



Population, Housing and Employment Growth Projection Study, 2021-2051

City of London

Final Draft Report

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Executive Summary

The City of London retained Watson & Associates Economists Ltd. (Watson) in early 2022 to undertake an update of the City's 2018 Population, Housing and Employment Growth Study.^[1] Historical and forward-looking development activity, demographic and economic trends within the City of London and the surrounding region have been analyzed to inform this updated growth analysis for the City to the year 2051. More specifically, this report provides a review of the following:

- Statistics Canada Census population and household trends from 2001 to 2021;
- Recent residential and non-residential building permit activity by dwelling type (new units only) and major employment sector from 2016 to 2021;
- Labour force trends for the London Census Metropolitan Area (C.M.A.);
- Future potential residential development supply by structure type by stage of development;
- Recent Ontario Ministry of Finance (M.O.F.) population projections for the London-Middlesex Area;^[2]
- Key growth drivers and disruptors influencing future residential and non-residential growth;
- Three population, housing and employment growth scenarios for the City of London, including low, medium and high growth forecasts to the year 2051 in five-year increments;
- Population and housing growth options by planning policy area, i.e., Built-Area Boundary (B.A.B.), designated greenfield area (D.G.A.) and remaining Rural Area by housing structure type to the year 2051;^[3] and
- Non-residential gross floor area forecast by major employment sector to the year 2051.

^[1] City of London Population, Housing and Employment Growth Forecast, 2016 to 2044 Final Report, February 1, 2018, Watson & Associates Economists Ltd.

^[2] For the purpose of this analysis, the London-Middlesex Area includes the City of London and Middlesex County.

^[3] Designated Greenfield Area is defined as the land area between the Built-Area Boundary and Urban Growth Boundary in accordance with the London Plan (Official Plan).



The results of this growth forecast update will form the foundation for business planning and long-range planning initiatives, including the review of the London Plan (Official Plan (O.P.), Development Charges (D.C.) Background Study, as well as Service Area Infrastructure and Community Facility Master Planning Studies. As part of the terms of reference for this study, three long-term City-wide population and employment growth forecasts have been explored and evaluated, including a low, medium and high growth scenario. Further details regarding forecast housing growth by structure type are examined regarding the "recommended" Medium Growth Scenario (reference forecast) over the 2021 to 2051 planning horizon. In developing the long-term assessment of forecast housing demand by structure type, three draft options regarding the allocation of population and housing growth within the City's B.A.B., D.G.A. and Rural Area have been explored. More specifically, this includes a reduced long-term housing intensification target of 40%, a status quo scenario (i.e., 45% residential intensification), and a 50% housing intensification scenario from 2021 to 2051. The City's recommended approach to the allocation of growth by planning policy area will be further determined as part of the City's Comprehensive Review (C.R.) exercise, which is anticipated to commence in 2023.^[1]

City of London's Population, Employment and Housing Trends, 2001 to 2021

Over the past 20 years, the City of London has experienced steady population growth. Since 2011, the rate of population growth across the City has increased substantially, driven by steady net migration across all major demographic groups (i.e., particularly children, adults, and to a lesser extent, seniors). Between 2011 and 2021, the City's annual population growth rate increased to 1.5%, fueling demand for steady new housing construction throughout the City.

For many Ontario municipalities, including the City of London, the COVID-19 pandemic has been a significant driver of ownership housing demand, largely led by the ultra-low interest rate environment generated throughout 2020 and 2021 in response to the pandemic, combined with steady outward growth pressure during this period, particularly from the larger urban centres of the Greater Toronto Hamilton Area (G.T.H.A). Demand for rental housing within the City has also steadily increased over

^[1] According to the Provincial Policy Statement (P.P.S.), 2020, a Comprehensive Review is defined as an O.P. review or an O.P. Amendment which is initiated by a planning authority, for the purposes of policies 1.1.3.8 (expansion of a settlement area) and/or 1.3.2.4 (conversion of land within Employment Areas).



the past decade, and most notably over the past several years. As of October 2021, rental vacancy rates within the primary rental market within the City of London averaged 1.9%, down from 3.4% from the previous year. Comparatively, the average vacancy rate for the province of Ontario was 3.4% as of October 2021.^[1] This recent trend of relatively stronger demand toward rental and ownership housing is anticipated to continue over the medium to long term, notwithstanding a general cooling in the ownership housing market in the near term.

The City of London is anticipated to accommodate a growing share of young adults and new families seeking competitively priced home ownership and rental opportunities. It is also important to recognize that the population base of the City is getting older, on average, and aging at a similar rate to the province as a whole. More specifically, the percentage of the City's population in the 65+ age group is forecast to increase over the forecast period from 18% in 2021 to 21% in 2051 (refer to section 4.3 of this report for further details). Similar to broader national trends, the aging of the population and declining population growth associated with natural increase (i.e., births less deaths) is anticipated to place downward pressure on the rate of population and labour force growth across the economic region over the long-term.

Over the past 20 years, the City has experienced periods of employment growth and decline resulting from economic expansion and contraction across the broader regional economy during this time. Between 2001 and 2006 the City's employment base increased by 14,200; however, since that time employment gains have been relatively modest. Following the 2008/2009 global financial crisis, the City of London economy has continued to strengthen and diversity; however, this recovery was slow to materialize. Similar to the national and provincial economies, the regional economy has also experienced disruption related to structural changes. While these structural changes have been present for several decades, they hit the export-based economy across the London-Middlesex Area particularly hard between 2006 to 2011. During the 2011 to 2021 period, the City experienced steady employment growth across a number of knowledge-based sectors, including professional, scientific, and technical services; health care and social assistance; and educational services. Strong local population growth has also fueled steady employment growth in the retail and construction sectors. A large portion of these employment gains experienced between 2011 and 2021, however, were offset by job losses in manufacturing and the accommodation and food

^[1] CMHC Housing Market Information Portal, 2022.



sector. It is noted that the 2021 employment estimate for the City, provided herein, reflects a large number of temporary job losses resulting from the impacts of COVID-19. As of 2022, it is estimated that the City's employment base has increased by 19,900 employees since 2016.

The existing housing stock within the City of London is weighted towards low-density housing forms (i.e., singles and semi-detached). In recent decades, however, the City has experienced a steady shift toward a higher share of medium-density and high-density housing types. This shift has been largely driven by declining housing affordability associated with low-density housing options, as well as increased demand for medium- and high-density housing forms, driven by demographic and socio-economics factors associated with the aging population base, high-density housing demand associated with non-permanent residents (N.P.R.) as well as lifestyle choices of existing and new residents. Between 2008 and 2021, medium- and high-density housing types accounted for 62% of all new residential construction across the City. Looking forward, a broad mix of future housing options across a range of density types will be required to accommodate both younger and older adults across varying income levels, including affordable housing options, throughout the City.

City of London Employment Growth Outlook to 2051

A broad range of considerations related to demographics, economics, and socioeconomics are anticipated to influence employment growth trends in the City of London over the coming decades. These factors will not only affect the rate and magnitude of growth but will also influence the built-form, density, and location of non-residential development and the need for employment lands over the long term.

Over the past several decades, the provincial economy has been steadily shifting away from goods-producing sectors towards services-providing and knowledge-based jobs. As a result of these continued structural changes occurring in the macro-economy, it is important to recognize that the above-mentioned trends will generate both positive and disruptive economic impacts related to employment growth, local business investment, and labour force demand. These disruptive forces are also anticipated to have long-term impacts on industrial, commercial, and retail space requirements, as well as long-term employment land needs, which must be considered and monitored on an on-going basis when planning for non-residential development within the City of London (refer to section 4.5.1, herein).



The long-term economic growth outlook for the City of London has strengthened relative to the previous population and employment projections which were prepared for the City in 2018.^[1] This relative strength is anticipated to be driven by local and regional economic opportunities which are supporting higher immigration rates (including higher numbers of non-permanent residents), as well as increased inter- and intra-provincial net-migration to the City and surrounding region.

Since the onset of the pandemic, COVID-19 has acted as a near-term driver of housing demand for the London-Middlesex Area, largely driven by opportunities for remote/ hybrid work schedules and the City's attractiveness to families seeking grade-related housing forms which are more competitively priced relative to the Greater Golden Horseshoe (G.G.H.). In the near-term, tighter monetary policy imposed by the Bank of Canada in response to persistently high inflation rates is likely to continue to cool the regional housing market for the remainder of 2022 and 2023. Notwithstanding anticipated short-term trends in the regional housing market, the longer-term economic and population growth outlook for the London-Middlesex Area remains strong.

The City of London continues to have a strong appeal to both businesses and residents. This appeal is largely attributed to the City's geographic location, which offers opportunities for urban living within proximity to retail, entertainment and other urban amenities, including public and private schools, three regional hospitals, two postsecondary institutions, access to urban indoor and outdoor recreational facilities, as well as access to recreational opportunities within the surrounding rural countryside. These attributes make the City of London an attractive destination for permanent residents of all ages, non-permanent residents, domestic post-secondary students and businesses by size and sector.

The regional employment base is particularly concentrated in employment sectors related to financial services, information technology, business services, health care and social services, government, advanced manufacturing, energy, information and cultural industries, education, training and research, agri-business and tourism. These sectors, as well as other emerging knowledge-based industries, are anticipated to represent the fastest growing segments of the London-Middlesex Area economy. As the employment base continues to grow within the City of London and the surrounding commuter-shed, the economy is also anticipated to diversify, generating a range of new live/work and

^[1] City of London Population, Housing and Employment Growth Forecast, 2016 to 2044 Final Report, February 1, 2018, Watson & Associates Economists Ltd.



commuting opportunities. Accordingly, the City of London will continue to be a desirable location for workers to live, leading to steady population growth across the City. Over the next 30 years, the City's local employment base is also anticipated to benefit from the regional economic expansion anticipated within neighbouring municipalities in southwestern Ontario. As such, raising the economic profile of the City by leveraging the economic opportunities and strengths of the broader regional economy should represent a key long-term economic development strategy for the City of London.

Figure ES-1 summarizes three long-term employment forecast scenarios for the City of London over the 2021 to 2051 forecast period relative to historical employment trends between 2001 and 2021. By 2051, the City's employment base is forecast to grow to between approximately 295,000 and 339,300. This represents an increase of approximately 97,700 to 142,000 jobs between 2021 and 2051. Under the Medium Growth Scenario (Reference Scenario), the City of London employment base is forecast to grow to 302,800, representing an increase of approximately 105,500.







Note: Total employment includes no fixed place of work and work at home employment.

Source: Historical derived from Statistics Canada Census data, 2001 to 2016. 2018 City of London Forecast from City of London Population, Housing and Employment Growth Forecast, 2016 to 2044, Final Report, February 1, 2018. Low, Reference and High Scenarios by Watson & Associates Economists Ltd.

Employment Scenario	2021	2051	2021-2051	Annual Growth	Annual Growth Rate
Low Scenario	197,300	295,000	97,700	3,260	1.3%
Medium Scenario	197,300	317,500	120,200	4,010	1.6%
High Scenario	197,300	339,300	142,000	4,730	1.8%

Note: Figures may not add precisely due to rounding.

Source: 2021 estimated by Watson & Associates Economists Ltd., and 2051 by Watson & Associates Economists Ltd.

Employment growth is anticipated across a variety of export-based employment sectors (e.g., transportation and warehousing, wholesale trade, construction, energy and manufacturing). Population-related employment (including retail, accommodation and food services and range of knowledge-based sectors) is also anticipated to experience steady growth fueled by relatively higher levels population growth within the City and surrounding economic region. Relative to historical trends, stronger employment growth rates are also anticipated related to work at home and off-site employment.

City of London Permanent Population Growth Outlook to 2051

Figure ES-2 summarizes three long-term population forecast scenarios for the City of London over the 2021 to 2051 forecast period relative to historical population between



2001 and 2021. By 2051, the City's permanent population base is forecast to grow to a range between 601,500 to 692,100. This represents an increase of approximately 164,300 to 254,900 persons between 2021 and 2051. Under the Medium Growth Scenario (Reference Scenario), the City of London population base is forecast to grow to 647,500, representing an increase of approximately 210,300.

Based on our review, the Medium (Reference) Scenario represents the "recommended" growth forecast scenario for the City of London for the following reasons:

- 1. The rate population growth identified in the 15 to 64 population age group is reasonable given forecast job growth in the local and regional economy.
- 2. Forecast net migration levels are higher but appropriate relative to historical trends experienced over the past 20 years, particularly during the post-2016 period. Forecast net migration trends are reflective of steady growth anticipated in the local and regional economies, forecast work at home opportunities, as well as the attractiveness of the City to empty nesters and seniors as a retirement/ semi-retirement destination.
- The forecast level of permanent annual housing growth required to accommodate the Reference Growth Scenario is reasonable in relation to historical trends observed based on residential building permit data, Statistics Canada Census data.
- 4. It represents a reasonable future ratio of population relative to the surrounding municipalities in comparison to historical and forecast trends.



Figure ES-2			
City of London			
Long-term Forecast Population Scenarios,	2021	to	2051



Source: Historical derived from Statistics Canada Census data, 2001 to 2021. 2018 City of London Forecast from City of London Population, Housing and Employment Growth Forecast, 2016 to 2044, Final Report, February 1, 2018, Low, Medium and High Scenarios by Watson & Associates Economists Ltd.

Population Scenario	2021	2051	2021-2051	Annual Growth	Annual Growth Rate
Low Scenario	437,200	601,500	164,300	5,480	1.1%
Medium Scenario	437,200	647,500	210,300	7,010	1.3%
High Scenario	437,200	692,100	254,900	8,500	1.5%

Note: Figures may not add precisely due to rounding.

Source: 2021 derived from Statistics Canada Census data and 2051 by Watson & Associates Economists Ltd.

In comparing recent population growth trends and the Reference Growth Scenario to the City of London O.P. growth forecast, the following observations can be made:

The most recent Statistics Canada Census results indicate that the City of • London permanent population was 422,300 as of 2021. Accounting for an estimated net Census undercount adjustment of approximately 3.5%, the City's 2021 permanent population was estimated at 437,200.^[1] Comparably, the City's

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^[1] The Statistics Canada population is adjusted to account for the net number of persons who are missed (i.e., over-coverage less under-coverage) during enumeration. For the City of London, the net under-coverage is approximately 3.5%.



2021 population is approximately 17,600 persons higher than the 2021 population estimate as set out in the City of London O.P.; and

- According to the City of London O.P., the City's population is forecast to reach 458,400 by the year 2035, excluding the net Census undercount. Including an upward adjustment of approximately 3.5% for the net Census undercount, the City's population is projected to reach 474,500 in accordance with the City of London O.P. In comparison, the City is forecast to reach 547,800 persons by the year 2035 under the Reference Growth Scenario, which represents an increase of approximately 73,300 persons.
- In addition to the forecast population growth identified above from permanent residents, population increase is also anticipated from the City's student population not captured by the Statistics Canada Census.

City of London Post-Secondary Student Population Growth Outlook, 2021 to 2051

Post-secondary students are an important part of the City of London as they contribute to the vibrancy, diversity and economic strength of this area. Within the City of London there are two main post-secondary institutions, including the University of Western Ontario and Fanshawe College. As of 2021, there are approximately 56,900 full-time students attending these two post-secondary institutions within the City. This includes all students who are permanent residents within Canada and international students who are captured as non-permanent residents in the City. These students comprise those who live on-campus, off-campus with parents, as well as all remaining students residing off-campus primarily in rental housing.

As part of this growth analysis update for the City, a full-time post-secondary enrolment forecast has been prepared for the City's two post-secondary institutions. The results of this analysis indicates that full-time enrolment is forecast to increase from 56,900 in 2021 to 82,600 by 2051, an increase of 45% (25,700 students) over the forecast period (1.3% annual growth rate).

City of London Post-Secondary Housing Growth Outlook, 2021 to 2051

To accommodate the long-term Population Growth Scenario, the City will require between 83,800 and 112,800 additional households over the 2021 to 2051 planning horizon. Under the Medium Growth Scenario, the City's housing base is forecast to increase by 98,300 households over the next 30 years. Figure ES-3 provides a summary of the City's anticipated housing needs by structure type in five-year

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increments over the 2021 to 2051 based on the Medium Housing Growth Scenario. For additional context, historical housing growth trends by structure type in five-year increments are also provided. Over the 30-year forecast period the City of London is forecast to average approximately 3,280 new households per year, representing an 37% increase in annual housing activity when compared to annual housing development over the past 15 years in accordance with Statistics Canada data.^[1] An additional 2,800 of off-campus dwelling units are anticipated to be required to accommodate post-secondary students not captured in the Census.

New residential development within the City of London is anticipated to steadily shift away from low-density housing forms towards medium- and high-density types. This shift is anticipated to be largely driven by declining housing affordability associated with low-density housing options, as well as the increased demand for high-density housing associated with seniors and the increase in the share of population aged 65+. Over the 2021 to 2051 forecast period, new housing development is projected to comprise 27% low-density (singles and semi-detached), 28% medium-density (townhouses) and 45% high-density (apartment) housing units.

^[1] As previously noted, the number of residential building permits (new units only) issued between 2016 and 2021 exceeds the household growth reported by the Census between 2016 and 2021, as a large number of these residential building permits were not occupied during the 2021 Census enumeration. These residential building permits are expected to be captured in the 2026 Census.







Source: Historical derived from Statistics Canada Census data, 2001 to 2021. 2018 City of London Forecast from City of London Population, Housing and Employment Growth Forecast, 2016 to 2044, Final Report, February 1, 2018. Low, Reference and High Scenarios by Watson & Associates Economists Ltd.

Housing Scenario	2021	2051	2021-2051	Annual Growth	Annual Growth Rate
Low Scenario	174,700	258,500	83,800	2,790	1.3%
Medium Scenario	174,700	273,000	98,300	3,280	1.5%
High Scenario	174,700	287,500	112,800	3,760	1.7%

Note: Figures may not add precisely due to rounding.

Source: 2021 derived from Statistics Canada Census data and 2051 by Watson & Associates Economists Ltd.

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Note: Low density includes singles and semis.

Source: 2006 to 2021 derived from City of London building permit data. 2021 to 2051 forecast by Watson & Associates Economists Ltd.

To ensure that economic growth is not constrained by future labour shortages, effort will be required by the City of London to continue to explore ways to attract and accommodate new skilled and unskilled working residents to the City within a diverse range of housing options. Attraction efforts must also be linked to housing accommodation (i.e., both ownership and rental), infrastructure, municipal services, and amenities, as well as quality of life attributes that appeal to the younger mobile population, while not detracting from the City's attractiveness to older population segments.

Building on Reference Growth Scenario (Medium Growth Scenario), three draft longterm population and housing growth options by planning policy area (i.e., B.A.B., D.G.A and Rural Area) have been developed. Each of the long-term growth options by planning policy area have been developed to facilitate the key directions and broad city building policies of the City of London O.P., while also reflecting anticipated housing market trends by structure type and tenure to the year 2051. The long-term growth options developed, include:

Medium density includes townhouses and apartments in duplexes. High density includes bachelor, 1-bedroom and 2-bedroom+ apartments.



Growth Option 1: 40% Housing Intensification

Growth Option 1 is premised on an annual housing intensification target of 40%, which is slightly lower than the City of London O.P.^[1] It is noted that the City of London O.P. establishes an intensification target of 45% over the long-term planning horizon (2016 to 2035).

Growth Option 2: 45% Housing Intensification

Growth Option 2 is premised on an annual housing intensification target of 45%, consistent with the City of London O.P.

Growth Option 3: 50% Housing Intensification

Under Growth Option 3, the City's long-term housing intensification target has been increased to 50% over the forecast period between 2021 and 2051. Similar to Growth Option 2, the City's housing intensification target between 2015 and 2031 has been held consistent with the current City of London O.P. intensification target of 45%.

As previously noted, the City's recommended approach to the allocation of growth by planning policy area will be further determined as part of the City's C.R. exercise, which is anticipated to commence in 2023.

^[1] Excludes students not captured by the Census.



1. Introduction

1.1 **Terms of Reference**

The City of London retained Watson & Associates Economists Ltd. (Watson) in early 2022 to undertake an update of the City's 2018 Population, Housing and Employment Growth Study.^[1] Historical and forward-looking development activity, demographic and economic trends within the City and the surrounding region have been analyzed to inform this updated growth analysis for the City to the year 2051. More specifically, this report provides a review of the following:

- Statistics Canada Census population and household trends from 2001 to 2021;
- Recent residential and non-residential building permit activity by dwelling type (new units only) and major employment sector from 2016 to 2021;
- Labour force trends for the London Census Metropolitan Area (C.M.A.);
- Future potential residential development supply by structure type by stage of development;
- Recent Ontario Ministry of Finance (M.O.F.) population projections for the London-Middlesex Area;^[2]
- Key growth drivers and disruptors influencing future residential and nonresidential growth;
- Three population, housing and employment growth scenarios for the City of London, including low, medium and high growth forecasts to the year 2051 in five-year increments;
- Population and housing growth options by planning policy area, i.e., Built-Area Boundary (B.A.B.), designated greenfield area (D.G.A.) and remaining Rural Area by housing structure type to the year 2051;^[3] and

^[1] City of London Population, Housing and Employment Growth Forecast, 2016 to 2044 Final Report, February 1, 2018, Watson & Associates Economists Ltd.

^[2] For the purpose of this analysis, the London-Middlesex Area includes the City of London and Middlesex County.

^[3] Designated Greenfield Area is defined as the land area between the Built-Area Boundary and Urban Growth Boundary in accordance with the London Plan (Official Plan).



Non-residential gross floor area forecast by major employment sector to the year 2051.

The results of this growth forecast update will form the foundation for business planning and long-range planning initiatives, including the review of the London Plan (Official Plan (O.P.), Development Charges (D.C.) Background Study, as well as Service Area Infrastructure and Community Facility Master Planning Studies. As part of the terms of reference for this study, three long-term City-wide population and employment growth forecasts have been explored and evaluated, including a low, medium and high growth scenario. Further details regarding forecast housing growth by structure type are examined regarding the "recommended" Medium Growth Scenario (reference forecast) over the 2021 to 2051 planning horizon. In developing the long-term assessment of forecast housing demand by structure type, three draft options regarding the allocation of population and housing growth within the City's B.A.B., D.G.A. and Rural Area have been explored. More specifically, this includes a reduced long-term housing intensification target of 40%, a status quo scenario (i.e., 45% residential intensification), and a 50% housing intensification scenario from 2021 to 2051. The City's recommended approach to the allocation of growth by planning policy area will be further determined as part of the City's Comprehensive Review (C.R.) exercise, which is anticipated to commence in 2023.^[1]

Summary of Key Findings 1.2

This summary report provides an overview of the preliminary findings associated with the City-wide long-term population and employment growth scenarios and growth options by planning policy area for the City of London to the year 2051. This forecast has been provided within the context of regional economic conditions and growth assumptions as well as region-wide and local development trends. These findings identify the following:

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^[1] According to the Provincial Policy Statement (P.P.S.), 2020, a Comprehensive Review is defined as an O.P. review or an O.P. Amendment which is initiated by a planning authority, for the purposes of policies 1.1.3.8 (expansion of a settlement area) and/or 1.3.2.4 (conversion of land within Employment Areas).



- The City of London 2018 Growth Forecast housing is tracking closely to Census housing growth from 2016 to 2021, being approximately 2% above Census housing growth.^[1] It is important to note that high-density housing unit growth comprised a greater share of growth than anticipated. Between 2016 and 2021, high-density units comprised 50% of new residential units from building permit activity and 39% of Census housing growth compared to 30% in the 2018 Population, Housing and Employment Growth Study.
- Active housing supply has also become significantly more oriented to highdensity developments with the high-density share of active developments increasing from 26% in 2016 to 47% in 2022 of the total active housing development inventory. This shift suggests that the City's housing forecast will likely continue to be more weighted toward high-density housing relative to the results of the 2018 Growth Forecast Study.
- Non-residential growth from building permits issued from 2016 to 2021 is generally comparable to the 2018 Growth Forecast Study, tracking 12% lower than anticipated. However, industrial building permit activity has shown a relatively strong rebound, with gross floor area (G.F.A.) from building permit data 23% higher than previously forecast in the 2018 Growth Forecast Study. The industrial employment sector has also been steadily recovering since the 2008/2009 economic downturn. Historically low province-wide industrial vacancy rates and competitively priced industrial lands continue to attract demand to the City of London for industrial and export-based development.
- Residential and non-residential development activity is anticipated to be particularly strong over the next 10 to 15 years relative to historical growth, driven by steady immigration, intra-provincial migration, particularly from within the Greater Golden Horseshoe (G.G.H.), and to a lesser degree inter-provincial migration.
- The Medium (Reference) Scenario represents the "recommended" growth forecast scenario for the City of London. Under the Reference Scenario the permanent population is forecast to grow from 437,200 to 647,500 during the 2021 to 2051 period, increasing at a rate of 1.3% annually. This represents a higher population growth rate relative to the historical annual growth rate of 1.1% achieved from 2001 to 2021.

^[1] City of London Population, Housing and Employment Growth Forecast, 2016 to 2044 Final Report, February 1, 2018, Watson & Associates Economists Ltd.



