the methodology and results of the housing potential analysis for the Etobicoke, North York, Scarborough, and Yonge-Eglinton Centres and for the Yonge-Eglinton Secondary Plan area.

Context

Section 2.2.2 of the Official Plan describes the Etobicoke, North York, Scarborough, and Yonge-Eglinton Centres as vital mixed use communities with excellent transit accessibility where jobs, housing, and services will be concentrated. The policies in the plan direct growth to these areas in order to achieve gross density targets of 400 people and jobs per hectare, as directed by the Provincial Growth Plan.

Though all four Centres are subject to the same density targets, the Centres have differing existing and planned contexts which are reflected in the secondary plans covering each of the Centres. The secondary plans set out detailed policies for how each Centre will grow, the design of public spaces and buildings, and how to address other local needs.

Methodology

The objective of this analysis was to estimate how much development can occur within each Centre and the Yonge-Eglinton Secondary Plan area, the anticipated type and form of development, and when the development is most likely to be built and occupied over a 35-year timeframe to 2051. For Etobicoke, North York, and Scarborough Centres, this analysis was completed using a model based on whether development sites within the Centre were built to the maximum allowed under the Zoning By-law. The model for the Yonge-Eglinton Secondary Plan area, including the Yonge-Eglinton Centre, used a more site-specific analysis as a result of work completed for the recently completed secondary plan.

Zoning Potential

The growth potential analysis for the Etobicoke, North York, and Scarborough Centres followed a similar approach based on the existing zoning framework for each respective area. This approach was based on the methodology used during the previous MCR in 2016, but the existing built form, zoning, and parcel fabric was updated to reflect the changes since that time. Using the Zoning By-law permissions, a maximum potential number of residential units was calculated for each parcel within these Centres. This maximum potential was then compared with the existing, proposed, and approved land uses on each parcel. Any existing, proposed, or approved residential units were subtracted from the maximum potential to calculate the net remaining potential for each parcel.

Some differences do exist for these Centres which will be described below in the sections specific to each geography.

Yonge-Eglinton Development Potential Analysis

The growth potential analysis methodology used for the Yonge-Eglinton Centre differs from the other three Centres because the Yonge-Eglinton Secondary Plan was newly approved in 2019, resulting in the existing zoning being inconsistent with the new plan.

At the time of the 2022 Municipal Comprehensive Review, the work to revise the zoning was being undertaken but not yet complete. Therefore, a different approach was required in order to take into account the revised planning framework for this area.

In addition to a methodological difference, the geography for this growth potential analysis is different from the other Centres. The other three Centres have Secondary Plans which match the geography of each respective Centre. Yonge-Eglinton Secondary Plan area covers a significantly larger geography than just the Yonge-Eglinton Centre and this analysis looked at the Secondary Plan area as a whole. Consequently, the Opportunities Analysis excludes both the Yonge-Eglinton Centre and Yonge-Eglinton Secondary Plan.

The growth potential analysis for Yonge-Eglinton Secondary Plan was based on a development potential analysis completed in 2019 as background analysis for the Secondary Plan review. This analysis identified potential development sites, which were then modelled based on the permissions established by the Secondary Plan, as approved by the Minister of Municipal Affairs and Housing. The results of this modelling contained an estimated number of residential units for each development site which was assumed to be the potential for Yonge-Eglinton Centre and the larger Secondary Plan area.

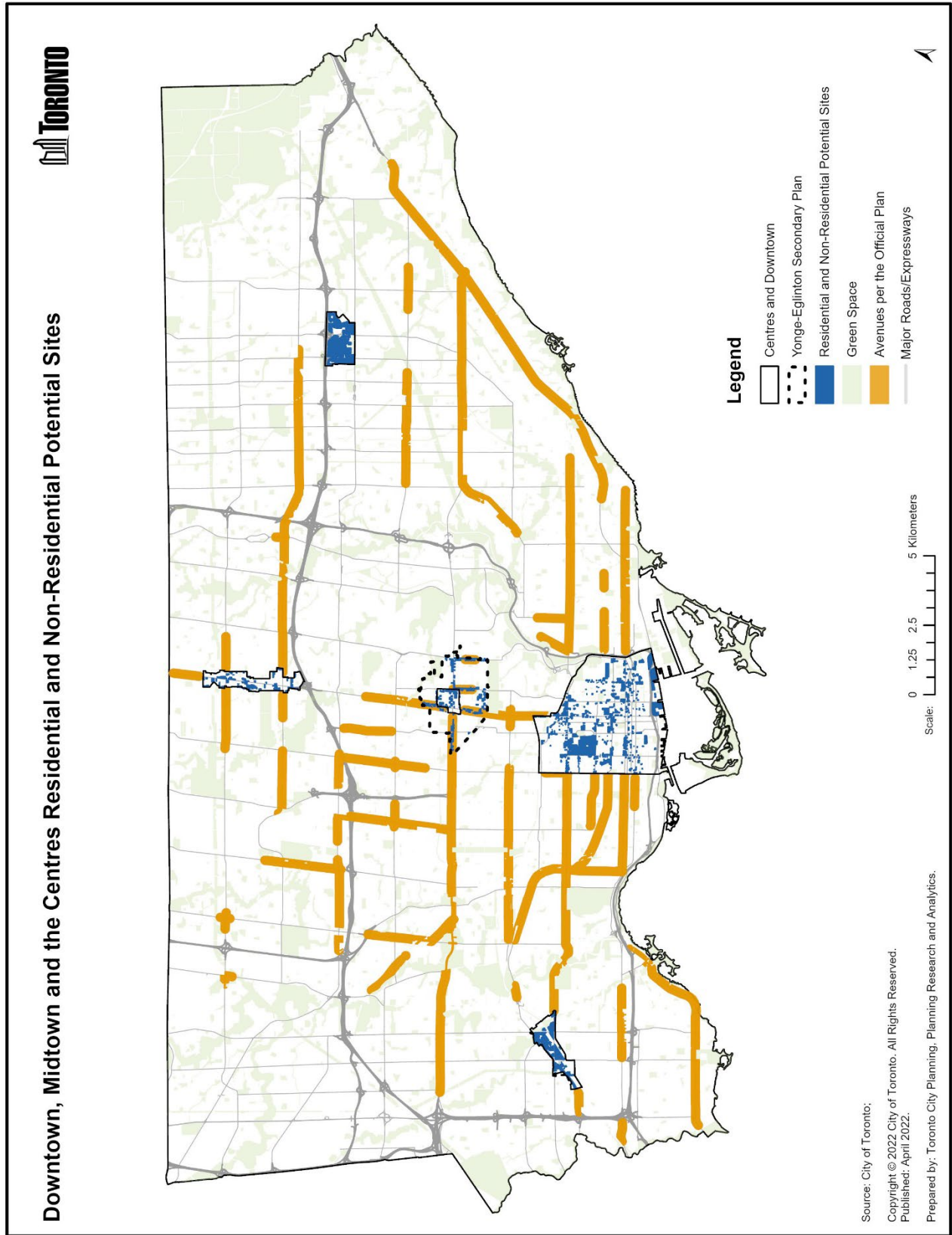
Results

In total, the four Centres have a residential potential of 56,025 units, with 97% of these units expected to be in the form of high-rise apartments, defined as any building 12 storeys and over. This type of development is to be expected in the Centres given their concentrated, transit-oriented development frameworks. The residential potential in the Yonge-Eglinton Secondary Plan outside of the Yonge-Eglinton Centre is an additional 22,587 units, with the just over half of these expected to be mid-rise built form. Table 7.1 below shows the breakdown of development potential by geography and built form. A map of the Centres and Midtown Potential sites are shown in Figure 7.1.

Table 7.1: Residential Potential by Centre by Built Form

Geography	Ground-Related	Mid-Rise	High-Rise	Total Units
Etobicoke Centre	76	124	18,895	19,095
North York Centre	831	0	12,816	13,647
Scarborough Centre	60	0	11,916	11,976
Yonge-Eglinton Centre	0	807	10,500	11,307
Centres Total	967	931	54,127	56,025
Remainder of Yonge-Eglinton Secondary Plan (YESP)	319	12,868	9,400	22,587
YESP and Centres Total	1,286	13,799	63,527	78,612

Figure 7.1: Midtown and the Centres Residential and Non-Residential Potential Sites



Comparison with the 2016 MCR Analysis

Table 7.2 below compares the results of the 2016 and 2022 MCR analyses. In 2022, the Etobicoke and Scarborough Centres saw small decreases in their housing potential, reflecting the continued development of these areas. However, the housing potential has increased overall and specifically in the North York and Yonge-Eglinton Centres, despite significant development occurring in both of these areas since 2016.

In all Centres, the average unit size has decreased since 2016, which means that we can now expect that developments will include more units in the same-sized building than they would have in 2016. This partially explains why the total housing potential for all Centres has increased since 2016.

The other main factors in this growth relate to the two Centres which saw large increases in their potential from 2016 to 2021: North York Centre and Yonge-Eglinton Centre. In North York Centre, where the potential increased by over 3,000 units, most developments in the years since 2016 have obtained Zoning By-law amendments for more density than was contemplated in the Secondary Plan, resulting in more growth than would have been expected based on the zoning. Adjustments to the model were made to take into account the realities of this increased development density. The potential for Yonge-Eglinton Centre increased by over 4,000 units due to the new Yonge-Eglinton Secondary Plan which was approved in 2019.

Table 7.2: Comparison between 2016 and 2022 Residential Potential

Geography	2016 Potential	2022 Potential	Difference
Etobicoke Centre	19,733	19,095	-638
North York Centre	10,564	13,647	3,083
Scarborough Centre	13,309	11,976	-1,333
Yonge-Eglinton Centre	7,156	11,307	4,151
Centres Total	50,762	56,025	5,263

Note: There is no comparable 2016 analysis for the remainder of the Yonge-Eglinton Secondary Plan area.

Table 7.3: Residential Development in the Centres, MCR Pipeline

Geography	Under Review	Approved, Not Built	Built
Etobicoke Centre	8,577	1,234	1,983
North York Centre	3,540	4,561	2,897
Scarborough Centre	6,388	3,665	0
Yonge-Eglinton Centre	2,862	6,150	6,569
Centres Total	21,367	15,610	11,449
Remainder of Yonge-Eglinton Secondary Plan area (YESP)	1,552	1,202	2,620
YESP and Centres Total	22,919	16,812	14,069

Etobicoke Centre

Development in Etobicoke Centre has continued steadily since 2016, with nearly 2,000 new residential units completed in this time. In general, the planning framework for Etobicoke Centre has remained similar to how it was in 2016 and development has fallen largely within the density parameters established by this plan. The exception to this is the Six Points Interchange Reconfiguration project.

