OXFORD COUNTY

POPULATION HOUSEHOLD AND EMPLOYMENT FORECASTS AND EMPLOYMENT LANDS STUDY

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EXECUTIVE SUMMARY

The County of Oxford retained Watson & Associates Economists Ltd. in the spring of 2013 to undertake an update of the population, housing and employment forecasts for the County and its Area Municipalities which was last updated in 2006.¹ This update addresses the amount, type and location of forecast population, housing and employment for the County and its eight Area Municipalities. A long-term employment land needs analysis and competitiveness assessment is also provided for the County by Area Municipality over the next 20 years. The results of this analysis are intended to guide decision making and policy development specifically related to planning and growth management, urban land needs, master plans and municipal finance at the County-wide and Area Municipal levels. More specifically, this update will provide background to the County's five-year Official Plan (OP) Review and 2014 Development Charges (DC) Background Study. The following provides a summary of the key findings of this report with respect to forecast long-term residential/non-residential growth potential and employment land needs.

Demographic and Socio Economic Profile

Population and Housing Trends, 1991-2011

- Oxford County's population grew by approximately 14% between 1991 and 2011, increasing from 92,900 to 105,000 over this 20-year period. This represents an annual population growth rate of 0.6% during this historical period. Comparatively, the population for the Province of Ontario as a whole grew at an average rate of 1.2% over the past 20 years.
- New residential development activity has been predominately associated with low-density housing forms (i.e. single and semi-detached); however, recent building permit activity indicates that demand for high-density housing (i.e. apartments) has been increasing, most notably in the City of Woodstock.
- It has been observed that over the 1991-2011 period, the average number of persons per housing unit (PPU) has steadily decreased from 2.80 to 2.54. This has largely been a result of the aging of the County's population and, to a lesser extent, the gradual increased share of high-density housing forms.
- Over the 1991-2011 period, the average age of the County's population has steadily increased as a result of the aging "baby boom" population (born between 1946 and 1964). During this historical time period, the percentage of population aged 55+ increased from 23% to 29%. Comparatively, Oxford County's 55+ population is larger in proportion and has increased at a slightly faster rate than the Ontario average.
- The percentage of Oxford County's population in the 55+ age group is expected to increase as the "baby boom" population continues to age over the next 20+ years. As a result, the County's population base is becoming increasingly more dominated by an older population, which is heavily weighted towards "empty-nesters" and seniors. Looking forward, this has implications for the County with respect to seniors' and affordable housing needs, as well as future demands for both hard and soft municipal services.

¹ Population, Households & Employment Forecasts, 2001-2031. Oxford County. Hemson Consulting Ltd. April 2006.

Employment Growth Trends

- Over the past 10 years, Oxford County's employment base grew by approximately 18%, increasing from 44,200 to 52,000 jobs. This represents an annual employment growth rate of approximately 1.6% over the 2001-2011 period. Comparatively, the employment base for the Province increased at an annual rate of 0.7% between 2001 and 2011.
- During this period, approximately 93% of the County-wide employment growth occurred within the County's Urban Centres (i.e. Woodstock, Ingersoll and Tillsonburg), largely driven by employment growth within the City of Woodstock.
- The County has recently experienced employment growth in a number of economic sectors, including manufacturing (i.e. automotive, food processing, warehousing/distribution), transportation/logistics, professional, scientific and technical services, health services, retail trade, as well as accommodation and food.
- The County-wide employment activity rate (i.e. ratio of jobs per population) has steadily increased from 44% to 49%, which has largely been driven by the County's growing industrial base.

Growth Outlook to 2041

Growth Drivers

A number of factors are anticipated to drive future population growth within County of Oxford over the next 30 years, which are highlighted below.

Location

- Oxford County is part of a broader market area (commuter-shed) which includes Waterloo Region and the Counties of Perth, Brant, Haldimand-Norfolk, Middlesex and Elgin. Location factors play a key role in the distribution of the dominant business clusters visible across Oxford County and the broader market area today, such as auto-manufacturing and transportation/warehousing.
- For both international and locally based industries, Oxford County has a strong appeal, given its location within Ontario's industrial heartland

 between the Greater Toronto Area + Hamilton (GTAH) and Waterloo Region to the east and London to the west. Given its location, the
 County's Employment Areas are accessible to both domestic and U.S. markets via excellent highway access (401/403).
- Forecast net migration for Oxford County is strongly influenced by the economic growth potential of the export-based economy for both the County and surrounding commuter-shed. Ultimately, this economic growth potential is a key driver of population growth for working age adults and their families.

Competitive Industrial Development Market

- The County and the surrounding market area have a strong and diverse industrial base which is forecast to experience steady employment growth over the next 30 years. Within this broader context, Oxford County is well positioned geographically, benefiting from access to 400 series highways and proximity to major markets in the GGH and the U.S.
- From a cost competitive standpoint, Oxford represents a more affordable industrial development location compared to the west GTAH or GGH communities. This competitive advantage has been a key driver of the County's recent success in attracting major export-based industries and their suppliers.

Oxford's ability to attract export-based development is largely determined by the competitiveness of its employment lands. Tillsonburg has a
relatively healthy supply of vacant designated employment lands to accommodate future industrial growth, although the supply in Woodstock
and Ingersoll is limited.

Quality of Life

- Oxford County has a reputation as a vibrant, growing, affordable, low-crime location in which to live in Ontario, with access to a wide range of recreational opportunities within the County and throughout the surrounding countryside.
- Talent attraction and retention will be a key issue in Oxford's competitiveness going forward and, therefore, a factor in Oxford's economic growth will be the extent to which it can develop "quality of life" enhancements to appeal to mobile young talent, while not detracting from its attractiveness for other population segments.

Population and Housing Forecast to 2011-2041

The County is forecast to experience modest population growth over the 2011-2041 period. Population growth is forecast to be the strongest during the 2011-2021 period, driven by relatively strong levels of net migration during this time period. Post 2021, population growth is forecast to gradually slow down as a result of the County's aging population. Key findings regarding the County-wide and Area Municipal population and housing forecasts are summarized below:

- Oxford County's housing base is forecast to increase from approximately 41,600 in 2011 to 52,900 in 2041, an increase of 11,300;
- All local municipalities are expected to experience housing growth over the long-term forecast period;
- The County's population is forecast to increase by approximately 17,500 persons over the forecast period, growing from 108,200¹ persons in 2011 to 125,700 in 2041;
- Over the 2011-2041 period, approximately 52% of County-wide housing growth has been allocated to the City of Woodstock. As of 2011, the City of Woodstock comprised approximately 38% of the occupied housing base (up from 35% in 2001). By 2041, Woodstock is estimated to comprise approximately 41% of the occupied housing base;
- Average annual housing growth over the next 30 years is forecast to be lower than the 2001-2011 period for the Urban Centres (i.e. Woodstock, Ingersoll and Tillsonburg). For the Townships, average annual housing growth is forecast to be comparable or higher than the 2001-2011 period, based on Statistics Canada Census data;²
- The rate of incremental population and housing growth is forecast to decline for all local municipalities over the forecast period as a result of the aging of the population and labour force; and
- The average number of persons per unit (PPU) is forecast to steadily decline for all Area Municipalities due to the aging of the population.

¹ 2011 population includes an upward adjustment for the net Census undercount of approximately 2.4%.

² It is noted that residential building permit activity (new units) during the 2001-2011 period was significantly higher than household growth as reported by Statistics Canada.

Employment Forecast to 2011-2041

Forecast employment growth for Oxford County has been based on a comprehensive review of employment growth potential for the commuter-shed surrounding Oxford County, as well as an assessment of the key growth drivers expected to influence the amount, type and location of future employment growth across Oxford County over the next 30 years. As part of this review, the competitive position of Oxford County's employment lands has been assessed. Based on this analysis, the key findings regarding forecast employment growth for Oxford County are summarized below:

- Total employment is forecast to increase from 52,000 in 2011 to 65,000 in 2041, an increase of approximately 13,000 over the period. This represents an average annual rate of growth of 0.7%, which is lower than the average attained over the 2001-2011 period of 1.7%. All of the Area Municipalities are anticipated to experience employment growth over the forecast period;
- Employment growth is expected to be strongest over the 2016-2021 period. Post 2021, the rate of employment growth is anticipated to slow with the aging of the labour force within the County and surrounding commuter-shed;
- During the forecast period, the County's employment activity rate (i.e. jobs per population) is expected to steadily increase from 49% to 53%, driven by the County's growing export-based economy;
- All major employment sectors are anticipated to demonstrate growth, largely driven by employment growth in automotive manufacturing, warehousing and transportation, agribusiness, retail trade and business services;
- The County's industrial sector is forecast to increase by approximately 5,900 jobs. The commercial and institutional sectors are also expected to experience steady employment growth over the forecast period, increasing by 4,000 and 2,000 new jobs, respectively. A further 1,000 jobs are anticipated to be generated through "work at home" employment. Lastly, the County's primary sector (i.e. agricultural and resource-based employment) is forecast to experience minimal employment growth over the next 30 years; and
- It is estimated that approximately 88% of the County-wide employment growth will occur in Oxford County's Urban Centres (Woodstock, Ingersoll and Tillsonburg) over the 2011-2041 period. Comparatively, over the 2001-2011 period, approximately 93% of County-wide employment growth occurred within the County's Urban Centres.

Oxford County Employment Lands Profile and Inventory

Traditionally, the term "employment lands" has been used as an alternative description for "industrial lands" in Official Plans throughout the Province. Employment lands continue to be a focus for industrial uses, but they may also include office and other non-residential uses. However, they do not include substantial retail commercial and institutional development. For the purposes of this study, employment lands include lands designated in the County Official Plan as "Industrial" or "Business Park." The following summarizes the County's current employment lands inventory:

- The County's employment lands are concentrated in Woodstock, Tillsonburg and Ingersoll with additional employment lands located in the County's Serviced Villages. Of the County's approximately 1,400 net Ha of developed employment land, 61% is located in Woodstock;
- The County's employment lands accommodate an estimated 16,800 jobs, representing approximately 32% of the Oxford employment base. Employment on employment lands is concentrated in the manufacturing sector, which accounts for 84% of the total. Other sectors accommodated on employment lands include wholesale trade, transportation and warehousing, construction, utilities and various commercial sectors including business services;

- Oxford County has experienced varied levels of industrial development activity in recent years. Over the 2009-2012 period, industrial land absorption averaged 15 net Ha (37 net acres) annually in Oxford County, of which 72% was in Woodstock;
- The County's net vacant designated employment lands supply is estimated at 579 net Ha (1,430 net acres). Approximately 57% of the supply is located in Woodstock (330 net Ha);
- Of the County's vacant employment lands inventory, 187 net Ha (462 net acres) is shovel-ready¹ of which 80% (147 net Ha) is located in Woodstock;
- To ensure employment lands are not unduly constrained, the County should ensure that a minimum 5-year supply of serviced employment lands (by various sizes, zoning and locations) is available at all times throughout the forecast period, in order to allow for proper market functioning; and
- It is recommended that the County monitor its current employment lands inventory, at minimum every 5 years, to determine if additional employment lands are required to accommodate forecast demand.

Employment Land Needs

Employment lands are an integral part of the County's economic development, goods-producing sector expansion and corresponding employment growth potential. Over the 2013-2033 planning horizon:

- Oxford County is expected to add a total of approximately 5,490 jobs on employment lands. To accommodate this employment growth, Oxford is expected to absorb 24 net Ha (58 net acres) of employment lands annually, slightly higher than the historical average. Employment land demand is expected to total 473 net Ha (1,169 net acres);
- Based on the existing supply of developable vacant employment land, Oxford County as a whole appears to have a sufficient supply of employment lands to meet long-term needs to 2033. However, notwithstanding the County-wide employment land surplus identified, there is a significant forecast employment lands shortfall in Woodstock and Ingersoll over the planning period (i.e. 2013-2033);
- Each of the Area Municipalities operates as a different industrial market given its location, access, proximity to labour, proximity to urban amenities, price of land, permitted uses, proximity to surrounding employment markets and related employment clusters, character of the Employment Area and surrounding non-industrial uses. As such, it is not reasonable to treat all of the County's Area Municipalities as one homogenous regional market area; and
- In accordance with the findings of this comprehensive review, Woodstock and Ingersoll will need to designate a <u>minimum</u> of approximately 36 gross Ha (89 gross acres) and 65 gross Ha (161 gross acres), respectively of employment land to meet long-term need to 2033. The gross land area identified does not include lands which are physically constrained or undevelopable due to environmental features. The County and Town should explore location options to accommodate these additional employment lands through a subsequent analysis.

It should be noted that substantial lead time (3-5 years) is often required to negotiate boundary adjustments and complete the required secondary planning studies to incorporate and designate such additional employment lands. As such, flexibility is required in the land budgeting analysis to update the vacant employment land supply inventory at the timing of approval for the boundary adjustment.

¹ "Shovel-ready" lands are defined as those that are serviced and zoned and generally considered potentially developable within the next 6 months.

Assessment of Oxford County's Employment Areas

Oxford County has a number of existing and planned Employment Areas located throughout the County. This includes employment lands within existing and planned industrial/business parks within the Urban Centres and concentration of employment land in some of the County's Serviced Villages. As part of this study, Oxford's Employment Areas were reviewed through a SWOC (strengths, weaknesses, opportunities, challenges) analysis. The County's key existing and planned Employment Areas within the Urban Centres were further assessed to better understand their competitiveness and investment readiness. Consideration was given to physical/economic characteristics, access/circulation, development opportunities and target sector attractiveness. Based on this analysis, the following key observations have been made:

- Employment Areas in Woodstock are highly competitive and offer great potential to attract development due to the relatively large supply of shovel-ready vacant employment land, corresponding market choice, proximity and access to Highways 401/403 and appeal to a broad range of sectors. Parks offering the highest potential to accommodate forecast employment lands development include Commerce Way, Woodstock Business Park, North East Business Park and Bysham. Though Patullo Ridge Business Park rates highly, the limited supply of remaining employment lands limits its further development potential;
- Ingersoll's existing Employment Areas are highly competitive but limited vacant employment land opportunities inhibit development potential. The Ingersoll Secondary Plan Area employment lands are highly marketable but currently not development ready; and
- Tillsonburg's two existing Employment Areas are competitive but are less attractive for uses that require proximity to Highways 401/403. Further, the lack of shovel-ready land limits development potential. The servicing of the Forest Hill Industrial Park lands to the south of Highway 3 and the development of the Highway 3 Business Park would greatly improve the supply and market choice of employment lands in the community.

