



2011-2031

# ReThink London Land Needs Background Study



Planning Policy & Programs

Planning Division

City of London



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# 1 INTRODUCTION

Beginning in 2011, the current 5 year Official Plan review process commenced. As part of the Official Plan process, municipalities may undertake a review of their land needs to ensure that sufficient lands are identified to accommodate urban growth through the planning period. Through the broader ReThink London consultation process with various stakeholder groups, including the Planning and Environment Committee, evaluating future Land Needs was identified as one of the issues for further review.

The 2011-2031 Land Needs Background Study is prepared as a reference document to the City of London's new Official Plan (2011) that will arise from the Rethink London process. The purpose of the Land Needs Study is to determine whether a justification exists under the provisions of the Provincial Policy Statement, 2005 (PPS) and the city's Official Plan to add additional land into the designated urban growth area to accommodate anticipated growth in population, housing and employment for the City of London.

There will be additional opportunities to review land requirements to accommodate development in future years. In accordance with the provisions of the Planning Act, London's Official Plan is to be reviewed at least every 5 years. During the municipal comprehensive review process, city staff will revisit population, housing and employment forecasts and determine if adjustments are required to address changes to growth patterns, market conditions and the broader legislative context. Should these updated forecasts demonstrate the need to include revisions to the urban growth boundary, Council will be afforded the opportunity to reconsider them at that time. Opportunities also exist for Council to initiate a comprehensive review of the land supply prior to such reviews, if it has been determined that there is a need to review expansions to the urban growth boundary.

## 1.1 Background Context

### 1.1.1 Provincial Policy Statement (PPS) and the City of London's Official Plan

The following section summarizes the applicable policies of the Provincial Policy Statement (PPS) and London Official Plan that provide the policy framework to guide the comprehensive review of the City's land need analysis.

The Settlement Areas policies contained in Section 1.1.3 of the PPS, provide clear objectives and criteria to ensure that expansions to municipal growth boundaries will only be considered where it has been demonstrated that sufficient opportunities for growth are not available through intensification, redevelopment and/or new development within designated growth areas (i.e., within the Urban Growth Boundary). The consideration of expansions to growth area boundaries must also consider the availability of infrastructure and public service facilities that are available or planned for the area; the consideration of alternatives options to avoid development in prime agricultural areas; and, the mitigation of impacts from expanding the growth area boundary on adjacent agricultural operations.

The policies of local planning jurisdictions must be "consistent with" Provincial policy and the PPS provides criteria that must be addressed before considering expansions to the Urban Growth Boundary. There is a clear onus on municipalities to demonstrate that expansions are required to the Urban Growth Boundary in order to meet the forecast demand for additional land requirements during the planning period.

It is intended that this analysis will meet the requirements set out in the PPS (1.1.2) which states that:

"Sufficient land shall be made available through intensification and redevelopment and, if necessary, designated growth areas, to accommodate an appropriate range and mix of employment opportunities, housing and other land use to meet projected needs for a time horizon of up to 20 years."

The PPS also makes reference for municipalities to maintain a minimum supply of land adequate to allow for 10 years of growth. Section 1.4.1 states that "...planning authorities shall:

- a) maintain at all times the ability to accommodate residential growth for a minimum of 10 years through residential intensification and redevelopment and, if necessary, lands which are designated and available for residential development; and
- b) maintain at all times where new development is to occur, land with servicing capacity sufficient to provide at least a 3 year supply of residential units available through lands suitably zoned to facilitate residential intensification and redevelopment, and land in draft approved and registered plans."

In addition to the policy framework set out in the PPS, modifications to the City's Urban Growth Boundary (UGB) must be consistent with the Official Plan. Policy 2.5.5 of the Official Plan provides a framework for the evaluation of land requirements to accommodate forecasted growth in population, housing and employment. Section 2.6 of the Plan provides a policy framework for growth management in the City of London, including specific policies that are identified under Growth Forecasting and Monitoring (2.6.5); Land Requirements Forecasting (2.6.6) and Identification of Growth Areas (2.6.7). Policy 2.6.6 establishes a target range of a fifteen to 20 year supply of vacant land designated for urban growth.

### **1.1.2 Planning Period**

Initiated with a baseline reference period in 2011, the planning period for the Land Needs Background Study is the year 2031.

### **1.1.3 Land Area Categories**

The Land Needs Background Study allocates residential and non-residential demand forecasts into two land area categories of Built Area and Greenfield Area. Figure 1.1.3 illustrates the location of each land area category for the City of London as of December 31, 2011. There are some concepts used in this report that are explained below. It should be noted that both Greenfield and Built Areas do not represent land use designations, but are intended for use as a planning and monitoring tools.

#### **Built Area / Built Area Boundary**

The lands located within the Built Area Boundary are referred to as the Built Area. The Built Area Boundary identifies the extent of developed urban area for the City of London at a point in time. It should be noted that this is not a static boundary and can be adjusted at the next Official Plan Review to reflect new development trends and priorities.

#### **Greenfield Area**

The Greenfield Area is the area between Built Area Boundary and Urban Growth Boundary. For the purposes of this study the Greenfield Area has been further subdivided into districts for analysis and allocation purposes discussed later in the report.