Construction on this project started in 2017 and was substantially complete by October 2020. In addition to numerous infrastructure improvements, this project has created a number of new development sites which will be the site of a new Etobicoke Civic Centre, cultural facilities, parks, and housing.

Much of the potential identified in 2016 is currently undergoing the development review process, with over 8,000 units under review in the Centre, as shown in Table 7.3. Though the 2022 potential is 638 units less than the 2016 figure, as shown in Table 7.2, this means that much of this is net new potential that was not anticipated in the previous analysis. This potential comes from a combination of new sites created by the Six Points project as well as the decline in unit sizes seen across all of the Centres, resulting in more units within the same gross floor area as would have been seen previously.

North York Centre

The methodology for the North York Centre growth potential analysis differed slightly from the other Centres using the zoning potential analysis. The zoning was still used as the base of this model, but certain likely development sites involved a soft-site assessment based on an analysis of recent development applications, as described below.

Development in North York Centre, since the 2016 Municipal Comprehensive Review, has largely exceeded the permissions included in the Secondary Plan and Zoning By-law. Due to this increase in development density, Community Planning staff undertook a development potential analysis in 2018 to identify remaining development sites within the Centre and analyse potential growth based on a number of different development scenarios. The development potential was included in the 2022 MCR analysis work and

identified as sites which would likely exceed the zoned potential when developed. To estimate the magnitude of development, staff analysed projects in the Development Pipeline and determined that on similar development sites within the North York Centre, applications generally were approved at 150% of their pre-existing development permissions. For this analysis, a soft-site analysis of potential development sites was undertaken in this context, while other sites were assumed to be developed at their maximum zoned potential.

Scarborough Centre

Since the 2016 MCR, the Scarborough Centre plan has remained relatively consistent and the methodology from the previous analysis was determined to still be relevant. However, the extension of the TTC's Line 2 subway to Scarborough Centre is now underway, along with a review of the Scarborough Centre Secondary Plan. At the time of this analysis, a new framework had not been advanced for this area but given the investment in subway infrastructure, it is expected that the housing potential of Scarborough Centre may grow compared to this analysis.

Yonge-Eglinton Centre

The housing potential analysis for the Yonge-Eglinton Centre differed significantly from the other Centres. Most significantly, the analysis included the entire Yonge-Eglinton Secondary Plan area, which is larger than the Yonge-Eglinton Centre itself. This analysis was undertaken because the entire area was subject to a recent planning study called Midtown in Focus, described below.

The Midtown in Focus study was an inter-divisional initiative led by City Planning in response to the rapid intensification and change underway in parts of the Yonge-Eglinton Secondary Plan area. The culmination of this study was an Official Plan Amendment with a new Yonge-Eglinton Secondary Plan which was submitted to the Minister of Municipal Affairs and Housing for approval in August 2018.

Part of the background work for this study was a detailed growth analysis based on the identification of potential development sites and a model for this development corresponding with the proposed planning framework.

On June 5, 2019, the Minister of Municipal Affairs and Housing approved the plan with modifications. These modifications required a revised growth estimate to be prepared due to the changes in permissions. The Minister's modifications resulted in an increase in residential permissions in the Secondary Plan area and a decrease in estimated jobs at build out.

The revised growth estimates, taking into account the Minister's modifications, made up the basis of the housing potential analysis for the Yonge-Eglinton Centre and Yonge-Eglinton Secondary Plan area.

Attachment 8: Avenues Residential Potential

Overview

The Avenues Residential Capacity analysis estimates the residential development potential along the Avenues.

Context

Section 2.2.3 of the Official Plan describes Avenues as important corridors along major streets where reurbanization is anticipated and encouraged. There are approximately 174 kilometres of Avenues spread across the city of Toronto. The Avenues are intended to introduce jobs and residents while also respecting the existing character of a neighbourhood and city growth patterns. However, not all land within an Avenue is designated for growth as the policies are to encourage intensification of the permitted underlying land use. The Avenues geography within the city of Toronto provide a more modest densification planning framework compared to other areas, such as the Centres or Downtown. See Figure 8.1 to see the distribution across the city.

Each Avenue is unique in terms of characteristics and potential. An Avenue Study is designed to create a framework for development to facilitate and shape growth in a particular area. A Study includes a new Zoning By-law and design guidelines created in consultation with the local community. The Zoning By-law will set out the mix of uses, heights, densities, setbacks and other zoning standards. Presently, there are 26 Avenue Studies, with an additional one underway. All but two of the studies have bylaws with density-related specifications i.e. height and floor space index (FSI). The studies covering College Street and O'Connor Avenue do not.

Methodology

The objective of the Avenues analysis was to estimate how much residential development can occur on an Avenue site, the anticipated type and form of development and finally, when the development is most likely to be built and occupied over a 35 year timeframe to 2051. Using density-related specifications from Avenue study by-laws and other city-wide development parameters, the estimated number of units was calculated for each parcel. A set of selection criteria were developed to determine the likelihood of redevelopment. All parcels subject to the Official Plan Avenue policies were inputted into the various models and the selection criteria were applied to them. This analysis is unlike the Opportunities and Downtown Growth Analyses within the LNA as it is based on policy, geography and mathematical calculations, whereas the other models are based around the judgement of Community Planners.

The modelling of the Avenues parcels is based on modelling that was completed for the previous MCR. However, this current analysis builds on the methodology used in those models by incorporating current data, current research on residential development trends, new By-laws now in force and that did not exist at the time of the previous analysis, and updated zoning.

Five models were created to determine the residential capacity of the Avenue parcels. Each model contained different inputs, parameters and methods to calculate parcel GFA. For all models, once GFA was determined it was divided by either an average unit size (for small parcels) or units per hectare (for large parcels) value to determine the estimated unit count for an individual parcel. The models were: Old, Bylaw, Template, Generic and Mid-rise.

- The Old model utilizes a generalized estimation method that does not take into consideration local conditions or specific planning parameters such as zoning.
- The Generic model takes into consideration in-force zoning and broad development patterns.
- The By-Law model is applied to only those Avenue parcels where there is a study with implementing zoning in force. The By-law model uses the density-related specifications of height and FSI to help determine the estimated unit count.
- The Template model applies to those parcels that are covered by a Template (all parcels not covered by the By-law model). Templates were created based on current Avenue studies that do have implementing zoning. Parcel segments with no by-law were assigned a template based on the characteristics of those parcels.
- The Mid-rise model is based on the parameters found within the Mid-rise Guidelines and Performance Standards.

After analysis it was determined that a combination of the By-law and Template models produced the most realistic estimates. Two of the models (Old and Generic) were based on general assumptions or in-force zoning which may be out of date. The last model was based on the Mid-rise Guidelines. This model produced higher-than-expected potential due to the complexity of the performance standards and assumptions, and their sensitivity to the site parameters.

A total of 16,957 parcels were included in the analysis. A set of formulas and parameters was created to calculate the residential potential on the parcels. However, not every parcel on the Avenue is likely to be redeveloped. In order to be selected for potential residential development on the Avenues parcels there was a set of criteria in which all needed to be true. The eight selection criteria were that:

- the parcel frontage was 22.86 metres (75 feet) or more, or unknown;
- the parcel area was 100m² or more;
- the structure was built before the year 2000;
- the land use was either vacant or not an institutional use, park or conservation land or utility;
- the tallest structure on the parcel had two or fewer full storeys, or the number of storeys was unknown;
- the parcel did not have any of the following structures: row/town house (rental or condominium), walk-up or medium or high-rise apartment or condominium; and
- the parcel had no development applications filed against it as of June 30, 2021.

Results

The Avenues Residential Potential sites are shown in Figure 8.1. Altogether, 796 parcels were selected which represents an estimated 61,316 units. Table 8.1 contains a summary of the selected parcels. The selected parcels comprise 765 (96.1%) parcels between 100 to 10,000 m² and 31 (3.9%) parcels over 10,000 m² with 14,587 units (23.8%); see Table 8.2.

The selected parcels were allocated into a mix of built forms: ground-related (1-4 storeys), mid-rise (5-11 storeys), and high-rise (12+ stories). The proportion distributed into each built form was 10% for ground-related, 24% for mid-rise and 66% for high-rise.

The selected parcels were phased over three time periods to determine anticipated units. The three time periods were short (2026-2031) at 20%, medium (2031-2041) at 40% and long (2041-2051) at 40%. The likelihood that all units would be developed was assumed to be 100%. For the selected parcels, it was estimated that 12,235 units would be built in the Short time period, with 24,497 units being built in each of the Medium and Long time periods.

There was some geographic overlap between the Avenues and the Opportunity Sites, as Opportunity Sites along the Avenues were included by Community Planners in their reviews of potential. In order to avoid double-counting potential units, the areas of overlap were removed from the Avenues. Of the selected parcels, 286 represent an Opportunity site with 30,002 units. Therefore of the selected parcels there remains 510 with 31,314 units. This number represents the total net potential on the Avenues.