While the County's Employment Areas are generally competitive and marketable, the supply of shovel-ready lands is limited. Oxford County needs to provide a balanced inventory of shovel-ready and developable vacant industrial land that is sufficient to meet market demand in the short, medium and longer term. This requires that the County provide sufficient designated employment lands which have the necessary water and wastewater servicing and road infrastructure in place to accommodate a broad range of users, from small scale to large scale. The lack of shovel-ready lands is most evident in Ingersoll and Tillsonburg where the limited supply of serviced developable land may be impeding growth potential. To address this, the County and the municipalities of Ingersoll and Tillsonburg should explore short-term opportunities to expand the shovel-ready vacant land inventory, based on the following:

- Developing the South Ingersoll Secondary Plan Area in Ingersoll for appropriate industrial/employment uses; and
- Developing the Highway 3 Business Park in Tillsonburg.

Over the medium term, the shovel-ready land supply in Woodstock will need to be expanded. To address this, the County and the City of Woodstock should explore opportunities to expand the shovel-ready vacant land inventory over the next five years, based on the following:

- Develop the North East Business Park; and
- Service employment lands to the northwest of the Toyota Assembly plant to offer broader development opportunities for large-scale uses such as distribution/logistics.

Over the longer term, opportunities should be explored to extend servicing east from the Patullo Ridge Business Park to service designated employment lands to the east.

Policy Recommendations

Chapter 9 provides OP policy recommendations which are informed by the substantial planning, economic and demographic analysis completed as part of this study. These recommendations are provided within the Provincial framework of the 2005 PPS and existing County OP.

Key issues and recommended planning principles include:

- Economic Development and Growth
 - o Maintain long-term sustainable and diverse economic growth on employment lands
 - o Attract and stimulate development in employment areas
- Long-term employment land supply
 - o Long-term employment land needs, 2013 to 2033
 - Increased need for broader market choice on employment lands (e.g. diversify employment land supply by designation, zoning and site size)
- Conversion of Employment Lands
 - o Restrict conversion of employment lands to non-employment uses
- Implementation and Monitoring
 - o Implementation of employment lands policy recommendations through five-year OP review

1. INTRODUCTION

1.1 <u>Terms of Reference</u>

The County of Oxford retained Watson & Associates Economists Ltd. in the spring of 2013 to undertake an update of the population, housing and employment forecasts for the County and its Area Municipalities which was last updated in 2006.¹ The update focuses on the population, housing and employment forecasts for the County and its eight Area Municipalities from 2011 to 2041. A long-term employment land needs analysis is also provided for the County by Area Municipality over the next 20 years. The results of this analysis are intended to guide decision making and policy development specifically related to planning and growth management, urban land needs, master plans and municipal finance at the County-wide and Area Municipal levels. More specifically, this update will provide background to the County's Official Plan Review (OP) and 2014 Development Charges (DC) Background Study. In accordance with the terms of reference of the study, this growth forecast study includes the following key components:

- A 30-year demographic analysis and forecast of population, housing and employment growth for the County of Oxford from 2011-2041 (by 5-year intervals) consistent with provincial policies and methodologies. The analysis includes a population, housing and employment forecast for each of the eight Area Municipalities including:
 - the Urban Centres: City of Woodstock, Town of Tillsonburg and Town of Ingersoll;
 - o the Rural Townships: Blandford-Blenheim, East-Zorra Tavistock, Norwich, South-West Oxford and Zorra;
- A determination of forecast employment growth on employment lands over the 2013-2033 period and corresponding employment land needs within each of the eight Area Municipalities;
- An assessment of Oxford County's key Employment Areas to accommodate forecast growth from a competitiveness and investment readiness perspective; and
- Policy recommendations related to the County's employment lands.

Population, Households & Employment Forecasts, 2001-2031. Oxford County. Hemson Consulting Ltd. April 2006.

2. APPROACH AND METHODOLOGY

2.1 Introduction

The population and household forecast methodology adopted for this study is based on a combined approach, which incorporates both the traditional "top-down" cohort-survival forecast methodology (i.e. population by age-cohort) and a "bottom-up" household formation methodology. This combined approach is adopted to ensure that both regional economic/demographic trends and local housing market conditions are adequately assessed in developing the County's long-term growth potential. Each of these two population growth methodologies is further described in Appendix A.

A key driver of future population growth is the link between local net migration and local/regional economic growth potential, which is discussed below.

2.2 Economic Drivers of Future Housing Growth in Oxford County

Local/regional economic activities can be divided into two categories, those that are "export-based" and those that are "community-based." The export-based sector is comprised of industries (i.e. economic clusters) which produce goods that reach markets outside the community (agriculture and primary resources, manufacturing, research and development). Export-based industries also provide services to temporary residents of the community/municipality (tourism-related sectors, colleges and universities) or to businesses outside the community (specialized financial, professional, scientific and technical services). Community-based industries produce services that primarily meet the needs of the local residents in the community/municipality (retail, personal services, medical, primary and secondary education, and personal and government services).

Ultimately, future population and housing growth within Oxford County will be determined in large measure by the competitiveness of the regional export-based economy. Growth in the working age population (i.e. 19-65) in a community will typically occur only if the export base is expanding. Without growth in the regional export-based economy, growth in community-based activities will be limited to housing development driven primarily by retirees, which is also anticipated to be an influence for many of the municipalities within the County. The approach is illustrated schematically in Figure 2-1.

Figure 2-1

SCHEMATIC APPROACH TO POPULATION AND EMPLOYMENT PROJECTIONS FOR OXFORD COUNTY



Watson & Associates Economists Ltd. H:\Oxford County\Oxford Population Housing and Employment Projections 2013\Oxford County Growth Forecast and Employment Lands Study.docx

The population, housing and employment growth forecast model directly incorporates the key economic drivers which are anticipated to influence housing growth at the County-wide and local municipal levels within Oxford County. These include:

- 1. **Market trends which are anticipated to influence employment growth by sector in the regional and local economy** Based on an investigation of key macro-economic indicators which are expected to influence both the rate and form of employment growth within the regional/local economy over the next 20 years, including current provincial trends, historical trends in the regional employment market by sector, regional economic clusters and a review of the key drivers of future employment growth within the regional market area by major sector.
- 2. Forecast employment growth by major employment sector for Oxford County and the surrounding commuter-shed from 2011-2041 – Based on a review of commuting trends to examine the ratio of Oxford County out-commuters to total surrounding regional market area employees by major employment sector. This analysis explores the potential impact of employment growth in the surrounding regional market area on local housing needs in Oxford County. Conversely, in-commuting trends from the surrounding regional market area into Oxford County are also explored to determine potential local employment growth potential in Oxford County net of live/work employment.
- 3. Current and future live/work employment growth opportunities within Oxford County (including work at home employment) Based on a review of historical trends and future opportunities which are anticipated to influence live/work employment by local municipality.
- 4. **Forecast market demand for housing geared to empty-nesters and retirees (i.e. 55+ group)** Population growth within this age group represents a driver of future housing demand in Oxford County, given potential demographic trends associated with the "baby boom" generation. Average housing occupancies within this age group are anticipated to be considerably lower in comparison to households headed by those in the 20-54 age group. The demographics associated with this age group will have implications on future population growth rates, age structure, as well as municipal servicing needs and housing requirements.

2.3 Approach to Employment Forecast

Similar to the population and household forecast methodology, the employment forecast methodology adopted for this study is also based on a combined approach. The methodology includes a "top-down" approach, consisting of an assessment of the employment growth potential in the District's export-based economy, largely the manufacturing sector, as well as a "bottom-up" approach, primarily based on forecast employment activity rates (i.e. ratio of jobs to population) and industrial absorption trends by Area Municipality. This approach is further described in Appendix A.

3. DEMOGRAPHIC AND ECONOMIC PROFILE

This Chapter provides a review of recent demographic and economic conditions within the County of Oxford. A brief overview of recent provincial economic trends is also given to provide a broader context of the macro economic factors which have influenced residential and non-residential growth trends within the County of Oxford in recent years. This analysis is used to help guide the long-term population, housing and employment forecasts provided in Chapter 5. The analysis provided herein is largely based on data provided from Statistics Canada and other demographic and real estate sources. Supplementary details with respect to historical demographic and economic data are provided in Appendix B.

3.1 <u>Historical Population and Housing Growth Patterns in Oxford County, 1991-2011</u>

Figure 3-1 summarizes historical trends in household and population growth for Oxford County over the 1991-2011 Census periods. Key highlights are as follows:

- Over the past 20 years Oxford County's permanent population grew by approximately 14%, increasing from 92,900 to 105,700 persons. This
 represents an annual population growth rate of approximately 0.6% over the 1991-2011 period. Comparatively, the Province of Ontario
 experienced a growth rate of approximately 1.2% during the same time period;
- New residential development activity has been predominately associated with low-density housing forms (i.e. single and semi-detached); however, recent building permit activity indicates that demand for high-density housing (i.e. apartments) has been increasing, most notably in the City of Woodstock; and
- It has been observed that over the 1991-2011 period, the County's average persons per housing unit (PPU's) have steadily decreased. This has largely been a result of the aging of the County's population and, to a lesser extent, the gradual increased share of high-density housing forms.

Year	Population	Households	Persons Per Unit (PPU)
1991	92,900	33,200	2.80
2001	99,300	37,300	2.66
2011	105,700	41,600	2.54

Figure 3-1 County of Oxford Historical Growth Trends, 1991-2011

Source: Statistics Canada Census, 1991 to 2011.

Population figures exclude the net Census undercount.

Over the 1991-2011 period, the average age of the County's population has steadily increased as a result of the aging "baby boom" population (born between 1946 and 1964). During this historical time period, the percentage of population aged 55+ increased from 23% to 29%. Comparatively, Oxford County's 55+ population is larger in proportion and has increased at a slightly faster rate than the Ontario average.

The percentage of Oxford County's population in the 55+ age group is expected to increase as the "baby boom" population continues to age over the next 20+ years. As a result, the County's population base is becoming increasingly more dominated by an older population, which is heavily weighted towards "empty-nesters" and seniors. Looking forward, this has implications on the County with respect to seniors' and affordable housing needs, as well as future demands for both hard and soft municipal services.

Figure 3-2 summarizes historical trends in total household and population growth for Oxford County over the 1991-2011 Census periods. Over this time period:

- All of the County's Area Municipalities have experienced new housing development;
- Recent residential building permit activity has been strong across all of the Townships; however this development activity has not been recognized in the 2011 Census;
- Over the 2001-2011 period, the vast majority of housing growth has occurred within the Urban Centres; however, between the 2001-2006 and 2006-2011 periods, the proportion of housing growth (based on Census data) in the Townships increased from 4% to 13%; and
- In total, the County's household base grew from 33,200 to 41,600 between 1991 and 2011, which represents an annual increase of approximately 420 households per year. During the past ten years, the average annual rate of housing construction increased modestly to 430 new households per year.

Housenoids by Local municipality, 1991-2011								
Municipality	1991 2011 Ho Households Households		Household Growth 1991 - 2011	Share of Household Growth				
Woodstock	11,550	15,700	4,150	49%				
Tillsonburg	4,850	6,820	1,970	23%				
Ingersoll	3,450	4,780	1,330	16%				
Blandford-Blenheim	2,380	2,620	240	3%				
Norwich	3,240	3,610	370	4%				
East Zorra-Tavistock	2,260	2,520	260	3%				
Zorra	2,710	2,940	230	3%				
South-West Oxford	2,720	2,590	(130)	-2%				
Oxford County 33,160 41,580 8,420 100%								

Figure 3-2 County of Oxford Households by Local Municipality, 1991-2011

Source: Statistics Canada 1991 - 2011

Note: Figures may not add precisely due to rounding

Figure 3-3 outlines Oxford County's population growth over the 1991-2011 period by local municipality. Key observations are as follows:

- During the past 20 years, the majority of the population growth (approximately 60% of the County-wide growth) has occurred in the City of Woodstock. Similarly, Tillsonburg and Ingersoll have also experienced large percentage shares of the County-wide population growth at 26% and 21%, respectively; and
- Notwithstanding recent residential building permit activity across the Townships, recent population growth within these municipalities has been slow or, in some cases, negative as a result of declining average PPU levels.

Population by Local widhicipality, 1991-2011							
Municipality	1991 Population	2011 Population	Population Growth 1991 - 2011	Share of Population Growth			
Woodstock	30,100	37,800	7,700	60%			
Tillsonburg	12,000	15,300	3,300	26%			
Ingersoll	9,400	12,100	2,700	21%			
Blandford-Blenheim	7,300	7,400	100	1%			
Norwich	10,100	10,700	600	5%			
East Zorra-Tavistock	7,300	6,800	(500)	-4%			
Zorra	8,200	8,100	(100)	-1%			
South-West Oxford	8,500	7,500	(1,000)	-8%			
Oxford County 92,900 105,700 12,800 100%							

Figure 3-3 County of Oxford Population by Local Municipality, 1991-2011

Source: Statistics Canada 1991 – 2011.

Note: Population figures exclude the net Census undercount

3.2 Recent Employment Trends in the County of Oxford

Figure 3-4 summarizes historical trends in employment growth for Oxford County over the 2001-2011 Census periods, while Figure 3-5 outlines historical trends in employment growth for Oxford County's local municipalities. Key observations include:

- Over the past 10 years, Oxford County's employment base grew by approximately 18%, increasing from 44,200 to 52,000 jobs. This represents an annual employment growth rate of approximately 1.6% over the 2001-2011 period. Comparatively, the provincial employment base increased at an annual rate of 0.7% over the same historical time period;
- During this period, approximately 93% of the County-wide employment growth occurred within the County's Urban Centres (i.e. Woodstock, Ingersoll and Tillsonburg), largely driven by employment growth within the City of Woodstock; and
- The County has experienced employment growth in a number of economic sectors, including manufacturing (i.e. automotive, food processing, warehousing/distribution), transportation/logistics, professional, scientific and technical services, health services, retail trade, as well as accommodation and food; and
- The County employment activity rate (i.e. ratio of jobs per population) has steadily increased from 44% to 49%, largely driven by the County's strong and growing industrial base.

Figure 3-4
County of Oxford
Historical Employment Growth Trends, 2001 to 201

Year	Population	Employment	Activity Rate	
2001	99,300	44,155	44%	
2006	102,800	48,440	47%	
2011	105,700	52,045	49%	

Source: Statistics Canada Census, 2001 to 2006.

2011 employment figures estimated by Watson & Associates Economists Ltd., based on a review of historical non-residential building permit activity, as well as discussions with municipal staff regarding business closures, downsizing and expansions. 2011 employment figures for the City of Woodstock were derived from the City's 2013 business directory.