- Historically, the share of London's population has been 84% of the London-Middlesex Area population from 2001 to 2021. Over the 2021 to 2046 forecast period, this share is forecast to remain relatively constant at 84% by 2046.
- The City's population is aging. By 2051, 12% of the City's population will be 75+ years of age or older, up from 8% in 2021.
- Over the 2021 to 2051 period, permanent households are expected to increase from 174,700 to 273,000, growing at a rate of 1.5% annually. This translates to an annual average of 3,280 housing units over the 30-year period, an increase of 37% above historical housing growth from 2006 to 2021.
- Under all growth options by planning policy area, which range from a 40% to 50% intensification target, strong housing demand is anticipated for medium- and high-density housing forms i.e., duplexes, townhouses, apartments (including purpose-built rentals and condos) and senior citizens' housing, largely driven by demand for more affordable housing types and the aging of the population. Medium and high-density housing types are forecast to comprise approximately 70% to 77% of forecast households under Growth Options 1 and 3, respectively.
- The City of London's employment base is forecast to reach 317,500 jobs by 2051 under the Reference Scenario. This represents an increase of approximately 120,200 jobs between 2021 and 2051, representing an average annual employment growth rate of 1.6%. This is notably higher relative to the historical annual growth rate of 0.5% achieved from 2001 to 2021.
- Employment growth is expected across a range of sectors driven by the continued development of the regional and local economic base. The majority of employment growth in the City is anticipated in the commercial and institutional categories which are expected to account for 71% of job growth between 2021 and 2051, followed by industrial with 12% of job growth, no fixed place of work (N.F.P.O.W.) employment at 10% and work at home employment at 7%.^[1]^[2]
- Over the 2021 to 2051 forecast period, the City of London is forecast to add 54.0 million sq.ft. of non-residential G.F.A. to its non-residential building space

^[2] Work from home employment reflects people who work from home on a full-time basis. This does not include people with a physical place of work outside their home who partially work from home in a hybrid working environment.

^[1] Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "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."



inventory under the Medium Growth Scenario. The non-residential building space forecast comprises 25% industrial and 75% commercial/institutional development.



2. Overview of the Macro-Economic Outlook and Regional Employment Trends

This chapter summarizes the national, provincial and regional economic trends that are anticipated to continue to influence the population and employment growth outlook for the London-Middlesex Area over the next three decades.

2.1 Near-Term Marco-Economic Impacts of COVID-19

2.1.1 Near-Term Economic Impacts

Since being declared a pandemic by the World Health Organization (W.H.O.) on March 12, 2020, the economic impacts of coronavirus disease (COVID-19) on global economic output have been significant. Economic sectors such as travel and tourism, accommodation and food, manufacturing, and energy were hit particularly hard by COVID-19 social-distancing measures. On the other hand, many employment sectors, particularly knowledge-based sectors, that have been more adaptable to the current remote work environment and evolving hybrid work-from-home/work-at-office environment have been less negatively impacted, and in some cases have prospered. Furthermore, required modifications to social behavior (i.e., physical distancing) and increased work-at-home requirements resulting from government-induced containment measures and increased health risks have resulted in significant economic disruption, largely related to changes in consumer demand and consumption patterns. Lastly, escalating tensions and constraints related to international trade have also begun to raise questions regarding the potential vulnerabilities of globalization and the structure of current global supply chains. This has been further exacerbated with the geopolitical unrest that has arisen due to the 2022 Russian invasion of Ukraine.

Currently, the level of sustained economic impact related to the "exogenous shock" to the global and Canadian economies resulting from the COVID-19 pandemic is still somewhat uncertain. As policy responses and vaccine efforts have been rolled out to pave the road for economic recovery, the rapid spread and threat of new variants have increased the uncertainty as to when the pandemic can be overcome. Generally, most national governments have now shifted their approach their approach in the management of COVID-19 focusing on living with the virus rather than eliminating it.



For many Ontario municipalities, including the City of London, the COVID-19 pandemic has been a significant driver of ownership housing demand, largely led by the ultra-low interest rate environment generated throughout 2020 and 2021 in response to the pandemic, combined with steady outward growth pressure during this period particularly from the larger urban centres of the Greater Toronto Hamilton Area (G.T.H.A). It is recognized, however, that the longer-term population and employment growth potential for the County will be heavily dependent on the sustained economic growth potential of the London-Middlesex Area and surrounding region. As such, it is important not to overstate the recent impacts of COVID-19 on housing demand in the London-Middlesex Area over the long term.

Looking ahead over the next several months, there are growing macro-economic headwinds to be aware of that are influencing economic conditions within the London-Middlesex Area economy. Most notably, persistently high global and national inflation levels have required an aggressive response by central banks to tighten monetary conditions through sharp increases in interest rates and quantitative tightening. It is noted that as of August 2022, Canada's inflation rate reached 7.6%, a level not seen since 1983.^[1] Current measures by central banks are anticipated to continue to cool economic output and consumer demand; however, on-going trade disruptions, geopolitical conflict and tight labour conditions continue to aggravate global supply shortages of goods and services. In turn, this limits the ability of tighter monetary conditions to ease rising inflationary pressures.

Rising public-sector debt due to pandemic response measures and increasing household debt loads resulting from sharp housing price appreciation in many areas of Canada, most notably the Country's largest urban centres, is also a concern. Recently, the national housing market has started to show cooling signs with respect to sales and price appreciation. Higher mortgage rates, rising borrowing costs, fuel costs and upward pressures on rents, however, are further exacerbating challenges associated with declining housing affordability through increases in monthly households carrying costs. These impacts, combined with the broader inflationary concerns outlined, are increasingly likely to result in potential near-term setbacks in the economy recovery path for Ontario and Canada. Despite these consequences of COVID-19 and the near-term economic headwinds discussed above, the long-term economic and housing outlook for the London-Middlesex Area, and more broadly southwestern Ontario, remains positive

^[1] Canada Inflation Rate (CPI) - July 2022 Update | WOWA.ca



as the region continues to be attractive to international investment and newcomers alike.

2.1.2 COVID-19 and the Changing Nature of Work

In addition to its broader impacts on the economy, COVID-19 is also accelerating changes in work and commerce as a result of technological disruptions which were already taking place prior to the pandemic. Businesses are increasingly required to rethink the way they conduct business with an increased emphasis on remote work enabled by technologies such as virtual private networks (V.P.N.s), virtual meetings, cloud technology and other remote work collaboration tools. These disruptive forces continue to broadly impact the nature of employment by place of work and sector, and have a direct influence on commercial, institutional and industrial real estate space needs.

As of 2021, it is estimated that approximately 7% of the City of London workforce is working from home on a full-time basis, up from 6% in 2016. The percentage of workers who reported having no fixed place of work (N.F.P.O.W.) was approximately 10% in 2021, remaining relatively stable in terms of percentage share compared to 2016.^{[1][2]} It is anticipated that the number of people who work from home on a full-time and part-time basis, as well as those who do not have a fixed place of work, will steadily increase over the long-term across the City of London driven by continued growth in knowledge-based employment sectors and continued technological advancement. As the percentage of work at home and off-site employment continues to steadily rise, this is anticipated to reduce the relative need for future commercial office and retail building space, which is discussed further in section 4.5.1.2, herein.

2.1.3 Immigration Levels for Canada – New Targets

In February 2022, the Canadian federal government released its Immigration Levels Plan for the next three years. Canada has continued to raise their immigration targets and aims to welcome 431,600 new permanent residents in 2022, 447,100 in 2023, and

^[1] Work at home and N.F.P.O.W. employment derived from 2001 and 2016 Statistics Canada Census data.

^[2] Statistics Canada defines N.F.P.O.W. employees as "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."



451,000 in 2024. This is an increase of 23,400 newcomers annually from the previous targets in 2023. The increase in immigration targets are aimed to make up for the shortfall in 2020 and fill crucial labour market gaps to ensure Canada remains competitive on the world stage. With a focus on economic growth, 60% of admissions are to come from the economic class.^{[1][2]}

Figure 2-1 summarizes admissions to Canada and Ontario by guarter since 2015. Throughout 2020 and the first half of 2021 national and provincial immigration levels sharply declined due to COVID-19. Immigration in the second half of 2021 rebounded strongly, resulting in 405,000 permanent residents admitted to Canada in 2021, while roughly half the total national immigration was accommodated in the Province of Ontario last year. Looking forward through 2022 and beyond, immigration levels to Canada and Ontario are anticipated to remain strong, exceeding pre-pandemic averages between 2015 and 2019.





Source: Derived from IRCC, August 17, 2022, data, by Watson & Associates Economists Ltd.

^[1] https://www.canada.ca/en/immigration-refugees-

citizenship/news/notices/supplementary-immigration-levels-2022-2024.html ^[2] Immigration, Refugee and Citizenship Canada news release, October 20, 2020. https://www.canada.ca/en/immigration-refugees-citizenship/news/2020/10/governmentof-canada-announces-plan-to-support-economic-recovery-through-immigration.html

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2.2 Planning within the Context of an Evolving National and Provincial Economy

2.2.1 Ontario Outlook within the Canadian Context

Similar to the broader Canadian economy, the economic base of Ontario, as measured by gross domestic product (G.D.P.) output, has shifted from the goods-producing sector (i.e., manufacturing and primary resources) to the services-producing sector over the past several decades. This shift has largely been driven by G.D.P. declines in the manufacturing sector which were accelerated as a result of the 2008/2009 global economic downturn. It is noted, however, that these G.D.P. declines in the manufacturing sector have started to show signs of stabilization over the past few years, both prior to the pandemic as well as through the more recent economic recovery.

Over the past decade, the Ontario export-based economy experienced a rebound in economic activity following the 2008/2009 downturn; however, this recovery was relatively slow to materialize with levels sharply rebounding by 2014, as illustrated in Figure 2-2. This economic rebound has been partially driven by a gradual recovery in the manufacturing sector, fueled by a lower-valued Canadian dollar combined with the gradual strengthening of the United States' (U.S.) economy.^[1] Provincial G.D.P. growth eased in 2019 to 1.6%, largely as a result of a tightening labour market and slowing global economic growth.^[2]

As illustrated in Figure 2-2, the Ontario economy contracted by 5.1% in 2020 before rebounding by 4.6% in 2021. BMO Capital Markets has forecast that the Ontario economy will continue its momentum through 2022 growing by 3.2%, while the overall Canadian economy is expected to grow by 3.4% in 2022. Economic growth in Ontario is forecast to moderate to 0.7% in 2023 and 1.0% for Canada.^[3]

^[1] Valued at approximately \$0.72 U.S. as of October 14, 2022.

^[2] Provincial Economic Outlook, BMO Capital Markets, January 7, 2022.

^[3] Provincial Economic Outlook, BMO Capital Markets, August 26, 2022.



Figure 2-2 Province of Ontario and Canada Annual Real G.D.P. Growth, Historical (2006 to 2020) and Forecast (2021 to 2023)



Note: 2021 (Ontario), 2022 and 2023 are forecast by BMO Capital Markets Economics. Source: Derived from BMO Capital Markets Economics, Provincial Economic Outlook, August 26, 2022, by Watson & Associates Economists Ltd., 2022.

2.2.2 Outlook for National and Provincial Manufacturing Sector

The Purchasing Managers' Index (P.M.I.) is a prevailing economic indicator for economic trends in the manufacturing and services sectors which is based on the purchasing managers' market condition outlook and serves as a key measure of the direction of the manufacturing sector on a monthly basis. The P.M.I. index ranges between a number of 1 to 100. A P.M.I. value greater than 50 represents an expansion relative to the previous month, while a P.M.I. value less than 50 represents a contraction. Figure 2-3 summarizes the P.M.I. for Canada between 2013 and 2022 (April). As illustrated in Figure 2-3, the P.M.I. data largely indicated moderate to strong expansion between 2013 and 2022, with the exception of 2015, 2019 and 2020 where the index showed sustained monthly contractions. The P.M.I. data shows steep contractions at the beginning of March 2020 due to the negative effects of COVID-19 on the global economy, international trade, and the general demand for goods and services. These conditions worsened into April 2020; however, the manufacturing sector showed signs of a strong rebound by July 2020. The most current P.M.I. data for August 2022 indicates that the strength of manufacturing sector has started to weaken considerably relative to the first half of 2022.





Figure 2-3 Purchasing Managers' Index for Canada, 2001 to September 2022

Note: Above 50.0 indicates growth from the previous month, 50.0 indicates no change from the previous month, and values below 50.0 indicate a decline from the previous month. Source: IHS Markit Canada, Canada PMI Index, June 2012 to July 2022 summarized by Watson & Associates Economists Ltd., 2022.

As summarized in Figure 2-4, the manufacturing sector in Ontario experienced significant declines between 2004 and 2009 with respect to labour force and G.D.P. Between 2009 and 2019, however, provincial labour force levels in the manufacturing sector stabilized, while G.D.P. output steadily increased. Since stabilizing in 2010, labour force levels in the manufacturing sector have remained relatively steady except for the mid-2020 decline and sharp recovery following the onset of COVID-19.

While manufacturing remains vitally important to the provincial and regional economies with respect to jobs and economic output, this sector is not anticipated to represent a high employment growth sector at the provincial or regional level. While there will continue to be a manufacturing focus in Ontario, the nature of industrial processes is rapidly shifting, becoming more capital/technology intensive and automated, with lower labour requirements. The highly competitive nature of the manufacturing sector will



require production to be increasingly cost effective and value-added oriented, which bodes well for firms that are specialized and capital/technology intensive. As a result of increased technological efficiencies in the manufacturing sector, provincial G.D.P. levels related to the manufacturing sector have moderately increased over the past decade compared to generally flat labour force trends, indicating increasing G.D.P. output per employee.



Figure 2-4 Manufacturing Labour Force Trends in Ontario, 2001 to July 2022

Regional Economic Trends 2.3

2.3.1 Middlesex County Long-Term Population Forecast, 2016 to 2046

Figure 2-5 compares the most recent Spring 2022 Ministry of Finance (M.O.F.) population projections for the London-Middlesex Area with the previous M.O.F. population projections prepared in 2017 and 2021.^[1] The M.O.F. has been progressively increasing their growth projections for the London-Middlesex Area on an annual basis since 2017. Under the 2022 M.O.F. forecast, the London-Middlesex Area

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^[1] The London-Middlesex Area includes the City of London and Middlesex County and is defined at the Middlesex Census Division by Statistics Canada Census geographic boundaries.



is projected to reach a permanent population of 692,800 by 2041. This represents an increase of 92,800 persons relative to the 2017 M.O.F. projections, and an increase of 24,500 persons relative to the 2021 M.O.F. projections.

Population growth in the London-Middlesex Area is expected to grow at a steady annual rate of 1.4% under the Summer 2022 M.O.F. projections.^[1] This represents a long-term annual population growth rate slightly higher than the province-wide average.



Figure 2-5 London-Middlesex Area

Note: Ontario Ministry of Finance projections for Middlesex County include the City of London. Population includes the

net Census Undercount. Source: Adapted from Ontario Ministry of Finance Population Projections Update, Spring 2017, Spring 2021, and Summer 2022, by Watson & Associates Economists Ltd.

2.4 London-Middlesex Area Historical Population Growth, 2001 to 2021

Figure 2-6 and Figure 2-7 summarize the historical population for the London-Middlesex Area, as provided by Statistics Canada from 2001 to 2021. The 2021 population for the London-Middlesex Area is 517,900 and is tracking notably higher from 2016 to 2021 compared to historical levels from 2001 to 2016.^[2] It is noted that population growth in

^[2] 2001 and 2021 Census population has been adjusted for the net Census undercount.

^[1] An increase from 0.9% annual population growth for Middlesex County as per the 2017 M.O.F. projections.



the London-Middlesex Area over the past decade has been largely driven by net migration and, to a lesser extent, natural increase (i.e., births less deaths). As such, Statistics Canada data indicates the London-Middlesex Area has attracted a higher number of new residents (in-migration less out-migration) during the post-2015 period relative to the 2001 to 2015 period.^[1] Between 2001 and 2021, the City of London accounted for approximately 84% of total population growth in the London-Middlesex Area.



Figure 2-6 London-Middlesex Area, Historical Population, 2001 to 2021

Note: Figures include net Census undercount. Figures have been rounded. Source: Derived from Statistics Canada Census data, 2001 to 2021, by Watson & Associates Economists Ltd.

^[1] Statistics Canada components of population change by Census Division, Table 17-10-0140-01.





Figure 2-7 City of London, Share of London-Middlesex Area Population, 2001 to 2021

Source: 2001 to 2016 derived from Statistics Canada Census, and 2021 estimated by Watson & Associates Economists Ltd.

Note: Population includes net Census undercount. Source: Derived from Statistics Canada Census data, 2001 to 2021, by Watson & Associates Economists Ltd.

2.4.1 London-Middlesex Area Historical Net Migration Trends, 2001 to 2021

Figure 2-8 summarizes the historical net migration trends for Middlesex Census Division as provided by Statistics Canada from 2001 to 2021. Key observations include:

- Net migration for Middlesex Census Division steadily increased over the 2001 to 2021 period;
- Both Middlesex Census Division and the Province of Ontario experienced increases in total net migration in the 2016 to 2021 period, relative to the previous period between 2001 and 2016;
- International migration represents the largest share of total net migration for both Middlesex Census Division and Ontario between 2001 and 2021; and
- While absolute net migration levels associated with intra-provincial migration (migration from other regions of Ontario) have increased across the London-Middlesex Area over the past 20 years, international migration is anticipated to



represent the largest component of net migration to this area over the next 30 years.



Figure 2-8 London-Middlesex Area Historical Net Migration Trends, 2001 to 2021

Note: Figures have been rounded. Figures are not adjusted for the residual deviation. Source: Statistics Canada Table 17-10-0140-01, Components of Population Change by Census Division, 2016 boundaries, by Watson & Associates Economists Ltd.

Figure 2-9 illustrates the share of intra-provincial and inter-provincial migration (migration from other provinces/territories within Canada) to the Middlesex Census Division from 2015 to 2020. Additional details regarding the age of intra-provincial and inter-provincial in-migration by age are provided in Appendix A. Key observations include:

- Central Ontario, also referred to as the G.G.H. accounted for the largest share of net migration, comprising 44% of all migration within Canada to the London-Middlesex Area. The Greater Toronto and Hamilton Area (G.T.H.A.) comprised 32% of migration and the G.G.H. Outer Ring comprised 13%. The Census divisions that experienced the most migration to the London Middlesex Area in the G.G.H are the City of Toronto, Peel Region, Region of Waterloo and York Region.
- The remaining areas outside the G.G.H. in Ontario represented 39% of migration, with the highest amount coming from Elgin County and Oxford County.



Over the past five years, inter-provincial net migration has represented a rather modest source of net migration, accounting for 16% of total inter-provincial and intra-provincial net migration. The Cities of Edmonton, Calgary and Montreal have had the highest amount of migration to the London-Middlesex Area over the past five years.

> Figure 2-9 Location of Inter-provincial and Intra-provincial Net Migration to the Middlesex Census Division. 2015 to 2020

Geographic Area	Share of Migration from Canadian Census Divisions to the London-Middlesex Area, 2015 to 2020			
G.T.H.A.	32%			
G.G.H. Outer-Ring	13%			
G.G.H. Total	44%			
Remaining Ontario	39%			
Ontario Total	84%			
Outside Ontario	16%			
Total	100%			

Source: Derived from Statistics Canada custom order data, by Watson & Associates Economists Ltd.

Looking forward, population growth within the London-Middlesex Area will be increasingly driven by net migration, as population growth associated with natural increase (births less deaths) is anticipated to steadily diminish over the long-term due to the aging of the regional and provincial population. While absolute net migration levels associated with intra-provincial migration have increased across the London-Middlesex Area over the past 20 years, it is anticipated that international migration will continue to represent the largest contributor to population growth in the London-Middlesex Area over the next 30 years.

Regional Labour Force Trends 2.5

Figure 2-10 summarizes the total employed labour force and unemployment rate trends for the London C.M.A. Census labour force data is not available for the City of London post-2016, but it is captured in the London C.M.A. by the Statistics Canada Labour Force Survey. From 2007 to 2011, the employed labour force declined and the

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unemployment rate peaked at a historical high in 2009, coinciding with the 2008/2009 global economic recession. Since 2011, the London C.M.A. economy has shown signs of recovery with steady overall growth in the employed labour force and a declining unemployment rate.

From 2016 to 2019, the employed labour force has increased by approximately 7,600 people at an annual growth rate of 1%. During the coronavirus disease (COVID-19) pandemic, the unemployment rate reached a high of 10.9% in July 2020. Comparatively, the unemployment rate for the Province of Ontario, as a whole, reached 12.2% in July 2020. In the period of economic recovery from the pandemic lockdowns, the unemployment rate steadily fell to 4.8% in April 2022, and the unemployment rate for the Province of Ontario declined to 5.5%.

The latest labour force participation rate forecast from Statistics Canada forecasts the Canadian labour force to decline from 65% in 2016 to between 62% and 63%% in 2036, which is consistent with previous projections released in 2014 by the federal government which forecasted a decrease from 67% in 2014 to 62% by 2036 and 61% by 2050.^{[1] [2]} Similar to national and provincial trends, the City's population and labour force base is aging. Looking forward, the aging labour force base is anticipated to result in continued gradual decline in the City's labour force participation rates over the long-term planning horizon. More specifically, the City of London's labour force participation rate is forecast to gradually decline at a similar rate from 63% in 2016 to between 59% and 61% by 2051.^{[3] [4]}

Addressing the interconnection between the City's competitive economic position and its longer-term housing needs by market segment is critical in realizing the City's future forecast population and employment growth potential as well as the City's ultimate goals related to prosperity, opportunity, and livability. This approach recognizes that the accommodation of skilled labour and the attraction of new businesses are inextricably linked and positively reinforce one another. To ensure that economic growth is not

^[4] 2021 Census labour force data is not available during this time.

^[1] Statistics Canada, Insight on the Canadian Society, The Labour Force in Canada and it's Regions: Projections to 2036. By Laurent Martel. March 20, 2019.

^[2] Jobs Report: The State of the Canadian Labour Market, Department of Finance, Canada, 2014.

^[3] Labour force participation rate in this section does not include the net Census undercount.


constrained by future labour shortages, continued effort will be required by the City of London to continue to explore ways to attract and accommodate new skilled and unskilled working residents to the economic region within a broad range of housing options by type and tenure.



Figure 2-10 London Census Metropolitan Area Labour Force Trends, 2011 to Year-to-Date 2022



Source: Statistics Canada Data Tables 14-10-0096-01, 14-10-0385-01, 14-10-0378-01, 14-10-0327-01, and 14-10-0017-01. Data derived by Watson & Associates Economists Ltd., 2022.



2.6 City of London Employment Trends by Sector, 2001 to 2021

Recent Employment Growth Trends by Sector 2.6.1

Figure 2-11 summarizes total employment growth in the City of London between 2001 and 2021. This includes the live/work labour force, including work at home employees as well as in-commuters. During this time period, the City experienced an increase of approximately 18,000 jobs. The City's employment activity rate decreased from 51% in 2001 to approximately 45% in 2021, indicating that the population has been increasing at a faster rate than the local employment base.^[1] While total employment was relatively flat from 2016 to 2021 due to the impacts of COVID-19, it is estimated that total employment has grown to 217,200 as of 2022.



Figure 2-11

Source: 2001 to 2016 derived from Statistics Canada Census data, and 2021 derived by Watson & Associates Economists Ltd.

^[1] An employment activity rate is defined as the number of local jobs in a municipality divided by resident population.



Figure 2-12 summarizes the employment share by sector in 2021, representing the number of jobs located within the City of London. The City employment base is diverse, spanning a range of employment sectors from healthcare and social assistance, retail trade, education, manufacturing, professional and scientific services to construction. The largest employment sector in the City in 2021 is healthcare and social service accounting 16% of the share of the total employment base.



Source: Derived from EMSI data by Watson & Associates Economists Ltd.

As summarized in Figure 2-13, most major commercial, institutional and industrial employment sectors have experienced growth in the City of London over the past decade, driven by a gradual provincial and regional economic recovery following the 2008/2009 global financial crisis. Employment growth across the County has been



particularly strong in professional, scientific, and technical services as well as institutional sectors such as health care and social assistance and educational services, which experienced notable increases in employment over the past decade. A large portion of the employment gains experienced between 2011 and 2021, however, were offset by job losses in manufacturing and the accommodation and food sector. Again, it is noted that a portion of these job losses have been recovered as of 2022.

Figure 2-13 City of London Employment Growth, 2011 to 2021



Note: Figure includes employees and self-employed jobs. EMSI data may differ from Census data. Source: Derived from EMSI data by Watson & Associates Ltd., 2022.

Observations 2.7

A broad range of considerations related to demographics, economics, and socioeconomics are anticipated to influence employment growth trends in the London-Middlesex Area over the coming decades. These factors will not only affect the rate

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and magnitude of growth but will also influence the built-form, density, and location of non-residential development and the need for employment lands over the long term.

Over the past several decades, the provincial economy has been steadily shifting away from goods-producing sectors towards services-providing and knowledge-based jobs. As a result of these continued structural changes occurring in the macro-economy, it is important to recognize that the above-mentioned trends will generate both positive and disruptive economic impacts related to employment growth, local business investment, and labour force demand. These disruptive forces are also anticipated to have longterm impacts on industrial, commercial, and retail space requirements, as well as longterm employment land needs, which must be considered and monitored on an on-going basis when planning for non-residential development within the City of London.

The long-term economic growth outlook for the London-Middlesex Area has strengthened relative to the previous population and employment projections which were previously prepared for the City in 2017.^[1] This relative strength is anticipated to be driven by local and regional economic opportunities which are supporting higher immigration rates (including higher numbers of non-permanent residents), as well as increased inter- and intra-provincial net-migration to the region.