Table 8.1: Summary of Selected Avenues Parcels

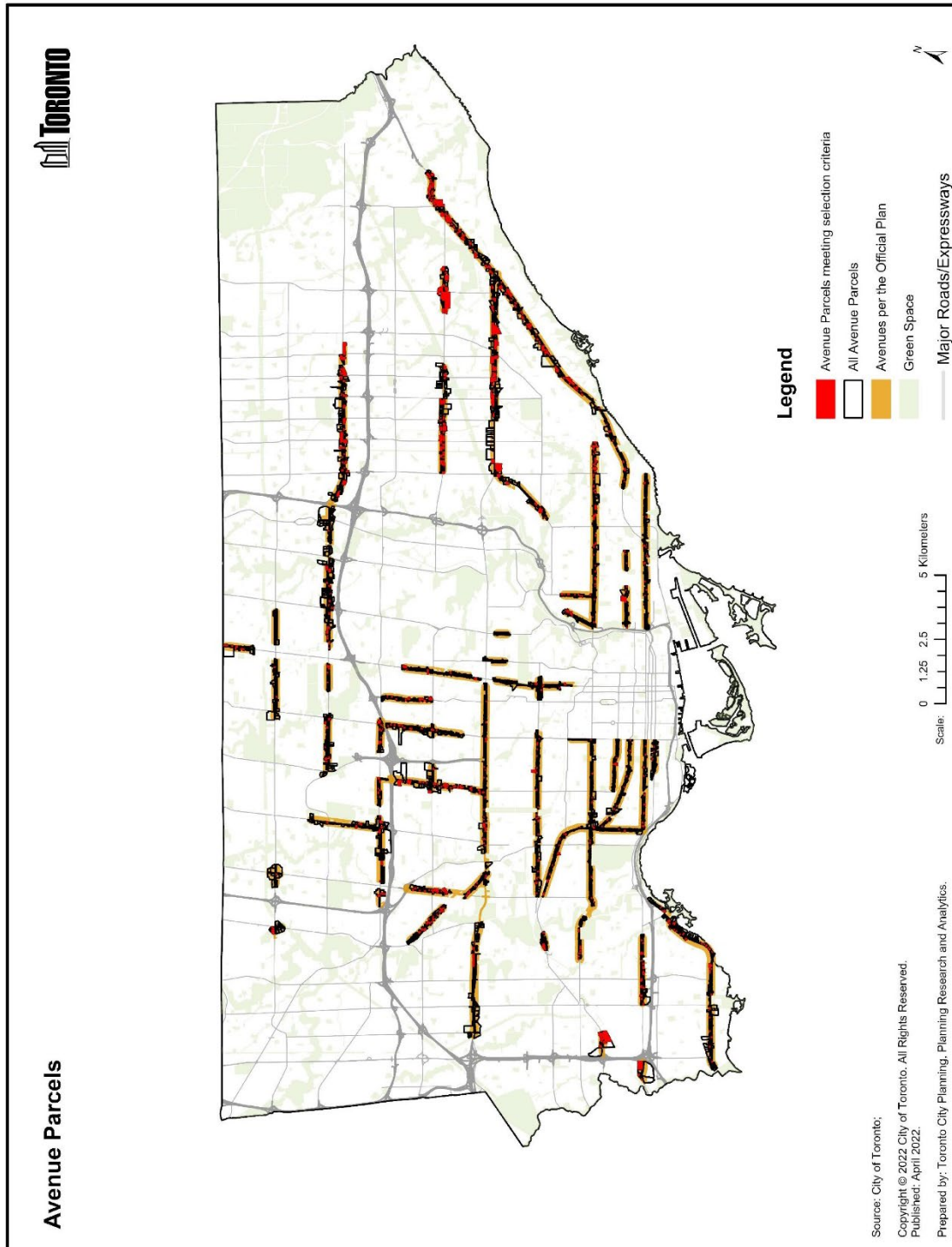
Category	Variable	Total Selected	Percent	Total Selected minus Opportunity Sites
Selected Parcels	Parcels	796	Not Applicable	510
	Area (m ²)	2,369,231	Not Applicable	1,146,689
	Total Units	61,316	Not Applicable	31,314
Total Units based on Timing	2026-2031	12,235	20%	6,235
	2031-2041	24,497	40%	12,497
	2041-2051	24,497	40%	12,497
	Total Units	61,229	100%	31,229
Total Units based on Built Form Mix	Ground	6,138	10%	3,129
	Mid-Rise	14,659	24%	7,479
	High-Rise	40,084	66%	20,424
	Total after Allocation	60,881	100%	31,032
	Rounding	-435	Not Applicable	197

Table 8.2: Selected Avenues Parcels by Area

Area (m ²)	Parcels	%	Units	%	Area (m ²)	%	Average (Area)
100 – 500	26	3.3%	280	0.5%	8,989	0.4%	346
500 – 1,000	167	21.0%	3,749	6.1%	131,686	5.6%	789

Area (m ²)	Parcels	%	Units	%	Area (m ²)	%	Average (Area)
1,000 – 5,000	508	63.8%	30,216	49.3%	1,066,225	45.0%	2,090
5,000 – 10,000	64	8.0%	12,484	20.4%	448,129	18.9%	7,002
10,000 – 50,000	28	3.5%	9,763	15.9%	478,145	20.2%	17,077
50,000 – 100,000	2	0.3%	2,497	4.1%	122,196	5.2%	61,098
100,000 +	1	0.1%	2,327	3.8%	113,862	4.8%	113,862
Total	796	100.0%	61,316	100.0%	2,369,231	100.0%	Not Applicable

Figure 8.1: Map of Avenues Analysis Parcels



Comparison with the 2016 MCR Analysis

The previous analysis of the Avenues yielded 97,158 units on 1,056 selected parcels. Of these units, 50,273 were not within an Opportunity Site. The current model resulted in a notably lower number of potential units. This can be explained by several reasons.

The base parcel fabric is different which means that total number of parcels and their characteristics have changed (uses and lot measurements). The total number of parcels and land area has changed. The total number of parcels in the current analysis is 16,957 parcels and the land area is 17,990,829m². The total number of parcels count in the previous analysis was 17,487 and the land area was 23,401,976 m².

The Official Plan Avenues geography has changed resulting in the current model containing fewer base parcels than the previous model. The Avenues overlay has been modified to exclude Employment Areas. The Avenues policies encourage intensification of the underlying land use, which, when it was an employment land use. This was not indicative of a willingness to consider land conversion.

At the time of the last analysis there were 11 Avenue studies with implementing bylaws. There are currently more than double that meaning that more parcels were considered in the Bylaw model. With the new addition of stricter criteria there is a depressing effect on the residential potential.

In the current model, large parcels (10,000 m² or more) were analyzed to determine if the entire parcel was appropriate for full development. The Avenues policy seeks to concentrate development towards the front of a parcel. If development of the full parcel was not justified a custom parcel was created based on the portion fronting along the Avenue. This has the effect of reducing the total potential on that site regardless of the density or height limit or other zoned potential. The previous analysis assumed full development of all parcels.

The previous analysis was based on a combination of the Bylaw and Generic model. A new model, the Template model, was introduced this time in order to better reflect the policies of the Avenues. By creating templates based on existing Avenue studies with implementing zoning, the Template model seeks to apply the same assumptions and high level of precision as the Bylaw model than the broad assumptions of the previous Generic model.

The two analyses rely on different Pipeline projects as a selection criteria for redevelopment. Parcels subject to development projects for the last analysis have most likely been built which makes those parcels now not suitable for redevelopment. Additionally, the model parameters were generated by an analysis of recent development trends, which are different from the trends seen at the time of the previous analysis.

Finally, the previous analysis used 2012 as the threshold for the year built selection criteria. In effect this only excluded parcels in which a structure had been constructed within the previous two years. This analysis took a different approach in that it considered that newer buildings do not have as good a redevelopment potential as older buildings. The year 2000 was used a threshold in this analysis.

Attachment 9: Neighbourhood Typology and Intensification

Overview

The Neighbourhood Typology and Intensification Analysis estimates the potential number of as-of-right housing units that are likely to be developed within designated Neighbourhoods that are outside of Major Transit Station Areas and the other geographies identified in this report. Building on the work reported in the [Neighbourhood Change and Intensification bulletin](#), this analysis uses historical building permit data to understand the observed rate of development within Neighbourhoods. Historical trends were carried forward, with increases applied selectively based on Neighbourhood typology to reflect an evolving policy framework. A K-means clustering algorithm was used to classify Neighbourhoods based on built form and land use characteristics. The model estimates that approximately 56,000 units are likely to be built in Toronto Neighbourhoods by 2051.

Context

Toronto's history of growth and amalgamation have created a broad diversity of types and densities. The Official Plan designates 21,145 hectares or 33.3% of the city's land area Neighbourhoods. Neighbourhoods are described in the Official Plan as "physically stable areas made up of residential uses in lower scale buildings such as detached houses, semi-detached houses, duplexes, triplexes and townhouses as well as interspersed walk-up apartments". The Official Plan recognizes that Neighbourhoods are not static and will evolve in a manner that respects the existing physical patterns and over time change will occur through renovations, additions and infill housing development.

As part of the LNA, staff reviewed development potential across the entire City of Toronto. While there are specific analyses related to Strategic Growth Areas and other development opportunities, this analysis seeks to identify the potential for additional as-of-right low-rise housing development activity within designated Neighbourhoods. This is development potential that would not otherwise be captured by the planning approvals processes and therefore forms a distinct source of potential housing supply. The provision of this type of housing is a critical component of planning for complete communities as envisioned by the Growth Plan as amended in 2020.

In July 2020 City Council endorsed the Expanding Housing Options in Neighbourhoods (EHON) work plan which established a framework of strategies at various scales to increase housing options within designated Neighbourhood areas. This endorsement included direction that staff proceed with several priority initiatives related to missing middle housing in Neighbourhoods, such as:

- Develop a research bulletin looking at Neighbourhood change and intensification;
- Allowing for the development of garden suites or coach houses;
- Allowing laneway suites (not directly connected to EHON but related);
- Allowing for the development of multiplexes more broadly;
- Removing parking minimums for missing middle housing types;
- Reviewing financial barriers to missing middle housing development; and
- Implementing pilot studies in select areas of the city.

Extensive analysis was completed as part of the Neighbourhood change and Intensification bulletin. This work builds on that research and attempts to generalize insights gained from case studies conducted as part of that work to the whole city.

Methodology

This analysis focused exclusively on areas that are designated as Neighbourhoods in the Official Plan. The analysis excluded areas within Major Transit Station Areas (MTSAs) and the other geographies captured by analysis described in the other attachments to this report. MTSAs were excluded given provincially mandated targets and policies, the impact of which will be analyzed in detail separately.

Given recent changes to as-of-right planning permissions in Neighbourhoods it is expected that residential infill development will increase, in some areas of the City, over what has been observed historically. To estimate uptake of new types of infill housing throughout the city, Neighbourhoods were classified based on the variables that had a strong correlation with historical residential intensification. The initial analysis included over 30 variables. This list was reduced by removing redundant variables (those with high collinearity) and iteratively testing the clustering algorithm, resulting in the following final list of variables:

- Built form and property characteristics (average for parcels by Census Tract)
 - Frontage;
 - Gross Floor Area (GFA);
 - Number of bedrooms;
 - Floor Space Index (FSI);
- Proximity to transit and amenities (average for parcels by Census Tract)
 - Distance to Major Transit Station Areas;
 - Distance to grocery stores and Neighbourhood retail (from the Toronto Employment Survey);
- Proportion of existing housing types (low-rise dwellings only by Census Tract)
 - Single detached;
 - Semi-detached;
 - Row/Townhouses;
 - Duplex apartments; and
 - Apartments in buildings under five storeys
- Age of Primary Household Maintainers (PHM) (in low-rise dwellings only by Census tract)
 - Percent of PHMs that are 25-39 years of age;
- Tenure of residents (low-rise dwellings only by Census Tract);
 - Percent owner versus renter; and
- Population change
 - Percent change in population from 1996 to 2016 by Census Tract.