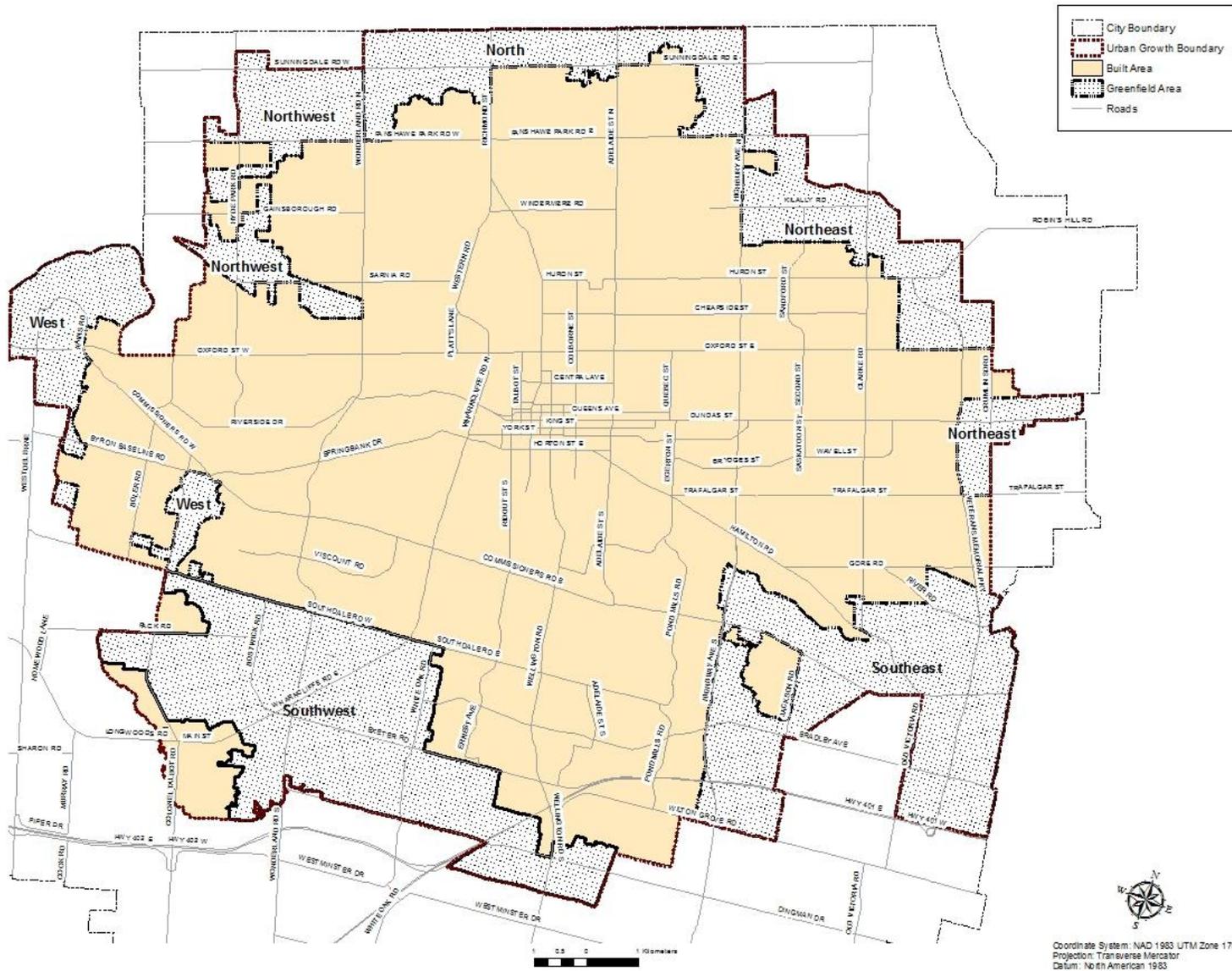
## **Urban Growth Boundary (UGB)**

The Urban Growth Boundary defines the areas for future growth with the planning period of the Official Plan.

## **Intensification**

Intensification means the development of a property, site or area at a higher density than currently exists, through development, redevelopment, infill and expansion or conversion of existing buildings. For the purposes of this study it is assumed that development that occurs within the Built Area Boundary is considered intensification.

Figure 1.1.3: City of London Land Area Classifications (2011)



#### 1.1.4 Residential Housing and Employment Growth Forecast

The basis of this Land Needs Background Study is the population, employment, housing and non-residential (commercial and institutional) space projections for the 20 year planning period from 2011 to 2031. These growth projections inform the likelihood of anticipated residential and non-residential demand over the next 20 years. Altus Group Economic Consulting was retained by the City to prepare an update to their 2006 growth forecast report: Employment, Population, Housing and Non-Residential Construction Projections, City of London, Ontario.

The primary aim of developing growth forecasts for the City is to establish a probable scenario about the future long-term growth of the population and employment base and infer associated housing and employment land requirements. The base case scenario utilized is prepared using the knowledge of past conditions, emerging trends and assumptions about anticipated future outcomes. Extensive research and analysis of relevant statistical data is conducted to establish a realistic trajectory to provide the greatest possible degree of confidence. However, given the inherent challenges of making exact predictions about the future, both high and low growth scenarios were also prepared to inform this analysis.

City staff reviewed the updated forecast report and is satisfied that the report is comprehensive, reasonable and a reliable source document for future growth studies, including the Land Needs Study. Based on this review, staff recommended that the base case growth scenario be used as the basis for anticipated demand over the 2011-2031 Official Plan Review planning period and the 2014 Development Charges Study. The Altus 2011 update report has been circulated to members of the public through a communications strategy connected to the broader ReThink London engagement process and was circulated internally to City departments. Comments were received from the Urban League of London, the London Development Institute, and the London Police Service. No concerns were raised related to the draft report's methodology or findings. It is worth noting both the Urban League and the London Development Institute recognize the importance of the use of rigorous and well-founded forecasts for growth planning purposes.

In October 2012, Council passed the following motion with regard to the growth forecasts contained in the 2011 Altus update report:

*That, on the recommendation of the Managing Director, Planning and City Planner, the baseline growth projections, outlined in the final report prepared by Altus Group Economic Consulting, entitled "Employment, Population, Housing and Non-Residential Construction Projections, City of London, Ontario, 2011 Update", BE ENDORSED for use in the 2011 Official Plan Review and the 2014 Development Charges Study;*

*it being noted that the Municipal Council, through the Investment and Economic Prosperity Committee, is aggressively working to accelerate London's economy to reach a growth target of 2% per year; it being further noted that an average of*

*more than 6,100 net new jobs per year will be required to achieve this growth rate target;*

*it being pointed out that the Planning and Environment Committee received the presentation from P. Norman, Altus Group Economic Consulting, with respect to this matter.*

## **Methodology**

The growth forecast update reflects changes in underlying socio-economic and demographic conditions, federal policies affecting immigration, 2011 census data, and the land-planning policy framework in Ontario. Four interrelated models were employed to generate the forecast: economic, population, housing demand and non-residential building space. The methods used to derive these models are well accepted across the industry and have been used by other municipalities to model growth in many other cities across Canada.

The forecast begins with an examination of London's economy within the context of international, national, provincial, regional and local economy. Prospects for growth are considered by economic sector and an employment forecast is prepared. The employment forecast largely drives population projections since employment is the key motivation for migration, which in turn drives population growth. Forecasts for future population are based on a cohort survival model -births minus deaths plus net migration- consistent with methodological guidelines endorsed by the Ministry of Municipal Affairs and Housing. Population forecasts are then modelled using the Altus Group's housing demand model to project anticipated household growth for the City of London. Potential household growth is a function of the projected population by age using headship rates (number of people in each age group who are projected to head up a household). Demand for housing by structure type is derived from examining historical housing starts and completion data along with factoring household headship propensities.

The employment forecast in the economic model also informs the non-residential (commercial and institutional) land requirements. Floor space factors were derived from historical statistics, industry outlooks, and expectations on how these factors might change over time.

These forecasts were prepared using the best information and data available at the time of publication and are only an informed estimation of future development prospects. Such an estimation involves an understanding of past trends, established demographic and market trends, and a knowledge of changes that are taking place, or likely to take place, in the future. They are not, however, assured predictions about the future.

### **1.1.5 2014 Development Charges Background Study**

In April 2012, City Council initiated a development charges background study to review growth servicing needs for a 20 year period. According to the Development Charges Act, municipalities are required to forecast future growth based on the amount, type and location of development as the basis for determining eligible development charge servicing costs.

The Altus Group Economic Consulting projections prepared for the City's Land Needs Study were interpolated for the 2014 Development Charges Study time period (2014-2034), and the identified residential and non-residential growth was allocated by Staff to future growth locations across the city. The Development Charges Study growth allocations preceded the City's Land Needs Background Study, and thus an initial assessment of land needs was conducted as part of forecasting future locations for development.

Throughout the DC Study growth allocations process, City staff have indicated that the City's Land Needs Study was being prepared concurrently and, depending on final outcomes, revisions to growth allocations may be required. As a result, the Land Needs Background Study provides important directions to future growth planning initiatives, including development charges background studies.

### **1.1.6 Greenfield Demand**

The Land Needs Background Study will focus on the Built Area and Greenfield Area in order to evaluate overall land requirements so as to determine whether a justification exists to add additional land into the designated Urban Growth Boundary. The portion of Greenfield Area demand required to accommodate urban development, once intensification opportunities are exhausted, is the primary factor determining whether or not additional lands will be required. If opportunities to accommodate growth do not exist within the Greenfield Area, then the municipality will need to consider an expansion to the Urban Growth Boundary.

### **1.1.7 Industrial Land Needs Study**

It should be noted that the review of industrial land requirements has been undertaken concurrently in a separate study to determine if there is a need to consider the inclusion of additional land into the City's established Urban Growth Boundary to address and safeguard for future strategic employment opportunities. The findings of the study will be discussed in Section 4.5.