Since the onset of the pandemic, COVID-19 has acted as a near-term driver of housing demand for the London-Middlesex Area, largely driven by opportunities for remote/ hybrid work schedules and the City's attractiveness to families seeking grade-related housing forms which are more competitively priced relative to the G.G.H. In the near-term, tighter monetary policy imposed by the Bank of Canada in response to persistently high inflation rates is likely to continue to cool the regional housing market for the remainder of 2022 and 2023. Notwithstanding anticipated short-term trends in the regional housing market, the longer-term economic and population growth outlook for the London-Middlesex Area remains strong, driven by strong intra-provincial migration and international immigration

Within the London-Middlesex Area, the City of London continues to have a strong appeal to both businesses and residents. This appeal is largely attributed to the City's geographic location which offers opportunities for urban living within proximity to retail, entertainment and other urban amenities, including public and private schools, three

^[1] City of London Population, Housing and Employment Growth Forecast, 2016 to 2044 Final Report, February 1, 2018, Watson & Associates Economists Ltd.



regional hospitals, two post-secondary institutions, access to urban indoor and outdoor recreational facilities, as well as access to recreational opportunities within the surrounding rural countryside. These attributes make the City of London an attractive destination for residents of all ages, students, as well as small, mid-sized and large-scale businesses.

The regional employment base is particularly concentrated in employment sectors related to financial services, information technology, business services, health care and social services, government, advanced manufacturing, energy, information and cultural industries, education, training and research, agri-business and tourism. These sectors, as well as other emerging knowledge-based industries, are anticipated to represent the fastest growing segments of the London-Middlesex Area economy. As the employment base continues to grow within the City of London and the surrounding commuter-shed, the economy is also anticipated to diversify, generating a range of new live/work and commuting opportunities. Accordingly, the City of London will continue to be a desirable location for workers to live, leading to steady population growth across the City. Over the next 30 years, the City's local employment base is also anticipated to benefit from the regional economic expansion anticipated within neighbouring municipalities in southwestern Ontario. As such, raising the economic profile of the City by leveraging the economic opportunities and strengths of the broader regional economy should represent a key long-term economic development strategy for the City of London.



3. City of London Trends

3.1 City of London Residential Trends

3.1.1 Historical Population Growth, 2001 to 2021

Figure 3-1 summarizes the historical population for the City of London as provided by Statistics Canada from 2001 to 2021. Similar to the broader London-Middlesex Area, the 2021 population for the City of London (i.e., 437,200 persons including the net Census undercount) is tracking notably higher from 2016 to 2021 compared to historical levels from 2001 to 2016.^[1]





Note: Figures include Census undercount. Figures have been rounded. Source: Derived from Statistics Canada Census data, 2001 to 2021, by Watson & Associates Economists Ltd.

^[1] 2001 and 2021 Census population has been adjusted for the net Census undercount.



3.1.2 City of London Residential Building Permit Activity by Dwelling Type

Figure 3-2 summarizes historical trends regarding residential building permit activity (i.e., new units) for the City of London during the 2006 to 2021 period. Over the past 15-year period:

- The City of London issued an average of approximately 2,400 residential building permits per year related to new residential dwellings;
- The average rate of residential building permit activity significantly increased during the 2016 to 2021 period, partly driven by a large number of permits issued for new high-density residential dwellings during this time period; and
- The share of residential building permits issued for low-density housing • progressively decreased from 51% during the 2006 to 2010 period to 48% during the 2011 to 2015 period, and to 30% during the 2016 to 2021 period.



Figure 3-2

Note: Low density includes singles and semi-detached. Medium density includes townhouses in duplexes. High density includes bachelor, 1-bedroom and 2-bedroom+ apartments Source: Building permit data provided by the City of London, summarized by Watson & Associates Economists Ltd., 2022.

3.1.3 City of London Residential Building Permit Activity with the Built-Area Boundary, 2017 to 2021

Figure 3-3 summarizes historical trends regarding residential building permit activity (i.e., new units) within the B.A.B. for the City of London during the 2017 to 2021 period. The London Plan, i.e., the City of London O.P., establishes an intensification target of 45% over the 20-year planning horizon (2016 to 2035). It is important to understand



intensification trends since the O.P. target was established from 2016. It is noted that the City's B.A.B., as summarized in Figure 3-3 below, was last delineated in 2016. Accordingly, the historical time period below appropriately aligns with the time period in which the B.A.B. was last updated. The following observations can be made over the past five-year period:

- The City of London issued an average of approximately 1,285 residential building permits per year in the B.A.B. from 2017 to 2021 related to new residential dwellings, while the last two years averaged 1,615 units annually; and
- Over the 2017 to 2021 time period, the City averaged 42% of new housing unit growth in the B.A.B., with 2018 and 2021 exceeding the O.P. target of 45%.



Figure 3-3 City of London Historical Intensification, 2017 to 2021

Source: Derived from City of London building permit data, 2017 to 2021, by Watson & Associates Economists Ltd.

3.1.4 City of London Residential Building Permit Activity Comparison to 2021

Figures 3-4, 3-5 and 3-6 summarize how the 2018 Growth Forecast Study is tracking to historical residential building permit activity. Key observations are as follows:

• Over the 2016 to 2021 period, average annual Census households increased by 2,304, compared to a forecast annual average of 2,348 housing units over the 2016 to 2021 period, as reported in the 2018 Growth Forecast Study. This



represents a decrease of 2% from the 2018 study with respect to short-term annual housing growth. It is important to note that the persons per unit (P.P.U.) increased from 2.44 in 2016 to 2.50 in 2021, meaning the average occupancy per unit from 2016 to 2021 is higher relative to 2016. This results in a lower housing requirement from population growth.

- The share of Census housing by structure type between 2016 and 2021 is as follows:
 - High-density dwelling units (apartments) 39%;
 - \circ Low-density dwelling units (singles and semi-detached) 36%; and
 - \circ Medium-density dwelling units (townhouses and rows) 25%.
- Comparatively, the housing unit forecast by type between 2016 to 2021 as per the 2018 Growth Forecast, anticipated a higher share of low-density development and a lower share of high-density development.
- Comparing 2016 to 2020 residential building permits (new units only) to the 2021 Census for the City of London indicates that the number of residential building permits issued was approximately 28% higher than housing growth derived between the 2016 and 2021 Census periods. Most of this difference is within the high-density dwelling units, with an almost 600-unit difference in building permits issued between 2016 and 2020 when compared to Census housing in 2021.^[1] This discrepancy appears to be largely associated with the lag time between building permit issuance and occupancy of high-density dwellings.

^[1] It is noted that actual household growth between Census periods, is typically about 10 to 15% lower than annual residential building permits issued for new units for the City of London, based on a review of Census household data and residential building permit data (new units only) between 2006 and 2016 for the City of London.



Figure 3-4 City of London, Short-Term Housing Forecast Comparison, 2016 to 2021, vs. Census Housing 2016 to 2021

Housing by Structure Type	City of London Population, Housing and Employment Growth Forecast, 2016 to 2021 Annual Average		Census Housing, 2016 to 2021		Difference (Actual-Forecast)	
	Total	Share	Total	Share	Total	Share
Low Density	1,128	48%	837	36%	-291	-12%
Medium Density	516	22%	568	25%	52	3%
High Density	704	30%	899	39%	195	9%
Total	2,348	100%	2,304	100%	-44	0%

Low density includes singles and semi-detached.

Medium density includes townhouses and apartments in duplexes.

High density includes bachelor, 1-bedroom, and 2-bedroom+ apartments.

Source: City of London Population, Housing and Employment Growth Forecast, 2016 to 2044; derived by Watson & Associates Economists Ltd., 2018. Historical Activity from Statistics Canada Census, 2016 and 2021.

Figure 3-5

City of London, Short-Term Housing Forecast Comparison, 2016 to 2021, vs. Residential Building Permit Activity, 2016 to 2020

Housing by Structure Type	City of London Population, Housing and Employment Growth Forecast, 2016 to 2021 Annual Average		Historical Activity, Building Permits, 2016 to 2020		Difference (Actual - Forecast)	
	Total	Share	Total	Share	Total	Share
Low Density	1,128	48%	841	28%	-287	-20%
Medium Density	516	22%	641	22%	125	0%
High Density	704	30%	1,482	50%	778	20%
Total	2,348	100%	2,964	100%	616	0%

Low density includes singles and semi-detached.

Medium density includes townhouses and apartments in duplexes.

High density includes bachelor, 1-bedroom, and 2-bedroom+ apartments.

Source: City of London Population, Housing and Employment Growth Forecast, 2016 to 2044; derived by Watson & Associates Economists Ltd., 2018. Historical activity from City of London.



Figure 3-6 City of London, Housing Comparison, 2016 to 2020 Building Permits vs. Census Housing, 2016 to 2021

Housing by Structure Type	Historical Activity, Building Permits, 2016 to 2020 Annual Average		Census Housing, 2016 to 2021 Annual Average		Difference (Actual – Forecast)	
	Total	Share	Total	Share	Total	Share
Low Density	841	28%	837	36%	-4	-8%
Medium Density	641	22%	568	25%	-73	-3%
High Density	1,482	50%	899	39%	-583	-11%
Total	2,964	100%	2,304	100%	-660	0%

Low density includes singles and semi-detached.

Medium density includes townhouses and apartments in duplexes.

High density includes bachelor, 1-bedroom, and 2-bedroom+ apartments.

Source: Historical building permit activity from City of London. Statistics Canada Census 2016 and 2021.

Figures 3-7, 3-8, and 3-9 compare the housing development forecast by structure type from the 2018 Population Forecast Growth Study relative to historical building permit activity by structure type. Key observations include:

- In 2018 and 2019, the amount of low-density housing development activity decreased, falling well short of the 2018 Growth Forecast Study during this time period. Between 2020 and 2021, low-density housing development activity increased, tracking closer to the 2018 Growth Forecast Study.
- During the 2018 to 2021 period, medium- and high-density building permits tracked significantly higher compared to the 2018 Growth Forecast Study.



Figure 3-7 City of London Low-Density Housing Activity Comparison



Source: Historical building permit data received from City of London. Watson forecast from City of London Population, Housing and Employment Growth Forecast, 2016 to 2044, released February 1, 2018, by Watson & Associates Economists Ltd., Figure prepared by Watson & Associates Economists Ltd., 2022.



Figure 3-8 City of London Medium-Density Housing Activity Comparison



Source: Historical building permit data received from the City of London. Watson forecast from City of London Population, Housing and Employment Growth Forecast, 2016 to 2044, released February 1, 2018, by Watson & Associates Economists Ltd. Figure prepared by Watson & Associates Economists Ltd., 2022.



Figure 3-9 City of London High-Density Housing Activity Comparison



Source: Historical building permit data received from the City of London. Watson forecast from City of London Population, Housing and Employment Growth Forecast, 2016 to 2044, released February 1, 2018, by Watson & Associates Economists Ltd. Figure prepared by Watson & Associates Economists Ltd., 2022.



3.1.5 City of London Post-Secondary Student Population

Within the City of London there are two main post-secondary institutions, including the University of Western Ontario and Fanshawe College. As of 2021, there are approximately 56,900 full-time students attending these two post-secondary institutions within the City. This includes students who are permanent residents within the City, permanent residents outside the City and international students who are captured as non-permanent residents in the City. These students comprise those who live on campus, off campus with parents, as well as remaining residents living off campus primarily in rental housing as illustrated in Figure 3-10.

A portion of the post-secondary student population is not captured in the Statistics Canada Census data. More specifically, of the 2021 full-time enrolment, an estimated 43% (24,430 students), are not captured in the 2021 Census. This includes students living on campus (in school residences) and living off campus largely in rental housing. The students captured by Census data include those living at home (with parents) or otherwise captured as permanent or non-permanent residents during the Census enumeration.





Note: Figures presented are for 2021.



3.1.6 City of London Future Housing Supply Potential

Figure 3-11 and Figure 3-12 compare the City of London's housing supply potential by housing structure type as of December 2021 to the 2016 supply identified in the 2018 Growth Forecast. Key observations include:

- As of 2021, the City of London has a potential future housing supply of approximately 72,800 future residential units in active and future developments, up from approximately 67,100 in 2016.
- Of the City's total residential supply potential (housing units), 22% is low density (single detached and semi-detached), 37% is medium density (townhouses) and 40% is high density (apartments).^[1]
- In comparison to the 2016 housing supply, the City's total long-term housing supply shifted further towards medium- and high-density development.
- The City's active developments increased from approximately 28,800 in 2016 to approximately 38,900 in 2021.
- Active housing supply has also become significantly more oriented to highdensity developments with the share of active high-density developments increasing from 26% to 47% of the total active housing development inventory.
- This shift in the City's active housing development inventory suggests that the City's housing forecast will likely continue to be more weighted toward high-density housing relative to the results of the 2018 Growth Forecast Study.

^[1] The following notes are provided regarding the City's long-term housing supply potential. The Vacant Land Inventory (V.L.I.) is based on the land use designations of the 1989 Official Plan. Densities for the V.L.I. are from development trends between 2000 and 2010. The 2021 V.L.I. includes Site Plans, summarized here in the "Submitted" category. The City's total housing supply inventory on vacant urban does not include all future housing potential within the B.A.B. through residential intensification and redevelopment. The City is planning to undertake a more detailed assessment of housing supply opportunities within the B.A.B. during their next Comprehensive Review (C.R) update.



Figure 3-11 City of London Summary of Future Residential Supply (Housing Units) by Housing Structure Type (Active and Future Developments)





Figure 3-12 City of London Summary of Future Residential Supply (Housing Units) by Housing Structure Type (Active Developments Only)





3.1.7 London Area Housing Price Trends

Figure 3-13 summarizes housing prices for all sales listed on the Multiple Listing Service (M.L.S.) in the City of London. Key observations include:

- The average blended housing sale price in the City of London over the 2019 to 2022 period increased significantly from January 2019 at \$387,900 to \$773,600 in January 2022. Since January 2022, the average sales price has decreased to \$673,600 as of July 2022;^[1]
- Residential sales activity in the City of London has slowed as of August 2022. Recent data from the London St. Thomas Realtor Association (LSTAR) indicates that active listings have increased to 1,052 in August 2022 in comparison to 358 active listings for the month of August 2021; and
- Within this context of residential listings, the City of London has experienced a decrease in housing demand over the past year, with months of residential inventory increasing from 0.5 in August 2021 to 2.5 in August 2022.^[2]

With respect to rental vacancy trends in the City of London, total vacancy rates in the primary rental market have decreased from 3.4% in October 2020 to 1.9% in October 2021; however, this vacancy rate remains below the overall provincial vacancy rate of 3.4%.[3]

^[1] London & St. Thomas Association of Realtors, Residential Market Activity January 2019 to July 2022. ^[2] Ibid. ^[3] CMHC Housing Market Information Portal, 2022.

Watson & Associates Economists Ltd.





Figure 3-13

Source: London and St. Thomas Association of Realtors Residential Market Activity Reports, January 2019 to July 2022, summarized by Watson & Associates Economists Ltd.

City of London Non-Residential Trends 3.2

3.2.1 City of London Non-Residential Building Permit Activity

Figure 3-14 and Figure 3-15 summarize non-residential building construction by industrial, commercial and institutional sector (I.C.I.) for the City of London during the 2008 to 2021 period, expressed in G.F.A. in square feet (sq.ft.). Key observations include:

- The City of London has averaged 1,105,000 sq.ft. of non-residential building • activity over the 2008 to 2021 period;
- Over the most recent five-year period examined, the share of industrial development activity has increased to 50% of total non-residential construction; and
- Non-residential construction activity decreased in 2020 and 2021 in comparison to 2019.



Figure 3-14 City of London, Non-Residential Building Permit Activity by ICI, 2008 to 2021



Source: Building permit data provided by the City of London. Summarized by Watson & Associates Economists Ltd., 2022.

Figure 3-15 City of London, Share of Non-Residential Building Permit Activity by ICI, 2008 to 2021

Period	Industrial	Commercial	Institutional	Total
2008-2012	31%	23%	46%	100%
2013-2017	30%	40%	30%	100%
2018-2021	50%	24%	26%	100%

Source: Data provided by the City of London, 2022.

3.2.2 City of London Non-Residential Building Permit Activity Comparison

Figure 3-16 further summarizes how the City of London 2018 Growth Forecast Study is tracking to historical non-residential building permit activity. Key observations include:

- Over the 2016 to 2021 period, approximately 958,445 sq.ft. has been issued annually through non-residential building permit activity. This compares to an annual average forecast of 1,089,100 sq.ft. over the 2016 to 2021 period as per the 2018 Growth Forecast Study, or approximately 12% lower than anticipated total non-residential building activity; and
- Actual building permit activity from 2016 to 2021 indicates that the recent share • of industrial development activity has been higher, while the share of institutional



development activity has been lower relative to the short-term forecast relative to the City of London 2018 Growth Forecast Study.

Comparison								
Density	City of London Population, Housing, and Employment Growth, Forecast 2016 to 2020 Annual Average		Historical Activity 2016 to 2021 Annual Average		Difference (Forecast - Average)			
Sector	G.F.A.	Share	G.F.A.	Share	G.F.A.	Share		
Industrial	326,730	30%	403,162	42%	76,432	-12%		
Commercial	304,948	28%	272,904	28%	-32,044	0%		
Institutional	457,422	42%	282,381	29%	-175,041	13%		
Total	1 089 100		958 446		-130,654	0%		

Figure 3-16 City of London, Annual Average G.F.A. from Non-Residential Building Permit Activity

Source: City of London Population, Housing and Employment Growth Forecast, 2016 to 2044, by Watson & Associates Economists Ltd., 2018. Historical activity from City of London.

3.3 Observations

Over the past 20 years, the City of London has experienced steady population growth. Since 2011, the rate of population growth across the City has increased substantially, driven by steady net migration across all major demographic groups (i.e., children, adults and seniors) as through stronger immigration of non-permanent residents. Between 2011 and 2021, the City's annual population growth rate increased to 1.5%, fueling demand for steady new housing construction throughout the City.

For many Ontario municipalities, including the City of London, the COVID-19 pandemic has been a significant driver of ownership housing demand, largely led by the ultra-low interest rate environment generated throughout 2020 and 2021 in response to the pandemic, combined with steady outward growth pressure during this period particularly from the larger urban centres of the Greater Toronto Hamilton Area (G.T.H.A). This recent trend towards relatively stronger annual new housing construction is anticipated to continue over the medium to long term, notwithstanding a general cooling in the housing market in the near term.



As previous discussed, the City of London is anticipated to accommodate a growing share of young adults and new families seeking competitively priced home ownership and rental opportunities. It is also important to recognize that the population base of the City is getting older on average and aging at a similar rate to the Province as a whole. More specifically, the percentage of City's population in the 65+ age group is forecast to increase over the forecast period from 18% in 2021 to 21% in 2051 (refer to section 4.3 for further details). The aging of the population and declining population growth associated with natural increase (i.e., births less deaths) is anticipated to place downward pressure on the rate of population and labour force growth within the region and, subsequently, the regional labour force participation rate. These demographic trends are anticipated to place potential constraints on the rate of population and economic growth expected across the City over the longer term.

The existing housing stock within the City of London is weighted towards low-density housing forms (i.e., singles and semi-detached). In recent decades, however, the City has experienced a steady shift toward a higher share of medium-density and high-density housing types. This shift has been largely driven by declining housing affordability associated with low-density housing options as well as increased demand for medium and high-density housing forms driven by demographic and socio-economics factors associated with the aging population base, high-density housing demand associated with non-permanent residents, as well as lifestyle choices of existing and new residents. Between 2008 and 2021 medium and high-density housing types accounted 62% of all new residential construction. Looking forward, a broad mix of future housing options across a range of density types will be required to accommodate both younger and older adults across varying income levels, including affordable housing options, throughout the City.

In summary, the demographic and socio-economic trends explored in this chapter will continue to have broad implications on the amount, type and density of future housing needs, municipal service needs and public infrastructure requirements for the City over the long term. Chapter 4 provides a detailed discussion with respect to forecast near-term and longer-term population, housing and employment growth for the City as a whole, as well as by planning policy area.



4. City of London Population, Housing and Employment Forecast, 2021 to 2051

In accordance with the recent demographic, economic and socio-economic trends discussed in Chapters 1 to 3 of this summary report, as well as the anticipated growth drivers/disruptors discussed in this chapter, three long-term population, housing and employment growth scenarios have been prepared for the City to the year 2051. In developing the City's long-term population forecasts, consideration has been given to the long-term population, housing and employment growth outlook for the surrounding market area.

4.1 Key Growth Assumptions

The following provides a summary of the key growth assumptions which inform the Low, Medium and High Growth Scenarios the City of London from 2021 to 2051. These assumptions are presented below.

4.1.1 Macro-Economic Trends

As previously discussed, the COVID-19 pandemic had a significant economic impact on the national and provincial economies in 2020 and 2021, as measured in terms of G.D.P. COVID-19 is anticipated to continue to influence the global and national macroeconomic outlook over the next several years. It is noted that the near-term macroeconomic outlook is changing associated with persistently high inflation levels, rising interest rates, and slowing global economic growth. These factors are anticipated to moderate regional economic and population growth and continue to cool the provincial and regional housing markets relative to trends experienced in recent years since the onset of the COVID-19 pandemic under all long-term growth scenarios explored for the City. Section 2.2 provides a detailed discussion regarding forecast G.D.P. annual growth rates for Canada and Ontario. Under the Low Scenario, it is assumed that the provincial economy will underperform, on average, relative to near-term forecasts, while the Medium and High Scenarios, respectively, assume that the provincial G.D.P. growth will generally meet and exceed near-term provincial G.D.P. forecasts over the 2021 to 2051 planning horizon.



4.1.2 National Immigration Trends

Subsection 2.1.3 of this report provides a discussion regarding federal immigration targets for Canada and Ontario. Under the Low Scenario, it is assumed that national immigration will underperform relative to federal targets over the 2021 to 2051 planning horizon. The Medium Scenario assumes national immigration targets will be met, while the High Scenario assumes that immigration targets will be exceeded. Under each of the long-term growth scenarios, it is assumed that the share of total immigration allocated to the City of London will increase.

4.1.3 London-Middlesex Area Population and Economic Trends

The following key economic assumptions have been made in developing the City of London long-term population and employment growth scenarios:

- As previously discussed, the M.O.F. has consistently projected higher population growth for the London-Middlesex Area with each release from 2017 to 2021 (refer to section 2.1 for further details).
- As identified in section 2.2, the City of London comprised 84% of population growth in the London-Middlesex Area from 2001 to 2021. This trend is anticipated to continue in slightly varying degrees over the forecast period under each of the long-term growth scenarios.
- Under the Low Growth Scenario, it is anticipated that the London-Middlesex Area population growth will underperform relative to the M.O.F. 2022 projections and subsequent M.O.F. population projection updates. Under the Medium Scenario, the London-Middlesex Area is anticipated to slightly outperform M.O.F. 2022 projections, while under the High Scenario the London-Middlesex Area is projected to outperform the 2021 M.O.F. projections as well as subsequent provincial projection updates for the Area.
- The regional economy and labour force has strongly rebounded from the impacts of COVID-19 (refer to section 2.3 for additional details) and is anticipated to steadily expand over the long-term.
- The industrial market has also been steadily recovering since the 2008/2009 economic downturn. Historically low province-wide industrial vacancy rates and competitively priced industrial lands are attracting demand to the London-Middlesex Area for industrial and export-based development.



- Employment growth in the regional area also drives population growth to the City of London. With respect to the most recent commuting trends, 88% of City of London residents work within the City, while 12% work outside the City.
- Given the competitive position of existing and planned Employment Areas in the City of London (as measured in terms of location/access to major North American employment markets and large population centres, parcel size, price per acre, and competitive development costs, etc.), the City is anticipated to achieve a relatively stronger rate of industrial absorption over the long-term planning horizon under all three growth scenarios, relative to historical trends observed over the past decade.
- It is important to note that the regional and local economy and industrial sector has been steadily recovering since approximately 2015. The London-Middlesex Area has key local infrastructure supporting growth which includes, but is not limited to the following:
 - Strategic location within Ontario's industrial heartland in southern Ontario, offers proximity to eastern and western U.S. markets;
 - Access to infrastructure assets such as Highway 401 and Highway 402, and the London International Airport; and
 - Proximity to a growing skilled regional labour force base.
- Employment growth comprised two major categories, export-related and community-related employment, as summarized below:
 - Community-related job growth is tied to population growth. These jobs provide services such as retail, entertainment, and hospitality to the community. Under the Low Scenario, lower population growth relative to the other scenarios requires less community-based employment to service the needs of the population. As the population forecast increases under the Medium and High Scenarios, more community-based jobs are required to provide services to the increased population.
 - Export-related jobs are largely industrial based and consist of industries such as manufacturing and logistics. Local factors which can influence export-related employment growth within the City include, but are not limited to, price of industrial lands, availability of shovel-ready industrial lands with a broad range of sizes, access to labour force and localized supply-chain opportunities. These local factors are anticipated to influence the share of industrial employment accommodated within the City and within the broader region under each long-term growth scenario.



4.1.4 Demographic Trends

The following key demographic assumptions have been made in developing the City of London long-term population and employment growth scenarios:

- The City of London's population is aging, driven by the Baby Boomer age group; (refer to section 4.3 for additional details).
- The City's mortality rate is forecast to increase from 2021 to 2051 due to the aging of the population. Additionally, there is downward pressure on births as the population ages. These factors result in a progressively declining natural increase (i.e., births less deaths) from 2021 to 2051.
- From 2001 to 2021, the City of London experienced an average net migration of 3.490 people annually. Forecast net migration shares by age group from 2021 to 2051 are comparable to historical trends from 2001 to 2021; however, a higher share of young adults aged 35 to 44 is anticipated, driven by the relative affordability of housing options within the City of London relative to the G.G.H. region, which represents the largest share of intra-provincial migration to the City.
- Between 2016 and 2021, net migration data for the London-Middlesex Area showed an increase in the share of net migration in the 35 to 44 age group relative to the 2001 to 2016 period. Overall, the share of net-migration the 0 to 44 age group is forecast to comprise 85% of net migration from 2021 to 2051, which is comparable to 84% from 2001 to 2021.
- Under all growth scenarios, annual net migration is forecast to be considerably higher relative to 2001 to 2021 levels for all age groups. Progressively higher net migration levels are assumed for the Medium and High Growth Scenarios, relative to the Low Growth Scenario.
- Net migration impacts the population age structure. As the existing population ages, the City of London will become increasingly dependent on net-migration to maintain its existing share of younger age groups. Under the Low Growth Scenario, the population will be older by 2051 due to lower levels of net-migration in younger age groups. Under the Medium and High Growth Scenarios, the population age structure is forecast to remain younger due to relatively higher net-migration levels associated with working-age residents and their families.