Data was aggregated to Neighbourhoods by Census Tract and Neighbourhood typologies were developed using a k-means clustering algorithm. K-means is a machine learning technique that determines natural clusters or concentrations of common values across a set of input variables and assigns each data point (Census Tracts, in this case)

to one of the clusters. The input variables outlined above were used to create six Neighbourhood typologies:

- Cluster 1: Areas with a very high proportion of single-detached houses, large lots and low FSI. Houses in these areas are generally not within walking distance of higher order transit or local amenities, have very few renters and in many cases, have lost population in recent decades.
- Cluster 2: Areas with a high proportion of smaller row houses and semis in close proximity to lower density areas (such as Cluster 1). These areas have a higher proportion of renters, and have grown substantially in recent decades. These areas have higher distances to transit and amenities.
- Cluster 3: These areas have a very high proportion of low-rise apartments, row houses and semi-detached houses. These areas are higher density, very close to transit and amenities and have a high proportion of low-rise apartment buildings.
- Cluster 4: These areas have a higher percentage of duplex apartments and semi-detached housing. PHMs are typically older and the proportion of renters is very low. These areas are higher density than clusters 1 and 6 but lower than 3 or 5. Parcels in these areas are at the average distance to transit and local amenities.
- Cluster 5: These areas have a very low proportion of singles, with younger Primary Household Maintainers and a high proportion of renters. These areas have smaller units, with lower-than-average bedrooms per unit and are generally close to transit and local amenities. These areas saw moderate growth from 1996 to 2016.
- Cluster 6: These areas are similar to cluster 1 in that they have a high proportion of singles and older PHMs, very low proportion of renters and large lots with low FSI. These areas tend to have slightly more low rise apartments and duplexes than Cluster 1 and differ significantly in that they are largely transit oriented and closer to local amenities.

In order to understand the baseline level of residential development in Neighbourhoods, Building Permits for the period of 2016-2020 were used. As-of-right development was identified by excluding all Permits associated with Development Pipeline projects and the potential for double-counting was mitigated by removing all Permits that overlapped the other geographies described in this report. We concluded that by isolating as-of-right permits within Neighbourhoods, all residential development being proposed was less than five storeys. Table 9.1 shows historical trends in residential development for Neighbourhoods, totalling 7,769 units over five years.

Table 9.1: Residential Units Permitted in Designated Neighbourhoods, 2016 to 2020

Year	2016	2017	2018	2019	2020
Residential Units	1,279	1,217	1,321	1,179	1,084
As-of-Right in MTSAs	330	320	338	368	333

Given recent changes to as-of-right planning permissions in Neighbourhoods such as permissions for laneway and garden suites and proposed expanded permissions for multiplexes, it is anticipated that residential infill development will increase, in some areas of the city, over what has been observed historically. To estimate uptake of new types of infill housing throughout the city, areas with similar characteristics to those that have had historically higher rates of residential infill were evaluated across the rest of the city. Staff estimated potential for multiplexes and secondary units as corresponding to the characteristics of Neighbourhoods by typology.

Results

Results show that an estimated 56,708 residential units are likely to be built in Toronto designated Neighbourhoods between 2021 and 2051, in addition to 7,769 units built as-of-right 2016-2020 and 1,689 units built as-of-right in MTSA's over each of the following 5-year periods. Although somewhat offset by demolitions, this analysis suggests that the proportion of units representing intensification, rather than one-for-one unit replacement is likely to increase in many areas of the city. This is considered a conservative estimate and represents an increase of 33% over historically observed trends.

This analysis did not include Neighbourhoods within Major Transit Station Areas. As-of-right Building Permits within MTSA Neighbourhoods that were completed 2016 to 2020 were included based on their locations without further analysis. Future cluster analysis will be completed to include MTSA Neighbourhoods and apply the same analysis of residential infill potential outlined above.

Figure 9.1: Neighbourhood Typology Clusters

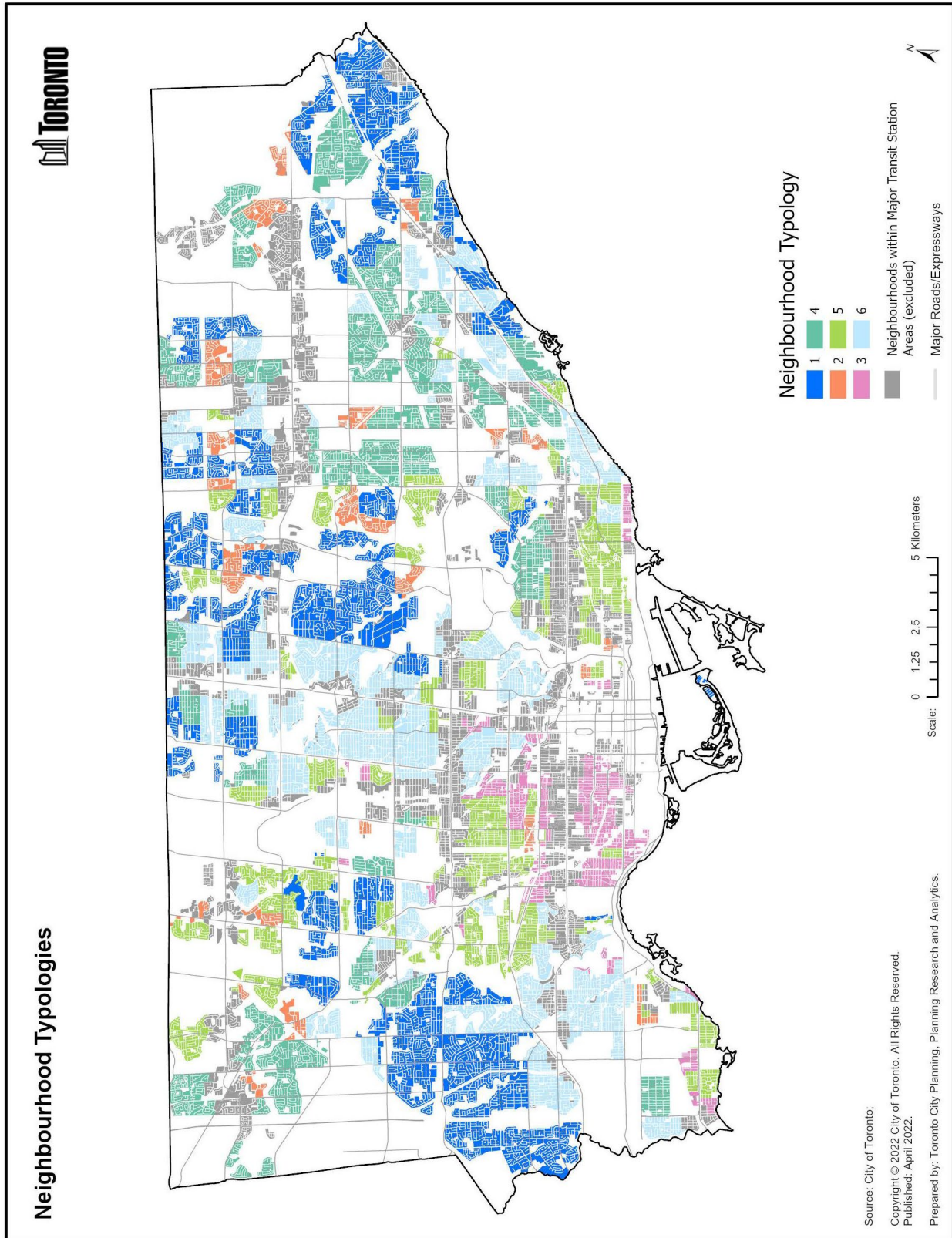
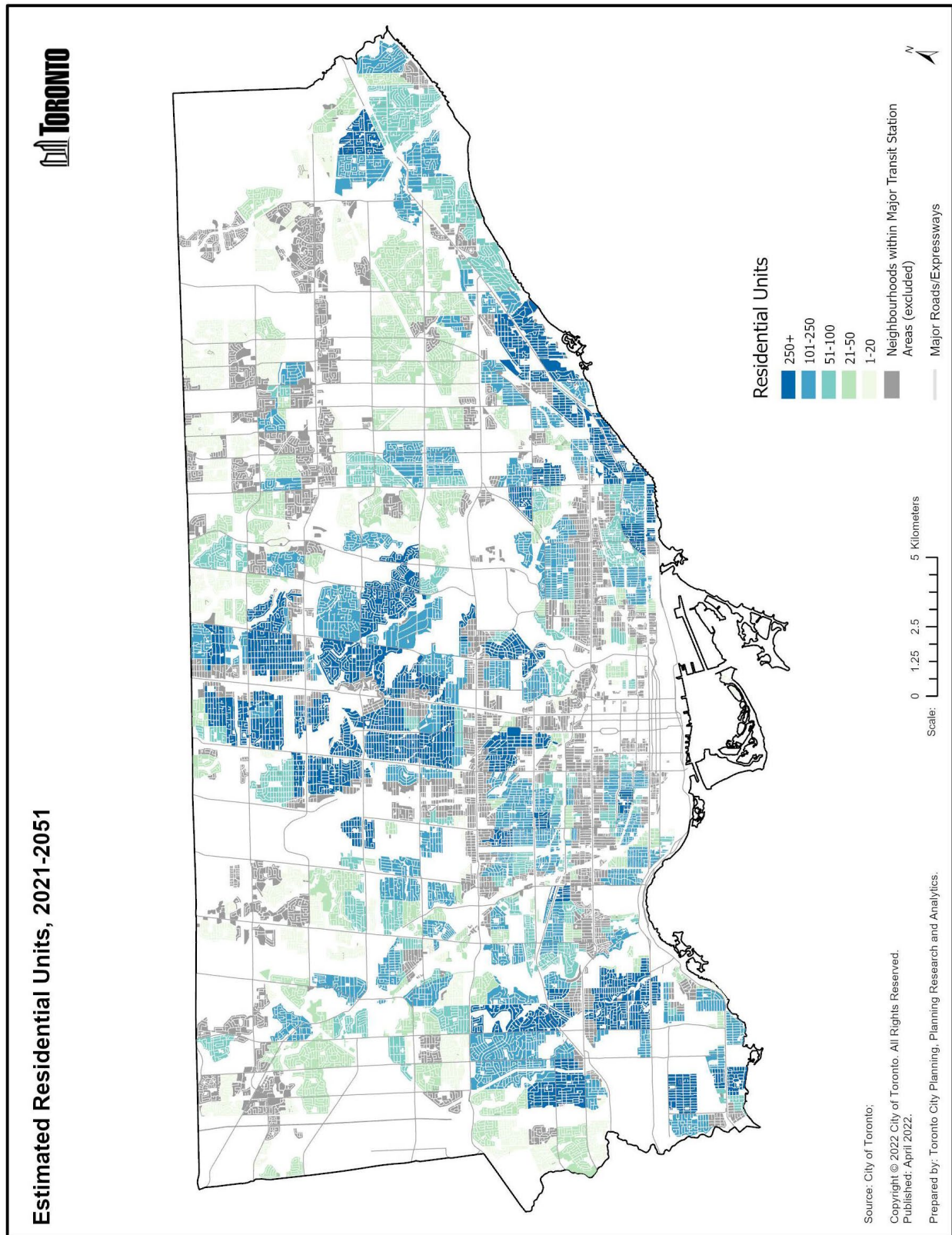