Population figures exclude the net Census undercount.

It is noted that a large proportion of recent employment growth which has occurred within Oxford County can be attributed to the opening of the Toyota Plant (2008) in the City of Woodstock. Looking forward, it is assumed that forecast employment growth levels for the City of Woodstock will be steady, but well below the 2006-2011 period. Further details are provided in Chapter 5 and Appendix C.

Municipality	2001 Employment	2011 Employment	Employment Growth 2001 - 2011	Share of Employment Growth			
Woodstock	15,740	22,125	6,385	82%			
Tillsonburg	8,920	8,735	(185)	-2%			
Ingersoll	7,255	8,250	995	13%			
Blandford-Blenheim	2,130	2,015	(115)	-1%			
Norwich	3,445	3,605	160	2%			
East Zorra-Tavistock	2,445	2,240	(205)	-3%			
Zorra	2,590	2,710	120	2%			
South-West Oxford	1,635	2,220	585	8%			
Oxford County	44,200	52,000	7,740	100%			

Figure 3-5
Oxford County
Local Municipality Employment Growth Trends, 2001-2011

Source: Statistics Canada Census, 2001. 2011 employment figures estimated by Watson & Associates Economists Ltd.

Note: Figures may not add precisely due to rounding

4. OXFORD COUNTY'S GROWTH DRIVERS

This Chapter explores a number of key factors which are anticipated to drive future population growth within the County of Oxford over the next 30 years. This includes local employment growth drivers such as the County's locational attributes, strength and growth potential of the existing industrial base, competitiveness of its industrial development market and quality of life attributes. Further, there are potential opportunities for commuting within the Oxford County commuter-shed, driven by employment growth prospects within the surrounding market area, which are expected to drive local population growth. Each of these factors is explored herein.

4.1 Location

Oxford County is part of a broader market area (commuter-shed) which includes Waterloo Region and the Counties of Perth, Brant, Haldimand-Norfolk, Elgin and Middlesex, as illustrated in Figure 4-1. Location factors play a key role in the distribution of the dominant business clusters visible across Oxford County and the broader market area today, such as auto-manufacturing and transportation/warehousing. For both international and locally based industries, Oxford County has a strong appeal, given its location within Ontario's industrial heartland – between the Greater Toronto Area + Hamilton (GTAH) and Waterloo Region to the east and London to the west. The Greater Golden Horseshoe (GGH), which encompasses the eastern part of the defined market area (including Waterloo Region, Brant County and Haldimand County), is one of the fastest growing and economically diverse regions in North America. Given its location, the County's Employment Areas are accessible to both domestic and U.S. markets via excellent highway access (401/403).

As of 2006, the employment base within the Oxford County commuter-shed was approximately 574,000. Oxford County commuters comprised approximately 2% of this employment base, representing approximately 10,300 jobs. Future trends in out-commuting are an important input to consider in forecasting population growth for the County, because these commuters generate increased demands for new housing. According to the most recent employment growth forecasts for this area, the employment base of the Oxford County commuter-shed (excluding Oxford) is forecast to increase by 270,000 jobs between 2011 and 2041. Assuming that the proportion of Oxford County out-commuters remains relatively stable at 2%, this represents an increase of approximately 5,000 jobs held by Oxford County residents. Accordingly, future employment growth within the commuter-shed surrounding Oxford County is an important driver of future net migration for the County.

As previously discussed in Chapter 2, the future population growth rate of the County will be largely driven by local job growth opportunities in the County's export-based employment sectors (i.e. manufacturing and agriculture). Growth potential within the County's export-based employment sectors represents the primary draw for working age persons and their families considering Oxford County as a permanent place of residence. In turn, population growth driven by local export-based employment opportunities stimulates demand for population-related employment growth in sectors such as retail, accommodation and food, business and personal services, public administration, education and health care and social assistance.

Within the broader market area, Oxford's ability to attract export-based development is largely determined by the competitiveness of its employment lands. This competitiveness is based on a number of factors including the quality and quantity of developable employment lands and financial factors which impact the cost of development. These are discussed below.



Figure 4-1 Oxford County Primary Commuter-shed

4.2 Competitive Industrial Development Market

In addition to the regional locational attributes identified above, there are a number of financial factors which also influence the market demand and the general competitiveness of the employment lands within Oxford County, such as industrial land prices, development charges, tax rates, water/sewer rates and construction costs. Collectively, these financial factors impact the overall cost of industrial development and the competitive position of Oxford County. The cost competitiveness of industrial development is examined herein in the context of the County's three urban municipalities – Woodstock, Ingersoll and Tillsonburg.

Industrial Land Prices

Land prices can provide a key advantage for increasing regional competitiveness, especially for land extensive uses such as transportation, wholesale trade, warehousing and large-scale manufacturing. Figure 4-2 summarizes industrial land prices (\$ per acre) for the Oxford County municipalities of Woodstock, Ingersoll and Tillsonburg, and the surrounding market area based on recent market survey data. As illustrated, industrial land values within Oxford County are significantly lower than in the west GTAH (i.e. Milton and Hamilton) and other GGH municipalities, including Guelph, Cambridge and Kitchener. Compared to other communities in southwestern Ontario, Oxford County's employment land prices are comparable to London but marginally higher than those in St. Thomas and Strathroy-Caradoc.

Lower industrial land values can have both positive and negative impacts on the market potential of this area. On the one hand, lower land values generally encourage the development of more land-extensive developments related to logistics, warehousing and processing. While development within these sectors typically does not generate high employment densities, it does contribute to the tax assessment base. Furthermore, municipal expenditures associated with land extensive industrial development is also generally low when compared to denser commercial and residential development.

On the other hand, lower land prices can also be associated with lower returns on investment and a lack of private sector interest to develop Employment Areas. Where private sector interest is present, development is typically geared towards a build-to-suit driven market with little speculative construction occurring. In turn, this can limit market choice and the ability to attract users with development timeframes that cannot be satisfied by build-to-suit options.

Figure 4-2



Property Taxes and Development Charges

Industrial tax rates and development charges can influence the relative attractiveness of an area for employment lands development.

Figure 4-3 summarizes industrial development charge rates in the surveyed municipalities. As shown, Woodstock, Ingersoll and Tillsonburg have no industrial development charges. London, St. Thomas and Stratford also have no industrial development charges. Industrial development charges in the other municipalities surveyed range between \$2.66 and \$17.17 per sq.ft., with the highest rates found in the GTAH, Cambridge, Kitchener and Guelph. Development charges typically represent a relatively small component of total on-going industrial development costs, since they represent a one-time development fee.





Figure 4-4 summarizes average industrial property taxes (expressed on a per sq. ft. basis for standard industrial development) in the municipalities surveyed. As shown, average industrial property taxes in Woodstock and Ingersoll are among the highest surveyed while Tillsonburg ranks as the second lowest.



Figure 4-4

Typical Development Cost of Industrial Development Comparative Analysis

The cost competitiveness of industrial development within the Oxford County municipalities was examined through a cost of development analysis of a prototypical 300,000 sq.ft. industrial building. The analysis was completed for Woodstock, Ingersoll and Tillsonburg and the other surveyed municipalities. The analysis includes the cost of industrial land, construction costs, development charges and developer profit margin, and summarizes total development cost on a sq.ft. basis. The results of this analysis are presented in Figure 4-5. As shown, the cost of industrial development of the prototypical development in Woodstock, Tillsonburg and Ingersoll is estimated at \$74-76 per sq.ft. The cost of development in these Oxford County municipalities is significantly lower than in the west GTAH (i.e. Milton and Hamilton) and major urban centres in the GGH, including Kitchener, Cambridge, Guelph and Brantford. The cost of development in the Oxford County municipalities is comparable to other municipalities in southwestern Ontario, including Strathroy-Caradoc, London, Stratford and St. Thomas.





Vacant Designated Employment Land Supply

A major factor in the competitiveness of Oxford County is the supply and quality of industrial and employment lands.

Figure 4-6 summarizes the total designated vacant employment land by surveyed municipality. As shown, the largest designated vacant employment land inventories are in London (984 net Ha) followed by Hamilton (741 net Ha) and Milton (600 net Ha). Woodstock has a relatively large vacant designated employment land inventory relative to its population size, with an inventory greater than many larger communities, including Guelph, Cambridge, Brantford and Kitchener. Tillsonburg's inventory of designated vacant employment lands is more moderate, comparable to Strathroy-Caradoc while Ingersoll's inventory is the smallest.





4.3 <u>Strength and Growth Potential of Existing Regional and Local Industrial Base</u>

Oxford County and the surrounding market area have a diverse and strong industrial base which has experienced relatively strong employment growth over the past several years (2009-2013). Ultimately, the aggregate indicators of Oxford County's and the surrounding market area's economic performance are determined in large measure by the competitiveness of their industry clusters. A cluster is a set of inter-linked private sector industries and public sector institutions whose final production reaches markets outside the local market. Thus, the cluster approach to economic development reflects, in some way, a more traditional focus on the export base of a region.¹ An expanding export base – or competitive clusters – is a key component to the economic prosperity of the local economy of the surrounding area, because exports bring money into the local market to be circulated amongst local-serving enterprises and their employees.

Location Quotients (LQ's) are a commonly used tool in regional economic analysis to identify and assess the relative strength of industry clusters. They assess the concentration of economic activities within a smaller area, relative to the overarching region in which it resides. The LQ for a given municipality or local geographic area is calculated by dividing the percentage of total <u>local employment</u> represented by a sector, by the percentage of the total broader <u>employment</u> base (typically based on provincial and/or national levels) represented by the sector. An LQ of 100% identifies that the concentration of employment by sector is consistent with the broader employment base average. An LQ of greater than 100% identifies that the concentration of employment in a given employment sector is higher than the broader base average, which suggests a relatively high concentration of a particular employment sector or "cluster." Employment sectors with a relatively high LQ generally serve both the local population base, as well as employment markets which extend beyond the boundaries of the municipality. On the other hand, employment sectors with an LQ of less than 100% identify particular employment sectors which have relatively lower concentrations (as compared with the broader market average) and are generally under-servicing the needs of the local market.

Figure 4-7 presents the industry clusters in the market area in terms of relative size (by employment), LQ and recent employment growth. As illustrated, the most dominant clusters for the surrounding market area include agriculture, manufacturing, health and social services, construction, accommodation and food services, education services and wholesale trade. Dominant sectors which have seen strong employment growth over the past few years (2009-2013) include health and social services, construction, wholesale trade, and accommodation and food. Manufacturing, which is a significant part of the regional economic structure, has seen modest employment growth in recent years.

¹ Toronto Competes: An Assessment of Toronto's Global Competitiveness. February, 2000.

Oxford Market Area Cluster Size and Growth Matrix 1.80 Agriculture and forestry 1.60 Manufacturing -1.40 Wholesale Health care and social trade assistance Retail trade Accomm. And food services 1.20 Location Quotient Arts, entertainment, Educational services Construction recreation 1.00 Prof'l, scientific, tech. services Other services 0.80 Management of companies Transportation and warehousing **Real estate** and rental 0.60 Utilities Finance and Public administration insurance Admin support, waste mgmt and remediation Information 0.40 and cultural industries Mining and gas 0.20 -20.0% -15.0% -10.0% -5.0% 0.0% 5.0% 10.0% 15.0% Employment Growth, 2009-2013 Source: Derived from EMSI data by Watson & Associates Economists Ltd.

Figure 4-7



Figure 4-8 illustrates the strength of employment sectors in Oxford County relative to the Province using Location Quotients (LQ). As shown, Oxford County's economy is largely oriented towards agriculture, manufacturing, transportation and warehousing and wholesale trade. In contrast, Oxford County has a relatively low concentration of employment in professional, scientific and technical services, utilities, management of companies and enterprises, finance and insurance, public administration, and information and cultural industries. The area also has a moderate concentration of employment in several other industrial and commercial sectors, including retail trade, accommodation and food services, construction and health care/social assistance.





The growth of business activity in Oxford County is expected to be largely tied to the growth potential of the economy across the broader market area (discussed above). This suggests that the County's economic base is expected to continue to diversify. In industrial growth clusters where Oxford County has a solid presence and is currently exhibiting a competitive advantage, growth across the surrounding market area will likely translate into further development in Oxford County. This includes the wholesale trade (distribution and logistics) sector which to-date has experienced growth largely within Woodstock (i.e. recent construction of SYSCO, a 400,000 sq.ft. food distribution centre).

The County's manufacturing sector, identified as a mature cluster, will remain an important part of the local economy and has the strongest growth potential in the transportation and food/beverage processing subsectors. The County's manufacturing base and transportation sector is anticipated to experience steady employment with the auto cluster centred around the Toyota plant in Woodstock and the GM CAMI plant in Ingersoll. Since opening in 2008, the Toyota plant has added 2,800 direct jobs to the local manufacturing base, with an additional 400 new jobs planned to boost production of the RAV4 compact sport utility vehicle from 150,000 per year to 200,000 per year. In addition, GM recently announced an additional \$250 million investment into the CAMI plant to expand production.

4.4 Quality of Life

Quality of life is a factor influencing the residential location decisions of individuals and their families. It is also a factor considered by companies in relocation decisions. Typically, quality of life encompasses a number of sub-factors such as employment opportunities, cost of living, housing affordability, crime levels, quality of schools, transportation, recreational opportunities, climate, arts and culture, entertainment, amenities and population diversity. The importance of such factors, however, will vary considerably depending on life stage and individual preferences.

Oxford County has a reputation as a vibrant, growing, affordable, low-crime location in which to live in Ontario, with access to a wide range of recreational opportunities within the County and throughout the surrounding countryside. Talent attraction and retention will be a key issue in Oxford's competitiveness going forward and, therefore, a factor in Oxford's economic growth will be the extent to which it can develop "quality of life" enhancements to appeal to mobile young talent, while not detracting from its attractiveness for other population segments.

4.5 Conclusions

The County and surrounding market area have a strong, diverse and growing industrial base which will continue to be a key driver of net migration within the working age population and their children. There are a number of factors which suggest that Oxford County will see relatively strong employment growth over the coming decades. The County is well positioned geographically, benefiting from access to 400 series highways and proximity to major markets in the GGH and the U.S. From a cost competitive standpoint, Oxford represents a more affordable industrial development location compared to the west GTAH or GGH communities. This competitive advantage has been a key driver of the County's recent success in attracting major export-based industries and their suppliers. Woodstock and Tillsonburg have a relatively healthy supply of vacant designated employment lands to accommodate future industrial growth, though the supply in Ingersoll is limited.