## 1.2 Study Objectives

- Review the 2005 Provincial Policy Statement as it directly and indirectly relates to land needs, in particular Section 1.1.3 (Settlement Areas). Review Official Plan policies as it directly and indirectly relates to land needs, in particular Policy 2.5.5 and Section 2.6 (Growth Management).
- Review forecasts for population, housing, employment and non-residential land requirements established by Altus Group Economic Consulting, and confirm that they are accurate and current for the 2011 Official Plan Review.
- Review past development patterns and test assumptions relating to usage of residential and non-residential lands in the City. (eg. density, housing mix, intensification, floor area ratios, past development patterns, etc.)
- Review and update the Vacant Land Inventories so they are accurate and current as of December 31, 2011.
- Determine whether a justification exists under the provisions of the Provincial Policy Statement (PPS) and the City's Official Plan to add additional land into the designated urban growth area to accommodate anticipated growth in population, housing and employment for the City of London for the 20 year planning period.
- Formulate criteria to assist in reviewing the merits of landowner requests for inclusion within the Urban Growth Boundary.

## 1.3 Working Groups and Public Consultation

The Development Charge Study External Stakeholders Committee was established in 2012 to provide input into the development of the 2014 Development Charge Background Study. The Development Charge Study External Stakeholders Committee has representatives from the Urban League of London, London Development Institute, London Home Builders Association and developers who are not members of the London Development Institute. Feedback from the stakeholders was provided on the initial assessment of land needs and how residential and employment demand was being allocated for city-wide for the 2014 DC Study. As a result the growth allocations work conducted by the 2014 DC Study has been used to inform the allocations proposed by the Land Needs Background Study.

The City will circulate the Land Needs Background Study for public review and comment. Should an Urban Growth Boundary expansion be warranted by this review, an opportunity will be provided for landowners, or their agents, to submit their land to be included for consideration in the review of Urban Growth Boundary.

## 2 RESIDENTIAL DEMAND AND SUPPLY

### 2.1 Population Growth Forecast

Over the course of the 20 year planning period examined in this Land Needs Background Study, the City of London's population is expected to grow by 77,350 persons to approximately 443,500 by 2031. This population outlook translates into a forecasted growth rate of 1.06% throughout the planning period (2011-2031). Statistics Canada reported in the 2011 Census release that the city's population was 366,151 with an associated household count of 168,175, which establishes the baseline figures utilized in this review.

One of the key factors determining the amount of land required to accommodate expected growth is an understanding of to what extent the city's population base is likely to expand, and how this translates into overall housing needs. The table highlighted below compares the age structure of the City's historical population with what is projected to take place in 2031. Table 2.1 breaks down the projected population by age segment in 5 year increments to provide an overview of trending population dynamics. As indicated in the table, a significant transition is expected to take place with the aging of the population as a result of the maturing of the 'baby boomer' generation, along with the prospect of a rebounding infant cohort. This report notes major implications to be expected with this unprecedented transformation of the age structure of society, along with the type of housing required to address emerging needs.

**Table 2.1: Population by Age Cohort, Historical and Forecasted Outlook, 1996-2031**

	Census				Projections			
	1996(a)	2001(a)	2006(a)	2011(a)	2016f	2021f	2026f	2031f
<b>Age Cohort</b>	<b>Number of Persons</b>							
<b>0-4</b>	22,665	19,235	18,470	19,995	20,900	22,200	23,000	23,300
<b>5-9</b>	22,245	22,330	19,545	19,005	19,500	20,900	22,100	23,000
<b>10-14</b>	21,670	22,600	22,830	20,365	19,200	20,400	21,800	23,000
<b>15-19</b>	20,525	22,720	24,405	24,715	24,400	23,700	25,200	26,600
<b>20-24</b>	24,515	25,880	28,195	28,925	31,800	29,700	29,300	30,800
<b>25-29</b>	25,850	23,360	25,065	26,990	28,400	31,700	29,600	29,300
<b>30-34</b>	29,285	24,025	22,755	23,835	27,600	28,500	31,800	29,700
<b>35-39</b>	27,685	27,975	23,810	22,535	24,700	27,600	28,500	31,700
<b>40-44</b>	25,175	27,390	28,215	24,235	23,600	25,700	28,800	29,600
<b>45-49</b>	22,710	25,015	27,860	28,490	23,400	22,900	25,000	28,100
<b>50-54</b>	16,865	22,295	24,890	27,835	27,400	23,300	22,900	25,000
<b>55-59</b>	13,620	16,530	21,915	24,265	26,700	26,800	22,800	22,500
<b>60-64</b>	12,345	13,140	16,075	21,255	23,500	25,800	26,000	22,200
<b>65-69</b>	11,910	11,955	12,720	15,540	20,300	22,800	25,100	25,400
<b>70-74</b>	11,355	11,215	11,280	11,995	15,000	19,600	22,200	24,400
<b>75-79</b>	7,965	9,995	10,030	10,070	11,200	13,700	18,000	20,400
<b>80-84</b>	5,255	6,155	8,150	8,035	8,200	9,100	11,300	14,900
<b>85+</b>	4,000	4,715	6,195	8,030	9,400	10,200	11,400	13,700
<b>Total</b>	<b>325,640</b>	<b>336,530</b>	<b>352,395</b>	<b>366,151</b>	<b>385,100</b>	<b>404,600</b>	<b>424,800</b>	<b>443,500</b>

Source:

(a) Baseline data from Statistics Canada 1996, 2001, 2006, 2011 Census.

(f) Forecast figures provided by Altus Group Economic Consulting (2011 update), "Employment, Population, Housing and Non-Residential Construction Projections".

Note: Some totals may not add-up due to the cumulative impact of rounding.

## 2.2 Housing Demand

The annual housing demand forecast is summarized by structure type in Table 2.2.1 below. The associated Figure 2.2 (see below) shows a graphical comparison of this forecast to actual housing construction in the previous 5 year period.

**Table 2.2.1: Annualized Housing Completions, Actual and Forecast, 2006-2031**

	Singles & Semis	Row Housing	Apartments	All Unit Types
Census Periods	<i>Occupied Dwelling Units</i>			
2006-2011 (a)	1,103	238	793	2,134
2011-2016 (f)	1,043	332	679	2,055
2016-2021 (f)	1,170	379	705	2,254
2021-2026 (f)	1,151	354	644	2,149
2026-2031 (f)	1,096	318	604	2,018
<b>2011-2031</b>				
<b>Forecast Avg.</b>	<b>1,115</b>	<b>346</b>	<b>658</b>	<b>2,119</b>
<b>Forecast Total</b>	<b>22,300</b>	<b>6,915</b>	<b>13,160</b>	<b>42,380</b>

Source:

(a) CMHC Completion Data

(f) Forecast outlook provided by Altus Group Economic Consulting (2011 update)