4.2 City-Wide Permanent Population Forecast Scenarios, 2021 to 2051

Building on the Key Growth Assumptions identified in section 4.1, three long-term permanent population forecasts have been prepared for the City of London. Figure 4-1 summarizes the three long-term City-wide population growth scenarios to the year 2051 including Low, Medium, and High Growth Scenarios. Key observations include:

- Under the Low Growth Scenario, the City of London's permanent population base is forecast to grow at an average annual rate of 1.1% per year. The population is forecast to increase moderately between 2021 and 2051 by 164,300, from 437,200 to 601,500, respectively.
- The City of London's permanent population is forecast to grow at an annual rate of approximately 1.3% under the Medium Growth Scenario. This represents an average annual growth rate that is above the historical growth rate of 1.1% achieved 2001 to 2021. The population is expected to reach 647,500 by 2051, representing an increase of approximately 210,300 from 2021 to 2051.
- Under the High Growth Scenario, the City of London's permanent population base will grow at an average annual rate of 1.5% per year. The population is anticipated to grow by approximately 254,900 persons, increasing from 437,200 in 2021 to 692,100 in 2051.







Source: Historical derived from Statistics Canada Census data, 2001 to 2021. 2018 City of London Forecast from City of London Population, Housing and Employment Growth Forecast, 2016 to 2044, Final Report, February 1, 2018, Low, Medium and High Scenarios by Watson & Associates Economists Ltd.

City-Wide Reference Permanent Population Forecast, 4.3 2021 to 2051

Based on our review, the Medium (Reference) Scenario represents the "recommended" growth forecast scenario for the City of London for the following reasons:

- 1. The level of population growth in the 15 to 64 population age group is reasonable given forecast job growth in the local and regional economies.
- Forecast net migration levels are higher, but appropriate, relative to historical trends experienced over the past 20 years, particularly during the post-2016 period. Forecast net migration trends are reflective of steady growth anticipated in the local and regional economies, forecast work at home opportunities, as well as the attractiveness of the City to empty nesters and seniors as a retirement/ semi-retirement destination.
- 3. The forecast level of permanent annual housing growth required to accommodate the Reference Growth Scenario is reasonable in relation to historical trends observed based on residential building permit data and Statistics Canada Census data.



4. It represents a reasonable future ratio of population relative to the surrounding municipalities in comparison to historical and forecast trends.

Figure 4-2 summarizes the Medium (Reference) Growth Scenario to the City of London. Relative to the City's current O.P. population forecast the following observations can be made:

- The most recent Statistics Canada Census results indicate that the City of London's permanent population was 422,300 as of 2021. Accounting for an estimated net Census undercount adjustment of approximately 3.5%, the City's 2021 permanent population was estimated at 437,200.^[1] Comparably, the City's 2021 population is approximately 17,600 persons higher than the 2021 population estimate, according to the City of London O.P.
- According to the City of London O.P., the City's population is forecast to reach 458,400 by the year 2035, excluding the net Census undercount. Including an upward adjustment of approximately 3.5% for the net Census undercount, the City's population is projected to reach 474,500 in accordance with the City of London O.P. In comparison, the City is forecast to reach 547,800 persons by the year 2035 under the Reference Growth Scenario, which represents an increase of approximately 73,300 persons.

^[1] The Statistics Canada population is adjusted to account for the net number of persons who are missed (i.e., over-coverage less under-coverage) during enumeration. For the City of London, the net under-coverage is approximately 3.5%.





Figure 4-2 City of London

Source: Historical derived from Statistics Canada Census data. 2001 to 2021. The London Plan OP forecast from the The London Plan (2016). Forecast by Watson & Associates Economists Ltd.

City of London Reference Population Forecast Share of the 4.3.1 London-Middlesex Area Total Population to 2046

Figure 4-3 summarizes the share of the City of London's population as a proportion of the London-Middlesex Area total population. Historically, the share of London's population has been relatively steady at 84% from 2001 to 2021. Over the 2021 to 2046 forecast period, this share is projected to remain relatively constant at 84%.^[1]

^[1] A 2046 forecast horizon is used for the purposes of Section 4.3.1 and Figure 4-3 because the Middlesex County forecast has a 2046 long-term forecast horizon.



Figure 4-3 City of London Share of London-Middlesex Population, Medium Scenario, 2001 to 2046



Source: 2001 to 2021 derived from Statistics Canada Census data. Forecasts for City of London and Middlesex County High Scenario by Watson & Associates Economists Ltd.

4.3.2 City-Wide Reference Population Forecast by Age Group, 2021 to 2051

Figure 4-4 summarizes the Reference population forecast by major age group from 2021 to 2051, with additional details provided in Appendix A. Key observations include:

- The population is expected to age, with the proportion of the 75+ age group • expected to increase from 9% to 12% between 2021 and 2051.
- The percentage of population in the 0 to 19 age cohort (youth population) is expected to decline from 23% to 20% between 2021 and 2051.
- London's young adult/adult population (20 to 54 years of age) is the largest age cohort group; this population cohort is forecast to decline from 48% to 47% between 2021 and 2051.
- The share of the youth and young adult/adult population (0 to 54 years of age) is forecast to comprise the majority (92%) of future net migration in the City of London from 2021 to 2051, which is comparable to 91% from 2001 to 2021.



Relative to Middlesex County, the 2021 population base for the City of London is slightly younger. The City of London has a larger share of people under the age of 65. In particular, the City's population share of adults between the age of 20 and 54 is 47% compared to 41% in Middlesex County.^[1]





Note: Population includes net Census undercount.

Source: Population forecast by age derived from 2006 to 2021 Statistics Canada Census by Watson & Associates Economists Ltd. 2021 to 2051 population forecast by age prepared by Watson & Associates Economists Ltd.

4.3.3 City-Wide Total Permanent Housing Forecast (Reference Growth Scenario), 2021 to 2051

Figure 4-5 and Figure 4-6 summarize the City-wide total permanent housing forecast and the city-wide annual incremental housing forecast from 2021 to 2051, respectively. Historical Census housing trends are provided for historical context. Further details regarding the City's housing forecast under the Reference Growth Scenario are provided in Appendix B, C and D.

Total housing needs are determined by the rate of household formation by population age group within a municipality over a specific time period. Household formation rates,

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^[1] The 20 to 54 age group shares for the City of London and Middlesex County exclude the net Census undercount and may vary slightly from the age group shares including the net Census undercount.



also known as household headship rates, are defined as the ratio of primary household maintainers, or heads of households, by major population age group (i.e., cohort).^[1] Between 2006 and 2016, the City of London's total headship rate remained relatively stable from 40% to 41%; refer to Appendix B for additional details. Forecast trends in population age structure provide important insights into future headship rates and average persons per unit (P.P.U.) trends for the City of London. It is important to note that headship rates by major age group are anticipated to remain relatively stable over the long-term forecast period.

Key observations for the City of London housing forecast include the following:

- Over the 2021 to 2051 period, permanent households are expected to increase from 174,660 to 273,025, growing at a rate of 1.5% annually.
- Annual housing demand over the long term is anticipated to remain well above historical levels during the past 20 years. More specifically, household growth is forecast to average 3,280 per year from 2021 to 2051, compared to 2,390 new households annually between 2006 and 2021.
- A review of September 2022 year-to-date building permit data suggests that housing activity from building permits is consistent relative to the recent two years during the pandemic. Over the 2021 to 2051 forecast period, annual housing growth is anticipated to be highest between 2021 and 2026, averaging approximately 3,540 new households annually, driven by strong residential building permit activity between 2020 and 2022.

^[1] It is noted that each household is represented by one primary household maintainer.




Figure 4-5 City of London Permanent Households Forecast (Reference Scenario), 2021 to 2051

Historical Reference Forecast Permanent Households

Note: Figures have been rounded.

Source: Historical data from Statistics Canada Census, 2001 to 2021. 2021 to 2051 forecast by Watson & Associates Economists Ltd.





Note:

Low Density includes singles and semis.

Medium density includes townhouses and apartments in duplexes. High Density includes bachelor, 1-bedroom and 2-bedroom + apartments.

Source: 2006 to 2021 derived from City of London building permit data. 2021 to 2051 forecasted by Watson & Associates Economist Ltd.



4.3.4 Population and Housing Growth Forecast Scenarios by Planning Policy Area, 2021 to 2051

Building on the Reference Growth Scenario (Medium Growth Scenario), three draft long-term population and housing growth options by planning policy area (i.e., B.A.B., D.G.A and Rural Area) have been developed. Each of the long-term growth options by planning policy area have been developed to facilitate the key directions and broad city building policies of the City of London O.P., while also accurately reflecting anticipated housing market trends by structure type and tenure to the year 2051. The long-term growth options have been developed in accordance with the following key assumptions:

Growth Option 1: 40% Housing Intensification

 Growth Option 1 is premised on an annual housing intensification target of 40%, which is slightly lower than the City of London O.P.^[1] It is noted that the City of London O.P. establishes an intensification target of 45% over the long-term planning horizon (2016 to 2035).

Growth Option 2: 45% Housing Intensification

• Growth Option 2 is premised on an annual housing intensification target of 45%, consistent with the City of London O.P.

Growth Option 3: 50% Housing Intensification

- Under Growth Option 3, the City's long-term housing intensification target has been increased to 50% over the forecast period between 2021 and 2051.
- Similar to Growth Option 2, the City's housing intensification target between 2015 and 2031 has been held consistent with the current City of London O.P. intensification target of 45%.

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^[1] Excludes students not captured by the Census.



Defining Housing by Structure Type

The forecast refers to several types of housing categories. The definition of these categories are as follows:

- Low-density housing: Includes all single and semi-detached houses as per Statistics Canada.
- Medium-density housing: Includes townhouses and apartments in duplexes.
- High-density housing: Includes bachelor, 1-bedroom, and 2 bedroom+ apartments.
- Secondary Units: A secondary unit represents a self-contained unit within an existing home/primary dwelling unit. Statistics Canada does not implicitly identify accessory apartments in the Census housing categories. They are embedded within the Census housing categories but are not reported based on the amount or in which categories they are embedded. Secondary units have high-density occupancy but a grade-related built form. For the purposes of this report, they have been forecast from 2021 to 2051 and are included in the high-density housing category.

Please refer the Appendix D, Figure D-10 for information on new unit P.P.U.'s by structure type.

Assessing Local Housing Demand and Supply

Each of the three long-term growth options have been developed based on an assessment of regional demographic and economic trends, which are anticipated to influence the amount, type and location of development within the City of London over the long term. In developing the three long-term growth options for the City by planning policy area, consideration was given to the following key regional/local supply and demand factors:

Demand Factors

- City-wide historical housing trends by structure-type based on Statistics Canada Census Housing data from 2001 to 2021.
- Historical City-wide housing activity based on building permit from 2006 to 2021, as well as by planning policy area from 2017 to 2021.

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- Age-specific City-wide housing propensity trends by structure type and tenure between 2001 and 2021, based on available Statistics Canada Census data.
- Commuting trends and access to surrounding employment markets.
- Estimated migration trends by type (i.e., international, inter-provincial and intraprovincial) for the London Middlesex Area, as well as estimated net migration by population age group for the City of London between 2001 and 2021.
- Anticipated trends in market demand for housing by structure type, by age group.
- Forecast housing market demand by major demographic group (i.e., young adults, families, empty-nesters and seniors) by planning policy area.

Supply Factors

- Supply of potential future housing stock in the development process by housing structure type, approval status, and planning policy area.
- Potential longer-term housing intensification supply opportunities (i.e., infill and redevelopment).
- Current inventory of net vacant designated urban "greenfield" lands not currently in the development approvals process by housing structure type.
- Provincial and local planning policy direction. •

A key input in forecast housing by structure type is a housing propensity analysis by population age, housing structure type and housing tenure (i.e., ownership versus rental). There are a multitude of factors that influence housing propensity by structure type which include, but are not limited to, housing affordability, demographics and socioeconomics (e.g., housing demand associated with families, aging of the population, cultural diversity), lifestyle choices, the changing nature of work. This approach uses current Census data, in this case 2016 Statistics Canada Census data, as a starting point to derive housing propensity rates by structure type for the City of London by population age group. Based on a review of historical trends over the past 20 years, combined with a review of forward-looking demographic and socio-economic trends, major infrastructure investments and planning policy objectives (which are anticipated to influence future housing demand by density type), and forecast propensity rates by housing structure type and tenure have been prepared for each growth option at the city-wide level. Refer to Appendix C for additional details regarding the approach and results of the housing propensity analysis.

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The results of the age-specific housing propensity analysis under each of the three growth options are summarized in Figure 4-7 at the city-wide level. Additional details are provided in Appendix C. Figure 4-8 summarizes the forecast rate of housing growth by structure type over the 2021 to 2051 forecast period relative to historical trends from 1991 to 2001, based on Statistics Canada Census data. The results of this analysis identify the following:

- The rate of housing growth within the City of London associated with low-density households has been gradually slowing over the past 30 years from 1.6% annually between 1991 to 2001 to 0.9% annually from 2011 to 2021.
- The rate of housing growth within the City of London associated with mediumdensity households increased modestly between 2001 and 2011 relative to the previous 10-year period, from 1.6% to 1.7%. The annual growth rate associated with medium-density housing continued to steadily increase over the 2011 to 2021 period to 1.9%.
- The rate of housing growth within the City of London associated with high-density households moderately decreased between 2001 and 2011 relative to the previous historical 10-year period. Between 2011 and 2021, however, the rate of annual housing growth within the City of London steadily increased to an annual rate of 1.7%.

Under each of the growth options, housing demand is anticipated to continue to gradually shift away from low-density housing forms towards medium- and high-density housing forms over the long term. This trend is anticipated to be largely driven by declining housing affordability associated with low-density housing options as well as increased demand for medium- and high-density housing forms driven by demographic and socio-economic factors associated with the aging population base, high-density housing demand associated with non-permanent residents, as well as lifestyle choices of existing and new residents.

As a result of the continued shift anticipated in housing demand from low- to mediumand high-density housing forms across the City, it is projected that the rate of annual housing growth associated with low-density housing will continue to gradually decline. Conversely, this trend is anticipated to be off-set by a steady increase in relative growth rate for a broad range of medium- and high-density housing forms.

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Consistent with historical trends, this shift in housing forms is projected be most pronounced in younger population age groups between 25 and 34 years of age, as well as older age groups (i.e., 65+). Geographically, this shift in the share of forecast housing demand by structure type is anticipated to be concentrated within the strategic growth areas of the City's B.A.B. (i.e., Downtown, Transit Villages and Rapid Transit Corridors), as these areas are planned to accommodate transformative change enabled by transportation infrastructure which is supportive of more compact development forms.

Figure 4-7 City of London Population and Housing Forecast by Structure Type for Growth Option 1 to 3, 2021 to 2051

				2051				
	2001	2011	2021	Option 1 - 40%	Option 2 - 45%	Option 3 - 50%		
1				mensincation	Intensiication	Intensincation		
Population ¹	350,000	377,600	437,200	647,500	647,500	647,500		
			Housing To	otal				
Low Density	75,085	84,030	91,535	121,005	117,315	113,685		
Medium Density	19,570	23,050	27,775	54,690	55,445	56,475		
High Density	43,110	46,555	55,350	97,010	99,945	102,545		
Total	137,765	153,635	174,660	273,025	273,025	273,025		
		Housing	Mix by Str	ucture Type				
Low Density	55%	55%	52%	44%	43%	42%		
Medium Density	14%	15%	16%	20%	20%	21%		
High Density	31%	30%	32%	36%	37%	38%		
Total	100%	100%	100%	100%	100%	100%		
Persons Per Unit (P.PU.)								
Total P.P.U.	2.54	2.46	2.50	2.37	2.37	2.37		

¹ Population includes net Census undercount.

Notes: Figures may not sum precisely due to rounding.

Source: Historical (2001 to 202) derived from Statistics Canada Census data, and forecast (2051) derived by Watson & Associates Economists Ltd.

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Figure 4-8 City of London Annual Housing Growth Rate by Structure Type Population for Growth Option 1 to 3, 2021 to 2051

				2021-2051				
	1991-2001	2001-2011	2011-2021	Option 1 - 40%	Option 2 - 45%	Option 3 - 50%		
				Intensification	Intensification	Intensification		
Low Density	1.6%	1.1%	0.9%	0.9%	0.8%	0.7%		
Medium Density	1.6%	1.7%	1.9%	2.3%	2.3%	2.4%		
High Density	1.1%	0.8%	1.7%	1.9%	2.0%	2.1%		
Total	1.4%	1.1%	1.3%	1.5%	1.5%	1.5%		

Source: Historical (2001 to 2021) derived from Statistics Canada Census data, and forecast (2051) derived by Watson & Associates Economists Ltd.

Local housing supply and demand factors, as previously discussed above, have been assessed to further direct the allocation of forecast population growth and housing demand by structure type by planning policy area between 2021 and 2051 under each of the three long-term growth options, as summarized in Figure 4-9 (additional details are provided in Appendix D). Key observations include:

- Under Growth Option 1, new housing development comprises 30% low-density (i.e., singles and semi-detached), 27% medium-density (i.e., townhouses) and 42% high-density (i.e., apartments) units.
- Growth Option 1 maximizes low-density housing development potential in the B.A.B., with increased intensification under Growth Options 2, and 3.
- Under each of the growth options, the City's housing mix by structure type is forecast to gradually shift further from low-density to medium-density housing forms. Under Option 3, new housing development comprises 23% low-density (i.e., singles and semi-detached), 29% medium-density (i.e., townhouses) and 48% high-density (i.e., apartment) units.
- Forecast housing demand in the D.G.A. is oriented towards grade-related (low and medium-density) housing forms under all three growth options, with increasing shares and absolute housing levels directed towards medium-density forms ("missing middle" housing) between Growth Option 1 to 3 on a City-wide basis.^[1]

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^[1] "Missing middle" housing describes a range of medium-density and low-rise, highdensity housing types between single detached houses and apartment buildings that



• Under all three options, forecast housing demand in the Rural Area is oriented towards low-density housing. All three growth options forecast the same amount of housing demand in the Rural Area.

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have gone "missing" from many of our cities in the last 60 to 70 years. This includes a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living, such as duplexes, triplexes, fourplexes, rowhouses, and townhouses.



Figure 4-9 City of London Housing Growth Options by Planning Policy Area, 2021 to 2051

	City of London Total Housing Unit Growth (2021 to 2051)			Built-Ai	Built-Area Boundary Housing Unit Growth (2021 to 2051)			Designated Greenfield Area Housing Unit Growth (2021 to 2051)			Rural Area Housing Unit Growth (2021 to 2051)					
Housing Forecast Scenario	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing
		То	tal Housi	ng Unit Gr	owth (202	1 to 2051))									
Growth Option 1 - 40% Intensification	29,790	26,910	41,660	98,370	2,150	9,810	27,290	39,250	27,490	17,100	14,380	58,970	150	0	0	150
Growth Option 2 - 45% Intensification	26,100	27,670	44,600	98,370	2,150	10,290	32,300	44,740	23,800	17,380	12,300	53,480	150	0	0	150
Growth Option 3 - 50% Intensification	22,470	28,700	47,200	98,370	2,150	11,050	37,020	50,220	20,170	17,650	10,180	48,000	150	0	0	150
Housing Growth Shares by Density Type (2021 to 2051)																
Growth Option 1 - 40% Intensification	30%	27%	42%	100%	5%	25%	70%	100%	47%	29%	24%	100%	100%	0%	0%	100%
Growth Option 2 - 45% Intensification	27%	28%	45%	100%	5%	23%	72%	100%	45%	33%	23%	100%	100%	0%	0%	100%
Growth Option 3 - 50% Intensification	23%	29%	48%	100%	4%	22%	74%	100%	42%	37%	21%	100%	100%	0%	0%	100%

Notes:

Low density housing includes singles and semi-detached.

Medium density includes townhouses.

High density housing includes bachelor, 1-bedroom, and 2-bedroom+ apartments, and accessory units.

Figures may not add precisely due to rounding.

Source: Watson & Associates Economists Ltd.



4.4 City of London Student Enrolment and Corresponding Population Growth Forecast, 2021 to 2051

4.4.1 Approach to Student Population Growth Forecast

Post-secondary students are an important part of the City of London as they contribute to the vibrancy, diversity and economic strength of this area. As previously noted, it is recognized that there are approximately 56,900 full-time students attending local post-secondary institutions within the City of London. This includes students who are permanent residents within the City, permanent residents outside the city and international students who are captured as non-permanent residents in the city. A portion of this population is not recognized in the Census population base as reported by the Statistics Canada Census.^[1] As part of this analysis, population growth associated with post-secondary students not captured in the Census population has been forecast to the year 2051. The approach and methodology utilized to complete this analysis are discussed below.

The geographic origin of current (2021) full-time students was assessed with respect to the domestic and international students. This was completed through a review of available enrolment data from the two post-secondary schools and a review of Council of Ontario Universities Application statistics, and enrolment data from the Ministry of Colleges and Universities. The analysis also considered the current (2021) residency of London's post-secondary student population including students who live on campus, off campus with parents or commute from outside the city, as well as those residing off campus in rental housing. This was assessed through available housing data available from the post-secondary institutions and Census data.

The post-secondary student population not captured in the Census data was estimated to total 24,400 in 2021. This includes a share of students living off campus in student rental housing and students residing in on-campus residences. Full-time post-secondary enrolment forecasts were prepared the City of London's two post-secondary institutions which involved the following:

^[1] Reflects full-time enrolment at the University of Western Ontario and Fanshawe College campuses located within the City of London.



- Review of current and historical full-time enrolment growth trends by geographic location of student origin (i.e., domestic and international);
- Review of comparator post-secondary institution growth forecasts in Ontario prepared by Watson for the University of Waterloo, Wilfrid Laurier University, University of Guelph, Conestoga College and Queens University;
- Potential growth in international students based on recent and anticipated enrolment growth trends as well as the future outlook for macro-level growth in international students globally; and
- In the development of the short- to medium-term forecast (i.e., 2021 to 2031), the • analysis also considers planned student growth targets identified through discussions with City of London staff.

4.4.2 Student Enrolment Forecast

Based on the methodology presented in section 4.4.1, a long-term (2021 to 2051) aggregate post-secondary student enrolment forecast for the City of London was prepared reflecting growth potential within the City's two post-secondary institutions. As illustrated in Figure 4-10, full-time enrolment is forecast to increase from 56,900 in 2021 to 82,600 by 2051, an increase of 45% (25,700 students) over the forecast period (1.3% annual growth rate).

Recent full-time post-secondary student enrolment growth in London has been relatively stable. Over the short term (i.e., 2021 to 2026), full-time enrolment growth is expected to be the strongest with an annual growth rate of 2.6%, coinciding with growth in the non-permanent resident population which includes international students. Post-2026, full-time enrolment is forecast to moderate to an annual growth rate of approximately 1.0%, as summarized in Figure 4-11. The moderation of the long-term post-secondary student forecast is anticipated to be driven by the slowing of population growth related to domestic students and the increased global competition related to post-secondary international student attraction.



Figure 4-10 City of London Full-Time Post-Secondary Student Enrolment, 2021 to 2051



Source: Watson & Associates Economists Ltd.

Figure 4-11 City of London Full-Time Post-Secondary Student Enrolment Average Annual Growth Rate, 2021 to 2051



Note: Actual future student population may be impacted by a number of factors that affect student enrolment at post-secondary institutions, including changes in government policy related to enrolment and funding.

In accordance with domestic demographic trends, combined with demand from international students, the share of total full-time enrolment associated with international students is expected to increase from 23% in 2021 to 29% in 2051, as illustrated in



Figure 4-12. Conversely, the share of domestic students is expected to decrease from 77% to 71% during the same period.





Source: Watson & Associates Economists Ltd.

Based on anticipated growth trends in enrolment by geographic location and local residency patterns, it is anticipated that 38% (9,700 of 56,900 students) of forecast full-time post-secondary enrolment growth over the 2021 to 2051 period, will reflect students not captured in the Census (i.e., those who are counted elsewhere in Canada but require housing locally while they are studying at one of the post-secondary institutions in the City of London). It is important to note that international students are part of the non-permanent resident population and are already captured in the Census. Based on current occupancy trends, it is anticipated that approximately 2,600 of the students not captured in the Census (27% of total) will be accommodated in on-campus residences, as illustrated in Figure 4-13. The residual (73% or 7,000 students) is anticipated to be accommodated in off-campus housing. Assuming an average P.P.U. of 2.5, this will generate the need for approximately 2,800 off-campus dwelling units to accommodate post-secondary students not captured in the Census over the 2021 to 2051 period.



Figure 4-13 City of London Student Population Forecast, 2021 to 2051



4.5 City-Wide Employment Forecast Scenarios, 2021 to 2051

Building on the key growth assumptions identified in Section 4.1, three long-term employment growth scenarios have been developed for the City of London, including a Low Scenario, Medium (Reference) and High Growth Scenario as summarized in Figure 4-14.

- The Low Growth Scenario assumes that the City of London employment will grow at an average annual rate of 1.3% per year. Under the Low Growth Scenario the employment base is forecast to increase by approximately 97,700 jobs, from 197,300 in 2021 to 295,000 in 2051.
- The Reference Growth Scenario assumes an annual growth rate of approximately 1.6% for the City of London between 2021 and 2051. Under the Reference Growth Scenario, the employment base is expected to increase by approximately 120,200 jobs by 2051, increasing from 197,300 in 2021 to 317,500 by 2051.
- Under the High Growth Scenario, the City of London employment is forecast to grow at an average annual rate of roughly 1.8% per year. Under the High



Growth Scenario, the City of London is anticipated to add approximately 142,000 jobs, increasing from 197,300 in 2021 to 339,300 by 2051.