5. OXFORD COUNTY POPULATION, HOUSING AND EMPLOYMENT FORECAST

This Chapter summarizes the long-term population, household and employment forecasts for Oxford County from 2011-2041. The long-term growth forecasts contained in this Chapter are premised on the demographic and economic trends explored in Chapter 3 and the growth drivers assessed in Chapter 4. Additional details with respect to the population, housing and employment forecasts are provided in Appendix C.

5.1 **Population and Housing Forecasts**

Figure 5-1 summarizes the County-wide population and housing forecasts for the 2011-2041 period in comparison with recent historical trends, while Figures 5-2 through 5-4 summarize the population and housing forecasts by Area Municipality. The population and housing growth forecasts by Area Municipality have been derived based on a review of residential supply and demand factors by local municipality, including:

Local Supply Factors:

- Supply of potential future housing stock in the development process by housing structure type and approval status;
- Housing intensification opportunities;
- Current inventory of net vacant designated urban "greenfield" lands not currently in the development approvals process;
- A high-level review of identified water and wastewater servicing capacity and potential solutions to overcome constraints (where identified);
- A high-level review of proposed water/wastewater infrastructure expansions and timing; and
- Provincial policy direction regarding forecast residential growth by urban vs. rural area.

Demand Factors:

- Historical housing activity by structure type based on 2001-2011 Census data by Area Municipality;
- A review of historical residential building permit activity (new units only) by structure type (net of demolitions) from 2006-2012;
- Influence of population and employment growth within the surrounding market areas on the geographic distribution of growth and settlement patterns across the County;
- Forecast commuting trends and access to surrounding employment markets;
- Live/work and work at home employment potential;
- Market demand for housing intensification;
- Impacts of regional infrastructure (i.e. provincial highways, Tillsonburg Airport) on future housing and employment demand potential; and
- Appeal to empty-nesters/seniors.

It is noted that during the review of the growth forecast allocations with the Technical Advisory Committee (TAC), comments were raised regarding the impacts of the Town of Ingersoll Southwestern landfill proposal. The Environmental Assessment (EA) for the landfill was initiated by Walker Environmental Group in March, 2012. The project is currently in Phase 1 of the EA process, with the applicant currently seeking Ministry of Environment (MOE) approval for their draft terms of reference. Phase II of the EA study will not proceed unless MOE has approved the terms of reference for the study. Given that there is currently no estimated timeline to complete the EA or any insights with respect to the outcome of the EA process, it is premature and beyond the scope of this assignment to comment on the impacts of the proposed landfill on future population and employment growth rates on the County and/or the Town of Ingersoll.

The County is forecast to experience modest population growth over the 2011-2041 period. Population growth is forecast to be the strongest during the 2011-2021 period, driven by relatively strong levels of net migration during this time period. Post 2021, population growth is forecast to gradually slow down as a result of the County's aging population. Key findings regarding the County-wide and Area Municipal population and housing forecasts are summarized below:

- Oxford County's housing base is forecast to increase from approximately 41,600 in 2011 to 52,900 in 2041, an increase of 11,300;
- All local municipalities are expected to experience housing growth over the long-term forecast period;
- The County's population is forecast to increase by approximately 17,500 persons over the forecast period, growing from 108,200 persons in 2011 to 125,700 in 2041;
- Over the 2011-2041 period, approximately 52% of County-wide housing growth has been allocated to the City of Woodstock. As of 2011, the City of Woodstock comprised approximately 38% of the occupied housing base (up from 35% in 2001). By 2041, Woodstock is estimated to comprise 41% of the occupied housing base;
- Average annual housing growth is forecast to be lower than the 2001-2011 period for the Urban Centres (i.e. Woodstock, Ingersoll and Tillsonburg). For the Townships, average annual housing growth is forecast to be comparable or higher than the 2001-2011 period, based on Statistics Canada Census data;¹
- The rate of incremental population and housing growth is forecast to decline for all local municipalities over the forecast period as a result of the aging of the population and labour force; and
- The average number of persons per unit (PPU) is forecast to steadily decline for all Area Municipalities due to the aging of the population.

¹ It is noted that residential building permit activity (new units) during the 2001-2011 period was significantly higher than household growth reported by Statistics Canada.

Figure 5-1
Oxford County
Population and Household Forecast, 2011-2047

Year	Population (Excluding Net Census Undercount)	Population (Including Net Census Undercount)	Households	PPU
2001	99,300	103,200	37,300	2.77
2006	102,800	106,500	39,300	2.71
2011	105,700	108,200	41,600	2.60
2016	109,200	111,700	44,000	2.54
2021	112,800	115,500	46,400	2.49
2026	116,100	118,800	48,500	2.45
2031	119,100	121,900	50,400	2.42
2036	121,300	124,200	51,800	2.40
2041	122,800	125,700	52,900	2.38

Source: Watson & Associates Economists Ltd. 2013

Note: Figures may not add precisely due to rounding.

The average net Census undercount over the 1986 to 2011 period is estimated to be approximately 3%. Over this period, the undercount has steadily declined to 2.4%

Throughout the forecast period, the undercount is held steady at 2.4%

Area Municipal Population Forecasts, 2011-2041									
Year	Woodstock	Tillsonburg	Ingersoll	Norwich	Zorra	South-West Oxford	Blandford- Blenheim	East Zorra Tavistock	Oxford County
2001	34,400	14,600	11,400	10,900	8,400	8,100	7,900	7,500	103,200
2006	36,800	15,400	12,200	10,900	8,400	7,900	7,400	7,600	106,500
2011	38,700	15,700	12,400	11,000	8,300	7,700	7,500	7,000	108,200
2016	41,000	16,200	12,800	11,100	8,300	7,700	7,700	7,100	111,700
2021	43,300	16,700	13,200	11,300	8,300	7,600	7,900	7,300	115,500
2026	45,400	17,200	13,500	11,400	8,300	7,600	8,000	7,400	118,800
2031	47,100	17,700	13,900	11,600	8,400	7,600	8,200	7,500	121,900
2036	48,400	18,000	14,100	11,700	8,400	7,600	8,400	7,600	124,200
2041	49,200	18,200	14,300	11,900	8,500	7,600	8,500	7,600	125,700
2011-2031	8,400	2,000	1,500	600	100	-100	700	500	13,700
2011-2041	10,500	2,500	1,900	900	200	-100	1,000	600	17,500

Figure 5-2 Oxford County Area Municipal Population Forecasts, 2011-204²

Source: Watson & Associates Economists Ltd. 2013

Note: Figures may not add precisely due to rounding

Population includes an estimated net Census undercount of approximately 2.4%
Year	Woodstock	Tillsonburg	Ingersoll	Norwich	Zorra	South-West Oxford	Blandford- Blenheim	East Zorra Tavistock	Oxford County
2001	13,200	5,900	4,200	3,400	2,800	2,600	2,600	2,500	37,200
2006	14,400	6,400	4,600	3,500	2,900	2,600	2,500	2,600	39,500
2011	15,700	6,800	4,800	3,600	2,900	2,600	2,600	2,500	41,500
2016	17,100	7,200	5,000	3,700	3,000	2,600	2,700	2,600	43,900
2021	18,400	7,500	5,300	3,900	3,100	2,700	2,900	2,700	46,500
2026	19,500	7,800	5,500	4,000	3,200	2,700	3,000	2,800	48,500
2031	20,500	8,100	5,700	4,200	3,200	2,800	3,100	2,900	50,500
2036	21,200	8,300	5,900	4,300	3,300	2,800	3,200	3,000	52,000
2041	21,600	8,500	6,000	4,400	3,400	2,800	3,200	3,000	52,900
2011-2031	4,800	1,300	900	600	300	200	500	400	9,000
2011-2041	5,900	1,700	1,200	800	500	200	600	500	11,400

Figure 5-3 Oxford County Local Household Forecasts, 2011-2041

Source: Watson & Associates Economists Ltd. 2013

Note: Figures may not add precisely due to rounding

Figure 5-4
Oxford County
Percentage Share of Housing Growth by Area Municipality, 2011-2041

Municipality	Percent of County Housing Growth 2001 - 2011	Percent of 2011 County Housing	Percent of County Housing Growth 2011 - 2041	Percent of 2041 County Housing
City of Woodstock	57.8%	37.8%	52.4%	40.9%
Town of Ingersoll	13.6%	11.5%	10.7%	11.3%
Town of Tillsonburg	20.0%	16.4%	14.4%	16.0%
Township of Blandford-Blenheim	1.4%	6.3%	5.5%	6.1%
Township of East Zorra-Tavistock	0.3%	6.0%	4.4%	5.7%
Township of Norwich	4.1%	8.7%	6.6%	8.2%
Township of South-West Oxford	0.2%	6.2%	2.2%	5.4%
Township of Zorra	2.5%	7.1%	3.7%	6.3%
Oxford County		100%	100%	100%

5.2 Employment Forecasts

Figure 5-5 summarizes the employment forecast for Oxford County from 2011-2041 in comparison with recent historical trends, while Figure 5-6 summarizes the County's employment forecast by Area Municipality. The County-wide employment growth forecast has been developed in accordance with the demographic and economic trends explored in Chapter 3 and the growth drivers assessed in Chapter 4. The employment growth forecasts by Area Municipality have been determined based on a review of the following:

- A review of historical and forecast population and employment growth rates within the Oxford County commuter-shed;
- Recent non-residential building permit data by industrial, commercial and institutional (ICI) sector by Area Municipality within Oxford County;
- The marketability and competiveness of the County's vacant serviced or serviceable employment land supply (refer to Chapters 6, 7 and 8);
- Analysis of the Commercial Policy Review outlining the distribution of retail and commercial space demand in the County; and
- Discussion with Area Municipalities (Economic Development) regarding recent non-residential development trends and future employment prospects.

The 2011 employment base for each Area Municipality was derived by Watson & Associates using the 2006 employment base (Census) and estimating 2006-2011 employment growth through the assessment of non-residential development activity, adjusted downward to reflect major business closures/downsizing over the period. The same approach was used to estimate the 2013 employment base. This approach was considered to be a more accurate method of estimating 2011 employment than using the currently available 2011 Census employment data. In accordance with the employment growth forecast approach discussed in Chapter 2 and Appendix A, the following key observations have been made with respect to the County's long-term employment growth potential:

- Total employment is forecast to increase from 52,000 in 2011 to 65,000 in 2041, an increase of approximately 13,000 over the period. This represents an average annual rate of growth of 0.7%, which is lower than the average attained over the 2001-2011 period of 1.7%;
- Employment growth is expected to be strongest over the 2016-2021 period. Post 2021, the rate of employment growth is anticipated to slow with the aging of the labour force within the County and surrounding commuter-shed;
- During the forecast period, the County's employment activity rate (i.e. jobs per population) is expected to steadily increase from 49% to 53%, which reflects the County's growing export-based economy;
- Over the forecast period, all major employment sectors are anticipated to demonstrate growth, largely driven by employment growth in automotive manufacturing, warehousing and transportation, agribusiness, retail trade and business services;
- The County's industrial sector is forecast to increase by approximately 5,900 jobs. The commercial and institutional sectors are also expected to experience steady employment growth over the forecast period, increasing by 4,000 and 2,000 new jobs, respectively. A further 1,000 jobs are anticipated to be generated through "work at home" employment. Lastly, the County's primary sector (i.e. agricultural and resource-based employment) is forecast to experience minimal employment growth over the next 30 years;
- All of the Area Municipalities are anticipated to experience employment growth over the forecast period; and
- It is estimated that approximately 88% of the County-wide employment growth will occur in Oxford County's Urban Centres (Woodstock, Ingersoll and Tillsonburg) over the 2011-2041 period. Comparatively, over the 2001-2011 period, approximately 93% of County-wide employment growth occurred within the County's Urban Centres.

Figure 5-5
Oxford County
Employment Forecast, 2011-2041

Year	Population (Excluding Net Census Undercount)	Population (Including Net Census Undercount)	Employment	Activity Rate
2001	99,300	103,200	44,200	43%
2006	102,800	106,500	48,400	45%
2011	105,700	108,200	52,000	48%
2016	109,200	111,700	55,000	49%
2021	112,800	115,500	58,400	51%
2026	116,100	118,800	60,900	51%
2031	119,100	121,900	62,900	52%
2036	121,300	124,200	64,300	52%
2041	122,800	125,700	65,000	52%

Source: Watson & Associates Economists Ltd. 2013

Note: Figures may not add precisely due to rounding

Population includes a estimated net Census undercount of approximately 2.4%

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Year	Woodstock	Tillsonburg	Ingersoll	Norwich	Zorra	South-West Oxford	Blandford- Blenheim	East Zorra Tavistock	Oxford County
2001	15,700	8,900	7,300	3,400	2,600	1,600	2,100	2,400	44,200
2006	18,200	9,300	8,300	3,500	2,600	2,200	2,100	2,200	48,400
2011	22,100	8,700	8,300	3,600	2,700	2,200	2,200	2,200	52,000
2013	22,900	8,800	8,400	3,600	2,700	2,200	2,200	2,200	53,100
2016	24,000	9,100	8,600	3,700	2,800	2,300	2,300	2,300	55,000
2021	26,200	9,500	9,100	3,800	2,800	2,300	2,300	2,400	58,400
2026	27,600	9,900	9,500	3,900	2,900	2,300	2,400	2,400	60,900
2031	28,900	10,100	9,800	4,000	2,900	2,400	2,400	2,500	62,900
2036	29,800	10,200	9,900	4,000	2,900	2,400	2,500	2,500	64,300
2041	30,200	10,300	10,000	4,100	3,000	2,400	2,500	2,600	65,000
2011-2031	6,800	1,400	1,500	400	200	200	200	300	10,900
2011-2041	8,100	1,600	1,700	500	300	200	300	400	13,000

Figure 5-6 Oxford County Local Employment Forecasts, 2011-2041

Source: Watson & Associates Economists Ltd. 2013

Note: Figures may not add precisely due to rounding

6. OXFORD COUNTY PROFILE OF EMPLOYMENT LANDS

Employment lands are an integral part of the County's economic development, goods-producing sector expansion, and corresponding employment growth potential. This Chapter highlights the importance of the County's employment lands and explores the County's developed employment lands base and corresponding economic structure.

6.1 The Importance of Export-Based Employment in Oxford County

All employment can be categorized as being *basic* or *non-basic* in terms of its relationship to the local economy. Basic employment is that which primarily involves service to non-local markets. Non-basic employment is largely population-related and is geared to the local residential and business market. Basic employment forms the foundation of the export-based economy and is the engine of economic growth. Maintaining an adequate basic employment base is fundamental to providing potential spin-off employment and income opportunities in the non-basic sector. Furthermore, developing and enhancing the basic employment sector is a means to strengthening and growing the local economy.