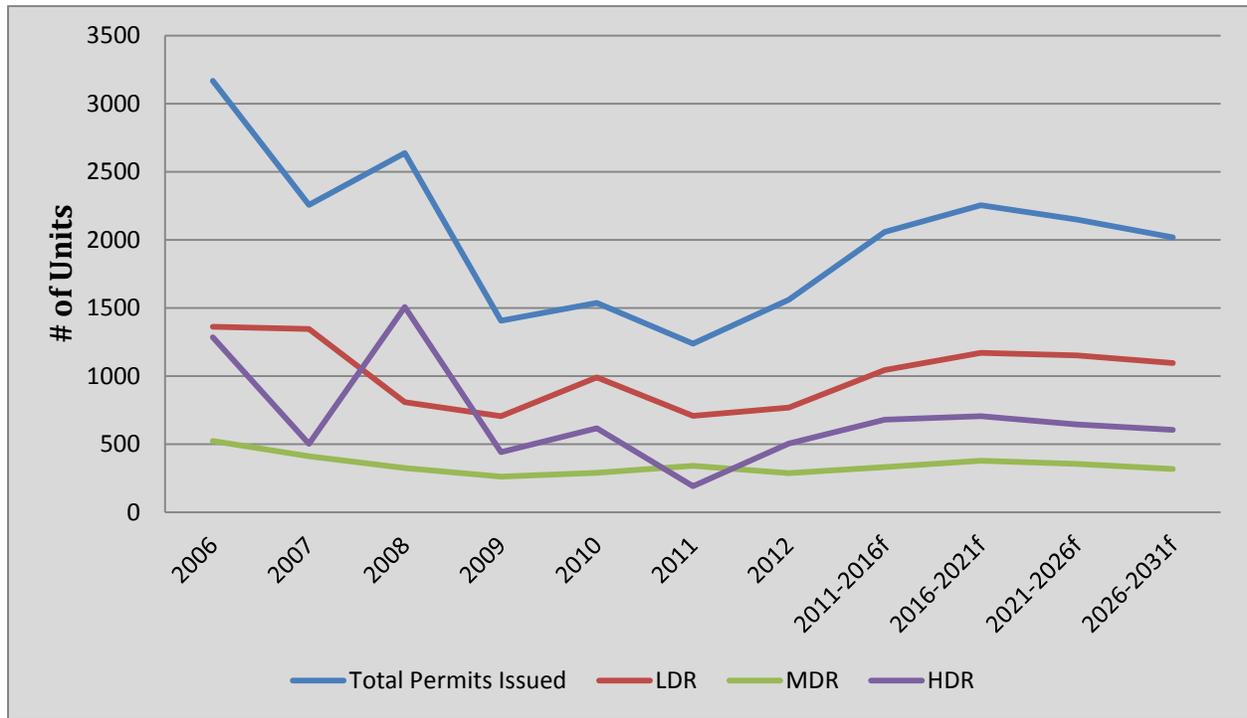
Note: Some totals may not add-up due to the cumulative impact of rounding.

Anticipated housing demand is disaggregated by structure type into three main categories: (1) single and semi-detached dwellings (low density), (2) row housing (medium density), and, (3) apartment units (high density). In total, the City is expected to require the addition of 42,380 new units over the 2011-2031 forecasted reference period.

Low density housing will continue to absorb a substantial portion of overall housing demand, roughly accounting for 53% of all completions. Over the course of the projection period, demographic shifts in the population structure, coupled with current trends toward renewed urbanization suggest a shift in consumer preference toward smaller, more compact forms of housing.

Overall housing construction peaked in the previous period and is expected to gradually rebound midway through the planning period (2021) before tapering off (see Figure 2.2). The demand forecast indicates that a gradual rebound will take place during the next decade requiring an annualized average of 2,119 units per year through to 2031. Thereafter, housing demand is expected to taper-off and remain more stabilized.

**Figure 2.2: Annual Housing Completions, Actuals and Forecast, 2006-2031**



Source:

Altus Group Economic Consulting (2011 update)

The *persons per unit (ppu)* count declines in presently-developed areas over the projection period. This relationship relates to the traditional lifecycle of households and neighbourhoods where average household size rises for the first several years of a dwelling's existence then falls off as dwellings reach 20 to 40 years old, stabilizing thereafter. This is in addition to the trend toward smaller households more generally. This relationship holds for low and medium density dwellings only, whereas high density household size remains consistent for dwellings of all age types. Tables 2.2.2 and 2.2.3 summarize population by dwelling structure type and period of construction for the forecast 10 year periods and shows person per unit assumptions.

**Table 2.2.2: Summary of Population by Dwelling Structure Type and Period of Construction at end of 10 year Planning Period (2021)**

	Housing Structure Type					
	Total	Low	Medium	High	High by Unit Type	
					<2 Bed	2+ Bed
<b>Population</b>						
In post-2006 dwellings	79,541	50,490	10,340	18,711	6,132	12,579
In pre-2006 dwellings	320,650	188,961	47,562	84,127	n/a	n/a
Total	397,931	239,451	57,902	102,838	n/a	n/a
<b>Dwellings</b>						
In post-2006 dwellings	32,024	16,345	4,702	10,976	4,390	6,586
In pre-2006 dwellings	141,934	75,383	18,370	48,180	19,272	28,908
Total	173,957	91,728	23,073	59,157	23,663	35,494
<b>Persons Per Unit (ppu)</b>						
In post-2006 dwellings	2.48	3.09	2.20	1.70	1.40	1.91
In pre-2006 dwellings	2.26	2.51	2.59	1.75	n/a	n/a
Total	2.29	2.61	2.51	1.74	n/a	n/a

Source:

Altus Group Economic Consulting (2011 update)

**Table 2.2.3: Summary of Population by Dwelling Structure Type and Period of Construction at end of 20 year Planning Period (2031)**

	Housing Structure Type					
	Total	Low	Medium	High	High by Unit Type	
					<2 Bed	2+ Bed
<b>Population</b>						
In post-2006 dwellings	130,251	82,670	18,266	29,315	9,692	19,623
In pre-2006 dwellings	306,821	176,518	45,547	84,755	n/a	n/a
Total	433,583	259,188	63,814	114,070	n/a	n/a
<b>Dwellings</b>						
In post-2006 dwellings	52,584	27,367	8,004	17,213	6,885	10,328
In pre-2006 dwellings	140,907	74,558	18,169	48,180	19,272	28,908
Total	193,491	101,924	26,173	65,394	26,157	39,236
<b>Persons Per Unit (ppu)</b>						
In post-2006 dwellings	2.48	3.02	2.28	1.70	1.41	1.90
In pre-2006 dwellings	2.18	2.37	2.51	1.76	n/a	n/a
Total	2.24	2.54	2.44	1.74	n/a	n/a

Source:

Altus Group Economic Consulting (2011 update)

## 2.3 Demand Assumptions

### Intensification

To determine the potential impact for residential intensification and associated assumptions for future yields, information provided in building permits was reviewed to determine the extent of permit activity within the built boundary. Based on this review, it was determined that intensification accounted for 36% of the total dwelling units constructed between 2006 and 2011, as shown in Table 2.3. This is up significantly from the 29% seen in the previous 2001-2006 period. In other words, 36% of the new units constructed between 2006 and 2011 were within the Built Area Boundary. Examination of intensification by type found that, on average in the past 5 years, 5% of the total single and semi-detached dwellings, 24% of total row housing units, 88% of total apartment units were constructed within the Built Area.

**Table 2.3: Building Permits in Built Area as a % of Total Structure Type**

	Average 2001-2006	2007	2008	2009	2010	2011	Average 2006-2011 Total
<b>Low</b>	5%	5%	6%	7%	4%	4%	5%
<b>Medium</b>	32%	20%	24%	38%	25%	18%	24%
<b>High</b>	75%	73%	98%	49%	100%	100%	88%
<b>Total</b>	29%	22%	60%	24%	37%	22%	36%

Source:

2014 DC Charges Study, 2007-2011 Building Permit Analysis. Tabulation by Planning Division.

In order for the City to achieve a 40% intensification target, as identified in the 2011 Official Review and 2030 Transportation Master Plan, 40% of the total housing demand will have to be accommodated through intensification. As a result, the intensification assumptions put forward for the Land Needs Background Study are that 7% of low density, 52% of medium and 88% of high density dwelling unit construction will occur as intensification (i.e., within the Built Area) to achieve 40% intensification over the next 20 year planning period.

## 2.4 Residential Greenfield Demand

Taking into account the intensification assumption outlined above, the total future residential Greenfield unit demand was determined after subtracting the number of units that will be constructed within the Built Area. The following table shows the total future residential Greenfield demand, broken down by low density, medium density and high density units. Figure 2.4 provides a high level overview of the anticipated split in forecasted unit demand between the Built Area and Greenfield Area (see below).