4.5.1 City-Wide Reference Employment Forecast, 2021 to 2051

In accordance with historical employment trends and the key macro and regional economic trends identified in Section 4-1, the Medium Scenario represents the "recommended" (Reference) long-term employment growth scenario for the City of London. Figure 4-15 summarizes the City of London Reference Scenario employment forecast and employment activity rate forecast (ratio of jobs to population) from 2021 to 2051. Key observations include:

- The City of London's employment base is forecast to reach 317,500 jobs by 2051. This represents an increase of approximately 120,100 jobs between 2021 and 2051, representing an average annual growth rate of 1.6%.
- The City of London's employment activity rate has declined from 53% in 2006 to 45% in 2021. This decline in the City's employment activity rate between 2006 and 2021 can be largely attributed to the following:
 - Structural changes in the macro-economy resulting in wide-spread provincial jobs losses in the manufacturing sector. It is noted that the

Note: Total employment includes no fixed place of work and work at home employment. Source: Historical derived from Statistics Canada Census data, 2001 to 2016. 2018 City of London Forecast from City of London Population, Housing and Employment Growth Forecast, 2016 to 2044, Final Report, February 1, 2018. Low, Reference and High Scenarios by Watson & Associates Economists Ltd.



global financial crisis of 2008/2009, further accelerated these jobs losses between 2010 and 2015; and

- Negative economic impacts associated with COVID-19 between 2020 and 2021.
- Over the 2021 to 2026 forecast period, the City's employment activity rate is forecast to rebound to 49% and remain relatively stable between 2021 and 2051.
- The increase to the City's employment activity rate is anticipated to be driven by local employment opportunities associated with the City's export-based employment sectors (e.g., transportation and warehousing, wholesale trade, construction, energy and manufacturing). Population-related employment (including retail, accommodation and food services and range of knowledgebased sectors) is also anticipated to experience steady growth fueled by relatively higher levels population growth within the City and surrounding economic region. A large percentage of forecast job growth is also anticipated to be accommodated through home occupations, home-based businesses, and offsite employment.



Figure 4-15 City of London Permanent Employment Forecast Reference Scenario, 2006 to 2051

Note: Figures have been rounded. Activity rate uses population including the net Census undercount.

Source: 2006 to 2016 derived from Statistics Canada Census data, and forecast by Watson & Associates Economists Ltd.



Reference Forecast Employment by Major Sector, 2021 to 2051 4.5.1.1

Employment growth within the City of London is expected across a range of sectors driven by the continued development of the regional and local economic base and local population growth. Figure 4-16 summarizes the 2021 to 2051 employment growth forecast by major employment sector for the City of London. As summarized, the majority of employment growth in the City is anticipated in commercial and institutional categories. These two sectors are expected to account for 71% of job growth between 2021 and 2051, followed by industrial with 12% of job growth, no fixed place of work with 10% and work at home employment with 7%.^[1] Additional details regarding employment growth in 5-year increments from 2021 to 2051 are provided in Appendix Ε.



Source: Watson & Associates Economists Ltd.

^[1] Work from home employment reflects people who work from home on a full-time basis. This does not include people with a physical place of work outside their home who partially work from home in a hybrid working environment.



4.5.1.2 Reference Forecast Gross Floor Area Forecast by Major Sector, 2021 to 2051

Figure 4-17 summarizes the average floor space per worker (F.S.W.) assumptions by major employment sector and forecast growth in non-residential space by major sector to from 2021 to 2051. Total non-residential space needs were developed by multiplying total employment by average assumptions by major sector. F.S.W. assumptions consider forecast sub-sectors anticipated to drive employment growth within each of the major employment categories, as well as recent non-residential density trends observed across London and Ontario. Key observations regarding F.S.W. trends by major sector include:

Industrial

- There are several macro-economic trends that are influencing density levels and trend in the average floor space per worker (F.S.W.) on employment lands (industrial lands) across the City of London, and more broadly across the City of London. Generally, industrial density levels on employment lands are declining while average F.S.W. levels are gradually rising in the manufacturing sector, as domestic manufacturers focus efforts on increased efficiency and competitiveness through automation. This trend is coupled with increasing demand for increasingly larger, more land-extensive warehousing and logistics facilities to support distribution and transportation of goods throughout the City's growing urban population base.
- In recent years, retail warehousing and third-party logistics has represented the fasting growing segment within the goods movement sector, driven by steady growth in e-commerce. The pace of growth in e-commerce accelerated between March 2020 and January 2022 driven by government induced lockdowns and social distancing measures in response to COVID-19. It is noted that the pace of national growth in e-commerce sales recently peaked in January 2022 following the ease of government restrictions related to COVID-19. Based on current data, e-commerce sales have increased at approximately three times the pace of instore sales since 2016; however, this pace of growth is anticipated to level off as



increasingly more retailers are recognizing that a physical store helps to drive growth and create brand awareness.^{[1][2]}

- Generally, the above-noted trends have resulted in a steady increase in average industrial F.S.W. levels across most southern Ontario municipalities over the past decade, particularly those that have experienced economic growth and notable construction related to the goods movement sector. Over the 2016 to 2021 period, the employment base in the transportation and warehousing sector grew at an annual rate of 1.7% during this period.^[3]
- In accordance with the national, provincial and local trends discussed above, the long-term industrial F.S.W. for the City of London has been estimated at 1,150 square feet per employee (sq.ft./employee). This represents an increase of 15% compared to the average long-term industrial F.S.W. assumed in City's 2018 Population, Housing and Employment Growth Study.

Retail Sector

- As previously discussed, e-commerce, automation and increased urbanization is anticipated to have an impact on the function of "bricks and mortar" retail stores, by blurring the lines between warehousing and retail (i.e., retail stores with microfulfillment centres) and influencing the format of retail. Notwithstanding the rapid pace of e-commerce growth experienced over the past decade, demand for "bricks and mortar" retail is anticipated to be here to stay. Retailers continue to focus on the retail store model, as it is still considered the most profitable model for many retailers.
- Anticipated population growth in the City of London and surrounding retail trade area will continue to drive demand for new local and regional serving retail products. Since the early 2000's, retail growth in urban centres across southern Ontario has primarily focused on infilling of existing retail sites through "baby-box" retail pads (smaller retailers with a similar building design to big-box retailers) in power centres, expansions of regional shopping centres and retail growth oriented towards serving the local needs of a neighbourhood. National

^[1] Statistics Canada Monthly Retail Trade Survey Data.

^[2] Making an impact in retail: Why Bricks & Mortar is here to stay. Cushman & Wakefield. June 16, 2022.

^[3] Economic Modelling Specialist International (EMSI) 2021 Q3 Dataset, Self Employed & Employees. April 2022.



and local retail trends suggest that retail growth will continue efforts on infilling of existing retail sites with an emphasis on retail uses focused on local serving uses, experiences, services and "bargain hunting" retail destinations with no e-commerce platforms.

 These retail uses tend to have a smaller retail footprint which provides more flexibility in accommodating mixed-use or intensification environments. These trends are anticipated to place a downward impact on the average retail F.S.W. as retail operations with smaller building footprints typically generate a lower average F.S.W. when compared to "big-box" retail operations. Under the 2018 Population, Housing and Employment Growth Study an average commercial F.S.W. of 425 was assumed, including a blend of retail and office uses. This assumption has been reduced under the current City of London growth analysis update to an average of 370 sq.ft. per commercial employee reflecting this downward trend in both retail and office space needs per employee.

Office Sector

- The average floor space per worker in the office sector across Ontario's larger urban centres have steady declined over the past decade primarily influenced by rising real estate costs and the changing nature of work (i.e., rise in hot desking, sharing of office space and increased growth in remote/hybrid work). In addition to its broader impacts on the economy, COVID-19 has accelerated changes in the nature of work as a result of technological disruptions which were already taking place prior to the pandemic.
- While some employers, typically those in the technology sector may move to a fully distributed work operation this does not appear to be the norm, as most employers are adopting a hybrid (at home/at office) work model. This approach emphasized a greater need to repurpose existing or new office space to provide more collaboration rooms, private meeting rooms and shared-office space with less emphasis on private office space. Looking forward, these trends are anticipated to generate increasingly higher average office F.S.W. levels and less office space needs over the long term. Under the 2018 City of London Population, Housing and Employment Growth Study an average commercial F.S.W. of 425 was assumed, including a blend of retail and office uses. This assumption has been reduced under the current City of London growth analysis update to an average of 370 sq.ft. per commercial employee.



Key observations regarding the City's non-residential G.F.A. forecast are as follows:

- The employment forecast assumes that employment growth will be accommodated within new construction G.F.A. space (new buildings and expansions). Recent vacancy rate trends suggest that rates have stabilized, in particular the industrial market which has absorbed a large portion of the vacant G.F.A. space since 2010. Industrial vacancy rates have fallen from a high of 11.5% in 2010 to 0.7% in 2022;^[1]
- It is expected that the commercial sector will experience strong G.F.A. growth to service the needs of the increasing population over the forecast period with an average of 529,700 sq.ft. of commercial development annually;
- The institutional sector is also anticipated to experience strong G.F.A. growth, with an average of 732,400 sq.ft. of development annually; and
- The industrial sector is forecast to experience steady G.F.A. growth, averaging approximately 538,600 sq.ft. per year.

Figure 4-17		
City of London		
Gross Floor Area Forecast by Major Sector,	2021 to 2	2051

Sector	Total Employment Growth (2021 to 2051)	Employment Losses Due to COVID-19	Total Employment Growth Net Vacant Space due to COVID-19 Job Losses (2021 to 2051)	Gross Floor Area Forecast Per Worker (F.S.W.) Assumptions (sq.ft.)	Non-Residential Gross Floor Area Forecast (sq.ft.)	Annual Average Gross Floor Area (sq.ft.)
Industrial	14,050		14,050	1,150	16,157,500	538,600
Commercial/ Population- Related	54,020	-11,040	42,980	370	15,890,283	529,700
Institutional	31,390		31,390	700	21,973,000	732,400
Total	99,460	-11,040	88,420	-	54,020,783	1,800,700

Note: Figures have been rounded. Employment losses due to COVID-19 derived from EMSI data.

Source: Watson & Associates Economists Ltd.

4.6 Observations

By 2051, the City of London permanent population base is forecast to grow to a range of approximately 601,500 to 692,100 persons. This represents an increase of

^[1] CBRE London Industrial Report, Q2, 2022.



approximately 164,300 to 254,900 residents between 2021 and 2051, or an average annual population growth rate between 1.1% to 1.5% during this time period. Comparatively, the population of the Province as a whole is forecast to increase at a rate of 1.3% over the 2021 to 2046 period.^[1]

It is important to recognize that while the City's population base is growing, it is also getting older. Between 2021 and 2051, the 75+ age group is forecast to represent the fastest growing population age group with an average annual population growth rate of 3.4%. With an aging population, the County will be more reliant on net migration as a source of population as opposed to natural increase. With respect to future housing needs, strong population growth in the 75+ age group is anticipated to place increasing demand on medium- and high-density forms including senior citizens' housing and affordable housing options. The City of London is also anticipated to accommodate a growing share of young adults and new families seeking competitively priced home ownership and rental opportunities. Population growth associated with young adults is anticipated to be primarily driven by net migration, while population growth associated with seniors will be largely driven by the aging of the City's existing Baby Boomer residents.

Accommodating the forecast range in population growth across the City will require approximately 83,800 to 112,800 new households, or approximately 2,795 to 3,760 new households annually. For historical context, the City averaged approximately 2,390 new households annually between 2006 and 2021. To adequately accommodate future housing demand across a diverse selection of demographic and socio-economic groups, a range of new housing typologies will be required with respect to built-form, location and affordability across the City.

The County's total employment base is forecast to steadily increase by between approximately 295,000 to 339,300 jobs by the year 2051. This represents an increase of approximately 97,700 to 142,000 new jobs between 2021 and 2051, or an average annual employment growth rate between 1.3% and 1.8% during this time period. Employment growth is anticipated across variety of export-based employment sectors (e.g. transportation, wholesale trade, construction, utilities and manufacturing). Population-related employment (including retail, accommodation and food services and

^[1] Ministry of Finance Summer 2022 Population Projections, Reference Scenario for the Province of Ontario.



range of knowledge-based sectors) is also anticipated to experience steady growth fueled by relatively higher levels population growth within the City and surrounding economic region. An increasing percentage of forecast job growth is anticipated to be accommodated through home occupations, home-based businesses and off-site employment.

Based on the review of the City's long-term growth outlook provided herein, the Medium Growth Scenario is recommended as the Reference long-term growth scenario for the City of London to the year 2051. The Reference growth scenario:

- Represents a reasonable absolute increase in long-term population and employment growth relative to historical trends;
- Accurately identifies the anticipated influence of identified regional and local growth drivers on future development trends for the City; and
- Represents a reasonable share of total population and employment growth for the City of London relative to the London-Middlesex Area and more broadly southwestern Ontario, as set out in the summer 2022 population projections prepared by the M.O.F.



5. Conclusion

This report provides a summary of the key findings associated with the City-wide longterm population and employment growth scenarios and growth options by planning policy area for the City of London to the year 2051. These forecasts have been provided within the context of regional economic conditions and key growth assumptions as well as region-wide and local development trends. These findings identify the following:

- The City of London 2018 Growth Forecast housing is tracking closely to Census housing growth from 2016 to 2021, being approximately 2% above Census housing growth.^[1] It is important to note that high-density housing unit growth comprised a greater share of growth than anticipated. Between 2016 and 2021, high-density units comprised 50% of new residential units from building permit activity and 39% of Census housing growth compared to 30% in the 2018 Population, Housing and Employment Growth Study.
- Active housing supply has also become significantly more oriented to highdensity developments with the high-density share of active developments increasing from 26% in 2016 to 47% in 2022 of the total active housing development inventory. This shift suggests that the City's housing forecast will likely continue to be more weighted toward high-density housing relative to the results of the 2018 Growth Forecast Study.
- Non-residential growth from building permits issued from 2016 to 2021 is generally comparable to the 2018 Growth Forecast Study, tracking 12% lower than anticipated. However, industrial building permit activity has shown a relatively strong rebound, with gross floor area (G.F.A.) from building permit data 23% higher than previously forecast in the 2018 Growth Forecast Study. The industrial employment sector has also been steadily recovering since the 2008/2009 economic downturn. Historically low province-wide industrial vacancy rates and competitively priced industrial lands continue to attract demand to the City of London for industrial and export-based development.
- Residential and non-residential development activity is anticipated to be particularly strong over the next 10 to 15 years relative to historical growth, driven

^[1] City of London Population, Housing and Employment Growth Forecast, 2016 to 2044 Final Report, February 1, 2018, Watson & Associates Economists Ltd.



by steady immigration, intra-provincial migration, particularly from within the Greater Golden Horseshoe (G.G.H.), and to a lesser degree inter-provincial migration.

- The Medium (Reference) Scenario represents the "recommended" growth forecast scenario for the City of London. Under the Reference Scenario the permanent population is forecast to grow from 437,200 to 647,500 during the 2021 to 2051 period, increasing at a rate of 1.3% annually. This represents a slightly higher population growth rate relative to the historical annual growth rate of 1.1% achieved from 2001 to 2021.
- Historically, the share of London's population has been 84% of the London-Middlesex Area population from 2001 to 2021. Over the 2021 to 2046 forecast period, this share is forecast to remain relatively constant at 84% by 2046.
- The City's population is aging. By 2051, 12% of the City's population will be 75+ years of age or older, up from 8% in 2021.
- Over the 2021 to 2051 period, permanent households are expected to increase from 174,700 to 273,000, growing at a rate of 1.5% annually. This translates to an annual average of 3,280 housing units over the 30-year period, an increase of 37% above historical housing growth from 2006 to 2021.
- Under all growth options by planning policy area, which range from a 40% to 50% intensification target, strong housing demand is anticipated for medium- and high-density housing forms i.e., duplexes, townhouses, apartments (including purpose-built rentals and condos) and senior citizens' housing, largely driven by demand for more affordable housing types and the aging of the population. Medium and high-density housing types are forecast to comprise approximately 70% to 77% of forecast households under Growth Options 1 and 3, respectively.
- The City of London's employment base is forecast to reach 317,500 jobs by 2051 under the Reference Scenario. This represents an increase of approximately 120,200 jobs between 2021 and 2051, representing an average annual employment growth rate of 1.6%. This is notably higher relative to the historical annual growth rate of 0.5% achieved from 2001 to 2021.
- Employment growth is expected across a range of sectors driven by the continued development of the regional and local economic base. The majority of employment growth in the City is anticipated in the commercial and institutional categories which are expected to account for 71% of job growth between 2021



and 2051, followed by industrial with 12% of job growth, no fixed place of work (N.F.P.O.W.) employment at 10% and work at home employment at 7%.^{[1][2]}

 Over the 2021 to 2051 forecast period, the City of London is forecast to add 54.0 million sq.ft. of non-residential G.F.A. to its non-residential building space inventory under the Medium Growth Scenario. The non-residential building space forecast comprises 25% industrial and 75% commercial/institutional development.

^[1] Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "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."

^[2] Work from home employment reflects people who work from home on a full-time basis. This does not include people with a physical place of work outside their home who partially work from home in a hybrid working environment.



Appendices



Appendix A City of London Population Forecast, 2021 to 2051



Low Scenario

Figure A-1: City of London, Low Scenaric	, Total Population Forecast b	y Major Age Group, 2021 to 2051
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Cohort	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
0-19	89,700	87,700	85,500	86,800	95,400	108,400	115,700	119,600	119,400	115,200	112,100
20-34	79,600	83,900	86,300	91,200	102,300	98,800	91,300	92,900	101,000	108,800	113,900
35-44	57,800	55,100	48,500	49,400	57,900	75,100	87,800	84,300	74,800	75,000	79,300
45-54	48,200	54,200	57,500	54,300	50,600	50,300	58,600	75,400	88,100	84,700	75,400
55-64	30,300	38,600	46,000	51,500	55,500	54,700	51,600	51,000	59,100	75,400	87,700
65-74	23,400	24,100	27,700	35,600	42,500	47,600	51,300	50,800	48,200	47,800	55,600
75+	21,100	24,400	26,300	28,600	33,000	41,800	50,900	60,700	69,400	74,800	77,500
Total	350,000	368,000	377,600	397,400	437,200	476,700	507,200	534,700	560,100	581,900	601,500
Annual Growth Rate (5-year increment)		1.0%	0.5%	1.0%	1.9%	1.7%	1.2%	1.1%	0.9%	0.8%	0.7%

Note: Population includes net Census undercount. Figures may not add precisely due to rounding.

Source: 2001 to 2021 from Statistics Canada Census and 2021 to 2051 forecast by Watson & Associates Economists Ltd.

Cohort	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
0-19	89,700	87,700	85,500	86,800	95,400	108,400	115,700	119,600	119,400	115,200	112,100
20-34	79,600	83,900	86,300	91,200	102,300	98,800	91,300	92,900	101,000	108,800	113,900
35-44	57,800	55,100	48,500	49,400	57,900	75,100	87,800	84,300	74,800	75,000	79,300
45-54	48,200	54,200	57,500	54,300	50,600	50,300	58,600	75,400	88,100	84,700	75,400
55-64	30,300	38,600	46,000	51,500	55,500	54,700	51,600	51,000	59,100	75,400	87,700
65-74	23,400	24,100	27,700	35,600	42,500	47,600	51,300	50,800	48,200	47,800	55,600
75+	21,100	24,400	26,300	28,600	33,000	41,800	50,900	60,700	69,400	74,800	77,500
Total	350,000	368,000	377,600	397,400	437,200	476,700	507,200	534,700	560,100	581,900	601,500

Figure A-2: City of London, Low Scenario, Total Population Forecast Shares by Major Age Group, 2021 to 2051

Note: Population includes net Census undercount. Figures may not add precisely due to rounding.

Source: 2001 to 2021 from Statistics Canada Census and 2021 to 2051 forecast by Watson & Associates Economists Ltd.



Figure A-3: City of London, Low Scenario,
Total Population Forecast Growth Rates
by Major Age Group, 2011 to 2051

Age Cohort	2001-2011	2011-2021	2021-2051
Under 25	-0.1%	0.6%	0.6%
25-34	0.6%	3.0%	0.2%
35-44	-1.7%	1.8%	1.1%
45-54	1.8%	-1.3%	1.3%
54-64	4.3%	1.9%	1.5%
65-74	1.7%	4.4%	0.9%
75+	2.2%	2.3%	2.9%
Total	0.8%	1.5%	1.1%

Note: Population includes net Census undercount. Figures may not add precisely due to rounding.

Source: 2001 to 2021 from Statistics Canada Census and 2021 to 2051 forecast by Watson & Associates Economists Ltd.





Note: Population includes net Census undercount. Figures have been rounded. Source: Historical (2001 to 2021) derived from Statistics Canada Demography Division and forecast (2021 to 2051) by Watson & Associates Economists Ltd.



Figure A-5:	City of London,	Low Scenario,	Historical a	nd Forecast I	Net Migration
	Shares by Ag	e Cohort, Low	Scenario, 20	021 to 2051	

Age Group	2001-2011	2011-2021	2021-2051
0-19	39%	39%	39%
20-34	44%	45%	34%
35-44	-8%	4%	13%
45-54	4%	7%	6%
55-74	8%	2%	4%
75+	13%	2%	4%
Total	100%	100%	100%

Source: 2001 to 2021 derived from Statistics Canada Census and Demography Division data, and 2021 to 2051 forecast by Watson & Associates Economists Ltd.



Medium Scenario

Cohort	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
0-19	89,700	87,700	85,500	86,800	95,400	110,300	120,300	127,100	129,500	127,500	127,100
20-34	79,600	83,900	86,300	91,200	102,300	100,400	95,000	98,400	108,200	118,300	126,500
35-44	57,800	55,100	48,500	49,400	57,900	76,100	90,600	88,800	80,900	82,600	88,800
45-54	48,200	54,200	57,500	54,300	50,600	50,400	58,900	76,800	91,300	89,600	81,900
55-64	30,300	38,600	46,000	51,500	55,500	54,900	52,200	51,700	59,900	77,300	91,200
65-74	23,400	24,100	27,700	35,600	42,500	47,600	51,300	51,000	48,700	48,400	56,100
75+	21,100	24,400	26,300	28,600	33,000	41,900	51,100	60,800	69,000	73,900	75,900
Total	350,000	368,000	377,600	397,400	437,200	481,700	519,500	554,500	587,500	617,500	647,500
Annual Growth Rate (5-year increment)		1.0%	0.5%	1.0%	1.9%	2.0%	1.5%	1.3%	1.2%	1.0%	1.0%

Figure A-6: City of London, Medium Scenario, Total Population Forecast by Major Age Group, 2021 to 2051

Note: Population includes net Census undercount. Figures may not add precisely due to rounding.

Source: 2001 to 2021 from Statistics Canada Census and 2021 to 2051 forecast by Watson & Associates Economists Ltd.



Cohort	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
0-19	26%	24%	23%	22%	22%	23%	23%	23%	22%	21%	20%
20-34	23%	23%	23%	23%	23%	21%	18%	18%	18%	19%	20%
35-44	17%	15%	13%	12%	13%	16%	17%	16%	14%	13%	14%
45-54	14%	15%	15%	14%	12%	10%	11%	14%	16%	15%	13%
55-64	9%	10%	12%	13%	13%	11%	10%	9%	10%	13%	14%
65-74	7%	7%	7%	9%	10%	10%	10%	9%	8%	8%	9%
75+	6%	7%	7%	7%	8%	9%	10%	11%	12%	12%	12%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Figure A-7: City of London, Medium Scenario, Total Population Forecast Shares by Major Age Group, 2021 to 2051

Note: Population includes net Census undercount. Figures may not add precisely due to rounding. Source: 2001 to 2021 from Statistics Canada Census and 2021 to 2051 forecast by Watson & Associates Economists Ltd.



Age Cohort	2001-2011	2011-2021	2021-2051
Under 25	-0.1%	0.6%	1.0%
25-34	0.6%	3.0%	0.5%
35-44	-1.7%	1.8%	1.4%
45-54	1.8%	-1.3%	1.6%
54-64	4.3%	1.9%	1.7%
65-74	1.7%	4.4%	0.9%
75+	2.2%	2.3%	2.8%
Total	0.8%	1.5%	1.3%

Figure A-8: City of London, Medium Scenario, Total Population Forecast Growth Rates by Major Age Group, 2001 to 2051

Note: Population includes net Census undercount. Figures may not add precisely due to rounding.

Source: 2001 to 2021 from Statistics Canada Census and 2021 to 2051 forecast by Watson & Associates Economists Ltd.





Note: Population includes net Census undercount. Figures have been rounded. Source: Historical (2001 to 2021) derived from Statistics Canada Demography Division and forecast (2021 to 2051) by Watson & Associates Economists Ltd.



Figure A-10: City of London, Medium Scenario, Historical and Forecast Net Migration Shares by Age Cohort, Low Scenario, 2001 to 2051

Age Group	2001-2011	2011-2021	2021-2051
0-19	39%	39%	39%
20-34	44%	45%	34%
35-44	-8%	4%	13%
45-54	4%	7%	6%
55-74	8%	2%	4%
75+	13%	2%	4%
Total	100%	100%	100%

Note: Figures have been rounded.

Source: 2001 to 2021 derived from Statistics Canada Census and Demography Division data, and 2021 to 2051 forecast by Watson & Associates Economists Ltd.