Figure 9.2: Estimated Residential Development in Neighbourhoods, 2021-2051



Attachment 10: Employment Projections

Overview

The Employment Projections Model was developed as an input into the Municipal Comprehensive Review, Transportation Ridership Modelling, and other forward-looking analyses such as infrastructure planning and long-range land use policy. The Employment Projections Model will continue to be refined and updated as new information, such as the results of the 2021 Census, become available.

Context

As specified in the Land Needs Assessment Methodology for the Greater Golden Horseshoe (2020), the Employment Projections Model takes into account Schedule 3 forecasts as a minimum growth scenario, and projects employment by North American Industry Classification System (NAICS) and by Place of Work status.

The projections are developed for the three primary classifications of Place of Work status, as reported by the Census: Usual Place of Work, No Fixed Place of Work, and Work at Home.³ Following the timeline of A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020), the projections have been developed through to 2051 at five-year periods.

- 2016 figures are derived from the 2016 Census, Place of Work tabulations.
- 2021 figures are estimates that have been developed prior to the release of the 2021 Census results.
- Figures for 2026, 2031, 2036, 2041, 2046, and 2051 are projections.

The Employment Projections Model was developed using Traffic Zone level sub-geographies in the city of Toronto. Traffic Zones align closely with standard Census geographies allowing the opportunity to explore relationships between employment projections and available Census information.

The North American Industry Classification System (NAICS) Canada 2017 Version 3.0 was used as a foundational element in the Employment Projections Model. Employment projections for each time period, geography, and Place of Work status are subdivided by the 20 industry classifications at the 2-digit level of detail.

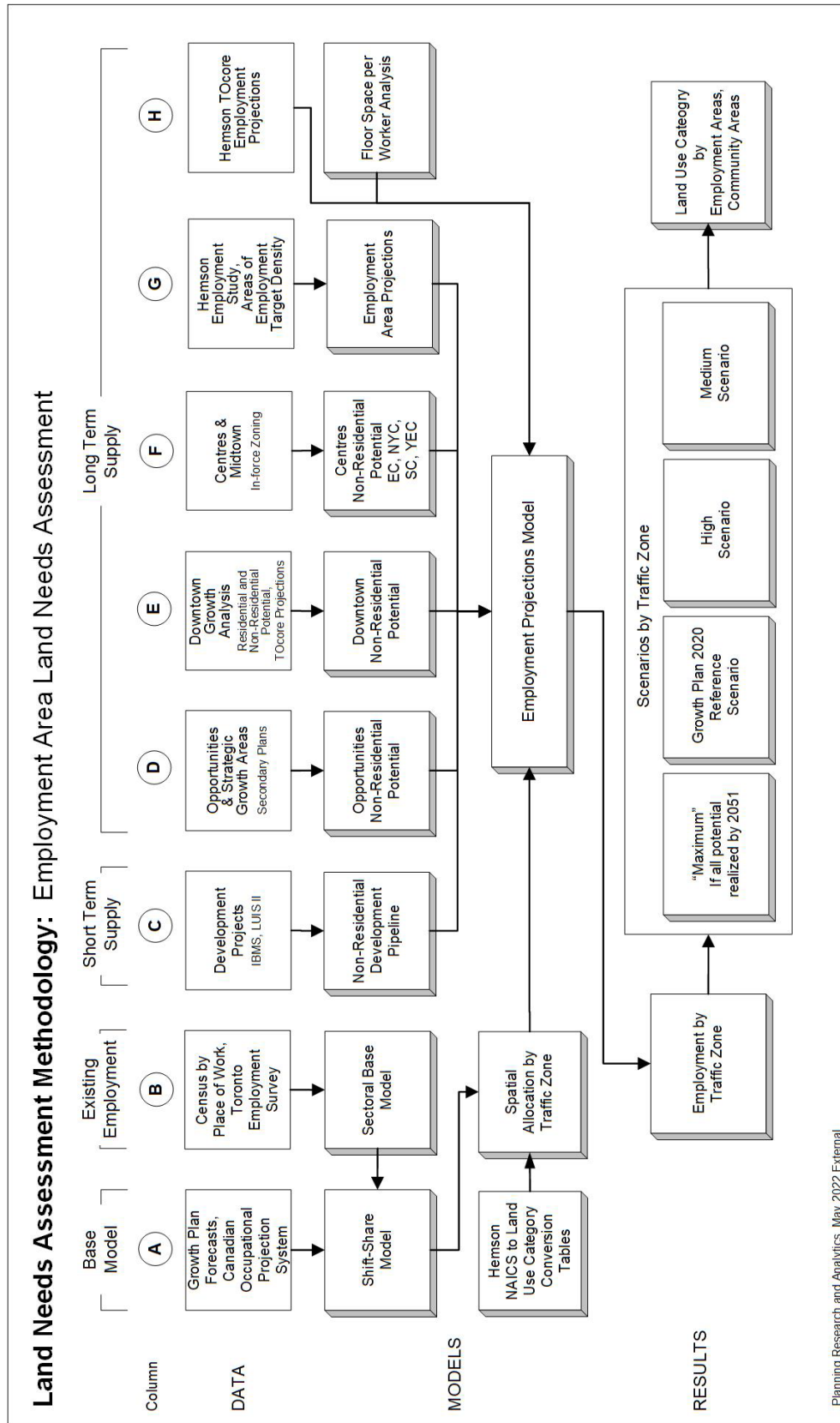
³ **Worked at home** – Persons whose job is located in the same building as their place of residence, persons who live and work on the same farm, building superintendents and teleworkers who spend most of their work week working at home.

No fixed workplace address (No Fixed Place of Work) – Persons who do not go from home to the same workplace location at the beginning of each shift. Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.

Usual workplace address (Usual Place of Work) – Persons who are not included in the categories described above and who report to the same (usual) workplace location at the beginning of each shift are included here. Respondents are asked to provide the street address, city, town, village, township, municipality or reserve, province/territory and postal code of their workplace. If the full street address was not known, the name of the building or nearest street intersection could be substituted.

The **Worked outside Canada** category of Place of Work status is not included in this analysis.

Figure 10.1 Employment Area Land Needs Assessment



Methodology

The methodology for the Employment Projections Model combines both city-wide projections and small-area Traffic Zone level growth estimates for Usual Place of Work employment. A Reference, Medium, and High employment projection provides city-wide totals through to 2051 by industry. In addition, a "Maximum Potential Scenario" was developed to inform the relative scale, type, and location of employment anticipated at the Traffic Zone level. The combination of these two approaches allows small-area analysis and data inputs to inform growth trajectories, while at the same time ensuring city-wide totals are consistent with pre-established scenarios. The following inputs were used to produce the Employment Projections.

Census Place of Work Custom Tabulations

Staff obtained a custom tabulation of Place of Work data derived from long form responses after each Census is completed. The data tabulations enable Place of Work/place of residence data to be linked to the Census of Population Place of Work data, and coded on the Census database as a workplace variable. The custom tabulation provides the number of employees by 2-digit NAICS by Traffic Zone for those who worked at home or had a usual Place of Work.

The 2016 tabulation serves as the fundamental base layer in the Employment Projections Model. The reported employment by industry in each Traffic Zone is subsequently modified by a series of parameters referenced within this report to achieve 2051 projections.

Toronto Employment Survey

The annual Toronto Employment Survey is a full sample annual survey of all business establishments in the City of Toronto. Information is recorded for establishments including their location, NAICS, Land Use Activity Codes, full and part-time employment, and other relevant data points. As an establishment-based survey, the results of the Toronto Employment Survey are not directly comparable to the Census Place of Work tabulation which derives results from the responses of residents. However, at a city-wide level the year-to-year Toronto Employment Survey changes in employment by NAICS provide a reasonable proxy for estimating changes in employment for intercensal years. A modified output of the 2021 Toronto Employment Survey results was analyzed to generate 2-digit NAICS level growth rates.⁴ These growth rates helped inform 2021 employment estimates by NAICS by industry in the interim prior to receiving the results of the 2021 Census.

Canadian Occupational Projection System: Annual Employment Projections by Industry

Employment and Social Development Canada regularly publishes long-range projections of employment by occupation and industry. The most recent projections cover the period from 2019 to 2028. These national projections are used in a "shift

⁴ Modified 2-digit NAICS growth rates were developed by isolating establishments that responded to the 2021 Toronto Employment Survey, and removing those establishments that did not respond. The net result of these changes were higher growth rates that more closely aligned with the Toronto CMA Labour Force Survey growth rates for a similar time period. These figures are being used temporarily and will be replaced by 2021 Census Place of Work results when this information is made available.

share model" described below to estimate employment growth for Toronto from 2021 to 2028.

Shift-share is a form of analysis that estimates a region's share of a larger job total, and considers historic trends as a proxy for understanding how future growth may be allocated. The Canada-wide Canadian Occupational Projection System - Annual Employment Projections by Industry data series provides historical and future employment figures for 42 clusters (4-digit NAICS level). These clusters are aggregated to the 2-digit level to align with the Census Place of Work tabulation.