Employment lands are important because they accommodate basic employment. From an economic development perspective, maintaining an adequate employment lands base is fundamental to providing competitive local basic employment opportunities. A major source of basic employment in Oxford County includes uses such as manufacturing, wholesale trade, offices and utilities. It also includes emerging industries that are part of the knowledge-sector.

The importance of basic employment, and the need for employment lands to accommodate it, is discussed further below.

6.1.1 Economic Multipliers

Basic employment typically provides a higher potential of indirect or spin-off effects than non-basic employment. Economic multipliers identify the indirect economic effect or shock from income generated by a particular employment sector. The economic multiplier normally expresses the ratio of direct plus indirect income to direct income.

Figure 6-1 illustrates the typically higher employment multipliers which are calculated from basic vs. non-basic employment. For example, the employment multiplier for the manufacturing sector is 2.06. This means that for every \$1.00 of GDP (Gross Domestic Product) generated directly within this sector, an additional \$1.06 in GDP is normally created, based on several rounds of impacts down the supplier chain. When comparing basic vs. non-basic jobs:

- Basic employment sectors tend to have the highest economic multipliers;
- Of the basic employment sectors, utilities has the strongest economic multiplier, followed by manufacturing, both significantly higher than construction, transportation and warehousing, wholesale trade and professional, scientific and technical services; and
- Most non-basic employment sectors have relatively low economic multipliers.

Figure 6-1

Province of Ontario

Economic Multipliers by Sector, 2007

Predominantly Basic Jobs (Export-based)	Economic Multiplier
Utilities	2.13
Construction	1.53
Manufacturing	2.06
Wholesale Trade	1.53
Transportation and Warehousing	1.52
Professional, Scientific and Technical Services	1.38
Predominantly Non-Basic Jobs (Population-Related)	Economic Multiplier
Retail Trade	1.18
Information and Cultural Industries ¹	1.75
Finance, Insurance, Real Estate and Rental and Leasing ¹	2.22
Educational Services	1.08
Health Care and Social Assistance ¹	1.14
Arts, Entertainment and Recreation	1.35
Accommodation and Food Services	1.16
Other Services (except Public Administration)	1.09
Administrative and Support, Waste Management and Remediation Services	1.17

Source: Statistics Canada, System of National Account, Input-Output Tables, Provincial Input-Output Multipliers, 2007.

1. A portion of employment in these categories may also be considered as "basic" employment.

6.1.2 Induced Effect of Employment

Employment also generates positive "induced" effects which are generated from the spending of labour income on the consumption of goods and services which drive non-basic employment growth. This effect is not captured in the economic multipliers, but it is significant nonetheless. The strength of the induced effect is largely related to average household income. Higher income opportunities permit families and individuals to enjoy a higher standard of living with more disposable income. In turn, this will generate growth in household savings, taxation, consumption of goods and services within the local economy. This increase in demand will result in further expansion on the local and regional employment market, largely in the retail and business services sector.

Figure 6-2 illustrates 2012 average hourly wage rates in Ontario for major basic and non-basic sectors. Key observations are as follows:

- The highest paid job sectors contain a mix of basic and non-basic employment. This includes utilities, construction, manufacturing, professional, scientific, and technical services, public administration, educational services, real estate and rental leasing, finance and insurance, and health care and social assistance;
- The lowest paid jobs are dominated by non-basic employment, including retail trade and accommodation and food services;
- Manufacturing and transportation and warehousing, significant occupants of employment lands, have wage rates in the mid-range, higher than most non-basic sectors; and,
- In most cases, contributions to the local economy from employment lands employment are greater than those provided from retail and population-related commercial development, in terms of hourly wage rates.





6.1.3 Quality of Employment

In addition to providing higher average hourly wage rates, basic employment typically offers better employee benefits, increased full-time employment opportunities and a greater range of skilled jobs. This serves to better the quality of life.

for the households and individuals involved (i.e. family sustaining) and makes for a stronger and more balanced community.

6.2 Oxford County Employment Areas Profile

6.2.1 Employment Lands Overview

Oxford's employment lands are an integral part of the County's economic development potential and they accommodate a significant share of the County's businesses and employment. Traditionally, the term "employment lands" has been used as an alternative description for "industrial lands" in Official Plans throughout the Province. Employment lands continue to be a focus for industrial uses, but they also include office and other non-residential uses. However, they do not include substantial "freestanding" retail commercial and institutional development. For the purposes of this study, employment lands include lands designated in the County Official Plan as "Industrial" or "Business Park."

The County's employment lands are concentrated in Woodstock, Tillsonburg and Ingersoll with additional employment lands located in the County's Serviced Villages. Of the County's approximately 1,400 net Ha of developed employment land, 61% is located in Woodstock, followed by 16% in Ingersoll, 15% in Tillsonburg and 8% in the County's Serviced Villages, as shown in Figure 6-3.



6.2.2 Employment Lands Employment Structure

Oxford County's existing developed designated employment lands accommodate businesses across a broad range of sectors. The County's employment lands accommodate an estimated 16,800 jobs, representing approximately 32% of the Oxford employment base. Employment on employment lands is concentrated in the manufacturing sector, which accounts for 84% of the total, as shown in Figure 6-4. This is followed by wholesale trade (4%), transportation & warehousing (3%), construction (2%), utilities (2%) and other (5%). The remaining employment is largely comprised of commercial sectors, including professional, scientific and technical services.

Figure 6-4



The County-wide average employment density (on occupied designated employment lands) is 13 jobs per net Ha (5 jobs per net acre), as shown in Figure 6-5. The highest employment densities are found in the three urban municipalities, where employment on employment land densities range from 12 to 16 jobs per net Ha (5 to 7 jobs per net acre). In comparison, the average employment density on employment lands in the County's Serviced Villages is 7 jobs per net Ha (3 jobs per net acre). The highest employment densities are typically found in manufacturing and business services, while wholesale trade and transportation and warehousing tend to have lower employment densities.

Figure 6-5 Oxford County Employment on Employment Lands Density

	Employment Density			
Municipality	Jobs per net ha	Jobs per net Acre		
Woodstock	12	5		
Ingersoll	14	6		
Tillsonburg	16	7		
Serviced Villages	7	3		
County Average	12	5		

Source: Watson & Associates Economists Ltd.

6.2.3 Employment Lands by Local Municipality

The following provides a more detailed discussion of the County's employment lands in Woodstock, Ingersoll, Tillsonburg and the Serviced Villages.

Woodstock

Woodstock has the largest concentration of developed employment lands in the County with approximately 840 net Ha (2,070 net acres), accounting for more than 60% of the County total. This includes lands that are designated "Industrial" and "Business Park." The City's employment lands are located largely along the Highway 401 corridor. Major industrial/business parks include Pattullo Ridge Business Park, Woodstock Business Park, Commerce Way Industrial Park and Bysham Business Park. The City also has a concentration of developed employment lands south of Parkinson Road, west of Springbank Avenue South, and east of Norwich Avenue. A large part of the City's developed employment lands in the east end of the City are occupied by the Toyota assembly plant. The North East Business Park is a planned Employment Area being developed by the City.

Woodstock's employment lands accommodate approximately 8,200 jobs (36% of Town's total employment), of which 83% is in the manufacturing sector, followed by 5% in transportation and warehousing, 4% in construction and 3% in wholesale trade. The City's employment lands also accommodate some commercial and institutional employment. Major employers located on employment lands include Toyota Motor Canada, Toyota Boshoku Canada, Vuteq, North American Stamping Group and Firestone Textiles.

Woodstock has seen a significant amount of development activity on employment lands over the past five years. Major developments have been largely concentrated in the manufacturing, warehousing and distribution sectors. Further, the City's industrial built form has diversified over the past five years with an increasing share of multi-tenant industrial condominiums, something that has previously not been developed in the City to any great degree. The City has low industrial vacancy rates.

Ingersoll

The Town of Ingersoll's developed employment lands total approximately 225 net Ha (555 net acres) and are concentrated on the southwest side of the municipality, along Ingersoll Street. The Town's employment lands are designated "Industrial" in the Official Plan. The Town's employment lands accommodate approximately 3,700 jobs, about 36% of the Town's total employment. Of this, 93% of the jobs are in the manufacturing sector and 3% are in wholesale trade. The remaining 5% of employment is in a wide range of industrial, commercial and institutional sectors.

Ingersoll has two main Employment Areas – West Ingersoll Industrial Area and Samnah Business Park. The West Ingersoll Industrial Area is focused largely in manufacturing and anchored by the GM CAMI auto assembly plant. Other major employers include Autrans Corporation and IMT. The Samnah Business Park is a prestige Employment Area centred along Samnah Crescent and is home to small- to medium-size businesses largely in manufacturing and business services. Recent development on employment lands has been limited and includes SRG (business services) and the Conestoga Skills Training Centre. The Town, however, has seen a number of expansions to a number of existing employers including Hydra-Dyne and Metal One (now Coil Plus).

The Town has a limited supply of shovel-ready¹ vacant employment land. Vacant land that is available is for sale by private developers. The Town has limited vacant industrial building GFA, with the exception of the former Ingersoll Fasteners facility, comprising 19,900 s.m. (214,000 sq.ft.).

<u>Tillsonburg</u>

Employment lands in Tillsonburg are located on the south side of the municipality and are designated "Industrial" in the Official Plan. The Town's employment lands accommodate approximately 3,300 jobs, accounting for about 38% of the Town's total employment. The Town has approximately 205 net Ha (510 net acres) of developed employment lands located primarily in two industrial parks – Forest Hill Industrial Park and Van Norman Industrial Park. The Forest Hill Industrial Park is a mature industrial area located along Highway 3 east of Highway 19. The industrial area contains a number of large employers, including Marwood Metal Fabrication Ltd., Autoneum and TRW Automotive. The Van Norman Industrial Park is located on the southwest side of the Town, on the north side of Highway 3. The Park's major employers include Siemens and Fleetwood Metal Industries. Future industrial growth is expected to be largely accommodated within the planned Highway 3 Business Park, located on the south side of Highway 3, immediately south of the Van Norman Industrial Park.

The recent 2008/2009 economic recession had an impact on the Town's industrial base resulting in a number of closures, including DDM Plastics, Guardian Industries Canada and TDS. The first site remains vacant and offer redevelopment potential while the Guardian Industries Canada plant is now occupied by International Beam and the TDS plant is now largely occupied by E&E McLaughlin and a new business (Future Transfer - corn distribution). Post-recession, the Town has also seen the expansion of the Siemens plant (wind turbine blade production). However, the Town has a limited supply of shovel-ready vacant employment lands to accommodate greenfield growth.

Serviced Villages

Employment lands within the County's Serviced Villages are located in various settlements located throughout the County. The developed employment lands within the Serviced Villages total approximately 110 net Ha (275 net acres). Norwich Village (Norwich Township), Plattsville (Blandford-Blenheim) and Tavistock (Township of East Zorra-Tavistock) have the largest concentration of developed employment land. Employment lands accommodate approximately 1,700 jobs, with 78% in manufacturing, 15% in wholesale trade and 7% in other sectors. Major

¹ "Shovel-ready" lands are defined as those that are serviced and zoned and generally considered potentially developable within the next 6 months.

employers located on employment lands include Cold Spring Farms (Maple Leaf Foods) in Thamesford, Saputo Cheese in Tavistock and St. Gorbain Abrasives in Plattsville. Most other employers are relatively small in size (i.e. with less than 10 employees). Vacant employment lands in the Serviced Villages are privately held, with the exception of Township owned employment lands which were recently designated in the southeast corner of the Village of Norwich. Outside of Norwich, there has been limited development activity on employment lands in the Serviced Villages in the past five years.

6.3 Development Activity Trends on Oxford Employment Lands

Examining recent development trends in Oxford County provides some insight into future development activity; however, potential development constraints (i.e. availability of shovel-ready employment lands) must be considered within the context of this review. Oxford County has experienced varied levels of industrial development activity in recent years. This section provides a review of recent development activity on employment lands within Oxford County.

6.3.1 Industrial Development Activity

Figure 6-6 summarizes the total gross floor area of industrial development in Oxford County over the last 7 years. In 2006 and 2007, industrial growth in Oxford County was strong, with the development of 2,401,000 sq.ft. and 1,460,000 sq.ft. of industrial GFA per year. A large part of the 2006 activity is attributed to the construction of the Toyota assembly plant in Woodstock. The economic downturn significantly changed the economic landscape of Ontario, and the industrial development in the County dropped to 326,000 sq.ft. of gross floor area in 2008 and to 91,000 sq.ft. in 2009. Since 2008, the annual GFA has remained below the historical average, although data for 2012 suggests a moderate rebound in industrial development.



Figure 6-7 summarizes the proportionate share of industrial development, expressed by gross floor area, by local municipality within Oxford County over the 2006-2012 period. As illustrated, 80% of industrial development activity was concentrated in Woodstock. Comparatively, limited industrial development activity occurred in the County's other municipalities over the period.

Figure 6-6





Industrial development within Oxford County over the 2006-2012 period has occurred primarily as new construction, which has accounted for 84% of GFA. In comparison, additions to existing buildings has accounted for 16% of industrial GFA.

6.4 Historical Absorption Rates on Employment Lands within Oxford County

The total employment land absorbed (expressed in net Ha) in Oxford County annually over the 2009-2012 period is illustrated in Figure 6-8. As illustrated, over the 2009-2012 period, industrial land absorption averaged 15 net Ha (37 net acres) annually in Oxford County. Of the employment lands absorbed, 72% were located within Woodstock compared to 22% in Tillsonburg, 4% in Ingersoll and 2% in Norwich. No employment lands were absorbed over the period in the other Serviced Villages.



Figure 6-8

7. OXFORD COUNTY EMPLOYMENT LAND SUPPLY

A major factor in the future competitiveness of Oxford's economic base is the supply and quality of its vacant employment lands. This section provides a comprehensive assessment of the County's vacant employment lands supply.

7.1 Vacant Employment Lands Analysis

The County's 2012 Vacant Land Study dataset formed the basis for the development of the County's vacant employment lands inventory. To generate the vacant employment lands inventory, all vacant parcels within the Vacant Land Study designated as employment lands as defined herein were identified. The analysis was completed primarily through a desktop review using GIS mapping software. Spatial overlays utilized to develop the net land supply included official plan and zoning overlays, hydrology, environmental constraints¹, other constraints identifying non-developable features and 2012 orthophotos. Further, windshield surveys of the Employment Areas were completed to refine the analysis.