High Scenario

Figure A-11: City	y of London, High Scenario, [•]	Total Population Forecast by	[,] Major Age Group,	2021 to 2051
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Cohort	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
0-19	89,700	87,700	85,500	86,800	95,400	112,500	126,100	136,200	141,300	140,700	141,000
20-34	79,600	83,900	86,300	91,200	102,300	102,200	99,500	105,100	116,500	128,400	138,500
35-44	57,800	55,100	48,500	49,400	57,900	77,200	94,000	94,400	88,000	90,800	97,700
45-54	48,200	54,200	57,500	54,300	50,600	50,500	59,300	78,300	95,000	95,400	89,100
55-64	30,300	38,600	46,000	51,500	55,500	55,100	52,800	52,600	60,900	79,200	95,100
65-74	23,400	24,100	27,700	35,600	42,500	47,700	51,400	51,200	49,200	49,100	56,800
75+	21,100	24,400	26,300	28,600	33,000	42,000	51,400	60,900	68,600	72,700	73,900
Total	350,000	368,000	377,600	397,400	437,200	487,300	534,600	578,600	619,500	656,300	692,100
Annual Growth Rate (5-year increment)		1.0%	0.5%	1.0%	1.9%	2.2%	1.9%	1.6%	1.4%	1.2%	1.1%

Note: Population includes net Census undercount. Figures may not add precisely due to rounding.



Cohort	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
0-19	26%	24%	23%	22%	22%	23%	24%	24%	23%	21%	20%
20-34	23%	23%	23%	23%	23%	21%	19%	18%	19%	20%	20%
35-44	17%	15%	13%	12%	13%	16%	18%	16%	14%	14%	14%
45-54	14%	15%	15%	14%	12%	10%	11%	14%	15%	15%	13%
55-64	9%	10%	12%	13%	13%	11%	10%	9%	10%	12%	14%
65-74	7%	7%	7%	9%	10%	10%	10%	9%	8%	7%	8%
75+	6%	7%	7%	7%	8%	9%	10%	11%	11%	11%	11%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Figure A-12: City of London, High Scenario, Total Population Forecast Shares by Major Age Group, 2021 to 2051

Note: Population includes net Census undercount. Figures may not add precisely due to rounding.



Age Cohort	2001-2011	2011-2021	2021-2051
Under 25	-0.1%	0.6%	1.4%
25-34	0.6%	3.0%	0.8%
35-44	-1.7%	1.8%	1.8%
45-54	1.8%	-1.3%	1.9%
54-64	4.3%	1.9%	1.8%
65-74	1.7%	4.4%	1.0%
75+	2.2%	2.3%	2.7%
Total	0.8%	1.5%	1.5%

Figure A-13: City of London, High Scenario, Total Population Forecast Growth Rates by Major Age Group, 2001 to 2051

Note: Population includes net Census undercount. Figures may not add precisely due to rounding.

Source: 2001 to 2021 from Statistics Canada Census and 2021 to 2051 forecast by Watson & Associates Economists Ltd.





Note: Population includes net Census undercount. Figures have been rounded. Source: Historical (2001 to 2021) derived from Statistics Canada Demography Division and forecast (2021 to 2051) by Watson & Associates Economists Ltd.



Figure A-15:	City of London, H	ligh Scenario,	Historical	and Forecast N	Net Migration by
	Age Coh	ort, Low Scen	ario, 2021	to 2051	

Age Group	2001-2011	2011-2021	2021-2051
0-19	39%	39%	39%
20-34	44%	45%	34%
35-44	-8%	4%	13%
45-54	4%	7%	6%
55-74	8%	2%	4%
75+	13%	2%	4%
Total	100%	100%	100%

Note: Figures have been rounded.

Source: 2001 to 2021 derived from Statistics Canada Census and Demography Division data, and 2021 to 2051 forecast by Watson & Associates Economists Ltd.



Appendix B City of London Housing Headship Rates, 2006 to 2051

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Age Cohort		Household Headship Rates									
Age conort	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	
0-14	-	-	-	-	-	-	-	-	-	-	
15-24	0.1465	0.1455	0.1519	0.1443	0.1443	0.1443	0.1443	0.1443	0.1443	0.1443	
25-34	0.4408	0.4514	0.4448	0.3852	0.3852	0.3852	0.3852	0.3852	0.3852	0.3852	
35-44	0.5297	0.5387	0.5261	0.5144	0.5144	0.5144	0.5144	0.5144	0.5144	0.5144	
45-54	0.5759	0.5776	0.5821	0.5771	0.5771	0.5771	0.5771	0.5771	0.5771	0.5771	
55-64	0.5879	0.5988	0.5982	0.5918	0.5918	0.5918	0.5918	0.5918	0.5918	0.5918	
65-74	0.6247	0.6252	0.6179	0.6201	0.6201	0.6201	0.6201	0.6201	0.6201	0.6201	
75+	0.6445	0.6220	0.6302	0.6192	0.6192	0.6192	0.6192	0.6192	0.6192	0.6192	
Total	0.3954	0.4068	0.4106	0.3995	0.4007	0.4046	0.4099	0.4158	0.4229	0.4298	

Figure B-1: City of London, Low Scenario, Housing Headship Rates, 2006 to 2051

Source: 2006 to 2016 derived from Statistics Canada Census of Population data. 2021 to 2051 forecast prepared by Watson & Associates Economists Ltd.

Figure B-2: City of London, Low Scenario, Housing Forecast by Age of Primary Household Maintainer, 2006 to 2051

Ago Cohort		Total Household by Age of Primary Maintainer									
Age Conon	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	
0-14	-	-	-	-	-	-	-	-	-	-	
15-24	8,270	8,245	8,465	7,345	7,520	8,125	8,900	9,820	10,055	9,695	
25-34	23,395	24,920	26,255	28,655	28,055	24,225	24,160	25,875	27,920	30,155	
35-44	29,170	26,100	25,985	29,800	38,635	45,185	43,360	38,485	38,585	40,790	
45-54	31,230	33,190	31,615	29,220	29,040	33,815	43,535	50,865	48,900	43,525	
55-64	22,690	27,540	30,835	32,830	32,375	30,545	30,155	34,955	44,650	51,890	
65-74	15,035	17,300	21,995	26,350	29,510	31,805	31,510	29,910	29,655	34,465	
75+	15,730	16,340	17,995	20,460	25,865	31,530	37,575	42,985	46,345	48,005	
Total	145,520	153,635	163,145	174,660	191,000	205,230	219,195	232,895	246,110	258,525	

Source: 2006 to 2016 derived from Statistics Canada Census of Population data. 2021 to 2051 forecast prepared by Watson & Associates Economists Ltd.



Age Cohort				Househ	old Headshi	p Rates				
Age Conort	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
0-14	-	-	-	-	-	-	-	-	-	-
15-24	0.1465	0.1455	0.1519	0.1443	0.1443	0.1443	0.1443	0.1443	0.1443	0.1443
25-34	0.4408	0.4514	0.4448	0.3852	0.3852	0.3852	0.3852	0.3852	0.3852	0.3852
35-44	0.5297	0.5387	0.5261	0.5144	0.5144	0.5144	0.5144	0.5144	0.5144	0.5144
45-54	0.5759	0.5776	0.5821	0.5771	0.5771	0.5771	0.5771	0.5771	0.5771	0.5771
55-64	0.5879	0.5988	0.5982	0.5918	0.5918	0.5918	0.5918	0.5918	0.5918	0.5918
65-74	0.6247	0.6252	0.6179	0.6201	0.6201	0.6201	0.6201	0.6201	0.6201	0.6201
75+	0.6445	0.6220	0.6302	0.6192	0.6192	0.6192	0.6192	0.6192	0.6192	0.6192
Total	0.3954	0.4068	0.4106	0.3995	0.3993	0.4016	0.4055	0.4102	0.4162	0.4217

Figure B-3: City of London, Medium Scenario, Housing Headship Rates, 2006 to 2051

Source: 2006 to 2016 derived from Statistics Canada Census of Population data. 2021 to 2051 forecast prepared by Watson & Associates Economists Ltd.

Figure B-4: City of London, Medium Scenario, Housing Forecast by Age of Primary Household Maintainer, 2006 to 2051

Ago Cohort		Total Household by Age of Primary Maintainer									
Age Conon	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	
0-14	-	-	-	-	-	-	-	-	-	-	
15-24	8,270	8,245	8,465	7,345	7,645	8,405	9,345	10,480	10,955	10,860	
25-34	23,395	24,920	26,255	28,655	28,490	25,245	25,665	27,810	30,375	33,445	
35-44	29,170	26,100	25,985	29,800	39,145	46,630	45,690	41,600	42,505	45,695	
45-54	31,230	33,190	31,615	29,220	29,100	33,990	44,310	52,665	51,700	47,245	
55-64	22,690	27,540	30,835	32,830	32,485	30,870	30,590	35,465	45,725	53,985	
65-74	15,035	17,300	21,995	26,350	29,545	31,840	31,610	30,185	30,005	34,820	
75+	15,730	16,340	17,995	20,460	25,940	31,665	37,625	42,750	45,750	46,975	
Total	145,520	153,635	163,145	174,660	192,350	208,645	224,835	240,955	257,015	273,025	

Source: 2006 to 2016 derived from Statistics Canada Census of Population data. 2021 to 2051 forecast prepared by Watson & Associates Economists Ltd.



Ago Cohort				Househ	old Headshi	p Rates				
Age Conort	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
0-14	-	-	-	-	-	-	-	-	-	-
15-24	0.1465	0.1455	0.1519	0.1443	0.1443	0.1443	0.1443	0.1443	0.1443	0.1443
25-34	0.4408	0.4514	0.4448	0.3852	0.3852	0.3852	0.3852	0.3852	0.3852	0.3852
35-44	0.5297	0.5387	0.5261	0.5144	0.5144	0.5144	0.5144	0.5144	0.5144	0.5144
45-54	0.5759	0.5776	0.5821	0.5771	0.5771	0.5771	0.5771	0.5771	0.5771	0.5771
55-64	0.5879	0.5988	0.5982	0.5918	0.5918	0.5918	0.5918	0.5918	0.5918	0.5918
65-74	0.6247	0.6252	0.6179	0.6201	0.6201	0.6201	0.6201	0.6201	0.6201	0.6201
75+	0.6445	0.6220	0.6302	0.6192	0.6192	0.6192	0.6192	0.6192	0.6192	0.6192
Total	0.3954	0.4068	0.4106	0.3995	0.3978	0.3981	0.4004	0.4042	0.4099	0.4154

Figure B-5: City of London, High Scenario, Housing Headship Rates, 2006 to 2051

Source: 2006 to 2016 derived from Statistics Canada Census of Population data. 2021 to 2051 forecast prepared by Watson & Associates Economists Ltd.

Figure B-6: City of London, High Scenario, Housing Forecast by Age of Primary Household Maintainer, 2006 to 2051

Ago Cohort		Total Household by Age of Primary Maintainer									
Age Conon	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051	
0-14	-	-	-	-	-	-	-	-	-	-	
15-24	8,270	8,245	8,465	7,345	7,780	8,755	9,880	11,245	11,955	12,020	
25-34	23,395	24,920	26,255	28,655	28,985	26,500	27,505	30,060	32,960	36,485	
35-44	29,170	26,100	25,985	29,800	39,715	48,380	48,545	45,255	46,735	50,275	
45-54	31,230	33,190	31,615	29,220	29,170	34,205	45,205	54,830	55,050	51,450	
55-64	22,690	27,540	30,835	32,830	32,605	31,265	31,130	36,055	46,885	56,290	
65-74	15,035	17,300	21,995	26,350	29,580	31,885	31,725	30,510	30,425	35,200	
75+	15,730	16,340	17,995	20,460	26,025	31,840	37,690	42,460	45,020	45,770	
Total	145,520	153,635	163,145	174,660	193,860	212,830	231,680	250,415	269,030	287,490	

Source: 2006 to 2016 derived from Statistics Canada Census of Population data. 2021 to 2051 forecast prepared by Watson & Associates Economists Ltd.



Appendix C City of London Housing Propensity Analysis

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Appendix C: City of London Housing Propensity Analysis – Medium Scenario

C-1 City of London Long-Term Housing Growth Outlook by Structure Type

C-1.1 Approach

The City of London housing forecast by structure type has been further examined using a customized housing forecast modelling framework, which assesses future trends in age structure and housing structure type (i.e., single and semi-detached, townhouses and apartments) over the 2021 to 2051 planning horizon. The approach encompasses the following steps and is summarized in Figure C-1.







C-1.2 Housing Forecast by Population Major Age Group, 2021 to 2051

As discussed in Chapter 4, the City of London is anticipated to experience strong housing growth over the long term. The 2021 to 2051 Medium (Reference) Scenario housing forecast by age group (age of primary household maintainer) is summarized in Figure B-4. Over the 2021 to 2051 planning horizon, the City of London housing stock is forecast to increase by approximately 98,400 households. The largest share of housing growth is anticipated to be generated from the 75+ age group (27% of total housing growth), largely driven by the aging the City's Baby Boomer population base. Further details regarding the City's housing forecast by structure type and tenure are provided in Appendix C, Section C-2. Key observations from this analysis are summarized below:

Ago Cohort	Ηοι	iseholds
Age Conort	Total	Share (%)
Under 25	3,500	4%
25-34	4,800	5%
35-44	15,900	16%
45-54	18,000	18%
55-64	21,200	22%
65-74	8,500	9%
75+	26,500	27%
Total	98,400	100%

Figure C-2:	City of London, 2021 to 2051 Housing	Forecast
	by Age Group and Housing Type	

Note: Figures may not add precisely due to rounding. Source: Watson & Associates Economists Ltd.

C-1.3 City of London Housing Forecast by Structure Type, 2021 to 2051

Figures C-3 to C-5 summarize the Medium Scenario housing forecast for the City of London from 2021 to 2051 by population age group and structure type for Options 1, 2, and 3, respectively (refer to section C-2 in Appendix C for further details). Under each of the Options, trends in housing demand by age a household maintainer are similar. Between Options 1 to 3, demand for medium- and high-density housing is anticipated to moderately increase across all age groups. Key observations include:

• Young adults (34 years of age and under) are anticipated to comprise a large share of the relative demand for high-density housing forms;



- Low-density housing demand is anticipated to be strongest across all housing options for adults between 45 and 75+ years of age;
- The aging of the City's population is anticipated to place increasing demand on the need for a range of new housing options by type and built form, largely geared towards condominiums, rental apartments, senior citizens' housing, affordable housing and social housing products.

Figure C-3: City of London, Medium Scenario, Option 1 – 40% Intensification Housing Forecast by Structure Type by Age Group, 2021 to 2051



¹ Low density represents singles and semi-detached.

² Medium density includes townhouses and apartments in duplexes.

³ High density includes includes bachelor, 1-bedroom, and 2-bedroom+ apartments.

Secondary units are embedded within the categories above.



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¹ Low density represents singles and semi-detached.

² Medium density includes townhouses and apartments in duplexes.

³ High density includes bachelor, 1-bedroom, and 2-bedroom+ apartments.

Secondary units are embedded within the categories above.

Source: Watson & Associates Economists Ltd.





¹ Low density represents singles and semi-detached.

² Medium density includes townhouses and apartments in duplexes.

³ High density includes bachelor, 1-bedroom, and 2-bedroom+ apartments.

Secondary units are embedded within the categories above.



C-1.4 Rental Housing Outlook

The availability of rental housing is a key factor in attracting and retaining people and businesses to a community. As previously noted, steady market demand for rental housing in the City of London across all age groups will continue to be driven by a number of factors, including population growth driven by immigration (including non-permanent residents (NPR)), the erosion in housing ownership affordability, changing demographics (e.g., aging population) and lifestyle preferences. Between 2021 and 2051, rental housing is anticipated to represent 46% of the City's total housing growth. The City's current rental housing stock is highly concentrated by high-density households. This trend is anticipated to remain over the 2021 to 2051 planning horizon. Given the significant share of forecast rental to total housing growth and the strong propensity of rental housing towards high-density households, the influence of rental housing demand is important to consider when determining total housing demand by structure type over the forecast period.

This section provides a 30-year (2021 to 2051) total rental housing needs forecast for the City of London within the context of historical trends between 1996 and 2001. The City of London rental housing needs analysis has been informed by historical regional housing propensity (demand) rates, anticipated growth by age cohort, household formation patterns, and anticipated trends in household income.

C-1.5 Overview of the City of London Rental Market

The City of London has approximately 73,100 renter households as of 2021. The housing rental market can be characterized by both a primary and secondary market as follows:

- **Primary rental market** Canadian Mortgage and Housing Corporation (CMHC) identifies the primary rental market as structures that have at least three rental units. These properties are typically operated by an owner, manager, or building superintendent.
- Secondary rental market CMHC identifies rented condominiums, subsidized rental housing, and rentals in structures of less than three units as part of the secondary rental market. In fact, all rentals except privately initiated, purpose-built rental structures of three units or more are included in the secondary rental market.



As of 2021, the City of London rental market has approximately 65,070 units, which comprise approximately 47,640 (65%) units in the primary rental market and 25,460 (35%) units in the secondary rental market.^[1] For comparison, approximately 43% of renter households are accommodated in primary rental units at the province-wide level.

The rental vacancy rate for purpose-built rental housing in the City of London is currently at 1.9% (compared to the provincial average of 3.4%), indicative of a very tight market in purpose-built rentals.

Over the 2006 to 2021 period, renter household growth was accommodated in a range of building typologies including 54% in high-density units, 20% in medium-density units and 26% in low-density units. Both purpose-built and condominium units in the City being rented to tenants are anticipated to continue to be an important contributor to the rental market.

Achieving a stronger rate of rental housing growth in the City of London to meet anticipated needs will require that a steady supply of new rental housing opportunities is provided across both the primary and secondary rental markets. While the secondary market continues to be an important supplier of rental housing, it is recognized that increasing the supply of rental housing in the market will likely require greater participation by the private-sector development community and non-profit organizations to construct purpose-built rental housing.

Purpose-built rentals offer key advantages over units in the secondary market. Unlike the secondary rental market, the primary rental market is not subject to broader market fluctuations and variability in housing tenure. This provides for greater housing security as individual tenants have guarantees on longer-term rental accommodation. Purposebuilt units also tend to have lower market rents than comparable secondary market units and offer opportunities to incorporate non-market units in the housing mix. Finally, purpose-built developments are often designed with amenities oriented to renter households.

^[1] The total rental housing supply includes primary rental market of 47,640 units (based on the rental universe from CMHC data for City of London. The secondary market is estimated based on the remaining units (renter households less CMHC primary rental total).



C-1.6 How is the Rental Market Evolving?

As illustrated in Figure C-7, between 2006 and 2021, propensity rates for rental housing in the City of London increased for every age group except the 75+ cohort. Propensity rates in 2021 for rental housing are highest for households maintained by those under the age of 25 (88%) and are generally lowest for households maintained by those between 55 and 74 years of age (31% to 32%).



Figure C-7: City of London, Rental Housing Propensity Rates, 2006 to 2021

As illustrated in Figure C-8, rental housing propensity rates in the City of London are expected to moderately increase over the forecast period from 42% in 2021 to 44% in 2051. This assumption builds on broader regional growth trends in the rental market as well as the demographic and socio-economic trends previously discussed for the City of London in Chapter 4 of this summary report.

Source: Derived from Statistics Canada Census data, 2006 to 2021, Watson & Associates Economists Ltd.





Figure C-8: City of London, Rental Housing Propensity Rates, 1996 to 2051



C-2 Detailed Propensity Analysis: Total, Total Housing from 1996 to 2051 by Age-Group and Housing Structure Type

Tables C-9 through C-11 provide a summary of age-specific housing propensity by structure type building on the Medium Scenario analysis provided in Appendix C-1.



Table C-9: Medium Scenario, Option 1 – 40% Intensification City of London, Housing Forecast by Age Group and Housing Type, 1996 to 2051

			Total				
Age Cohort				Year			
	1996	2001	2006	2011	2016	2021	2051
Under 25	7,330	8,305	8,270	8,245	8,465	7,345	10,860
25-34	28,155	23,785	23,395	24,920	26,255	28,655	33,445
35-44	29,705	30,975	29,170	26,100	25,985	29,800	45,695
45-54	23,140	28,230	31,230	33,190	31,615	29,220	47,245
55-64	15,380	17,940	22,690	27,540	30,835	32,830	53,985
65-74	14,835	14,610	15,035	17,300	21,995	26,350	34,820
75+	11,195	13,920	15,730	16,340	17,995	20,460	46,975
Total	129,740	137,765	145,520	153,635	163,145	174,660	273,025

Low Density

	Year							
Age Cohort								
	1996	2001	2006	2011	2016	2021	2051	
Under 25	915	1,185	1,120	1,310	1,195	1,455	1,575	
25-34	11,195	9,580	9,075	10,185	9,975	10,015	10,530	
35-44	17,840	18,585	17,525	15,760	15,295	16,615	19,455	
45-54	15,100	18,145	19,745	20,890	19,890	18,260	24,750	
55-64	10,275	11,710	14,040	17,260	18,920	19,950	28,810	
65-74	9,030	8,865	8,875	10,145	12,770	15,160	18,710	
75+	5,365	7,010	7,790	8,505	9,325	10,205	17,490	
Total	69,720	75,080	78,170	84,055	87,370	91,660	121,325	

Medium Density

Are Cohort		Year							
Age Conort	1996	2001	2006	2011	2016	2021	2051		
Under 25	1,330	1,260	1,550	1,320	1,250	1,115	1,505		
25-34	5,655	4,350	4,570	4,510	4,735	5,175	5,810		
35-44	5,535	5,215	4,855	4,180	4,650	5,250	10,305		
45-54	3,295	4,090	4,760	4,800	4,575	4,680	10,680		
55-64	1,645	2,150	3,380	4,030	4,365	4,640	11,445		
65-74	1,335	1,460	1,900	2,320	3,035	3,725	5,870		
75+	665	1,040	1,810	1,925	2,215	3,100	9,070		
Total	19,460	19,565	22,825	23,085	24,825	27,685	54,690		

High Density

Ago Cobort	Year							
Age Conort	1996	2001	2006	2011	2016	2021	2051	
Under 25	5,085	5,860	5,600	5,615	6,020	4,775	7,780	
25-34	11,305	9,855	9,750	10,225	11,545	13,465	17,100	
35-44	6,330	7,175	6,790	6,160	6,040	7,935	15,930	
45-54	4,745	5,995	6,725	7,500	7,150	6,280	11,815	
55-64	3,460	4,080	5,270	6,250	7,550	8,240	13,735	
65-74	4,470	4,285	4,260	4,835	6,190	7,465	10,240	
75+	5,165	5,870	6,130	5,910	6,455	7,155	20,415	
Total	40,560	43,120	44,525	46,495	50,950	55,315	97,010	



Table C-10: Medium Scenario, Option 1 – 40% Intensification City of London, Annual Housing Forecast Growth Rate by Age Group and Housing Type, 1996 to 2051

Total										
Age Cohort	Period									
	1996-2021	1996-2011	2011-2021	2021-2051						
Under 25	0.0%	0.8%	-1.1%	1.3%						
25-34	0.1%	-0.8%	1.4%	0.5%						
35-44	0.0%	-0.9%	1.3%	1.4%						
45-54	0.9%	2.4%	-1.3%	1.6%						
55-64	3.1%	4.0%	1.8%	1.7%						
65-74	2.3%	1.0%	4.3%	0.9%						
75+	2.4%	2.6%	2.3%	2.8%						
Total	1.2%	1.1%	1.3%	1.5%						

Low Density

	Period									
Age Cohort	1996-2021	1996-2011	2011-2021	2021-2051						
Under 25	1.9%	2.4%	1.1%	0.3%						
25-34	-0.4%	-0.6%	-0.2%	0.2%						
35-44	-0.3%	-0.8%	0.5%	0.5%						
45-54	0.8%	2.2%	-1.3%	1.0%						
55-64	2.7%	3.5%	1.5%	1.2%						
65-74	2.1%	0.8%	4.1%	0.7%						
75+	2.6%	3.1%	1.8%	1.8%						
Total	1.1%	1.3%	0.9%	0.9%						

Medium Density

Ago Cohort	Period								
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051					
Under 25	-0.7%	-0.1%	-1.7%	1.0%					
25-34	-0.4%	-1.5%	1.4%	0.4%					
35-44	-0.2%	-1.9%	2.3%	2.3%					
45-54	1.4%	2.5%	-0.3%	2.8%					
55-64	4.2%	6.2%	1.4%	3.1%					
65-74	4.2%	3.8%	4.8%	1.5%					
75+	6.4%	7.3%	4.9%	3.6%					
Total	1.4%	1.1%	1.8%	2.3%					

High Density

Ago Cobort	Period								
Age conon	1996-2021	1996-2011	2011-2021	2021-2051					
Under 25	-0.3%	0.7%	-1.6%	1.6%					
25-34	0.7%	-0.7%	2.8%	0.8%					
35-44	0.9%	-0.2%	2.6%	2.4%					
45-54	1.1%	3.1%	-1.8%	2.1%					
55-64	3.5%	4.0%	2.8%	1.7%					
65-74	2.1%	0.5%	4.4%	1.1%					
75+	1.3%	0.9%	1.9%	3.6%					
Total	1.2%	0.9%	1.8%	1.9%					



Table C-11: Medium Scenario, Option 1 – 40% Intensification City of London, Housing Propensity Forecast by Age Group and Housing Type, 1996 to 2051

		Year							
Age Cohort	4000	0004		0011	0040	0004	0054		
	1996	2001	2006	2011	2016	2021	2051		
Under 25	12%	14%	14%	16%	14%	20%	15%		
25-34	40%	40%	39%	41%	38%	35%	31%		
35-44	60%	60%	60%	60%	59%	56%	43%		
45-54	65%	64%	63%	63%	63%	62%	52%		
55-64	67%	65%	62%	63%	61%	61%	53%		
65-74	61%	61%	59%	59%	58%	58%	54%		
75+	48%	50%	50%	52%	52%	50%	37%		
Total	54%	54%	54%	55%	54%	52%	44%		