In 2006, Toronto accounted for 7.5% of Canada's jobs, varying from a low of 0.2% of Agricultural, Forestry, Fishing and Hunting jobs (NAICS category 11), to a high of 52.6% of Finance and Insurance, Real Estate, Rental and Leasing jobs (NAICS category 52-53). 2021 employment estimates for Toronto show increased concentration in certain sectors, such as Finance, while Toronto has lost share in Manufacturing and Wholesale Trade jobs. In aggregate, Toronto's estimated capture of Canada-wide employment in 2021 was 7.4%

For the years 2022 to 2028, Toronto's 2021 capture by 2-digit NAICs was applied consistently to the Canada-wide projection figures to create Toronto-specific estimates. These estimates were then converted into an annualized growth rate, which was used to A) inform city-wide projections, and B) adjust the Usual Place of Work employment by NAICS in the "Base Model" in the Maximum Potential Scenario.

Floor Space per Worker Ratios

Floor Space per Worker ratios are a metric that estimates the average amount of gross floor area occupied per employee. This metric is a commonly used in exercises where employment projections must be converted into gross floor area, such as the Development Charges By-law review process. Floor Space per Worker ratios can also be used in reverse to translate proposed development into employment. Within the Employment Projections Model, Floor Space per Worker ratios were applied to translate the Development Pipeline and Opportunities Analysis into employment estimates.

Analysis conducted by Hemson Consulting Ltd. ("Hemson") as part of background work supporting TOcore, the study that resulted in the Downtown Plan, found evidence that Floor Space per Worker ratios commonly applied to office space overstated the level of employment generated. This overstatement could be occurring because commonly used ratios may not consider non-leasable area, vacant space and sub-lease vacancy, and excess space held by tenants that are in the process of staffing up or downsizing. In addition, common ratios applied to other uses such as industrial and institutional are subject to a high degree of individual variability by sub-use. Despite the conservative ratios applied by Hemson in this analysis, their forecasts show the Downtown growing faster than what would be implied by the Growth Plan.

Given the importance of Hemson's findings regarding Floor Space per Worker metrics, detailed city-wide analysis was conducted by City Planning staff that compared Development Pipeline projects and proposed space by use to actual employment reported by the Toronto Employment Survey. This analysis was based on:

- Non-residential gross floor area (GFA) values from built Development Pipeline projects with activity between January 1, 2001 and June 30, 2021, in order to yield enough data for the results to be analysed by different categories; and
- 2019 Toronto Employment Survey employment numbers. 2019 data was used as it is the most recent pre-pandemic year and so better reflects employment trends as they occurred before the disruptions of the pandemic.

FSWs were calculated as the sum of employment from all establishments in a given parcel divided by the total non-residential GFA in that parcel, including both retained non-residential GFA that existed on the site before the project was built plus any newly built GFA. Initially, only projects that contained one establishment were included in the analysis, in order to isolate the land use and employment activity and to be certain that no non-residential units were vacant. The initial single-occupant analysis provided some valuable insights, but yielded only 24 Office records and no hospital records in the Institutional category. Therefore, additional analysis was done on these two categories. Median FSWs were summarised by land use, with outliers excluded.

Development Pipeline

The five-and-a-half year MCR Pipeline dataset, spanning the period of January 1, 2016 to June 30, 2021, was used as an input. The MCR Pipeline includes both existing and proposed space, as well as a breakdown by use, allowing a high level estimate of net achieved employment post-completion by applying Floor Space per Worker ratios. Projects recorded as Built within the Pipeline provide an estimate of net additional employment for 2021, while those that are Active and Under Review are assumed to be completed and occupied over the subsequent 5 to 15 years.

Non-Residential Opportunities Consultation & Growth Potential Analysis

This consultation and analysis captures development potential that is anticipated to occur, but is not yet reflected by the Pipeline. Identified non-residential components of potential were subdivided into estimated floor space by use, then further converted into employment potential using Floor Space per Worker ratios.

Through the merging of top-down and bottom-up model components, the net resulting employment from the Non-Residential Opportunities Consultation & Growth Potential Analysis was adjusted to conform to the citywide projections in the Reference, Medium, and High scenarios. As such, the outputs of this analysis provide an indication of directionality and approximate relative magnitude of growth, rather than a direct output of employment projections.

TOcore Projections

In 2018, Hemson prepared the report Planning Downtown: The Outlook for Office & Institutional Employment to 2041 to support the Downtown Plan (TOcore). As part of this work, Hemson created four sets of employment projections to 2041 including: (A) Growth Plan Consistent (2012), (B) Low, (C) Medium, and (D) High. The Traffic Zone level projections incorporated an analysis of policy, trends, and redevelopment potential and covered the Downtown, South of Eastern, and Liberty Village areas.

As a result of Ministerial modifications to the Downtown Plan, and the impacts of the COVID-19 pandemic, the (B) Low scenario was applied as an input through to 2041 in the Employment Projections Model.

Hemson Inputs

Hemson was retained to provide additional support, guidance, and assumptions as part of the background work for the Employment Projections Model. Hemson produced the Schedule 3 forecasts for the Growth Plan as amended in 2020, along with forecast schedules contained within previous Growth Plans.

Hemson provided Toronto-specific assumptions of NAICS distribution by Employment Type (Major Office Population-Related, Employment Land), allowing their Technical Report employment forecasts to be disaggregated into 2-digit NAICS. Through this step, long-range employment growth rates by 2-digit NAICS are estimated and applied to the Employment Projections Model for the years spanning 2029 through to 2051.

In addition, assumptions from Hemson that were used as part of the Technical Report have been applied to estimate employment growth for No Fixed Place of Work and Work At Home categories. Finally, Hemson has provided additional input on specific topics such as growth potential in key areas of the city, integration of the TOcore projections, and a memo on employment trends.

Citywide Projections

Three citywide projection scenarios, informed by the Technical Report, were applied in the Employment Projections Model. Based on the current development pipeline magnitude, opportunities analysis, and Toronto's economic structure in relation to global macro trends, the Medium Scenario is considered to be the most likely growth outcome.

Reference Scenario (Growth Plan Reference Scenario)

The Growth Plan (2020) Reference Scenario projects a total employment for Toronto in 2051 of 1,978,800. To achieve this total, Toronto would need to grow its employment base at an annualized rate of 0.6% from 2016 to 2051. From 2006 to 2021, Toronto's estimated annual employment growth was nearly twice this rate at 1%. As such, the Reference Scenario is considered a low scenario as the future implied growth rate is substantially lower than the estimated rate of growth achieved in recent years.

Medium Scenario (Modified Growth Plan High Scenario)

The Technical Report contains a High Scenario that projects a total employment for Toronto in 2051 of 2,055,000. This scenario is applied to the Employment Projection's Model Medium Scenario, but with minor modifications to account for 2021 employment estimates informed by the Toronto Employment Survey results, and projected industry-specific growth rates derived from the shift-share analysis through to 2028. The net result of these modifications was slightly higher growth in the initial years of the projection period, which resulted in a total projected employment of 2,080,400 in 2051. The Medium Scenario represents an increase of 101,600 employees over the Reference Scenario.

High Scenario

A High Scenario was developed that exceeds the projections contained within the Technical Report. The Technical Report assumes that Toronto's capture of employment growth in the Greater Toronto and Hamilton Area (GTHA) will decline from a peak of 44% in 2021 to a low of 14% (Reference) to 16% (High) in 2041. Given that Toronto's relative capture of the region's employment base has increased rather than decreased in recent years, it is reasonable to consider alternative projection scenarios. For the High Scenario, it was assumed that Toronto would capture a consistent share of GTHA employment growth through to the end of the projection period in 2051. An average capture of 30% was applied, which is equal to Toronto's average employment share of the GTHA from 1996 to 2016.

Under the High Scenario, and including the growth modifications through to 2028 described in the Medium Scenario, the projected total employment for Toronto in 2051 is 2,179,000. The High Scenario represents an increase of 98,600 employees over the Medium Scenario, and an additional 200,200 employees over the Reference scenario.

Table 10.1: Citywide Employment Projections*

Projection Type	2016	2051 Reference	2051 Medium	2051 High
Land Use Category	1,607,800	1,978,800	2,080,400	2,179,000
Major Office	639,700	900,200	950,600	997,300
Population-Related	661,200	758,100	791,200	825,800
Employment Land	306,800	320,500	338,500	355,900
Geographic Allocation	1,607,800	1,978,800	2,080,400	2,179,000
Employment Area	410,700	465,200	491,300	516,300
Community Area	1,197,000	1,513,500	1,589,100	1,662,700
Place of Work Status	1,607,800	1,978,800	2,080,400	2,179,000
Usual Place of Work	1,342,400	1,654,800	1,748,400	1,834,900
Work At Home	101,300	131,200	131,200	131,200
No Fixed Place of Work	164,100	192,800	200,800	213,000

* Projections are preliminary and are subject to change as new information is available through ongoing monitoring and periodic outputs, including the results of the 2021 Census.

** Interim 2021 estimates have been developed through a combination of Toronto Employment Survey results and assumptions provided by Hemson.

*** Work At Home projections are a product of Hemson assumptions of employment by industry as a share of population. At this preliminary stage, Schedule 3 Reference Scenario population forecasts are being applied for Work at Home projections and may be updated as more detailed information becomes available.

Small-Area Traffic Zone Projections – Maximum Potential Scenario

To inform the distribution of growth under the city-wide projections, a small-area Maximum Potential Scenario was developed at the Traffic Zone level. These projections estimate the maximum potential employment growth that could be achieved in each of Toronto's 659 Traffic Zones, at 5-year periods, by 2-digit NAICS. While the maximum potential is unlikely to be realized, it provides a useful proxy of the magnitude of relative growth potential in specific areas of Toronto at an industry level.

The Maximum Potential Scenario is developed for Usual Place of Work employment. No Fixed Place of Work and Work at Home employment are incorporated after the Maximum Potential Scenario was merged with the city-wide projections.

The "Base Model" underpins the Maximum Potential Scenario and provides a business-as-usual growth trajectory for each of the Traffic Zones. The Base Model was developed for Usual Place of Work employment by 2-digit NAICS. Growth rates from 2016 to 2051 were derived from the Toronto Employment Survey, a shift share analysis based on national employment projections by industry, and Hemson's Technical Report.