Maps 7-1 through 7-4 illustrate the geographic location of the County's remaining vacant designated employment lands in Woodstock, Ingersoll, Tillsonburg and the Serviced Villages in the County's five Townships, respectively. Figure 7-1 summarizes the total gross and net vacant employment lands supply for Oxford County by local municipality (as of 2013). As illustrated, the County has a total of 935 gross Ha (2,311 gross acres) of vacant designated employment land.

In determining the net vacant land inventory, takeouts for environmental features, corridor right-of-ways (i.e. hydro, major transportation) and hydrological features were identified. Further, larger vacant parcels (i.e. 4 Ha or greater) which were not considered shovel ready were also subject to an additional downward adjustment to reflect internal infrastructure (i.e. roads, stormwater ponds, easements, etc.) with a net to gross adjustment of 75%. In accordance with the aforementioned adjustments for internal infrastructure and other non-developable features, the County's net vacant designated employment lands supply is estimated at 579 net Ha (1,430 net acres).

The net vacant employment lands supply by community is presented in Figure 7-2. As shown, approximately 57% of the supply is located in Woodstock (330 net Ha). This is followed by 96 net Ha in Tillsonburg, 46 net Ha in Ingersoll, 42 net Ha in Norwich, 22 net Ha in Southwest Oxford, 19 net Ha in East Zorra Tavistock, 18 net Ha in Blandford Blenheim and 7 net Ha in Zorra.

¹ Environmental constraints include Provincially Significant Wetlands, unevaluated wetlands, Official Plan designated environmental lands, regulatory flood hazard plains/zones and wood lots.

Employment Area	Total Gross Vacant (A)		Environmentally Constrained Adjustment (B) ¹		Adjustment for Roads, other Internal Infrastructure and other non- developable lands		Net Vacant Developable Employment Land Supply (D = A-B-C)	
	Net Acres	Net Ha	Net Acres	Net Ha	Net Acres	Net Ha	Net Acres	Net Ha
Woodstock	1336.2	540.7	305.2	123.5	216.1	87.5	814.9	329.8
Ingersoll	164.6	66.6	25.9	10.5	26.1	10.5	112.6	45.6
Tillsonburg	435.4	176.2	56.5	22.9	141.6	57.3	237.3	96.1
Blandford Blenheim	58.3	23.6	0.0	0.0	14.8	6.0	43.5	17.6
East Zorra Tavistock	75.6	30.6	0.0	0.0	28.0	11.3	47.6	19.3
Norwich	147.3	59.6	12.8	5.2	31.1	12.6	103.3	41.8
Southwest Oxford	72.8	29.5	2.4	1.0	16.8	6.8	53.6	21.7
Zorra	20.5	8.3	0.0	0.0	3.7	1.5	16.8	6.8
Total	2310.6	935.1	402.8	163.0	478.2	193.5	1429.6	578.5

Figure 7-1 Oxford County Gross vs. Net Supply of Employment Lands

Source: Watson & Associates Economists Ltd.

1. Reflects environmental takeout of vacant employment lands encroached by environmentally sensitive lands

2. Reflects a dow nw ard adjustment of 25% of the gross area (after environmental takeouts) which has been applied to account for internal infrastructure on parcels typically greater than 10 acres (4 ha) in size. Also includes additional non-developable features such as roadway ROWs and SWM ponds.

45.

Figure 7-2



Long-term land vacancy (i.e. vacant industrial parcels) is a common characteristic which is experienced in mature industrial parks throughout Ontario, including Oxford County. Typically, as industrial/business park lands are brought to market, the more marketable and developable industrial sites absorb first. Often the remaining less-marketable sites are fragmented throughout the industrial park, which limits their potential for larger scale development. Invariably, many of these sites remain vacant over the longer term, due to their limited market choice to end users. While these observations largely apply to Oxford's more mature Employment Areas, over time it is foreseeable that the County's newer Employment Areas will also begin to exhibit these characteristics. Accordingly, additional reductions to the net developable vacant employment land supply have been made to account for long-term land vacancy, as summarized in Figure 7-3. This adjustment accounts for sites or portions of sites which are unlikely to develop over the long term due to odd/small lot sizes and poor configuration, unfavourable site conditions (e.g. low lying areas prone to flooding), underutilized employment sites and site inactivity/land banking, which may tie up potentially vacant and developable lands.

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For the purpose of this analysis, an estimate of approximately 5% long-term land vacancy has been used, i.e. total net occupied (A) + total net vacant land area (B) X 5%. Adjusted for land vacancy, the County's net developable vacant designated employment land supply is 480 net Ha (1,188 net acres).

				-	_		-	
Employment Area	Developed Employment Lands (A)		Net Vacant Developable Employment Land Supply (B)		Long-term Land Vacancy Adjustment ¹ (C)		Total Net Employment Land Supply Adjusted for Land Vacancy (D = B-C)	
	Net Acres	Net Ha	Net Acres	Net Ha	Net Acres	Net Ha	Net Acres	Net Ha
Woodstock	2071.5	838.3	814.9	329.8	144.3	58.4	670.5	271.4
Ingersoll	553.3	223.9	112.6	45.6	33.3	13.5	79.3	32.1
Tillsonburg	507.9	205.6	237.3	96.1	37.3	15.1	200.1	81.0
Blandford Blenheim	12.5	5.1	43.5	17.6	2.8	1.1	40.7	16.5
East Zorra Tavistock	49.2	19.9	47.6	19.3	0.0	2.0	42.8	17.3
Norwich	165.5	67.0	103.3	41.8	0.0	5.4	89.8	36.4
Southwest Oxford	12.1	4.9	53.6	21.7	3.3	1.3	50.3	20.3
Zorra	35.9	14.5	16.8	6.8	2.6	1.1	14.2	5.7
Total	3407.9	1,379.2	1429.6	578.5	241.9	97.9	1187.7	480.6

Figure 7-3 Oxford County Net Supply of Employment Lands Adjusted for Long Term Vacancy

Source: Watson & Associates Economists Ltd.

1. Long-term employment land vacancy adjustment - 5% of net occupied and net developable employment lands. Accounts for employment land sites which may not develop over the long-term (i.e. 2031) due to odd/small lot size and poor configuration, underutilized employment sites, and sites inactive/land banking.





Map 7-2



Map 7-4



Serviced Villages Vacant Employment Lands

7.2 Serviced Shovel-Ready Lands

Based on further review of the net vacant employment land supply, it was determined that the County has 187 net Ha (462 net acres) of shovelready net vacant employment land. Figure 7-4 summarizes the share of serviced shovel-ready net vacant employment land, by local municipality. As shown, nearly 80% (147 net ha) of the County's shovel-ready vacant employment lands are located in Woodstock. In comparison, Ingersoll and Tillsonburg have a limited supply of shovel-ready employment lands (17 net Ha and 13 net Ha, respectively). Within the Townships, only Norwich (Norwich Village) has shovel-ready employment land (10 net Ha).



Figure 7-4

7.3 Market Choice Requirements

From a market choice perspective, one of the most important industrial site selection criteria, which is largely controllable by the County and its local municipalities, relates to ensuring that an ample supply of suitable vacant serviced (and serviceable) employment land is available for purchase and absorption. This involves providing a readily available and serviced employment land supply which is beyond forecast absorption levels over the next five years, to fully provide for a range of site selection choices with respect to:

- price;
- site size;
- availability and cost of servicing;
- neighbourhood and setting;
- zoning;
- visibility;
- highway access;
- privacy;
- topography;
- environmental conditions;
- tenure (lease vs. design build vs. own); and
- other industrial land market requirements which can be added, including soil conditions, site proportioning (frontage to depth), timing of servicing, site expandability, etc.

Oxford and its local municipalities need to provide a balanced inventory of shovel-ready and zoned developable vacant industrial lands that is sufficient to meet market demand in the short to medium term. As previously indicated, Tillsonburg and Ingersoll have a shortage of shovel-ready employment lands which is limiting development potential. Further, the Serviced Villages outside of Norwich also have no shovel-ready lands available for development. While Woodstock has a relatively healthy supply of shovel-ready lands in small- to medium-sized parcels, the City currently has a limited number of larger vacant employment lands parcels (i.e. 5 Ha and greater) available for development. In order for the City to continue to be competitive and potentially attract larger scale industrial employers, such as large-scale manufacturers and logistics and distribution centres, the City needs to provide a greater number of larger serviced industrial sites. Further, Woodstock has a limited supply of shovel-ready Business Park designated employment lands.

If Oxford is to have an adequate supply of employment lands over both the short- and long-term planning periods, then it needs to have a <u>full range</u> of employment land sites on the market. In order to allow for proper market functioning, the County should ensure that a minimum 5-year supply of serviced employment lands (by various sizes, zoning and locations) is available at all times throughout the forecast period.

Over the planning period, it is recommended that the County monitor its current employment lands inventory, at minimum every 5 years, to determine if additional employment lands are required to accommodate forecast demand.

8. EMPLOYMENT LAND NEEDS ANALYSIS 2013-2033

This section summarizes total employment land needs within Oxford County to the 2033 planning horizon, based on the employment lands supply summarized in Chapter 7 and forecast demand on employment lands summarized above. More detailed tables illustrating the analysis are provided in Appendix D.

8.1 Employment Land Needs Forecast Approach

Building on the long-term employment forecast presented in Section 5, anticipated employment land needs requirements have been identified based on consideration of the following:

- The share of employment growth on employment lands by major employment sector (i.e. industrial, commercial and institutional);
- Existing and forecast density (i.e. employees per net acre/hectare) of employment on industrial lands;
- Historical non-residential building activity and absorption trends on employment lands; and
- The amount of long-term vacant industrial lands within each of Oxford County's local municipalities.

Figure 8-1 illustrates this approach graphically.



Figure 8-1 OXFORD COUNTY SCHEMATIC APPROACH TO FORECASTING LONG TERM NEED FOR EMPLOYMENT LANDS

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In generating employment land area requirements for Oxford County and its local municipalities, the following tasks have been undertaken:

8.2 Employment on Employment Lands

The forecast demand for employment land is ultimately driven by the forecast growth of employment on employment lands. This is determined through the following:

Remove Work at Home Employment

As identified in Chapter 5, forecast employment growth has been categorized into four broad categories, including primary, industrial, commercial and institutional, based on 2006 Census data. These categories have been aggregated from specific employment sub-classifications based on the North American Industrial Classification (NAIC) system. As a first step, all estimated "Work at Home" has been excluded from the industrial land needs analysis, as these employees do not require land in the County's designated employment lands.

Determine the Amount of Employment by Sector to be Accommodated on Employment Lands

Based on a review of recent development trends in the County and a review of permissible uses on designated employment lands, the forecast allocation of employment growth on employment lands by sector for each local municipality within Oxford County is presented in Figure 8-2. As shown, 100% of industrial employment growth in Woodstock, Ingersoll and Tillsonburg is expected to be accommodated on employment lands. Within the County's five Townships, 80% of industrial employment growth is anticipated to be accommodated on employment lands within the Serviced Villages.

The current definition of employment lands has broadened to include a number of commercial uses (and to a lesser extent institutional uses) in addition to traditional industrial development. For example, a number of commercial and institutional uses (as defined by Statistics Canada) are permitted on lands designated employment lands. As such, 25% and 15%¹ of forecast commercial and institutional employment growth in Woodstock, respectively, has been allocated to employment lands within the City. For Ingersoll and Tillsonburg, the share of forecast employment growth in the commercial and institutional sectors on employment lands is anticipated to be 20% and 10%, respectively. Within the County's five Townships, 10% and 0% of commercial and institutional employment growth, respectively, is anticipated to be accommodated on employment lands.

¹ Based on a review of existing conditions in Oxford County and other municipalities across southern Ontario.

Figure 8-2 Oxford County Proportion of 2013-2033 Employment Growth on Employment Lands by Industrial, Commercial and Institutional (ICI) Sectors

Municipality	Industrial	Commercial	Institutional
Woodstock	100%	25%	10%
Ingersoll	100%	20%	10%
Tillsonburg	100%	20%	10%
Blandford Blenheim	80%	10%	0%
East Zorra Tavistock	80%	10%	0%
Norwich	80%	10%	0%
Southwest Oxford	80%	10%	0%
Zorra	80%	10%	0%

Source: Watson & Associates Economists Ltd.

Figure 8-3 summarizes forecast employment on employment lands over the forecast period, based on the assumed allocation of growth on employment lands assigned by industrial, commercial and institutional (ICI) sectors, as set out in Figure 8-2. As illustrated, over the 2013-2033 period, Oxford County's employment lands are anticipated to accommodate 5,490 jobs, representing 53% of the County's total employment growth.

Figure 8-3 Oxford County Employment Growth on Employment Lands, 2013-2033

Municipality	Total Employment Growth, 2013-2033	Employment Growth on Employment Lands, 2013-2033	Percent on Employment Lands
Woodstock	6,315	3,585	57%
Ingersoll	1,455	970	67%
Tillsonburg	1,325	675	51%
Blandford Blenheim	255	60	24%
East Zorra Tavistock	265	45	17%
Norwich	380	95	25%
Southwest Oxford	135	20	15%
Zorra	190	45	24%
Oxford County Total	10,320	5,490	53%

Source: Watson & Associates Economists Ltd.

Determine Accommodation of Employment Growth through Intensification

It is recognized that a small portion of forecast employment on employment lands growth will be accommodated through intensification. It is anticipated that this intensification will be accommodated through the up-take of current vacant industrial GFA and expansions of existing businesses. However, these employment gains will be potentially offset by the continued contraction of the employment base in established Employment Areas due to evolving structural changes in the macro economy and corresponding affects on the industrial sector. As such, no net employment growth is assumed through intensification.

Forecast Employment Density on Employment Lands

As previously discussed in Chapter 6, based on survey data, the average employment density on employment lands in Woodstock, Ingersoll and TIllsonburg ranges between 12 and 16 jobs per net Ha (5 and 7 jobs per net acre). It is anticipated that within these local municipalities, potential demand exists across a range of industrial sectors such as warehousing, logistics, transportation and manufacturing. It is anticipated that forecast employment density on employment lands within these three municipalities will be comparable to existing conditions in Woodstock. Hence, the forecast employment density on employment lands in Woodstock, Ingersoll and Tillsonburg is expected to average 12 jobs per net Ha (5 jobs per net acre), as summarized in Figure 8-4. Employment on employment lands in the County's five Townships is also forecast to be comparable to existing employment densities which, as discussed in Section 6, averages 7 jobs per net Ha (3 jobs per net acre).