Low Density Propensity (Low Density Households / Total Households)

Medium Density Propensity (Medium Density Households / Total Households)

Ago Cohort	Year							
Age Conort	1996	2001	2006	2011	2016	2021	2051	
Under 25	18%	15%	19%	16%	15%	15%	14%	
25-34	20%	18%	20%	18%	18%	18%	17%	
35-44	19%	17%	17%	16%	18%	18%	23%	
45-54	14%	14%	15%	14%	14%	16%	23%	
55-64	11%	12%	15%	15%	14%	14%	21%	
65-74	9%	10%	13%	13%	14%	14%	17%	
75+	6%	7%	12%	12%	12%	15%	19%	
Total	15%	14%	16%	15%	15%	16%	20%	

High Density Propensity (High Density Households / Total Households)

Ago Cohort		Year							
Age conort	1996	2001	2006	2011	2016	2021	2051		
Under 25	69%	71%	68%	68%	71%	65%	72%		
25-34	40%	41%	42%	41%	44%	47%	51%		
35-44	21%	23%	23%	24%	23%	27%	35%		
45-54	21%	21%	22%	23%	23%	21%	25%		
55-64	22%	23%	23%	23%	24%	25%	25%		
65-74	30%	29%	28%	28%	28%	28%	29%		
75+	46%	42%	39%	36%	36%	35%	43%		
Total	31%	31%	31%	30%	31%	32%	36%		



Table C-12: Medium Scenario, Option 1 – 40% Intensification City of London, Housing Propensity Forecast by Age Group and Housing Type, Annual Percent Point Change 1996 to 2051

	=•							
	Period							
Age Cohort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	0.3%	0.2%	0.4%	-0.2%				
25-34	-0.2%	0.1%	-0.6%	-0.1%				
35-44	-0.2%	0.0%	-0.5%	-0.4%				
45-54	-0.1%	-0.2%	0.0%	-0.3%				
55-64	-0.2%	-0.3%	-0.2%	-0.2%				
65-74	-0.1%	-0.1%	-0.1%	-0.1%				
75+	0.1%	0.3%	-0.2%	-0.4%				
Total	-0.1%	0.1%	-0.2%	-0.3%				

Low Density Propensity

Medium Density Propensity

Aco Cobort	Period							
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	-0.1%	-0.1%	-0.1%	0.0%				
25-34	-0.1%	-0.1%	0.0%	0.0%				
35-44	0.0%	-0.2%	0.2%	0.2%				
45-54	0.1%	0.0%	0.2%	0.2%				
55-64	0.1%	0.3%	0.0%	0.2%				
65-74	0.2%	0.3%	0.1%	0.1%				
75+	0.4%	0.4%	0.3%	0.1%				
Total	0.0%	0.0%	0.1%	0.1%				

High Density Propensity

Ago Cohort	Period							
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	-0.2%	-0.1%	-0.3%	0.2%				
25-34	0.3%	0.1%	0.6%	0.1%				
35-44	0.2%	0.2%	0.3%	0.3%				
45-54	0.0%	0.1%	-0.1%	0.1%				
55-64	0.1%	0.0%	0.2%	0.0%				
65-74	-0.1%	-0.1%	0.0%	0.0%				
75+	-0.4%	-0.7%	-0.1%	0.3%				
Total	0.0%	-0.1%	0.1%	0.1%				



Table C-13: Medium Scenario, Option 2 – 45% Intensification City of London, Housing Forecast by Age Group and Housing Type, 1996 to 2051

Total							
Area Cabart				Year			
Age conon	1996	2001	2006	2011	2016	2021	2051
Under 25	7,330	8,305	8,270	8,245	8,465	7,345	10,860
25-34	28,155	23,785	23,395	24,920	26,255	28,655	33,445
35-44	29,705	30,975	29,170	26,100	25,985	29,800	45,695
45-54	23,140	28,230	31,230	33,190	31,615	29,220	47,245
55-64	15,380	17,940	22,690	27,540	30,835	32,830	53,985
65-74	14,835	14,610	15,035	17,300	21,995	26,350	34,820
75+	11,195	13,920	15,730	16,340	17,995	20,460	46,975
Total	129,740	137,765	145,520	153,635	163,145	174,660	273,025

Low	Density
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	Year							
Age Cohort	1996	2001	2006	2011	2016	2021	2051	
Under 25	915	1,185	1,120	1,310	1,195	1,455	1,515	
25-34	11,195	9,580	9,075	10,185	9,975	10,015	10,225	
35-44	17,840	18,585	17,525	15,760	15,295	16,615	18,830	
45-54	15,100	18,145	19,745	20,890	19,890	18,260	23,975	
55-64	10,275	11,710	14,040	17,260	18,920	19,950	27,940	
65-74	9,030	8,865	8,875	10,145	12,770	15,160	18,180	
75+	5,365	7,010	7,790	8,505	9,325	10,205	16,880	
Total	69,720	75,080	78,170	84,055	87,370	91,660	117,545	

Medium Density

Are Cohort	Year							
Age Conort	1996	2001	2006	2011	2016	2021	2051	
Under 25	1,330	1,260	1,550	1,320	1,250	1,115	1,520	
25-34	5,655	4,350	4,570	4,510	4,735	5,175	5,870	
35-44	5,535	5,215	4,855	4,180	4,650	5,250	10,450	
45-54	3,295	4,090	4,760	4,800	4,575	4,680	10,850	
55-64	1,645	2,150	3,380	4,030	4,365	4,640	11,675	
65-74	1,335	1,460	1,900	2,320	3,035	3,725	5,940	
75+	665	1,040	1,810	1,925	2,215	3,100	9,185	
Total	19,460	19,565	22,825	23,085	24,825	27,685	55,495	

High Density

Ago Cohort	Year						
Age Conort	1996	2001	2006	2011	2016	2021	2051
Under 25	5,085	5,860	5,600	5,615	6,020	4,775	7,825
25-34	11,305	9,855	9,750	10,225	11,545	13,465	17,350
35-44	6,330	7,175	6,790	6,160	6,040	7,935	16,415
45-54	4,745	5,995	6,725	7,500	7,150	6,280	12,420
55-64	3,460	4,080	5,270	6,250	7,550	8,240	14,370
65-74	4,470	4,285	4,260	4,835	6,190	7,465	10,700
75+	5,165	5,870	6,130	5,910	6,455	7,155	20,910
Total	40,560	43,120	44,525	46,495	50,950	55,315	99,985



Table C-14: Medium Scenario, Option 2 – 45% Intensification City of London, Annual Housing Forecast Growth Rate by Age Group and Housing Type, 1996 to 2051

Total										
Age Cohort	Period									
	1996-2021	1996-2011	2011-2021	2021-2051						
Under 25	0.0%	0.8%	-1.1%	1.3%						
25-34	0.1%	-0.8%	1.4%	0.5%						
35-44	0.0%	-0.9%	1.3%	1.4%						
45-54	0.9%	2.4%	-1.3%	1.6%						
55-64	3.1%	4.0%	1.8%	1.7%						
65-74	2.3%	1.0%	4.3%	0.9%						
75+	2.4%	2.6%	2.3%	2.8%						
Total	1.2%	1.1%	1.3%	1.5%						

Low Density

	Period							
Age Cohort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	1.9%	2.4%	1.1%	0.1%				
25-34	-0.4%	-0.6%	-0.2%	0.1%				
35-44	-0.3%	-0.8%	0.5%	0.4%				
45-54	0.8%	2.2%	-1.3%	0.9%				
55-64	2.7%	3.5%	1.5%	1.1%				
65-74	2.1%	0.8%	4.1%	0.6%				
75+	2.6%	3.1%	1.8%	1.7%				
Total	1.1%	1.3%	0.9%	0.8%				

Medium Density

Ago Cohort	Period							
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	-0.7%	-0.1%	-1.7%	1.0%				
25-34	-0.4%	-1.5%	1.4%	0.4%				
35-44	-0.2%	-1.9%	2.3%	2.3%				
45-54	1.4%	2.5%	-0.3%	2.8%				
55-64	4.2%	6.2%	1.4%	3.1%				
65-74	4.2%	3.8%	4.8%	1.6%				
75+	6.4%	7.3%	4.9%	3.7%				
Total	1.4%	1.1%	1.8%	2.3%				

High Density

Age Cohort	Period								
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051					
Under 25	-0.3%	0.7%	-1.6%	1.7%					
25-34	0.7%	-0.7%	2.8%	0.8%					
35-44	0.9%	-0.2%	2.6%	2.5%					
45-54	1.1%	3.1%	-1.8%	2.3%					
55-64	3.5%	4.0%	2.8%	1.9%					
65-74	2.1%	0.5%	4.4%	1.2%					
75+	1.3%	0.9%	1.9%	3.6%					
Total	1.2%	0.9%	1.8%	2.0%					



Table C-15: Medium Scenario, Option 2 – 45% Intensification City of London, Housing Propensity Forecast by Age Group and Housing Type, 1996 to 2051

		Year								
Age Cohort										
	1996	2001	2006	2011	2016	2021	2051			
Under 25	12%	14%	14%	16%	14%	20%	14%			
25-34	40%	40%	39%	41%	38%	35%	31%			
35-44	60%	60%	60%	60%	59%	56%	41%			
45-54	65%	64%	63%	63%	63%	62%	51%			
55-64	67%	65%	62%	63%	61%	61%	52%			
65-74	61%	61%	59%	59%	58%	58%	52%			
75+	48%	50%	50%	52%	52%	50%	36%			
Total	54%	54%	54%	55%	54%	52%	43%			

Low Density Propensity (Low Density Households / Total Households)

Medium Density Propensity (Medium Density Households / Total Households)

Ago Cohort	Year								
Age Conort	1996	2001	2006	2011	2016	2021	2051		
Under 25	18%	15%	19%	16%	15%	15%	14%		
25-34	20%	18%	20%	18%	18%	18%	18%		
35-44	19%	17%	17%	16%	18%	18%	23%		
45-54	14%	14%	15%	14%	14%	16%	23%		
55-64	11%	12%	15%	15%	14%	14%	22%		
65-74	9%	10%	13%	13%	14%	14%	17%		
75+	6%	7%	12%	12%	12%	15%	20%		
Total	15%	14%	16%	15%	15%	16%	20%		

High Density Propensity (High Density Households / Total Households)

Age Cohort	Year								
Age conort	1996	2001	2006	2011	2016	2021	2051		
Under 25	69%	71%	68%	68%	71%	65%	72%		
25-34	40%	41%	42%	41%	44%	47%	52%		
35-44	21%	23%	23%	24%	23%	27%	36%		
45-54	21%	21%	22%	23%	23%	21%	26%		
55-64	22%	23%	23%	23%	24%	25%	27%		
65-74	30%	29%	28%	28%	28%	28%	31%		
75+	46%	42%	39%	36%	36%	35%	45%		
Total	31%	31%	31%	30%	31%	32%	37%		



Table C-16: Medium Scenario, Option 2 – 45% Intensification City of London, Housing Propensity Forecast by Age Group and Housing Type, Annual Percent Point Change 1996 to 2051

	Period							
Age Cohort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	0.3%	0.2%	0.4%	-0.2%				
25-34	-0.2%	0.1%	-0.6%	-0.1%				
35-44	-0.2%	0.0%	-0.5%	-0.5%				
45-54	-0.1%	-0.2%	0.0%	-0.4%				
55-64	-0.2%	-0.3%	-0.2%	-0.3%				
65-74	-0.1%	-0.1%	-0.1%	-0.2%				
75+	0.1%	0.3%	-0.2%	-0.5%				
Total	-0.1%	0.1%	-0.2%	-0.3%				

Medium Density Propensity

Ago Cohort	Period								
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051					
Under 25	-0.1%	-0.1%	-0.1%	0.0%					
25-34	-0.1%	-0.1%	0.0%	0.0%					
35-44	0.0%	-0.2%	0.2%	0.2%					
45-54	0.1%	0.0%	0.2%	0.2%					
55-64	0.1%	0.3%	0.0%	0.2%					
65-74	0.2%	0.3%	0.1%	0.1%					
75+	0.4%	0.4%	0.3%	0.1%					
Total	0.0%	0.0%	0.1%	0.1%					

High Density Propensity

Ago Cohort	Period							
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	-0.2%	-0.1%	-0.3%	0.2%				
25-34	0.3%	0.1%	0.6%	0.2%				
35-44	0.2%	0.2%	0.3%	0.3%				
45-54	0.0%	0.1%	-0.1%	0.2%				
55-64	0.1%	0.0%	0.2%	0.1%				
65-74	-0.1%	-0.1%	0.0%	0.1%				
75+	-0.4%	-0.7%	-0.1%	0.3%				
Total	0.0%	-0.1%	0.1%	0.2%				



Table C-17: Medium Scenario, Option 3 – 50% Intensification City of London, Housing Forecast by Age Group and Housing Type, 1996 to 2051

			Total				
Ago Cohort				Year			
Age Collon	1996	2001	2006	2011	2016	2021	2051
Under 25	7,330	8,305	8,270	8,245	8,465	7,345	10,860
25-34	28,155	23,785	23,395	24,920	26,255	28,655	33,445
35-44	29,705	30,975	29,170	26,100	25,985	29,800	45,695
45-54	23,140	28,230	31,230	33,190	31,615	29,220	47,245
55-64	15,380	17,940	22,690	27,540	30,835	32,830	53,985
65-74	14,835	14,610	15,035	17,300	21,995	26,350	34,820
75+	11,195	13,920	15,730	16,340	17,995	20,460	46,975
Total	129,740	137,765	145,520	153,635	163,145	174,660	273,025

Low	Density
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	Year								
Age Cohort									
	1996	2001	2006	2011	2016	2021	2051		
Under 25	915	1,185	1,120	1,310	1,195	1,455	1,495		
25-34	11,195	9,580	9,075	10,185	9,975	10,015	10,175		
35-44	17,840	18,585	17,525	15,760	15,295	16,615	18,190		
45-54	15,100	18,145	19,745	20,890	19,890	18,260	23,185		
55-64	10,275	11,710	14,040	17,260	18,920	19,950	27,060		
65-74	9,030	8,865	8,875	10,145	12,770	15,160	17,635		
75+	5,365	7,010	7,790	8,505	9,325	10,205	16,260		
Total	69,720	75,080	78,170	84,055	87,370	91,660	114,005		

Medium Density

Are Cohort	Year							
Age Conort	1996	2001	2006	2011	2016	2021	2051	
Under 25	1,330	1,260	1,550	1,320	1,250	1,115	1,450	
25-34	5,655	4,350	4,570	4,510	4,735	5,175	5,795	
35-44	5,535	5,215	4,855	4,180	4,650	5,250	10,685	
45-54	3,295	4,090	4,760	4,800	4,575	4,680	11,115	
55-64	1,645	2,150	3,380	4,030	4,365	4,640	12,010	
65-74	1,335	1,460	1,900	2,320	3,035	3,725	6,065	
75+	665	1,040	1,810	1,925	2,215	3,100	9,375	
Total	19,460	19,565	22,825	23,085	24,825	27,685	56,475	

High Density

Ago Cohort	Year							
Age conon	1996	2001	2006	2011	2016	2021	2051	
Under 25	5,085	5,860	5,600	5,615	6,020	4,775	7,910	
25-34	11,305	9,855	9,750	10,225	11,545	13,465	17,475	
35-44	6,330	7,175	6,790	6,160	6,040	7,935	16,820	
45-54	4,745	5,995	6,725	7,500	7,150	6,280	12,945	
55-64	3,460	4,080	5,270	6,250	7,550	8,240	14,915	
65-74	4,470	4,285	4,260	4,835	6,190	7,465	11,120	
75+	5,165	5,870	6,130	5,910	6,455	7,155	21,340	
Total	40,560	43,120	44,525	46,495	50,950	55,315	102,545	



Table C-18: Medium Scenario, Option 3 – 50% Intensification City of London, Annual Housing Forecast Growth Rate by Age Group and Housing Type, 1996 to 2051

Total									
Ago Cohort	Period								
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051					
Under 25	0.0%	0.8%	-1.1%	1.3%					
25-34	0.1%	-0.8%	1.4%	0.5%					
35-44	0.0%	-0.9%	1.3%	1.4%					
45-54	0.9%	2.4%	-1.3%	1.6%					
55-64	3.1%	4.0%	1.8%	1.7%					
65-74	2.3%	1.0%	4.3%	0.9%					
75+	2.4%	2.6%	2.3%	2.8%					
Total	1.2%	1.1%	1.3%	1.5%					

Low Density

	Period								
Age Cohort	1996-2021	1996-2011	2011-2021	2021-2051					
Under 25	1.9%	2.4%	1.1%	0.1%					
25-34	-0.4%	-0.6%	-0.2%	0.1%					
35-44	-0.3%	-0.8%	0.5%	0.3%					
45-54	0.8%	2.2%	-1.3%	0.8%					
55-64	2.7%	3.5%	1.5%	1.0%					
65-74	2.1%	0.8%	4.1%	0.5%					
75+	2.6%	3.1%	1.8%	1.6%					
Total	1.1%	1.3%	0.9%	0.7%					

Medium Density

Ago Cobort	Period							
Age Conon	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	-0.7%	-0.1%	-1.7%	0.9%				
25-34	-0.4%	-1.5%	1.4%	0.4%				
35-44	-0.2%	-1.9%	2.3%	2.4%				
45-54	1.4%	2.5%	-0.3%	2.9%				
55-64	4.2%	6.2%	1.4%	3.2%				
65-74	4.2%	3.8%	4.8%	1.6%				
75+	6.4%	7.3%	4.9%	3.8%				
Total	1.4%	1.1%	1.8%	2.4%				

High Density

Ago Cobort	Period							
Age conort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	-0.3%	0.7%	-1.6%	1.7%				
25-34	0.7%	-0.7%	2.8%	0.9%				
35-44	0.9%	-0.2%	2.6%	2.5%				
45-54	1.1%	3.1%	-1.8%	2.4%				
55-64	3.5%	4.0%	2.8%	2.0%				
65-74	2.1%	0.5%	4.4%	1.3%				
75+	1.3%	0.9%	1.9%	3.7%				
Total	1.2%	0.9%	1.8%	2.1%				



Table-C-19: Medium Scenario, Option 3 – 50% Intensification City of London, Housing Propensity Forecast by Age Group and Housing Type, 1996 to 2051

	Year									
Age Cohort										
	1996	2001	2006	2011	2016	2021	2051			
Under 25	12%	14%	14%	16%	14%	20%	14%			
25-34	40%	40%	39%	41%	38%	35%	30%			
35-44	60%	60%	60%	60%	59%	56%	40%			
45-54	65%	64%	63%	63%	63%	62%	49%			
55-64	67%	65%	62%	63%	61%	61%	50%			
65-74	61%	61%	59%	59%	58%	58%	51%			
75+	48%	50%	50%	52%	52%	50%	35%			
Total	54%	54%	54%	55%	54%	52%	42%			

Low Density Propensity (Low Density Households / Total Households)

Medium Density Propensity (Medium Density Households / Total Households)

Ago Cobort		Year									
Age Conon	1996	2001	2006	2011	2016	2021	2051				
Under 25	18%	15%	19%	16%	15%	15%	13%				
25-34	20%	18%	20%	18%	18%	18%	17%				
35-44	19%	17%	17%	16%	18%	18%	23%				
45-54	14%	14%	15%	14%	14%	16%	24%				
55-64	11%	12%	15%	15%	14%	14%	22%				
65-74	9%	10%	13%	13%	14%	14%	17%				
75+	6%	7%	12%	12%	12%	15%	20%				
Total	15%	14%	16%	15%	15%	16%	21%				

High Density Propensity (High Density Households / Total Households)

Ago Cohort	Year									
Age conort	1996	2001	2006	2011	2016	2021	2051			
Under 25	69%	71%	68%	68%	71%	65%	73%			
25-34	40%	41%	42%	41%	44%	47%	52%			
35-44	21%	23%	23%	24%	23%	27%	37%			
45-54	21%	21%	22%	23%	23%	21%	27%			
55-64	22%	23%	23%	23%	24%	25%	28%			
65-74	30%	29%	28%	28%	28%	28%	32%			
75+	46%	42%	39%	36%	36%	35%	45%			
Total	31%	31%	31%	30%	31%	32%	38%			



Table C-20: Medium Scenario, Option 3 – 50% Intensification City of London, Housing Propensity Forecast by Age Group and Housing Type, Annual Percent Point Change 1996 to 2051

	Period							
Age Cohort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	0.3%	0.2%	0.4%	-0.2%				
25-34	-0.2%	0.1%	-0.6%	-0.2%				
35-44	-0.2%	0.0%	-0.5%	-0.5%				
45-54	-0.1%	-0.2%	0.0%	-0.4%				
55-64	-0.2%	-0.3%	-0.2%	-0.4%				
65-74	-0.1%	-0.1%	-0.1%	-0.2%				
75+	0.1%	0.3%	-0.2%	-0.5%				
Total	-0.1%	0.1%	-0.2%	-0.4%				

Low Density Propensity

Medium Density Propensity

Aca Cabart	Period							
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	-0.1%	-0.1%	-0.1%	-0.1%				
25-34	-0.1%	-0.1%	0.0%	0.0%				
35-44	0.0%	-0.2%	0.2%	0.2%				
45-54	0.1%	0.0%	0.2%	0.3%				
55-64	0.1%	0.3%	0.0%	0.3%				
65-74	0.2%	0.3%	0.1%	0.1%				
75+	0.4%	0.4%	0.3%	0.2%				
Total	0.0%	0.0%	0.1%	0.2%				

High Density Propensity

Ago Cobort	Period							
Age Conort	1996-2021	1996-2011	2011-2021	2021-2051				
Under 25	-0.2%	-0.1%	-0.3%	0.3%				
25-34	0.3%	0.1%	0.6%	0.2%				
35-44	0.2%	0.2%	0.3%	0.3%				
45-54	0.0%	0.1%	-0.1%	0.2%				
55-64	0.1%	0.0%	0.2%	0.1%				
65-74	-0.1%	-0.1%	0.0%	0.1%				
75+	-0.4%	-0.7%	-0.1%	0.3%				
Total	0.0%	-0.1%	0.1%	0.2%				



Appendix D City of London Residential Forecast

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Figures D-1 through D-3 summarize the City's long-term population and housing forecast at the City-wide level for the Medium Scenario under Growth Options 1 to 3.

Figure D-1: City of London, Population and Census Housing Forecast, 2021 to 2051 Medium Scenario, Option 1: 40% Intensification.

		Denvilation	Denvelation		_	Housing Units			D D	Person Per
	Year	(Including Census Undercount) ¹	Census (Excluding Census undercount)	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	Unit (P.P.U.) with undercount	Units (P.P.U.): without undercount
	Mid-2001	350,000	336,500	74,720	19,570	43,110	370	137,770	2.54	2.44
orical	Mid-2006	368,000	352,400	77,820	22,820	44,520	370	145,520	2.53	2.42
Histo	Mid-2011	377,600	366,200	83,720	23,050	46,560	310	153,640	2.46	2.38
	Mid-2016	397,400	383,800	87,090	24,820	50,920	320	163,150	2.44	2.35
	Mid-2021	437,200	422,300	91,220	27,780	55,350	320	174,660	2.50	2.42
	Mid-2026	481,700	465,300	96,400	31,950	63,680	320	192,350	2.50	2.42
ist	Mid-2031	519,500	501,800	101,930	36,180	70,220	320	208,650	2.49	2.40
orece	Mid-2036	554,500	535,600	107,190	40,550	76,770	320	224,840	2.47	2.38
Ű.	Mid-2041	587,500	567,400	112,150	45,070	83,410	320	240,960	2.44	2.35
	Mid-2046	617,500	596,400	116,780	49,770	90,140	320	257,020	2.40	2.32
	Mid-2051	647,500	625,400	121,010	54,690	97,010	320	273,030	2.37	2.29
	2001-2006	18,000	15,900	3,100	3,250	1,410	0	7,750		
	2006-2011	9,600	13,800	5,900	230	2,040	-60	8,120		
	2011-2016	19,800	17,600	3,370	1,770	4,360	10	9,510		
	2016-2021	39,800	38,500	4,130	2,960	4,430	0	11,510		
	2021-2026	44,500	43,000	5,180	4,170	8,330	0	17,690		
_	2026-2031	37,800	36,500	5,530	4,230	6,540	0	16,300		
nenta	2021-2036	35,000	33,800	5,260	4,370	6,550	0	16,190		
ncrer	2036-2041	33,000	31,800	4,960	4,520	6,640	0	16,120		
_	2041-2046	30,000	29,000	4,630	4,700	6,730	0	16,060		
	2046-2051	30,000	29,000	4,230	4,920	6,870	0	16,010		
	2001-2021	87,200	85,800	16,500	8,210	12,240	-50	36,890		
	2021-2051	210,300	203,100	29,790	26,910	41,660	0	98,370		
	2001-2021 Housing Mix			45%	22%	33%	0%	100%		
	2021-2051 Housing Mix			30%	27%	42%	0%	100%		
	2021 Housing Mix			54%	15%	30%	0%	100%		
	2051 Housing Mix			47%	19%	35%	0%	100%		

¹ Census undercount estimated at approximately 3.5%. Note population including the undercount has been rounded. Secondary units in 2016 are embedded in the Census housing categories, and 2016 to 2051 secondary unit growth is captured as high density for the purposes of this table.

² Includes townhouses.

³ Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Figures may not add precisely due to rounding.

Source: Watson & Associates Economists Ltd.

Watson & Associates Economists Ltd.