**Table 2.4: Calculation of Residential Greenfield Unit Demand, 2011-2031**

	<b>Total City-wide Unit Demand 2011-2031<sup>(1)</sup></b>	<b>Intensification Factor</b>	<b>Subtract Built Area Units <sup>(2)</sup></b>	<b>Greenfield Unit Demand 2011-2031</b>
<b>LDR</b>	22,300	7%	1,561	20,739
<b>MDR</b>	6,915	52%	3,596	3,319
<b>HDR</b>	13,160	88%	11,581	1,579
<b>Total</b>	<b>42,380</b>	<b>40%</b>	<b>16,738</b>	<b>25,642</b>

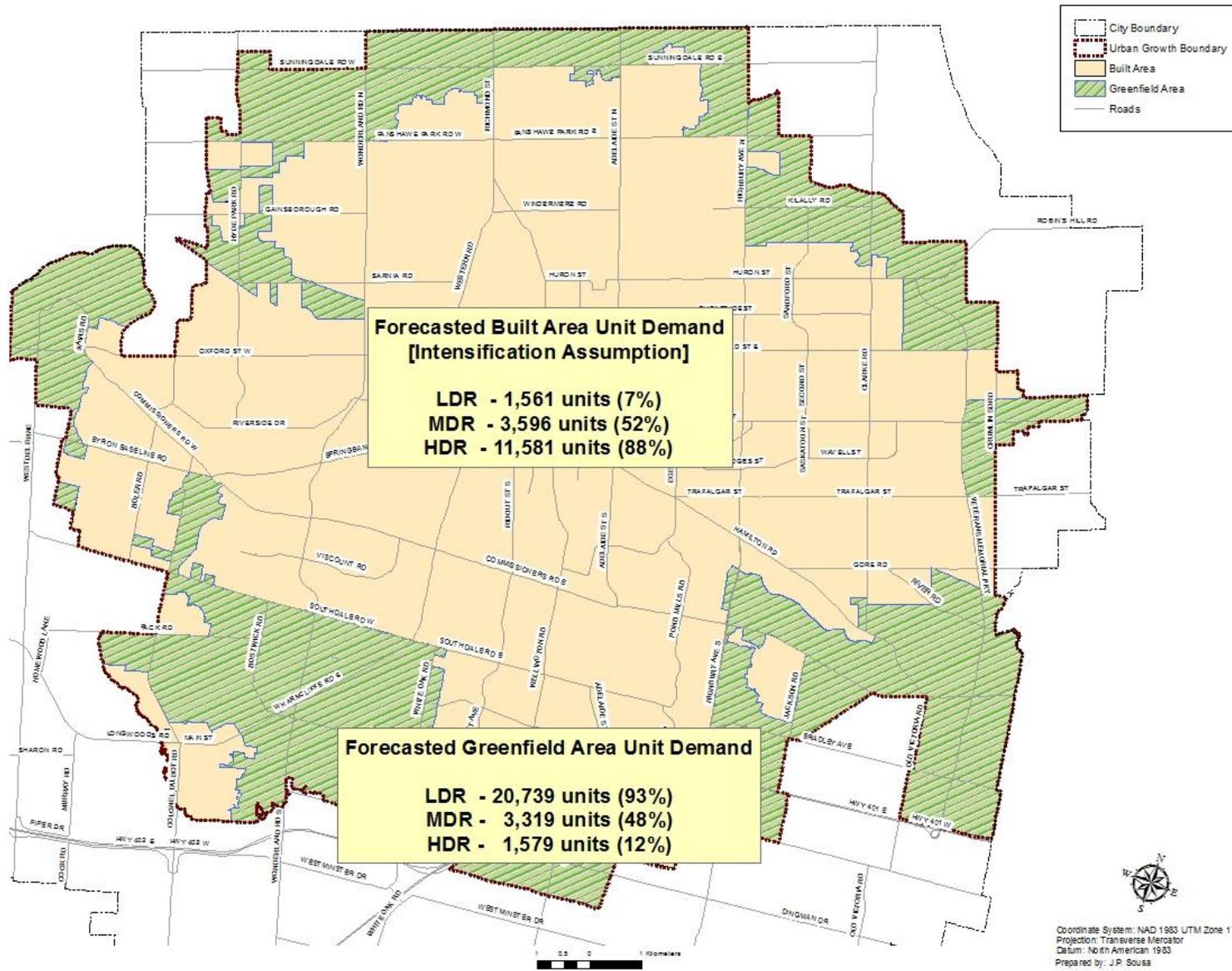
Source:

(1) Altus Group Economic Consulting (2011 update)

(2) City of London, Building Division. Tabulation compiled by Planning Division

Note: Some totals may not add-up due to the cumulative impact of rounding.

**Figure 2.4: Forecasted Residential Unit Demand –Spatial Allocations (Built and Greenfield Area), 2011-2031**



## 2.5 Residential Land Supply

This section of the report provides a summary of the supply and capacity of land within the Urban Growth Area (as of December 31, 2011) to accommodate forecast urban growth.

The supply of residential lands is monitored on an ongoing basis by the Planning Division, Development Services and Development Finance. The residential VLI to December 31, 2011 is based on relevant building permit information, subdivision files (including those that have been registered, draft approved or under review), community/area plans, other associated planning data and checked against 2011 aerial photography. Appendix B provides a full copy of the Residential Vacant Land Inventory as of December 31, 2011 (also available on the City of London web site). Based on the status of the land (Registered plan, Draft approved plan, designated residential, urban reserve community growth), the potential for residential development was inventoried as follows:

**Table 2.5: Residential Vacant Land Inventory – Units Available on December 31, 2011**

Status/Category	Land Area (ha)	Low Density Units	Medium Density Units	High Density Units	Total Units
Registered Subdivision Plans	1,209	1,457	2,004	807	4,268
Draft approved subdivision plans	541	4,132	2,877	1,731	8,740
Draft subdivision plans - under review	322	2,668	2,314	2,911	7,893
Designated residential lands	985	13,772	11,681	8,474	33,927
Urban Reserve Community Growth	666	2,545	1,036	622	4,203
<b>Total</b>	<b>3,723</b>	<b>24,574</b>	<b>19,912</b>	<b>14,545</b>	<b>59,031</b>

Source:

Vacant and Underutilized Residential Land Summary, 2011 Year-end Compilation. Prepared by Development Approvals Business Unit (DABU)

Note: VLI does not take into account additional supply within the built boundary made available via intensification efforts or urban redevelopment initiatives.

Five adjustments were made to the supply of residential Greenfield lands.

1. A sizable amount of industrial lands were subject to redesignation for non-industrial uses through the Southwest Area Plan (SWAP). Where applicable, these lands were removed from the industrial VLI and a portion was transferred to the residential VLI.
2. An examination of building permits issued between 2006 and 2011 indicates approximately 55% of the units built on medium designated lands were actually low density type structures (single and semi-detached dwellings). Conversely, nearly 10% of units built on low density designated land were of a medium density type (row townhouses or cluster housing). To account for this variation, a conservative approach was chosen whereby 25% of medium density residential lands would be allocated to low density residential lands.
3. Based on a review of subdivision plans, recently completed or approved medium density blocks and apartment developments over the past 5 years, it was found that low and medium density housing was being constructed at higher densities in recent years in comparison to subdivision construction earlier in the decade. The findings from our review also indicate that densities for apartment developments vary considerably, and as such, it was determined that the continued use of the high density assumption from the 2006 Land Needs Background Study was appropriate. Given this reference, the following density assumptions were made for the purposes of converting land area to housing requirements in the residential vacant land inventory:

Low (Singles and Semis)	16 gross units per hectare
Medium Density (Row Housing)	30 gross units per hectare
High Density (Apartments)	125 gross units per hectare

4. The designated and urban reserve lands located within the Byron Pits area have been included in the final supply as it is now likely there will be an opportunity for redevelopment to residential uses within the 20 year planning period. The development potential is based on staff communication with the pit operator as of January 2013.
5. The construction of the Southside Sewage Treatment Plant was previously identified as having major implications for the future development of land in the Southwest area of the City (land generally south of Southdale Road and west of Wharnccliffe Road). However, since capacity efficiencies have been realized at the Greenway Sewage Treatment Plant, the construction of the Southside Sewage Treatment Plant by 2016 is no longer a barrier to development in the Southwest. Therefore, it is assumed that higher levels of development in the Southwest can occur prior to the previously established timeline of 2016.