The forecast density identified herein has been used in generating future land demand on employment lands over the forecast period. It should be noted that the recommended average density on employment lands has been informed by recent and anticipated market trends and it is foreseeable that future density levels achieved on employment lands could differ depending on local policy planning objectives. Accordingly, it is recommended that the County continue to monitor future density trends on employment lands in conjunction with the County's 5-year Official Plan reviews.

Figure 8-4 Oxford County Employment Density on Employment Lands

	Employment Density			
Municipality	Jobs per net Ha	Jobs per net Acre		
Woodstock	12	5		
Ingersoll	12	5		
Tillsonburg	12	5		
Blandford Blenheim	7	3		
East Zorra Tavistock	7	3		
Norwich	7	3		
Southwest Oxford	7	3		
Zorra	7	3		

Source: Watson & Associates Economists Ltd.

8.3 Employment Land Demand

Figure 8-5 summarizes forecast demand for industrial land from 2013-2033, in accordance with the assumptions made above. As illustrated, Oxford County is forecast to absorb 473 net Ha (1,169 net acres) of employment land over the 2013-2033 period, representing an annual average demand of 24 net Ha per year (58 net acres/year). Over the forecast period, employment land demand is forecast to be strongest in Woodstock (299 net Ha or 738 net acres) followed by 81 net Ha (200 net acres) in Ingersoll and 56 net Ha (139 net acres) in Tillsonburg. Modest employment demand is forecast for the Serviced Villages over the 20-year forecast period.

Municipality	Employment Growth on	Employment Density		Total Employment Land Demand, 2013-2033		Annual Employment Land Demand, 2013-	
	Lands, 2013-2033	Jobs per net Ha	Jobs per net Acre	На	Acres	На	Acres
Woodstock	3,585	12	5	299	738	15	37
Ingersoll	970	12	5	81	200	4	10
Tillsonburg	675	12	5	56	139	3	7
Blandford Blenheim	60	7	3	8	21	<1	1
East Zorra Tavistock	45	7	3	6	15	<1	1
Norwich	95	7	3	14	34	1	2
Southwest Oxford	20	7	3	3	7	<1	<1
Zorra	45	7	3	6	16	<1	1
Oxford County Total	5,490			473	1,169	24	58

Figure 8-5 Oxford County Forecast Employment Land Demand, 2013-2033

Source: Watson & Associates Economists Ltd.

8.4 Employment Land Needs

Figure 8-6 summarizes forecast employment land need for Oxford County over the 2013-2033 period, in accordance with the existing supply of net vacant employment lands versus long-term demand. As shown, if viewed as a whole, Oxford County would appear to have a sufficient supply of employment lands to meet long-term needs to 2033. As of 2033, a County-wide net surplus of 8 net Ha (19 net acres) has been identified. However, notwithstanding this surplus at the County level, the analysis indicates that some of Area Municipalities within the County are forecast to have an employment lands shortfall.

Figure 8-6 Oxford County Total Employment Land Need (Demand vs. Supply), 2013-2033

	Net Ha	Net Acres
Net Employment Land Demand	473	1,169
Net Employment Land Supply ¹	481	1,188
Net Employment Land Surplus/ (Shortfall)	8	19

Source: Watson & Associates Economists Ltd.

1. Reflects land vacancy adjustment

Figure 8-7 summarizes forecast employment land need for Oxford County by local municipality over the 2013-2033 planning horizon. This analysis identifies that all of the County's local municipalities, with the exception of Woodstock, Ingersoll and Zorra, are anticipated to have net surpluses of vacant employment land to 2033.

Woodstock is anticipated to have a net deficit of approximately 27 net Ha (67 net acres) of employment land by 2033. This represents a gross area of 36 Ha (89 acres), reflecting site-specific takeouts, such as non-developable lands, stormwater ponds and internal roads. Further, Ingersoll is expected to have a net deficit of approximately 49 net Ha (121 net acres) of employment land by 2033. This represents a gross area of 65 Ha (161 acres), reflecting site-specific takeouts, such as non-developable lands, stormwater ponds and internal roads.

Zorra is anticipated to have a net deficit of approximately 1 net Ha (2 net acres) of employment land by 2033. This analysis does not reflect the proposed industrial area in the Village of Embro secondary plan, which comprises approximately 24 gross Ha. With these lands designated, Zorra would have sufficient vacant employment land to meet forecast demand over the forecast period.

Figure 8-7
Oxford County
Total Employment Land Need (Demand vs. Supply) by Local Municipality, 2013-2033

Municipality	Total Employment Land Demand (Net Ha)	Total Employment Land Supply ¹ (Net Ha)	Net Employment Land Surplus/(Deficit) (Net Ha)	Gross Land Need ² (Ha)
Woodstock	299	271	(27)	36
Ingersoll	81	32	(49)	65
Tillsonburg	56	81	25	
Blandford Blenheim	8	16	8	
East Zorra Tavistock	6	17	11	
Norwich	14	36	23	
Southwest Oxford	3	20	18	
Zorra	6	6	(1)	

Source: Watson & Associates Economists Ltd.

1. Reflects land vacancy adjustment

2. Based on 75% net to gross ratio

Notwithstanding the County-wide employment land surplus identified, there is a significant forecast employment lands shortfall in Woodstock and Ingersoll over the planning period (i.e. 2013-2033). It is not reasonable to treat all of the County Area Municipalities as one homogenous regional market area. Each of the Area Municipalities operates as a different industrial market given its location, access, proximity to labour, proximity to urban amenities, price of land, permitted uses, proximity to surrounding employment markets and related employment clusters, character of the Employment Area and surrounding non-industrial uses.

As such, Woodstock and Ingersoll will need to designate a <u>minimum</u> of approximately 36 gross Ha (89 gross acres) and 65 gross Ha (161 gross acres), respectively, of employment land to meet long-term need to 2033. The gross land area identified does not include undevelopable lands due to physical constraints and/or environmental features. The County and the Towns should explore location options to accommodate these additional employment lands through a subsequent study. It should be noted that substantial lead time (3-5 years) is often required to negotiate boundary adjustment and complete the required secondary planning studies to incorporate and designate employment lands. As such, flexibility is required in the land budgeting analysis to update the vacant employment land supply inventory at the timing of approval for the boundary adjustment.

Based on the employment land needs analysis contained herein, there is sufficient vacant employment land within the County's local municipalities to accommodate forecast employment land demand, with the exception of Woodstock and Ingersoll. The attributes and suitability of the County's vacant employment land supply to accommodate this forecast employment land demand are explored in Section 9.

9. ASSESSMENT OF OXFORD COUNTY EMPLOYMENT AREAS

A major factor in the future competitiveness of Oxford County's economic base is dependent, in part, on the attributes of its employment lands. This Chapter provides a comprehensive assessment of the County's main Employment Areas and their ability to accommodate forecast employment land demand.

9.1 General Characteristics of Employment Areas

Employment Areas require good access to regional transportation networks, on-site infrastructure including roadways and utilities, a critical mass and available zoned, shovel-ready land. Employment Areas are typically located on flat to slightly rolling topography in areas with minimal environmental issues. Roadways within Employment Areas tend to be laid out in a grid system to optimize circulation and parcel configuration. Parcels are typically square or rectangular in shape to optimize site design. Many of these attributes help to optimize the end-users' speed to market, while minimizing development costs and project risk. The specific attributes that are required for an Employment Area to be successful are largely based on the intended function and designations.

Employment Areas which accommodate largely industrial uses such as advanced manufacturing, logistics, distribution and transportation sectors, typically offer the following physical requirements:

- Access Proximity to controlled access highways (i.e. Highway 401/403) is critical for the success of general industrial parks that have a significant degree of manufacturing, warehousing, distribution and logistics. These parks do not necessarily have to be adjacent to a controlled access highway but must be in proximity and easily accessible via major arterials that pass through limited residential or mixed-use commercial area(s);
- Critical Mass Size is vital to ensure a wide selection/flexibility of land options and parks must include a sufficient supply of large parcels. As a minimum, 80 Ha (200 acres) is a suitable size for a park, in order to reach the critical mass needed to provide reasonable presence, choice and economies of scale;
- Location Location must provide efficient and effective vehicular access and circulation, particularly for heavy truck traffic, with a minimum of two access points to enter/exit the industrial park;
- Land Use Compatibility Buffering is important for general industrial parks in order to minimize noise and air pollution to neighbouring residential and other non-residential areas;
- Market Choice Parcel size and configuration needs to be conducive for a wide range of land uses, especially for land extensive uses such as wholesale trade and transportation; and
- **Competitive Development/Operating Costs** Land prices must be competitive, given the relatively land-extensive nature associated with many uses in general industrial parks.
Employment Areas which are more oriented for business park designation have moderately different requirements, including:

- Access and exposure/visibility to controlled access highways is critical for business parks, particularly for a corporate offices;
- Size is less important than it is for more general industrial parks but the business park must be generally large enough to foster a sense of place within a well-defined precinct and to allow for on-site amenities;
- More moderate buffering is sufficient for business parks which are more concerned about vandalism, theft, etc.; and
- Business parks must present a more prestigious image, created through high quality building design, streetscapes and attractive landscaping.

9.2 Oxford County Employment Areas Overview

Oxford County has a number of existing and planned Employment Areas located throughout the County. This includes employment lands within existing and planned industrial/business parks within the Urban Centres and concentration of employment land in some of the County's Serviced Villages, as summarized below:

- Woodstock Bysham, Commerce Way, Patullo Ridge Business Park, Woodstock Business Park, North East Business Park;
- Ingersoll Samnah Business Park and West Ingersoll Industrial Area;
- Tillsonburg Forest Hill Industrial Park, Van Norman Industrial Park (Clearview Drive) and Highway 3 Business Park; and
- Serviced Villages Drumbo, Tavistock, Norwich Village, Mount Elgin and Thamesford.

As part of this study, Oxford County's Employment Areas were reviewed through a SWOC (strengths, weaknesses, opportunities, challenges) analysis as summarized in Figures 9-1 through 9-4, based in part on the required attributes of Employment Areas discussed in section 9.1.

Figure 9-1 Woodstock Employment Areas SWOC

Employment Area	Strengths/Opportunities	Weaknesses/Challenges		
Bysham	 Vacant employment land available for development Opportunities for small- and medium- sized businesses at competitive land prices 	 General industrial character may detract marketability to more prestige uses Access/circulation limitations for heavy truck traffic Size of Employment Area 		
Commerce Way	 Excellent access/exposure to Highway 401 Prestige setting Park has experienced strong development activity (i.e. Sysco) Highly attractive for distribution/ logistics and multi-tenant industrial condos Highly marketed park with shovel- ready developable land available 	 Relatively high land prices may limit market appeal for some land-expansive businesses General industrial zoning may limit prestige nature of park 		
Patullo Ridge Business Park	 Well-established and defined Employment Area Excellent access/visibility to Highway 401 Shovel-ready lands with both prestige and general industrial zoning suited for small- to medium-sized land uses 	Limited land supply opportunities		
Woodstock Business Park	 Large contiguous, established industrial area with major industrial employers (i.e. GM, Toyota Boshoku) Proximity to Highways 401/403 Rail access Some vacant employment land opportunities 	 Park lacks definition General industrial character may detract marketability Some vacant land parcels currently lack road access 		
North East Business Park	 Large contiguous vacant employment land block offering range of potential site sizes Proximity to Toyota plant 	 Located further away from Highways 401/403 than other Employment Areas in Woodstock Access/visibility to major roadways limited Lands are not shovel ready 		







Figure 9-2 Ingersoll Employment Areas SWOC

Employment Area	Strengths/Opportunities	Weaknesses/Challenges
Samnah Business Park	 Excellent access/exposure to Highway 401 Moderately prestigious setting Shovel-ready lands which are well suited for smaller prestige uses 	Small size limits its development potential
West Ingersoll Industrial Area	 Access/proximity to Highway 401 Large contiguous Employment Area Strong industrial base anchored by CAMI plant 	Limited shovel-ready lands
South Ingersoll Secondary Plan Area	 Contiguous land area with potential to accommodate a broad range of employment uses. Highly marketable for logistics/distribution, transportation Proximity/exposure to Highway 401 	 Not available for development in the short term; timing of development unknown Residential land uses on the north side of Clarke Road will require buffering from non-compatible uses



Figure 9-3 Tillsonburg Employment Areas SWOC

Employment Area	Strengths/Opportunities	Weaknesses/Challenges	
Forest Hill Industrial Park	 Large, well-established industrial park Good access to Highway 3 General industrial character offers potential for broad range of uses Rail access Competitive land prices 	 Distance to Highway 401- accessing 401 requires travel through Town Limited supply of shovel-ready lands Vacant employment lands would require servicing and road connections to make development ready Configuration of southern portion of park may have physical constraints due to encroaching environmental lands Some vacant lands within the south part of park may have participation 	SIEMER 1
Van Norman Industrial Park (Clearview Drive)	 Established industrial area anchored by recent development of Siemens Vacant manufacturing sites offer redevelopment opportunities Good access to Highway 3 Rail access Competitive land prices 	 Distance to Highway 401- accessing 401 requires travel through Town Limited supply of shovel-ready lands 	KIRMINA - MUTANA
Highway 3 Business Park	 Large contiguous area with potential to create park of critical mass next to Van Norman Industrial Park Good access/exposure to Highway 3 Competitive land prices Well buffered from non-industrial uses Potential for manufacturing 	Distance to Highway 401	



Figure 9-4 Serviced Villages Employment Areas SWOC

Employment Area	Strengths/Opportunities	Weaknesses/Challenges
Blandford Blenheim (Drumbo)	 Proximity to Highway 401 Proximity to Kitchener-Waterloo 	 Lack of existing industrial base No shovel-ready employment lands Potential servicing constraints for larger sewage users
East Zorra Tavistock (Tavistock)	 Existing industrial base focused in food processing Proximity to Stratford/Kitchener-Waterloo 	 Limited supply of vacant employment lands with no shovel-ready lands
Norwich (Norwich Village)	 Existing industrial base with recent development activity Well suited for small to medium-sized businesses related to agribusiness, construction Some shovel-ready lands available for development 	Distance to Highway 401
Southwest Oxford (Mount Elgin)	 Relatively large supply of vacant employment lands Potential for agribusiness-related development 	 Lack of shovel-ready lands Distance to Highway 401 Potential conflicts with neighbouring residential uses
Zorra (Thamesford)	 Proximity to London Potential to build synergies with Cold Springs Farm (Maple Leaf Foods) plant 	 Limited industrial base Limited vacant employment lands and no shovel-ready lands







9.3 Employment Sector Requirements

At both the regional and local levels, location requirements of industry can vary considerably depending on the nature of the employment sector/use. Employment sectors typically situated in Employment Areas have varying site-specific requirements. To be successful in attracting the employment sectors with strong growth potential, as identified in section 9.2, the County's Employment Areas need to have the corresponding attributes and features, as summarized in Figure 9-5.