						Housing Units				Persons Per
	Year	Population (Including Census undercount) ¹	Population (Excluding Census undercount)	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	Persons Per Unit (P.P.U.) with undercount	Unit (P.P.U.): without undercount
	Mid-2001	350,000	336,500	74,720	19,570	43,110	370	137,770	2.54	2.44
orical	Mid-2006	368,000	352,400	77,820	22,820	44,520	370	145,520	2.53	2.42
Histo	Mid-2011	377,600	366,200	83,720	23,050	46,560	310	153,640	2.46	2.38
	Mid-2016	397,400	383,800	87,090	24,820	50,920	320	163,150	2.44	2.35
	Mid-2021	437,200	422,300	91,220	27,780	55,350	320	174,660	2.50	2.42
	Mid-2026	481,700	465,300	96,010	32,050	63,980	320	192,350	2.50	2.42
st	Mid-2031	519,500	501,800	100,900	36,360	71,070	320	208,640	2.49	2.40
oreca	Mid-2036	554,500	535,600	105,590	40,820	78,110	320	224,830	2.47	2.38
ŭ	Mid-2041	587,500	567,400	109,940	45,480	85,210	320	240,950	2.44	2.35
	Mid-2046	617,500	596,400	113,880	50,360	92,460	320	257,010	2.40	2.32
	Mid-2051	647,500	625,400	117,320	55,440	99,940	320	273,030	2.37	2.29
	2001-2006	18,000	15,900	3,100	3,250	1,410	0	7,750		
	2006-2011	9,600	13,800	5,900	230	2,040	-60	8,120		
	2011-2016	19,800	17,600	3,370	1,770	4,360	10	9,510		
	2016-2021	39,800	38,500	4,130	2,960	4,430	0	11,510		
	2021-2026	44,500	43,000	4,790	4,270	8,630	0	17,690		
_	2026-2031	37,800	36,500	4,890	4,310	7,090	0	16,290		
nenta	2021-2036	35,000	33,800	4,690	4,460	7,040	0	16,190		
ncren	2036-2041	33,000	31,800	4,350	4,660	7,100	0	16,120		
-	2041-2046	30,000	29,000	3,940	4,880	7,250	0	16,060		
	2046-2051	30,000	29,000	3,440	5,080	7,480	0	16,020		
	2001-2021	87,200	85,800	16,500	8,210	12,240	-50	36,890		
	2021-2051	210,300	203,100	26,100	27,660	44,590	0	98,370		
	2001-2021 Housing Mix			45%	22%	33%	0%	100%		
	2021-2051 Housing Mix			27%	28%	45%	0%	100%		
	2021 Housing Mix			54%	15%	30%	0%	100%		
	2051 Housing Mix			46%	19%	35%	0%	100%		

Figure D-2: City of London, Population and Census Housing Forecast, 2021 to 2051 Medium Scenario, Option 2: 45% Intensification

¹ Census undercount estimated at approximately 3.5%. Note population including the undercount has been rounded. Secondary units in 2016 are embedded in the Census housing categories, and 2016 to 2051 secondary unit growth is captured as high density for the purposes of this table.

² Includes townhouses.

³ Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Figures may not add precisely due to rounding.



Year		Population (Including Census undercount) ¹	Population (Excluding Census undercount)				Persons Per			
				Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	Persons Per Unit (P.P.U.) with undercount	Unit (P.P.U.): without undercount
	Mid-2001	350,000	336,500	74,720	19,570	43,110	370	137,770	2.54	2.44
Historical	Mid-2006	368,000	352,400	77,820	22,820	44,520	370	145,520	2.53	2.42
	Mid-2011	377,600	366,200	83,720	23,050	46,560	310	153,640	2.46	2.38
	Mid-2016	397,400	383,800	87,090	24,820	50,920	320	163,150	2.44	2.35
	Mid-2021	437,200	422,300	91,220	27,780	55,350	320	174,660	2.50	2.42
	Mid-2026	481,700	465,300	95,810	32,050	64,180	320	192,350	2.50	2.42
st	Mid-2031	519,500	501,800	100,290	36,440	71,590	320	208,650	2.49	2.40
Foreca	Mid-2036	554,500	535,600	104,340	41,060	79,120	320	224,840	2.47	2.38
	Mid-2041	587,500	567,400	107,950	45,890	86,790	320	240,960	2.44	2.35
	Mid-2046	617,500	596,400	111,060	51,020	94,610	320	257,020	2.40	2.32
	Mid-2051	647,500	625,400	113,690	56,470	102,550	320	273,030	2.37	2.29
	2001-2006	18,000	15,900	3,100	3,250	1,410	0	7,750		
	2006-2011	9,600	13,800	5,900	230	2,040	-60	8,120		
	2011-2016	19,800	17,600	3,370	1,770	4,360	10	9,510		
	2016-2021	39,800	38,500	4,130	2,960	4,430	0	11,510		
	2021-2026	44,500	43,000	4,590	4,270	8,830	0	17,690		
-	2026-2031	37,800	36,500	4,480	4,390	7,410	0	16,300		
nenta	2021-2036	35,000	33,800	4,050	4,620	7,530	0	16,190		
Incren	2036-2041	33,000	31,800	3,610	4,830	7,670	0	16,120		
	2041-2046	30,000	29,000	3,110	5,130	7,820	0	16,060		
	2046-2051	30,000	29,000	2,630	5,450	7,940	0	16,010		
	2001-2021	87,200	85,800	16,500	8,210	12,240	-50	36,890		
	2021-2051	210,300	203,100	22,470	28,690	47,200	0	98,370		
	2001-2021 Housing Mix			45%	22%	33%	0%	100%		
	2021-2051 Housing Mix			23%	29%	48%	0%	100%		
	2021 Housing Mix			54%	15%	30%	0%	100%		
	2051 Housing Mix			45%	19%	36%	0%	100%		

Figure D-3: City of London, Population and Census Housing Forecast, 2021 to 2051 Medium Scenario, Option 3: 50% Intensification

¹ Census undercount estimated at approximately 3.5%. Note population including the undercount has been rounded. Secondary units in 2016 are embedded in the Census housing categories, and 2016 to 2051 secondary unit growth is captured as high density for the purposes of this table.

² Includes townhouses.

³ Includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Figures may not add precisely due to rounding.



Figure D-4 provides compared forecast housing trends under each of the growth options to historical building permit activity between 2017 and 2021. It is recognized that a longer historical time period is required to develop a more accurate understanding of housing demand by planning policy area; however, it is noted that the City's B.A.B., as summarized below, was last delineated in 2016. Accordingly, the historical time period below appropriately aligns with the time period in which the B.A.B. was last updated.

	City of London Total Housing Unit Growth			Built-Area Boundary Housing Unit Growth			Designated Greenfield Area Housing Unit Growth				Rural Area Housing Unit Growth					
Housing Forecast Scenario	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing
Total Housing Unit Growth (2021 to 2051)																
Growth Option 1 - 40% Intensification	29,640	26,910	41,660	98,370	2,150	9,810	27,290	39,250	27,490	17,100	14,380	58,970	150	0	0	150
Growth Option 2 - 45% Intensification	26,100	27,670	44,600	98,370	2,150	10,290	32,300	44,740	23,800	17,380	12,300	53,480	150	0	0	150
Growth Option 3 - 50% Intensification	22,470	28,700	47,200	98,370	2,150	11,050	37,020	50,220	20,170	17,650	10,180	48,000	150	0	0	150
			Ho	ousing Gro	owth Share	es by Dens	sity Type (2021 to 20	51)				-			
Growth Option 1 - 40% Intensification	30%	27%	42%	100%	5%	25%	70%	100%	47%	29%	24%	100%	100%	0%	0%	100%
Growth Option 2 - 45% Intensification	27%	28%	45%	100%	5%	23%	72%	100%	45%	33%	23%	100%	100%	0%	0%	100%
Growth Option 3 - 50% Intensification	23%	29%	48%	100%	4%	22%	74%	100%	42%	37%	21%	100%	100%	0%	0%	100%
				Total H	Iousing U	nit Growth	n (2017 to	2051)					Inte	nsificatior	% (2017-2	051)
Building Permit Activity (2017 to 2020)				11,310				4,620				6,690		4	1%	
Growth Option 1 - 40% Intensification (2017-2051)				109,670				43,870				65,660		40)%	-
Growth Option 2 - 45% Intensification (2017-2051)				109,670				49,360				60,170		45	5%	-
Growth Option 3 - 50% Intensification (2017-2051)				109,670				54,840				54,690		50)%	

Figure D-4: City of Historical Building Permit Activity (2017 to 2021) vs. Medium Scenario Forecast Housing Growth (2021 to 2051)

Low density includes singles and semi-detached.

Medium density includes townhouses.

High density includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Figures may not add precisely due to rounding.



Figures D-5 to D-7 provides compared forecast housing trends under each of the growth options to historical building permit activity between 2006 and 2021.

Figure D-5: City of Historical Building Permit Activity (2006 to 2021) vs. Forecast Housing Growth (2021 to 2051) Medium Scenario, Option 1: 40% Intensification



Annual Average Units	2006-2010	2011-2015	2016-2021	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
Low	1,160	805	916	1,037	1,105	1,052	993	925	845
Medium	227	300	670	834	847	874	903	941	983
High	875	559	1,514	1,667	1,307	1,311	1,328	1,346	1,374
Total	2,263	1,664	3,100	3,538	3,259	3,238	3,224	3,212	3,202

Low density includes singles and semi-detached.

Medium density includes townhouses.

High density includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Figures may not add precisely due to rounding. Forecast includes historical 2021 building permits.

Source: Historical building permit data provided by the City of London, forecast by Watson & Associates Economists Ltd.






Annual Average Units	2006-2010	2011-2015	2016-2021	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
Low	1,160	805	916	959	978	939	870	787	687
Medium	227	300	670	854	864	890	934	975	1,017
High	875	559	1,514	1,725	1,418	1,409	1,420	1,450	1,498
Total	2,263	1,664	3,100	3,538	3,259	3,238	3,224	3,212	3,202

Low density includes singles and semi-detached.

Medium density includes townhouses.

High density includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Figures may not add precisely due to rounding. Forecast includes historical 2021 building permits.

Source: Historical building permit data provided by the City of London, forecast by Watson & Associates Economists Ltd.



Figure D-7: City of Historical Building Permit Activity (2006 to 2021) vs. Forecast Housing Growth (2021 to 2051) Medium Scenario, Option 3: 50% Intensification



Annual Average Units	2006-2010	2011-2015	2016-2021	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050
Low	1,160	805	916	919	896	810	722	623	525
Medium	227	300	670	854	880	923	967	1,025	1,090
High	875	559	1,514	1,765	1,483	1,506	1,535	1,564	1,587
Total	2,263	1,664	3,100	3,538	3,259	3,238	3,224	3,212	3,202

Low density includes singles and semi-detached.

Medium density includes townhouses.

High density includes bachelor, 1-bedroom and 2-bedroom+ apartments.

Note: Figures may not add precisely due to rounding. Forecast includes historical 2021 building permits.

Source: Historical building permit data provided by the City of London, forecast by Watson & Associates Economists Ltd.



Figures D-8 and D-9 provide compared forecast housing trends for the Low and High Scenarios under each of the growth options to historical building permit activity between 2017 and 2021.

City of London Total Housing Unit Built-Area Boundary Housing Unit Designated Greenfield Area Housing Rural Area Housing Unit Growth Growth (2021 to 2051) Growth (2021 to 2051) Unit Growth (2021 to 2051) (2021 to 2051) **Housing Forecast Scenario** Medium High Medium High Medium High Medium High Low Low Low Low Total Total Total Total Density Housing Total Housing Unit Growth (2021 to 2051) Growth Option 1 - 40% Intensification 25,590 22,940 35,180 83,870 2,150 8,360 22,940 33,450 23,440 14,580 12,250 50,270 150 150 Growth Option 2 - 45% Intensification 22.550 23,580 37,740 83,870 2,150 8,790 27,270 38,210 20,250 14,790 10,470 45,510 150 0 0 150 Growth Option 3 - 50% Intensification 19,420 24,440 40,000 83,870 2,150 9,450 31,370 42,970 17,120 14,990 8,640 40,750 150 0 0 150 Housing Growth Shares by Density Type (2021 to 2051 100% 69% 100% 47% 29% 24% 100% 0% 0% 100% Growth Option 1 - 40% Intensification 31% 27% 42% 100% 6% 25% Growth Option 2 - 45% Intensification 27% 28% 45% 100% 6% 23% 71% 100% 45% 33% 23% 100% 100% 0% 0% 100% Growth Option 3 - 50% Intensification 23% 29% 48% 100% 5% 22% 73% 100% 42% 37% 21% 100% 100% 0% 0% 100% Total Housing Unit Growth (2017 to 2051) Intensification % (2017-2051) Building Permit Activity (2017 to 2020) 11,310 4,620 6,690 41% Growth Option 1 - 40% Intensification (2017-2051) 95.170 38.070 56.960 40% Growth Option 2 - 45% Intensification (2017-2051) 95,170 42,830 52,200 45% Growth Option 3 - 50% Intensification (2017-2051) 95,170 47,590 47,440 50%

Figure D-8: City of Historical Building Permit Activity (2017 to 2021) Vs Low Scenario Forecast Housing Growth (2021 to 2051)

Note: Figures may not sum precisely due to rounding.

Source: Building permit activity derived from City of London building permits data, and 2021 to 2051 forecast by Watson & Associates Economists Ltd.



Figure D-9: City of Historical Building Permit Activity (2017 to 2021) Vs High Scenario Forecast Housing Growth (2021 to 2051)

	City of	London To Growth (20	otal Housi 21 to 2051	ng Unit)	Built-A	rea Bound Growth (20	ary Housi 21 to 2051	ng Unit I)	Designa Uni	ted Greenf it Growth (ield Area 2021 to 20	Housing 151)	Rural <i>i</i>	Rural Area Housing Unit Growth (2021 to 2051) Low Medium High Density Tot Housing Jonsing Housing Housing 150 0 0				
Housing Forecast Scenario	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing	Low Density Housing	Medium Density Housing	High Density Housing	Total Housing		
Total Housing Unit Growth (2021 to 2051)																		
Growth Option 1 - 40% Intensification	33,690	30,880	48,110	112,830	2,150	11,260	31,630	45,040	31,540	19,620	16,480	67,640	150	0	0	150		
Growth Option 2 - 45% Intensification	29,640	31,760	51,440	112,830	2,150	11,790	37,310	51,240	27,340	19,970	14,130	61,440	150	0	0	150		
Growth Option 3 - 50% Intensification	25,510	32,950	54,370	112,830	2,150	12,640	42,660	57,450	23,210	20,310	11,710	55,230	150	0	0	150		
	Ho	ousing Gro	wth Share	es by Dens	sity Type (2	2021 to 20	51)											
Growth Option 1 - 40% Intensification	30%	27%	43%	100%	5%	25%	70%	100%	47%	29%	24%	100%	100%	0%	0%	100%		
Growth Option 2 - 45% Intensification	26%	28%	46%	100%	4%	23%	73%	100%	45%	33%	23%	100%	100%	0%	0%	100%		
Growth Option 3 - 50% Intensification	23%	29%	48%	100%	4%	22%	74%	100%	42%	37%	21%	100%	100%	0%	0%	100%		
				Total I	Housing U	nit Growth	n (2017 to 2	2051)					Inter	nsification	% (2017-2	.051)		
Building Permit Activity (2017 to 2020)				11,310				4,620				6,690		41	1%			
Growth Option 1 - 40% Intensification (2017-2051)				124,140				49,660				74,330		40	1%			
Growth Option 2 - 45% Intensification (2017-2051)				124,140				55,860				68,130		45	j%			
Growth Option 3 - 50% Intensification (2017-2051)				124,140				62,070				61,920		50	1%			

Note: Figures may not sum precisely due to rounding.

Source: Building permit activity derived from City of London building permits data, and 2021 to 2051 forecast by Watson & Associates Economists Ltd.



Figure D-10: City of London, New Unit Persons per Unit by Dwelling Type 2021 Census (25-Year Forecast Average)

	25-Year Fore New Unit Pers	cast Average ons Per Unit ^[1]
Structural Type	Excluding net Census Undercount	Including net Census Undercount ^[2]
Singles & Semi Detached	3.22	3.34
Multiples ^[3]	2.35	2.44
Apartments ^[4]	1.90	1.97

^[1] Persons per unit based on adjusted Statistics Canada Custom 2021 Census database.

^[2] Net Census Undercount estimated at approximately 3.5%.
^[3] Includes townhouses and apartments in duplexes.

^[4] Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

Source: Derived from Statistics Canada Census data, 2006 to 2021, by Watson & Associates Economists Ltd.



Appendix E City of London Non-Residential Forecast



					Activity Rate							Employment			
Period	Population	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	N.F.P.O.W. ¹	Total	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	N.F.P.O.W. ¹	Total
Mid-2006	368,000	0.001	0.027	0.118	0.210	0.128	0.043	0.526	400	9,800	43,300	77,100	47,000	15,900	193,500
Mid-2011	377,600	0.001	0.028	0.103	0.198	0.143	0.045	0.519	400	10,500	39,000	74,900	53,900	17,200	195,900
Mid-2016	397,400	0.001	0.028	0.088	0.194	0.136	0.049	0.496	400	11,300	35,100	77,000	54,200	19,300	197,300
Mid-2021	437,200	0.001	0.030	0.081	0.159	0.131	0.049	0.451	400	13,200	35,300	69,600	57,400	21,400	197,300
Mid-2026	476,700	0.001	0.033	0.080	0.188	0.136	0.050	0.488	400	15,900	38,100	89,500	65,000	23,700	232,700
Mid-2031	507,200	0.001	0.034	0.079	0.189	0.137	0.050	0.489	400	17,200	40,200	95,700	69,400	25,400	248,200
Mid-2036	534,700	0.001	0.034	0.078	0.189	0.137	0.050	0.490	400	18,400	41,900	101,300	73,300	26,900	262,200
Mid-2041	560,100	0.001	0.034	0.078	0.190	0.137	0.051	0.490	400	19,300	43,500	106,400	76,800	28,300	274,700
Mid-2046	581,900	0.001	0.034	0.077	0.190	0.137	0.051	0.490	400	20,000	44,800	110,800	79,800	29,600	285,400
Mid-2051	601,500	0.001	0.034	0.076	0.191	0.137	0.051	0.490	400	20,700	45,800	114,900	82,400	30,700	295,000
	Incremental Change														
2006-2021	69,200	0.000	0.004	-0.037	-0.050	0.003	0.0060	-0.0744	0	3,400	-8,000	-7,500	10,400	5,500	3,800
2021-2051	164,300	0.000	0.004	-0.005	0.032	0.006	0.0020	0.0390	0	7,500	10,500	45,300	25,000	9,300	97,700

Figure E-1: City of London, Employment Forecast, Low Scenario, 2021 to 2051

^[1] Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "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."

Source: Watson & Associates Economists Ltd.

Figure E-2: City of London, Gross Floor Area Forecast by Major Sector, Low Scenario, 2021 to 2051

Sector	Total Employment Growth (2021 to 2051)	Employment Losses Due to COVID-19	Total Employment Growth Net Vacant Space due to COVID- 19 Job Losses (2021 to 2051)	Gross Floor Area Forecast Per Worker (F.S.W.) Assumptions (sq.ft.)	Non-Residential Gross Floor Area Forecast (sq.ft.)	Annual Average Gross Floor Area (sq.ft.)
Industrial	10,550		10,550	1,150	12,132,500	404,400
Commercial/ Population-Related	45,240	-11,040	34,200	370	12,654,000	421,800
Institutional	25,080		25,080	700	17,556,000	585,200
Total	80,870	-11,040	69,830	-	42,342,500	1,411,400



					Activity Rate							Employment			
Period	Population	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	N.F.P.O.W. ¹	Total	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	N.F.P.O.W. ¹	Total
Mid-2006	368,000	0.001	0.027	0.118	0.210	0.128	0.043	0.526	400	9,800	43,300	77,100	47,000	15,900	193,500
Mid-2011	377,600	0.001	0.028	0.103	0.198	0.143	0.045	0.519	400	10,500	39,000	74,900	53,900	17,200	195,900
Mid-2016	397,400	0.001	0.028	0.088	0.194	0.136	0.049	0.496	400	11,300	35,100	77,000	54,200	19,300	197,300
Mid-2021	437,200	0.001	0.030	0.081	0.159	0.131	0.049	0.451	400	13,200	35,300	69,600	57,400	21,400	197,300
Mid-2026	481,700	0.001	0.033	0.080	0.188	0.136	0.050	0.488	400	16,100	38,500	90,500	65,700	24,000	235,100
Mid-2031	519,500	0.001	0.034	0.079	0.189	0.137	0.050	0.489	400	17,600	41,100	98,000	71,100	26,000	254,200
Mid-2036	554,500	0.001	0.034	0.078	0.189	0.137	0.050	0.490	400	19,100	43,500	105,100	76,000	27,900	271,900
Mid-2041	587,500	0.001	0.034	0.078	0.190	0.137	0.051	0.490	400	20,200	45,600	111,600	80,500	29,700	288,100
Mid-2046	617,500	0.001	0.034	0.077	0.190	0.137	0.051	0.490	400	21,300	47,500	117,600	84,600	31,400	302,800
Mid-2051	647,500	0.001	0.034	0.076	0.191	0.137	0.051	0.490	400	22,300	49,300	123,700	88,700	33,100	317,500
	Incremental Change														
2006-2021	69,200	0.000	0.004	-0.037	-0.050	0.003	0.0060	-0.0744	0	3,400	-8,000	-7,500	10,400	5,500	3,800
2021-2051	210,300	0.000	0.004	-0.005	0.032	0.006	0.0020	0.0390	0	9,100	14,000	54,100	31,300	11,700	120,200

Figure E-3: City of London, Employment Forecast, Medium Scenario, 2021 to 2051

^[1] Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "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."

Source: Watson & Associates Economists Ltd.

Figure E-4: City of London, Gross Floor Area Forecast by Major Sector, Medium Scenario, 2021 to 2051

Sector	Total Employment Growth (2021 to 2051)	Employment Losses Due to COVID-19	Total Employment Growth Net Vacant Space due to COVID- 19 Job Losses (2021 to 2051)	Gross Floor Area Forecast Per Worker (F.S.W.) Assumptions (sq.ft.)	Non-Residential Gross Floor Area Forecast (sq.ft.)	Annual Average Gross Floor Area (sq.ft.)
Industrial	14,050		14,050	1,150	16,157,500	538,600
Commercial/ Population-Related	54,020	-11,040	42,980	370	15,890,283	529,700
Institutional	31,390		31,390	700	21,973,000	732,400
Total	99,460	-11,040	88,420	-	54,020,783	1,800,700



					Activity Rate							Employment			
Period	Population	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	N.F.P.O.W. ¹	Total	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	N.F.P.O.W. ¹	Total
Mid-2006	368,000	0.001	0.027	0.118	0.210	0.128	0.043	0.526	400	9,800	43,300	77,100	47,000	15,900	193,500
Mid-2011	377,600	0.001	0.028	0.103	0.198	0.143	0.045	0.519	400	10,500	39,000	74,900	53,900	17,200	195,900
Mid-2016	397,400	0.001	0.028	0.088	0.194	0.136	0.049	0.496	400	11,300	35,100	77,000	54,200	19,300	197,300
Mid-2021	437,200	0.001	0.030	0.081	0.159	0.131	0.049	0.451	400	13,200	35,300	69,600	57,400	21,400	197,300
Mid-2026	487,300	0.001	0.033	0.080	0.188	0.136	0.050	0.488	400	16,300	39,000	91,500	66,400	24,300	237,900
Mid-2031	534,600	0.001	0.034	0.079	0.189	0.137	0.050	0.489	400	18,100	42,300	100,900	73,100	26,800	261,600
Mid-2036	578,600	0.001	0.034	0.078	0.189	0.137	0.050	0.490	400	19,900	45,400	109,600	79,300	29,100	283,700
Mid-2041	619,500	0.001	0.034	0.078	0.190	0.137	0.051	0.490	400	21,300	48,100	117,700	84,900	31,300	303,800
Mid-2046	656,300	0.001	0.034	0.077	0.190	0.137	0.051	0.490	400	22,600	50,500	125,000	90,000	33,300	321,800
Mid-2051	692,100	0.001	0.034	0.076	0.191	0.137	0.051	0.490	400	23,800	52,700	132,200	94,900	35,300	339,300
						Incre	mental Change								
2006-2021	69,200	0.000	0.004	-0.037	-0.050	0.003	0.0060	-0.0744	0	3,400	-8,000	-7,500	10,400	5,500	3,800
2021-2051	254,900	0.000	0.004	-0.005	0.032	0.006	0.0020	0.0389	0	10,600	17,400	62,600	37,500	13,900	142,000

Figure E-5: City of London, Employment Forecast, High Scenario, 2021 to 2051

^[1] Statistics Canada defines no fixed place of work (N.F.P.O.W.) employees as "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."

Source: Watson & Associates Economists Ltd.

Figure E-6: City of London, Gross Floor Area Forecast by Major Sector, High Scenario, 2021 to 2051

Sector	Total Employment Growth (2021 to 2051)	Employment Losses Due to COVID-19	Total Employment Growth Net Vacant Space due to COVID- 19 Job Losses (2021 to 2051)	Gross Floor Area Forecast Per Worker (F.S.W.) Assumptions (sq.ft.)	Non-Residential Gross Floor Area Forecast (sq.ft.)	Annual Average Gross Floor Area (sq.ft.)
Industrial	17,450		17,450	1,150	20,067,500	668,900
Commercial/ Population-Related	62,540	-11,040	51,500	370	19,055,000	635,200
Institutional	37,500		37,500	700	26,250,000	875,000
Total	117,490	-11,040	106,450	-	65,372,500	2,179,100