### 3 NON-RESIDENTIAL DEMAND AND SUPPLY

#### 3.1 Non-Residential Space Projections

Detailed employment growth projections, prepared by Altus, provide the basis for determining land needs requirements for non-residential uses. It is expected that 3,480,000 million square feet of commercial and 6,370,000 million square feet of institutional space will be required over the projection period, 56% of which is expected to occur in the first ten years. It is anticipated that 17% and 31% of total non-residential demand over the planning period will be for commercial and institutional space, respectively. Figure 3.1 shows historical and projected industrial, commercial and institutional space requirements.

**Figure 3.1: Net Non-Residential Space Requirements, Actual and Forecast, 2006-2031**



Source:

Altus Group Economic Consulting (2011 update)

## 3.2 Demand Assumptions

### Intensification

An adjustment has been made to the projected non-residential demand. By applying the same approach that was used to determine residential Greenfield demand, it was assumed that a certain proportion of the demand will be met through intensification of lands within the Built Area.

To determine the potential impact of intensification, information provided in building permits was reviewed to verify the extent of permit activity within the Built Area. Based on this review, it was determined that commercial floor space constructed on lands within the Built Area accounted for 53% of the total commercial construction. It was also determined that 87% of institutional floor space was constructed within the Built Area. This review demonstrates that a large proportion of commercial demand will continue to be accommodated through redevelopment or expansion of existing sites within the Urban Growth Boundary. Additionally, the majority of the demand for growth of major institutional uses will be met through expansion of existing facilities on their current sites as well. In the interest of consistency of approach to the residential demand analysis, very conservative intensification assumptions are proposed for determining commercial and institutional Greenfield demand over the 20 year planning period (see Table 3.2).

**Table 3.2: Commercial and Institutional Intensification, 2011-2031**

	<b>Actual Intensification 2006-2011</b>	<b>Intensification Assumption</b>
<b>Commercial</b>	53%	40%
<b>Institutional</b>	87%	82%

Source:

City of London, Building Division. Tabulation and Projections compiled by  
Planning and Development

### Non-Residential Floor Area Ratios

In order to convert the demand for Commercial and Institutional floor area to a demand for land, floor area ratio assumptions were utilized. A floor area ratio is the area of a building to the total area of the site it occupies. In the Land Needs Study completed for the 2006 Official Plan Update, employment floor area ratios were established based on a review of existing sites and building permits. For the purposes of this analysis the floor area ratios were carried forward from the 2006 Land Needs Background Study. Given these parameters, the commercial and

institutional floor area ratios used to calculate the land requirements for commercial and institutional demand are 0.30 and 0.42, respectively.

### 3.3 Non-Residential Greenfield Demand

Taking into account the intensification assumptions outlined above, future Greenfield demand for commercial and institutional lands were determined after subtracting the amount of demand that will be constructed within the Built Area. The following table (Table 3.3) shows the final Greenfield demand for both commercial and institutional lands. An alternative analysis was undertaken that assumed an intensification of 0% within the Built-up Area. The impact of this assumption will be discussed further in this study.

**Table 3.3: Calculation of Commercial and Institutional Greenfield Demand, 2011-2031**

	<b>Total City-wide Demand 2011-2031 (sq ft) <sup>(1)</sup></b>	<b>Intensification Assumption</b>	<b>Subtract Built Area (sq ft)</b>	<b>Greenfield Demand 2011-2031 (sq ft)</b>	<b>Divide By Floor Area Ratio</b>	<b>Final Greenfield Demand 2011-2031 (ha)</b>
<b>Demand considering intensification</b>						
<b>Commercial</b>	3,480,000	40%	1,392,000	2,088,000	0.30	65
<b>Institutional</b>	6,370,000	82%	5,223,400	1,146,600	0.42	25
<b>Demand without intensification</b>						
<b>Commercial</b>	3,480,000	-	-	3,480,000	0.30	108
<b>Institutional</b>	6,370,000	-	-	6,370,000	0.42	141

Source:

(1) Altus Group Economic Consulting (2011 update)

### 3.4 Non-Residential Land Supply

This section of the report provides a summary of the supply and capacity of land within the Urban Growth Area (as of December 31, 2011) to accommodate projected urban growth.

The supply of commercial and institutional lands was updated from the 2010 Industrial Commercial, and Institutional Vacant Land Inventory (VLI) by the Planning Division for the 2014 Development Charge Study work program. It should be noted that for the purposes of Land Needs Background Study the Industrial, Commercial, and Institutional Vacant Land Inventory (VLI) only details the supply-side availability of vacant lands. It does not take into consideration underutilized lands located in areas traditionally defined as industrial districts, business parks, commercial and institutionally designated areas that are available, or potentially available, to accommodate future employment growth. Also not included in the inventory are lands available, or potentially available, to accommodate future employment growth through infill, intensification, adaptive re-use or redevelopment within the urban core, under-utilized parcels along major arterials, in residential areas or outside the urban growth boundary.

#### **Commercial Lands**

Total commercial vacant land accounts for 295 hectares of land. There are many different types of commercially designated land, as outlined in the Vacant Land Inventory. Flexibility of use exists within these commercial areas and instances of re-designation from one commercial land use designation to another are common.

#### **Institutional Lands**

There are currently 102 hectares of vacant institutional land in the inventory. Most of the major institutional uses within the City perform a regional function and significant investment and expansion potential is expected to take place on-site and not relocate to Greenfield areas. However, the potential for smaller scale institutional uses such as churches, schools, libraries, municipal construction and nursing homes can be within both designated institutional areas, and other residential land use designations where these types of uses are permitted.

### 3.5 Supply Considerations

#### **Vacancies**

Vacant office and retail space within the City is monitored by CB Richard Ellis on a quarterly basis. As of 2012 the following vacancies were inventoried:

Office – 781,519 sq. ft (14.3%) (Source: CD Richard Ellis, 1<sup>st</sup> Quarter, 2012 Market Reports)

Retail – 1,117,723 sq. ft (6.7%) (Source: CD Richard Ellis, Fourth Quarter, 2011 Market Reports)

While this vacant space can accommodate some employment growth, it should be noted that a substantial portion of this space may be in obsolete, poorly located or site constrained buildings that would not meet the minimum requirements of businesses seeking to locate or expand in London. A determination of the viability of these sites is beyond the scope of this study, and as a result, forecasted demand has generally not been applied to these vacant buildings. That said, it should be noted that Altus Group consulting did account for limited vacant space ‘take-up’ in determining space requirements for non-residential uses.

# 4 LAND NEEDS ANALYSIS

## 4.1 City-wide Greenfield Residential Demand versus Supply

Future residential land needs are determined by evaluating the ability of Greenfield lands to accommodate projected demand for residential land over the planning period. The total supply of residential minus the projected residential demand yields a total supply of 33,393 Greenfield units remaining at the end of the 20 year planning period (2031). However, this available land supply is not equally distributed across all forms of residential structure type. When broken down by unit type, there will be sufficient land to accommodate 3,834 low density units, 16,593 medium density units and 12,966 high density units.

**Table 4.1.1: Greenfield Land Needs Calculation (Supply minus Demand)**

	<b>Low</b>	<b>Medium</b>	<b>High</b>
20 year Greenfield Supply	24,574	19,912	14,545
20 year Greenfield Demand *	20,739	3,319	1,579
<b>Greenfield units remaining at 2031</b>	<b>3,835</b>	<b>16,593</b>	<b>12,966</b>

\* Reflects number of units that have been removed and allocated for in the Built Area.