In addition, the Development Pipeline, Non-Residential Opportunities Analysis, and TOcore Projections were applied as inputs on top of the Base Model. These figures were converted into a common measurement of employment potential by 2-digit NAICS, at 5-year periods through to 2051.

The Maximum Potential Scenario was estimated by taking the highest value of each of the component inputs (Base Model, Development Pipeline, Opportunities Analysis, and TOcore Projections) for each 5-year period by 2-digit NAICS.

For example, an area such as the [Port Lands](#) with a largely industrial employment base would likely see gradual but modest growth through to 2051 in the Base Model. Through the Non-Residential Opportunities Analysis, significant growth in non-residential gross floor area was identified for several of the Traffic Zones within the Port Lands. This growth potential was then converted into employment by 2-digit NAICS using a series of Floor Space per Worker ratios and NAICS distribution assumptions. After this conversion, the highest employment potential for each 2-digit NAICS within these Traffic Zones was derived from the Non-Residential Opportunities Analysis. As such, the Base Model figures were removed from the Maximum Potential Scenario and the Non-Residential Opportunities Analysis estimates were carried forward into the next stage of the Model.

Merging City-Wide and Small-Area Traffic Zone Usual Place of Work Model Components

In the subsequent phase of the modelling process, the Maximum Potential Scenario was applied to inform the distribution of Usual Place of Work employment by industry across Traffic Zones at each 5-year period between 2021 and 2051. To achieve this, employment city-wide was projected through to 2051 by 2-digit NAICS using the methodology described above. This process created "control totals" for employment by 2-digit NAICS by 5-year period for each of the three scenarios.

The total employment by 2-digit NAICS by 5-year period was summed across all Traffic Zones within the Maximum Potential Scenario. The summed Maximum Potential for each industry was compared with the total by industry projected within the city-wide scenarios to calculate the relative differential. Typically, the Maximum Potential scenario exceeds the figure within the city-wide projections.

For example, under the Medium Scenario the citywide projected Usual Place of Work employment for 52 Finance and Insurance jobs in 2051 was 303,750. The Maximum Potential Scenario projects a total of 337,250 jobs in 52 Finance and Insurance in 2051.

Correspondingly, the Medium Scenario's projected employment for this industry is 10% lower than the Maximum Potential Scenario.

In the final step, the calculated differential for each 2-digit NAICS was applied against 2021 Traffic Zone estimates to align the total employment by industry with the totals contained within the citywide scenarios. Following the example described above, under the Medium Scenario the projected employment for each Traffic Zone in 2051 for 52 Finance and Insurance would be multiplied by 90% to bring the total combined Usual Place of Work employment to 303,750. The net result of this process was a Traffic Zone-level projection of employment for Usual Place of Work that collectively summed to the same totals by industry forecasted in the Reference, Medium, and High citywide projections.

Work at Home Employment

Separate from the Usual Place of Work calculations, Traffic Zone - level Work at Home employment projections were calculated by Traffic Zone by 2-digit NAICS for each 5-year period from 2021 to 2051. Population growth rates projected by Hemson under the Schedule 3 Reference scenario were applied to 2016 Work at Home employment reported in the 2016 Census at the Traffic Zone level. At this preliminary stage of analysis, population growth rates were not differentiated by the three scenarios and were not linked to the City's internal population and household projections. Higher rates of employment growth in excess of the reference scenario would likely be associated with higher rates of population growth. The projected Work at Home employment was added to Usual Place of Work employment for each Traffic Zone by industry to create a combined total.

No Fixed Place of Work Employment

Consistent with the forecast methodology underlying the Provincial Growth Plan forecasts of employment in Schedule 3, No Fixed Place of Work employment was incorporated as a share of regional employment, consistent with Hemson's methodology. The GTHA No Fixed Place of Work – GTHA (Greater Toronto and Hamilton Area) Hemson Redistribution column shown in the following table was calculated by summing the total Work at Home and Usual Place of Work employment for the City of Toronto, and the GTHA. Toronto's relative share of GTHA employment by 2-digit NAICS was then used to estimate the amount of No Fixed Place of Work employment that can be "redistributed" to the city of Toronto.

In 2016, the redistributed total represented an estimated 10.2% of all employment within the City of Toronto. In sectors where Toronto has a higher concentration of employment versus the GTHA average, it was allocated a correspondingly higher allocation of No Fixed Place of Work employment. These allocations by 2-digit NAICS for No Fixed Place of Work employment are held relatively constant in future years through to 2051 and applied to the projected Work at Home and Usual Place of Work combined totals.

The same methodology was also applied at a Traffic Zone level within Toronto. The relative concentration of each Traffic Zone's Usual Place of Work and Work at Home employment versus the city-wide total by 2-digit NAICS was used to determine No Fixed Place of Work allocations. This process was repeated for each 5-year period through to 2051 for each of the three scenarios.

Table 10.2: Total Place of Work Employment, 2016

Total - Industry - North American Industry Classification System (NAICS) 2012	Usual Place of Work	Work at Home	No Fixed Place of Work - GTHA Hemson Redistribution	Total Employment
Total	1,342,385	101,285	164,116	1,607,786
11 Agriculture, forestry, fishing and hunting	995	215	141	1,351
1 Mining, quarrying, and oil and gas extraction	1,900	135	254	2,289
22 Utilities	7,270	125	578	7,973
23 Construction	32,435	3,430	37,216	73,081
31-33 Manufacturing	95,175	2,850	4,072	102,097
41 Wholesale trade	39,775	4,020	3,209	47,004
44-45 Retail trade	131,865	4,685	6,957	143,507
48-49 Transportation and warehousing	37,840	1,555	12,826	52,221
51 Information and cultural industries	60,015	6,420	6,353	72,788
52 Finance and insurance	169,835	6,205	5,389	181,429
53 Real estate and rental and leasing	33,370	8,260	4,944	46,574
54 Professional, scientific and technical services	155,640	31,625	15,149	202,414
55 Management of companies and enterprises	5,085	200	109	5,394
56 Administrative and support, waste management and remediation services	54,180	4,885	20,992	80,057
61 Educational services	108,125	5,810	11,164	125,099
62 Health care and social assistance	151,220	6,125	12,808	170,153
71 Arts, entertainment and recreation	23,790	6,335	4,405	34,530
72 Accommodation and food services	96,380	1,655	5,760	103,795
81 Other services (except public administration)	60,255	6,000	7,302	73,557
91 Public administration	77,235	750	4,487	82,472

Source: Hemson Consulting Ltd.

Employment Projections Model Outputs

In the final step, the outputs from the Employment Projections Model were tabulated by summing Usual Place of Work, Work at Home, and No Fixed Place of Work by 2-digit NAICS by 5-year period by Traffic Zone. In effect, for every Traffic Zone within the City of Toronto the outputs for each of the three scenarios provide a projected total employment figure, comprised of additional detail about the industry and Place of Work status.

These detailed outputs by Traffic Zone are aggregated to develop projections for specific sub-areas of the city, such as Urban Growth Centres, Employment Areas, and other key nodes.

Provincially Significant Employment Zones (PSEZs) and Major Transit Station Areas (MTSAs)

An analysis of potential employment growth in PSEZs and MTSAs was conducted as part of the analysis process. To determine a baseline level of employment, 2019 Toronto Employment Survey results (pre-pandemic) were spatially joined to PSEZ and MTSA boundaries. The number of 2019 full-time and part-time jobs in each area were recorded, and any overlapping boundaries were removed to eliminate double counting. This geospatial distribution of jobs in PSEZs and MTSAs was then applied to the three 2051 employment projections as a method of estimating future employment in these areas.

Table 10.3: PSEZs and MTSAs 2051 Employment Estimates

Geography	2051 Reference	2051 Medium	2051 High
PSEZs	309,311	325,196	340,611
MTSAs	1,058,598	1,112,962	1,165,720

Comparison with the 2016 MCR Analysis

To support the ridership modelling projections for the proposed SmartTrack transit line, traffic zone level population and employment projections were developed to 2041. An explanation of the results and applied methodology is described in [Appendix 7 - Population and Employment Projections](#) of [EX9.1 SmartTrack Status Update \(2015\)](#). For comparison purposes, the preferred "Scenario 2, Medium with SmartTrack" projected 1,883,584 employees with a Usual Place of Work, or Work at Home, in 2041. This is compared to the following 2041 results from the Employment Projections Model described within this report:

- Reference Scenario: 1,708,104
- Medium Scenario: 1,759,074
- High Scenario: 1,810,012.

Attachment 11: Strategic Growth Areas

The Land Needs Assessment has regard for the requirements associated with Strategic Growth Areas as defined by the Growth Plan.

Urban Growth Centres and Their Densities

Toronto's Official Plan seeks to direct growth to the Centres and Downtown "in order to promote mixed use development to increase opportunities for living close to work and to encourage walking and cycling for local trips."

The Provincial Growth Plan sets minimum gross density targets to be achieved by 2031 for Urban Growth Centres (UGC's). The minimum gross density target is 400 residents and jobs combined per hectare for each Centre and for Downtown.

Table 11.1 shows the density of people and jobs per hectare for Downtown and each Centre between 2006 and 2020, and for the city overall. Since 2006, each of these areas has become steadily denser. North York Centre and Yonge-Eglinton Centre have achieved the 400 people and jobs per hectare target, as early as 2006 in the case of Yonge-Eglinton Centre. In 2020, total employment was lower than in 2019 due to the initial impacts of the COVID-19 pandemic. As a result, the estimated densities in 2020 are lower than they were in 2019. Nevertheless, Table 11.1 also shows that Downtown and the Centres have intensified in comparison to the city overall, as the Growth Plan has directed.

If the density trends continue, it is likely that Downtown will exceed the UGC density target well before 2031. The 2020 density of the Downtown UGC area is estimated to be 366 people and jobs per hectare. According to the Census, the Downtown UGC population increased by 41,668 people between 2011 and 2016 or 19.4 persons per hectare.

According to the City's Toronto Employment Survey, the employment increased by 95,390 jobs between 2011 and 2020 or 44.4 jobs per hectare (see Figure 11.1). The increase in density as a result of this growth is a minimum of an additional 63.8 people and jobs per hectare over the nine-year period 2011-2020, a per annum rate of at least 8.8 people and jobs per year. If the current trends continued for another 4 years after 2020, the additional density would yield a total of 402 people and jobs per hectare in 2024, exceeding the minimum Urban Growth Centre density target well before 2031. The timing of the city's growth will be affected by its recovery from the impacts of the COVID-19 pandemic.