As can be seen in Table 4.2, an additional 3 years of low density land, 48 years of medium density land and 20 years of high density land will remain after 2031. This means that there will be sufficient lands to accommodate the projected residential development during the 20 year planning period.

**Table 4.1.2: Estimated Years of Supply Available**

	Low	Medium	High
<b>Estimated Total Years of Greenfield Supply beyond 2011</b>	22	58	22
<b>Estimated Total Years of Greenfield Supply beyond 2031</b>	3	48	20

Calculation of years of supply based on projected annual household completions for the period 2011-2031 (1,115 low units, 346 medium units, 658 high units)

Source: Figures provided by Altus Group Economic Consulting (2011 update)

**4.2 Allocation of Greenfield Demand**

It is not a reasonable expectation for residential development to occur uniformly across all areas of the City. The following spatial distribution of residential demand to individual Districts was prepared as a way of forecasting where and when residential development might occur. District allocations were based on work completed as part of the 2014 DC Background Study.

When allocating residential demand, consideration was given to past development patterns, overall potential for development, propensity for housing types, the Transportation Master Plan, the Growth Management Implementation Strategy (GMIS) infrastructure timelines. The construction of the Southside Sewage Treatment Plant was previously identified as having major implications for the future development of land in the Southwest area of the City (land South of Southdale Road). This lack of servicing was previously seen as a significant limitation on the ability to develop in the Southwest area. However, since capacity efficiencies have been realized at the Greenway Sewage Treatment Plant the construction of the Southside Sewage Treatment Plant by 2016 is no longer a barrier to near and mid-term development in the Southwest. Therefore, it is assumed that higher levels of development in the Southwest can occur prior than previously forecast.

The following tables show the percentage allocation of low density (Table 4.2.1), medium density (Table 4.2.2) and high density (Table 4.2.3) development to different Districts of the City for the 0 to 5 year period, 5 to 10 year, 10 to 15 and 15 to 20 year period. These allocations are the basis of the land needs calculations in Section 4.3.

**Table 4.2.1: Allocations of Total Low Density Residential Construction by District**

District	2011-2016	2016-2021	2021-2026	2026-2031
<b>Northeast</b>	5%	25%	16%	10%
<b>North</b>	22%	18%	15%	10%
<b>Northwest</b>	22%	12%	10%	8%
<b>West</b>	15%	5%	4%	17%
<b>Southwest</b>	20%	25%	40%	50%
<b>Southeast</b>	16%	15%	15%	5%

Source:

Interpolation of 2014 DC Background Study growth allocations forecast to align with Land Needs Background Study (2011-2031) planning period

**Table 4.2.2: Allocations of Total Medium Density Residential Construction by District**

District	2011-2016	2016-2021	2021-2026	2026-2031
<b>Northeast</b>	10%	10%	10%	10%
<b>North</b>	25%	25%	25%	25%
<b>Northwest</b>	18%	18%	18%	18%
<b>West</b>	15%	15%	15%	15%
<b>Southwest</b>	18%	18%	18%	18%
<b>Southeast</b>	14%	14%	14%	14%

Source:

Interpolation of 2014 DC Background Study growth allocations forecast to align with Land Needs Background Study (2011-2031) planning period

**Table 4.2.3: Allocations of Total High Density Residential Construction by District**

District	2011-2016	2016-2021	2021-2026	2026-2031
Northeast	0%	0%	0%	51%
North	19%	45%	48%	0%
Northwest	75%	9%	0%	0%
West	6%	0%	0%	0%
Southwest	0%	46%	52%	49%
Southeast	0%	0%	0%	0%

Source:

Interpolation of 2014 DC Background Study growth allocations forecast to align with Land Needs Background Study (2011-2031) planning period

### 4.3 District Residential Demand Versus Supply

The residential Greenfield unit demand allocation by District outlined previously is compared to the Greenfield land available in each of the Districts. Table 4.3 summarizes the detailed units remaining by type in each of the Districts.

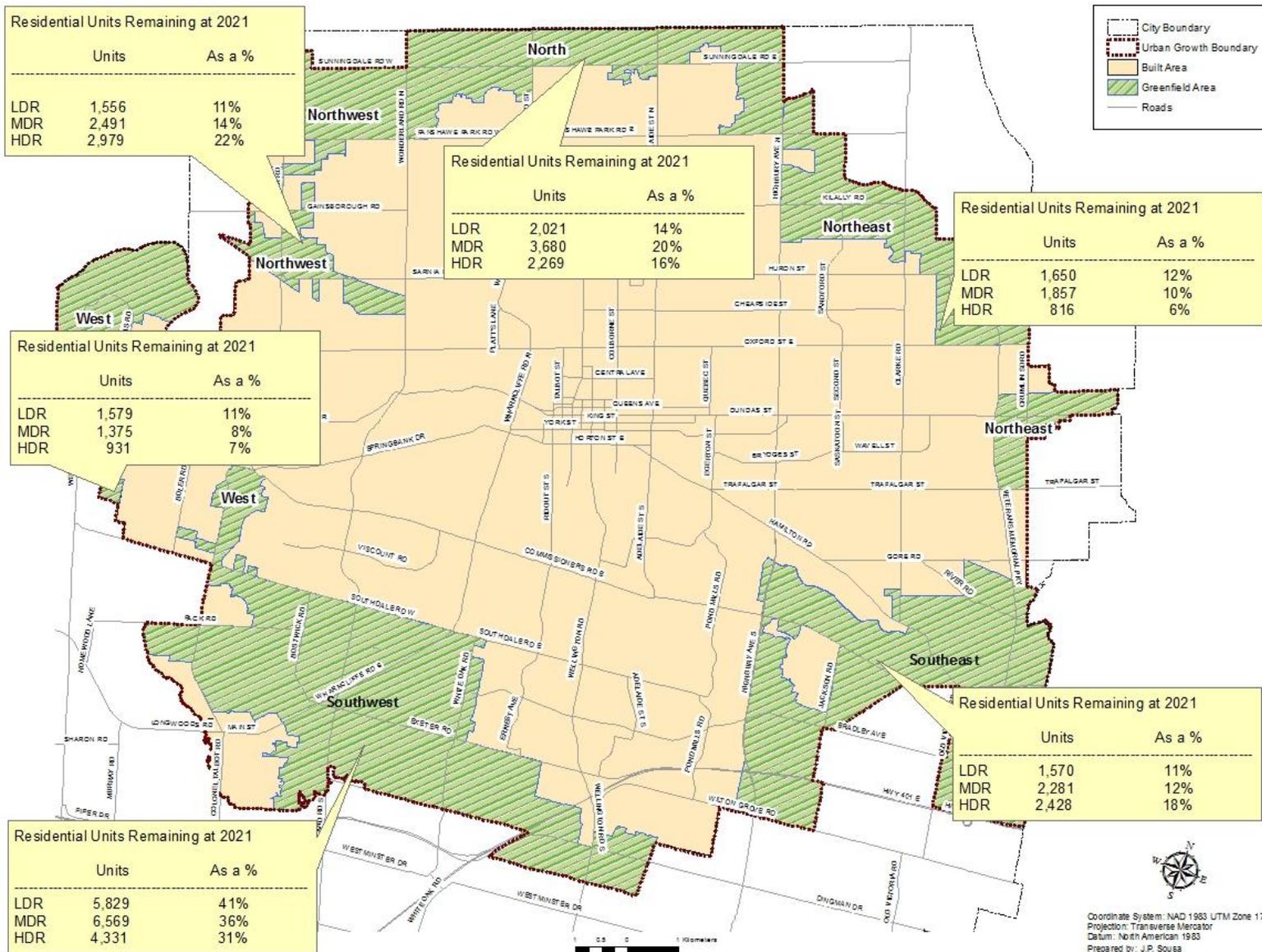
**Table 4.3: Residential Units Remaining at 2021 and 2031 by District**

District	Units Remaining at 2021 (10 years)			Units Remaining at 2031 (20 years)		
	Low	Medium	High	Low	Medium	High
Northeast	1,650	1,857	816	302	1,691	615
North	2,021	3,680	2,269	725	3,265	2,080
Northwest	1,556	2,491	2,979	623	2,193	2,979
West	1,579	1,375	931	490	1,126	931
Southwest	5,829	6,569	4,331	1,163	6,271	3,933
Southeast	1,570	2,281	2,428	533	2,048	2,428
<b>Total</b>	<b>14,205</b>	<b>18,254</b>	<b>13,756</b>	<b>3,835</b>	<b>16,594</b>	<b>12,966</b>

Housing choice in overall unit supply continues to exist city-wide beyond the 20 year period examined here. It should be noted that substantial housing supply of low density and medium density units in the Southwest remains by 2031. As previously indicated, development constraints have been relieved due to service capacity improvements at the Greenway Sewage Treatment Plant. Given recent and future anticipated infrastructure improvements additional lands would now be available in the Southwest for development purposes to address growth demands beyond the 20 year planning period.

Less choice exists for low density units in the Northeast and in the West for low and medium density units over the next 20 years as the continued development of lands within these Districts will take up the supply of available land for residential development. If demand persists, this could be an area to consider for the future expansion of the Urban Growth Boundary in conjunction with a review of the criteria to determine the best lands for future urban development.

**Figure 4.3.1: Residential Greenfield Units Remaining at 2021**





#### 4.4 Commercial and Institutional Demand Versus Supply

Future commercial and institutional land needs for the planning period are also determined by conducting the supply versus demand analysis that was undertaken for the purposes of calculating residential land needs. As indicated by the analysis summarized in Table 4.4, there is no demonstrated need for further expansion to the Urban Growth Boundary to accommodate growth on commercial or institutional land for the next 20 year reference period. However, the significance of the intensification assumptions used in the analysis should be highlighted. If institutional uses are not constructed within the Built Area, there will be a shortage of land available for development in the future. This is not anticipated given that the City's major institutional employers, Western University, Fanshawe College, London Health Sciences Centre, St. Joseph's Health Care London have already identified capacity within their strategic plans to accommodate future development. In addition, both Fanshawe College and Western University have expressed interest to increase their presence within the downtown area. Much of this growth will be accommodated by re-developing existing buildings, such as has been done by Western University in the Citi Plaza and Fanshawe College on Dundas Street at Market Lane.

**Table 4.4: Commercial and Institutional Land Needs Calculation**

	Supply (ha)	Intensification		No Intensification Assumption	
		Demand (ha)	Supply minus Demand (ha)	Demand (ha)	Supply minus Demand (ha)
<b>Commercial</b>	295	65	230	108	187
<b>Institutional</b>	102	25	77	141	(39)

#### 4.5 Industrial Land Needs Study

As mentioned, the review of Industrial Land needs for the City is being undertaken concurrently by a separate study also led by the Planning Division. It should be noted that the review of industrial land requirements seeks to determine if there is a justification to consider the addition of additional lands into the City's established Urban Growth Boundary. The findings of the Industrial Lands Study recommend that the City of London would be best served by an expansion to its Urban Growth Area of approximately 500 hectares to enhance industrial offerings. Such an expansion will increase the City's industrial land reserves and safeguard future employment lands and the potential for continued industrial development.

## 5 CONCLUSION

As demonstrated by the land needs analysis set out in this report and the Land Needs Background Study, and consistent with the Provincial Policy Statement and the policies of the City's Official Plan, there is no need to consider the addition of new lands into the City's Urban Growth Boundary through the 2011 Official Plan Review process. The City of London has a sufficient supply of both residential and non-residential land to meet development needs in the 15 to 20 year time horizon set out in the Official Plan and the 2005 Provincial Policy Statement. An adequate supply of land is available in all Districts of the City, allowing for the provision of choice in market location. Based upon current trends and assumptions, the City currently has enough residential land to accommodate its projected growth over the next 20 years. At the end of the 20 year planning period there would still be a 3 year supply of low density residential lands, a 48 year supply of medium density residential lands, and a 20 year supply of high density residential lands.

There will be additional opportunities to review land requirements to accommodate development on an ongoing basis. In accordance with the provisions of the Planning Act, Council may determine the need to review the Official Plan every five years. During the municipal comprehensive review process, city staff will revisit population, housing and employment forecasts and determine if adjustments are required to address changes to growth patterns, market conditions and the broader legislative context. Should these updated forecasts demonstrate the need to include revisions to the urban growth boundary, Council will be afforded the opportunity to reconsider them at that time. Opportunities also exist for Council to initiate a comprehensive review of the land supply at any time, if it has been determined that there is a need to review expansions to the Urban Growth Boundary.

## 6 EVALUATION CRITERIA

Based on the findings of the Land Needs Background Study, it is anticipated that during the next land needs analysis, the City may need to consider including additional land within the Urban Growth Boundary. Based on the anticipation that revisions to the Urban Growth Boundary may be necessary, a set of evaluation criteria has been proposed to assist in reviewing the most appropriate lands to be considered for inclusion within the Urban Growth Boundary at such time as a boundary expansion is justified, consistent with both City and Provincial Policy.

The following section summarizes the criteria which may be relevant evaluate future considerations to expand the Urban Growth Boundary.

### **Economic/Technical**

- What are the total costs of servicing the proposed additions to the Urban Growth Boundary?
- Can the existing or planned infrastructure required to accommodate the proposed expansion be provided in a financially and environmentally sustainable manner and consistent with any applicable City infrastructure master plan?
- What is the ability of existing or planned infrastructure to support the development of this expansion area? (Infrastructure includes matters such as pipes, public utilities, roads, transit, community facilities including schools and parks.)
- Is there a demonstrated need to add lands to the Urban Growth Boundary now? Associated with this criterion, and the City's target inventory of vacant land, are there negative implications of the proposed addition on the current supply of vacant land?
- Are sufficient opportunities not available in the City to accommodate forecasted growth for the municipality within the Built Area and Greenfield Area?
- Will the timing of the expansion and the phasing of development within the proposed Urban Growth Boundary adversely affect the achievement of the intensification and density targets and other policies of the Official Plan?
- Does the proposed expansion of the Urban Growth Boundary support an emergent opportunity (e.g. a unique and substantial economic development opportunity of regional significance)?

### **Social**

- What are the potential impacts on existing communities?
- Will the proposed expansion support the development of a sustainable transit oriented urban community?
- Is the lands proposed for expansion supportive of the City's urban structure of centres and corridors?

- Will the proposed expansion support the development of a complete community?
- Is the expansion of sufficient size to be developed as a complete community by itself, or can it be integrated with existing development to contribute to a complete community?
- Is boundary of the proposed expansion is logical, readily identifiable and consistent with goals, objectives and policies of this Plan and represent a logical extension of the existing Urban Growth Boundary?
- Is the proposed expansion contiguous to the existing Urban Growth Boundary?

### **Environmental**

- What are the potential effects on natural features and ecological functions?
- What are the potential impacts on agriculture?
- What are the potential impacts on mineral aggregate resources?

# APPENDICES

## Appendix A

### **Employment, Population, Housing and Non-Residential Construction Projections,**

**City of London, Ontario**

**2011 Update**

**Altus Group Economic Consulting**

Available at City of London's Planning Division, 206 Dundas Street, and online at:

[http://www.london.ca/d.aspx?s=/Planning\\_and\\_Development/plan\\_growth\\_for\\_london.htm](http://www.london.ca/d.aspx?s=/Planning_and_Development/plan_growth_for_london.htm)

## Appendix B

### **RESIDENTIAL VACANT LAND INVENTORY**

**December 31, 2011**

Available at City of London's Planning Division, 206  
Dundas Street