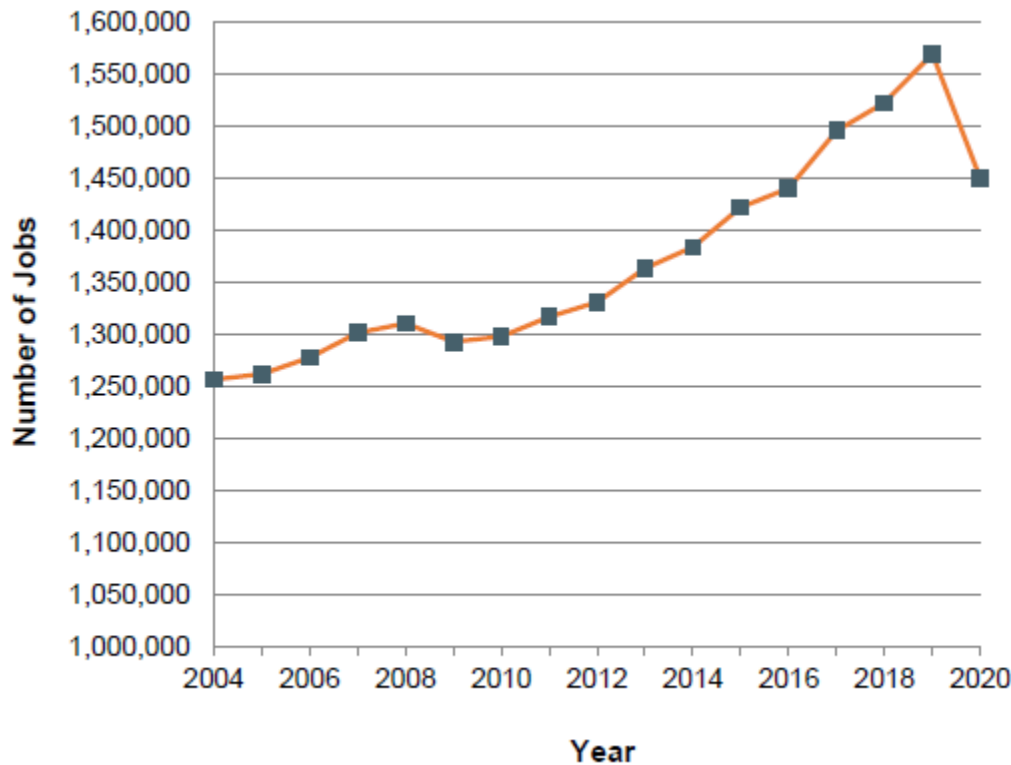
Table 11.1 Density of People and Jobs per Hectare in Urban Growth Centres

Measure	Density (People and Jobs Per Hectare)					Percent Change in Density	Percent Change in Density
	Year	2006	2011	2016	2019	2020	2006-2019
Scenario	Actual	Actual	Actual	Estimate	Estimate	Population Change	Population Change
City of Toronto	60	62	66	68	66	14%	11%
<i>Urban Growth Centres</i>							
Downtown and Central Waterfront Centres	265	302	354	388	366	47%	38%
Etobicoke Centre	137	144	155	164	158	20%	16%
North York Centre	385	455	450	460	454	19%	18%
Scarborough Centre	138	156	169	171	163	24%	18%
Yonge-Eglinton Centre	482	570	575	595	574	23%	19%

Sources: City Planning, Land Use Information System II. City Planning, Toronto Employment Surveys 2006, 2011, 2016, 2019, 2020. Statistics Canada, 2006, 2011 and 2016 Censuses, custom tabulations.

The 2006, 2011 and 2016 numbers were calculated based on employment values from the Toronto Employment Survey and population values from the latest Census. The 2019 and 2020 figures include the 2016 Census and the 2019 and 2020 Toronto Employment Survey results respectively.

Figure 11.1 City of Toronto Employment Survey



Source: Toronto City Planning, Toronto Employment Survey

Major Transit Station Areas

The Provincial Growth Plan defines a Major Transit Station Area as the area[s] generally within a 500 to 800 metre radius of a transit station, representing about a 10-minute walk. To satisfy the Growth Plan (2019) requirements, the City is required to individually delineate the boundaries for the Major Transit Station Areas ("MTSAs") within the city of Toronto and to demonstrate that each MTSA is planned for the established minimum target for residents and jobs, minimum density targets expressed as people and jobs per hectare.

Within the city of Toronto, there are currently 141 proposed MTSAs, of which 18 have been submitted to the Minister to date. Each MTSA is subject to a density target across the area as a whole. A subset of the MTSAs will be identified as Protected Major Transit Station Areas (PMTSAs), which are the areas that the Province allows municipalities to implement Inclusionary Zoning. The Province's Growth Plan for the Greater Golden Horseshoe sets out the following Major Transit Station Area minimum density targets for municipalities:

- 200 people and jobs per hectare for subway stations;
- 160 people and jobs per hectare for light rail transit stations; and
- 150 people and jobs per hectare for GO train stations.

City Planning has proposed a draft minimum density target for each of the 141 MTSAs, which are currently the basis of consultation. A number of potential MTSAs cannot meet the Growth Plan (2019) density targets and are eligible for lower targets due to: development constraints related to overlap with the City's Green Space System; and/or a station with high ridership where there is limited density (people and jobs). The Minister of Municipal Affairs and Housing is the approval authority for MTSAs.

To demonstrate the degree to which the planned MTSAs are anticipated to meet their planned minimum density targets, a comparison of existing density to future densities has been prepared as part of this LNA.

For the existing conditions, a series of baseline years (2016, 2019 pre-pandemic and 2021 mid-pandemic) were established to reflect known densities based on available population and employment data. The results show that as of 2016, 4.3% of MTSAs (6 MTSAs) had already achieved their minimum density target. The LNA relies on 2016 Census data as a baseline. The current assessment of population and employment thus rely on the 2016 Census of Population and more recent years of the Toronto Employment Survey. Insofar as the full impacts of the COVID-19 are not yet known and given the expectation that overall economic growth will return to pre-pandemic levels, then the results of both the 2019 Toronto Employment Survey and the 2021 Survey are used to assess the pre-pandemic and mid-pandemic MTSA densities. In 2019, through increased employment alone, 6.4% of MTSAs (9 MTSAs) had met their minimum density targets. This count declines slightly from 9 to 8 MTSAs in 2021, an anticipated outcome of lower employment observed during the pandemic.

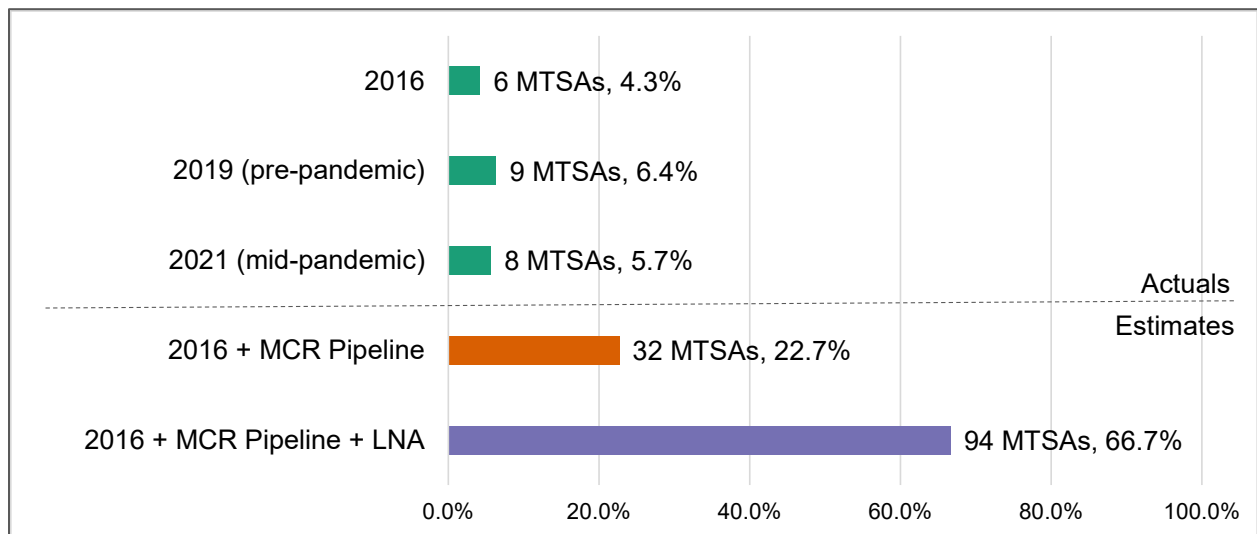
According to Hemson's Technical Report, overall growth is assumed to return to pre-pandemic expectations within 3 years from the 2020 economic contraction. Continued

monitoring of the MTSA density conditions will likely reflect population growth and a return to pre-pandemic employment levels within these MTSA, resulting in higher densities as recovery progresses and growth continues on its trajectory. Presently, these actuals demonstrate that even in a contracted economy, and without the benefit of factoring in added population growth between 2016 and 2021, there is demonstrable progress between 2016 and 2019, and between 2016 and 2021, with employment growth alone responsible for the additional density observed in these MTSA.

To assess future densities, the added potential from the full build-out of the MCR Pipeline is considered and thereafter, the added growth potential identified in this LNA. About 23% of all MTSA (32 MTSA) are anticipated to meet their draft minimum density targets based on a full build-out of the Pipeline, when that growth potential is added to 2016 base-year densities. When the potential population from the LNA's opportunity sites and potential jobs from employment projections are considered (in addition to the build-out of the MCR Pipeline) over two-thirds (67%) of all MTSA or 94 MTSA are estimated to be on track to meet their minimum density target.

Figure 11.2 shows a breakdown of the proportion of MTSA on track to meet their density targets based on the results of this analysis. MTSA that are located within and close to Downtown and the Centres are all on track to meet their minimum density targets based on the combined sources of potential population and employment growth identified in the MCR Pipeline and LNA combined.

Figure 11.2 Number and Percent of MTSA Anticipated to Meet Minimum Population and Job Density Target, Categorized by Estimated Source of Potential Supply



Attachment 12: Growth Plan Conformity Analysis Support

(Provided separately)