Employment Sector	Pequirements
Advanced Manufacturing	Accoss to 400 series/controlled access highways
Auvanceu Manufacturing	 Access to skilled and unskilled labour
	Provimity to markets and related industries
	 Provimity to Harres and related industries Provimity to II S
	Competitive land prices
	Parcel size: 1-4+ Ha
	Buffers from surrounding non-industrial uses
	General or prestige setting
Distribution and Logistics	Access to 400 series/controlled access highways
Distribution and Ecglotico	Access/traffic circulation for heavy truck traffic
	Proximity to markets, U.S. border
	Competitive land prices
	Parcel size: 1-5 Ha
	 Flexibility in zoning, parcel configuration
	 Compatible surrounding land uses/buffers from surrounding non-
	industrial uses
	 Ceiling height (typically 30 to 50+ ft.)
Agribusiness	 Access to major highways and rail
-	 Proximity to markets and related industry clusters
	Access to raw materials
	Competitive land prices
	Parcel size: 1-4+ Ha
	High physical separation/extensive buffering from non-compatible uses
	 Sites that have limited urban design requirements
	 Provision for lay down yards, open storage
Construction	Access to skilled and semi-skilled labour force
	Competitive land prices
	Proximity to customer base
	 Market choice in the range of size of development sites

Figure 9-5 Employment Sector Requirements

9.4 Assessment of Significant Employment Areas Investment Readiness

Oxford County has a number of significant existing and planned Employment Areas located within Woodstock, Ingersoll and Tillsonburg which are anticipated to accommodate the majority of employment land demand over the short, medium and long term. These include:

Existing Employment Areas

- Woodstock Bysham, Commerce Way, Patullo Ridge Business Park and Woodstock Business Park;
- Ingersoll West Ingersoll Industrial Area and Samnah Business Park; and
- Tillsonburg Forest Hill Industrial Park and Van Norman Industrial Park.

Planned Employment Areas

- Woodstock North East Business Park;
- Ingersoll South Ingersoll Secondary Plan Area; and
- Tillsonburg Highway 3 Business Park.

These identified industrial/business parks are assessed herein in terms of their investment readiness and competitiveness.

9.4.1 Physical and Economic Attributes of Existing Significant Employment Areas

A major factor in the short- and medium-term competitiveness of Oxford County's economic base is determined by the attributes of its existing significant Employment Areas. This includes their physical and economic characteristics, including the price, supply and quality of vacant Employment Areas to accommodate development, their locational attributes in terms of access to key transportation infrastructure, and their current occupant mix. Figure 9-6 summarizes these observations in regard to the County's existing Employment Areas. Key observations include:

- The County's existing Employment Areas range in size from 17 Ha (42 acres) to 190 Ha (469 acres). The County's largest Employment Areas include West Ingersoll Industrial Area, Woodstock Business Park and Forest Hill Industrial Park;
- West Ingersoll Industrial Area, Van Norman Industrial Area and Patullo Ridge Business Park are approaching buildout;
- Woodstock Business Park has the largest supply of vacant employment lands of the Employment Areas surveyed with 42 net Ha (104 net acres) followed by Commerce Way with 41 net Ha (101 net acres). This is followed by, Forest Hill Industrial Park with 31 net Ha (77 net acres), West Ingersoll Industrial Area with 21 net Ha (52 net acres), Bysham with 15 net Ha (37 net acres), Patullo Ridge Business Park with 7 net Ha (17 net acres), Van Norman Industrial Park with 5 net Ha (12 net acres), and Samnah Business Park with 2 net Ha (5 net acres);
- With the exception of Forest Hill Industrial Park, most of the vacant land supply is shovel ready;
- Employment Areas in Woodstock offer the broadest range of shovel-ready lands, both in terms of total parcels and range of sizes;
- Employment areas within Woodstock and Ingersoll are in proximity to Highway 401. In contrast, Employment Areas in Tillsonburg are not in proximity (i.e. 30 km away);
- Vacant employment land prices tend to be highest along the Highway 401 corridor in Woodstock (upwards of \$100,000 per acre) and lowest in Tillsonburg (\$45,000);
- Only the Woodstock Business Park, Van Norman Industrial Park and Forest Hill Industrial Park offer rail access; and

• The Employment Areas accommodate a range of sectors including manufacturing, wholesale trade, distribution, logistics, construction and business services.

Employment Area	Location	Total Size (net ha)	Vacant Land (net ha)	% Vacant	Shovel Ready Land (Net Ha)	Market Choice - Parcel Size	Proximity to 400 Series Highways	Access to Rail	Price of Serviced Land (\$ per acre)	Occupant Mix
Bysham	Woodstock	35	15	44%	15	1- 10 ha	4 km	NO	\$65,000	manufacturing, wholesale trade
Commerce Way	Woodstock	99	41	42%	41	2 - 17 ha	< 1 km	NO	\$70,000 - 100,000	Distribution/ logistics and multi tenant industrial
Patullo Ridge Business Park	Woodstock	57	7	12%	5	1 - 2 ha	< 1 km	NO	\$55,000 - 90,000	Manufacturing, wholesale trade, transportation, construction
Woodstock Business Park	Woodstock	177	42	24%	36	1 - 14 ha	< 1 km	YES	-	Manufacturing, wholesale trade, transportation
West Ingersoll Industrial Area	Ingersoll	190	21	11%	21	1 - 7 ha	< 1 km	NO	\$75,000	Manufacturing, wholesale trade
Samnah Business Park	Ingersoll	17	2	13%	2	0.5 - 1 ha	< 1 km	NO	-	Manufacturing, Business Services
Forest Hill Industrial Park	Tillsonburg	126	31	25%	2	0.5 - 1 ha	30 km	YES	\$45,000	Manufacturing, wholesale trade, transportation, construction
Van Norman Industrial Park	Tillsonburg	68	5	8%	5	1 - 4 ha	30 km	YES	\$45,000	Manufacturing

Figure 9-6

Source: Watson & Associates Economists Ltd.

9.4.2 Competitiveness and Investment Readiness of Significant Existing and Planned Employment Areas

Building on the analysis completed in section 9.3 and the analysis above, the identified existing and planned Employment Areas within the Urban Centres are assessed herein to better understand their potential to accommodate future employment land demand and growth within the sectors identified in section 9.4.

Figure 9-7 represents an assessment of the readiness and competitiveness of the County's key existing and planned Employment Areas. Consideration has been given to the following:

- Physical/Economic Characteristics, which include character of existing industrial base, continuity and delineation of Employment Area and price of employment land;
- Access/circulation, which includes an assessment of the accessibility of each site via road infrastructure and the visibility of the area to major transportation routes;
- Development opportunities, including vacant land supply, available lots on the market, parcel configuration and mix, servicing and site expandability; and
- Target sector attractiveness, including the target sector which the Employment Area is best suited to accommodate and the strength of that area with regard to those target sectors.

Qualitative observations are provided and categorized as follows:

- ✓ notes a positive rating of the Employment Area with regard to the factor being examined;
- notes a neutral (i.e. neither positive, nor negative) rating of the Employment Area with regard to the specific factor; and
- notes a negative rating for the Employment Area with regard to the factor being examined.

Figure 9-7 Competitiveness and Investment Readiness Analysis

Employment Area	Physical/Economic Characteristics	Access/Circulation	Development Opportunities	Target Sector Attractiveness
Bysham (Woodstock)	 Competitive land prices Proximity to off-site services/ amenities General industrial character which may detract potential for more prestige uses Relatively small industrial area offset from major roadways 	 Access/circulation limitations for heavy truck traffic In reasonable proximity to Highways 401/403 	 Reasonable supply of vacant shovel-ready land available with market choice in terms of parcel size 	 Attractive for small- or medium-sized businesses, including manufacturing and construction Not as well suited for warehousing/distribution or logistics/transportation
Commerce Way (Woodstock)	 Well defined industrial park built to urban design standards Prestige setting Highly marketable – park has seen significant development activity Land prices the highest in County 	 Excellent access/visibility to Highway 401 Good internal circulation 	 Relatively large vacant land supply Broad range of vacant parcel sizes available for development 	 Well suited for transportation, warehousing, logistics, multi-tenant industrial condos
Patullo Ridge Business Park (Woodstock)	 Well-established and defined Employment Area Physically removed from Woodstock's core industrial areas 	 Excellent access/visibility to Highway 401 Good internal circulation 	 Limited supply of vacant parcels with only small parcels available 	 Well suited for manufacturing and construction Not well suited for transportation, warehousing and logistics or large-scale users

Employment Area	Physical/Economic Characteristics	Access/Circulation	Development Opportunities	Target Sector Attractiveness
Woodstock Business Park (Woodstock)	 Large contiguous existing industrial area anchored by major industrial businesses Strong existing industrial base Proximity to off-site services/ amenities Park lacks definition General industrial character may detract marketability to certain uses 	 ✓ Good access to Highway 401 ✓ Good internal circulation ✓ Rail access 	 Reasonable supply of shovel-ready lands with broad range of vacant parcel sizes available for development Some parcels currently lack road access 	✓ Well suited for a broad range of small- to medium- and large-sized businesses, particularly in manufacturing
North East Business Park (Woodstock)	 Large contiguous block of land Proximity to Toyota assembly plant No existing industrial base 	 Reasonable access/ proximity to Highway 401 but further away than other Employment Areas in Woodstock Access/visibility to major arterials is limited 	 Large supply of vacant employment lands Lands are not shovel ready 	✓ Well suited for a broad range of uses including wholesale trade, warehousing, transportation and manufacturing
Samnah Business Park (Ingersoll)	 Moderately prestige setting unique to County Proximity to off-site amenities/ services Employment Area lacks definition and critical mass due to small size 	 Excellent access/visibility to Highway 401 	 Limited supply of vacant employment land 	✓ Well suited for business services and professional services and smaller scale advanced manufacturing suited for a more prestige setting
West Ingersoll Industrial Area (Ingersoll)	 Large contiguous, well- established Employment Area anchored by major industrial complex (GM CAMI) Proximity to off-site amenities/ services 	 Access/proximity to Highway 401 Excellent internal circulation 	 Limited supply of vacant employment land 	 Well suited for manufacturing, wholesale trade Proximity to GM CAMI can be considered an advantage or disadvantage, depending on the business

Employment Area	Physical/Economic Characteristics	Access/Circulation	Development Opportunities	Target Sector Attractiveness
South Ingersoll Secondary Plan Area (Ingersoll)	 Large contiguous land parcel No existing industrial base on site or in proximity to the lands 	 Excellent access/visibility to Highway 401 Good access to site via Clarke Road 	 Large supply of vacant employment lands Lands are not shovel ready 	 Highly marketable for manufacturing, logistics, distribution
Forest Hill Industrial Park (Tillsonburg)	 Large contiguous, well- established Employment Area anchored by a number of large employers Competitive land prices 	 Good access to Highway 3 Rail access Distance to Highway 401 Accessing Highway 401 via Highway 19 requires driving through downtown core 	 Moderate supply of vacant employment lands available for development in south part of Employment Area Limited supply of shovel- ready lands Some vacant lands within the south part of park may have servicing challenges Well buffered but environmental lands may impede configuration potential in the southern part 	 Well suited for manufacturing and construction sectors Not well suited for logistics/distribution or transportation
Van Norman Industrial Park (Tillsonburg)	 Established industrial area anchored by Siemens Competitive land prices 	 Good access to Highway 3 Rail access Distance to Highway 401 	 Two large-scale closed manufacturing plants offer redevelopment potential Limited supply of vacant employment land 	 Well suited for manufacturing and construction sectors Not well suited for logistics/ distribution or transportation
Highway 3 Business Park (Tillsonburg)	 Very large contiguous land area with potential to create industrial park of critical mass Located next to Van Norman Industrial Park Competitive land prices 	 Good access/exposure to Highway 3 Distance to Highway 401 	 Large supply of vacant employment lands Lands are not shovel ready 	 Well suited for manufacturing and construction sectors Not well suited for logistics/ distribution or transportation

Based on the collective summary of the qualitative assessments, the competitiveness of the Employment Areas is as follows:

- The Employment Areas in Woodstock are highly competitive and offer great potential to attract development due to the relatively large supply of shovel-ready vacant employment land, corresponding market choice, proximity and access to Highway 401/403, and appeal to a broad range of sectors. Parks offering the highest potential to accommodate forecast employment lands development include Commerce Way, Woodstock Business Park, North East Business Park and Bysham. Though Patullo Ridge Business Park rates highly, the limited supply of remaining land supply limits its further development potential;
- Ingersoll's existing Employment Areas are highly competitive but limited vacant employment land opportunities inhibit development potential. The Ingersoll Secondary Plan Area employment lands are highly marketable but currently not development ready; and
- Tillsonburg's two existing Employment Areas are competitive but are less attractive for uses that require proximity to Highways 401/403. Further, the lack of shovel-ready land limits development potential. The servicing of the Forest Hill Industrial Park lands to the south of Highway 3 and the development of the Highway 3 Business Park would greatly improve the supply and market choice of employment lands in the community.

9.5 Future Development Options for Employment Areas.

The above analysis suggests that the County's Employment Areas are generally competitive and marketable, but findings herein indicate that the supply of shovel-ready lands is limited. Accordingly, there is a need to provide a balanced inventory of shovel-ready and developable vacant industrial lands that is sufficient to meet market demand in the short, medium and longer term. This requires that sufficient employment lands are designated which have the necessary water and wastewater servicing and road infrastructure in place to accommodate a broad range of users, from small scale to large scale.

The lack of shovel-ready lands is most evident in Ingersoll and Tillsonburg, where the limited supply of serviced developable land may be impeding growth potential. To address this, the County and the municipalities of Ingersoll and Tillsonburg should explore short-term opportunities to expand the shovel-ready vacant land inventory, based on the following:

- Developing the South Ingersoll Secondary Plan Area in Ingersoll for appropriate industrial/employment uses; and
- Developing the Highway 3 Business Park in Tillsonburg.

Over the medium term, the shovel-ready land supply in Woodstock will need to be expanded. To address this, the County and the City of Woodstock should explore opportunities to expand the shovel-ready vacant land inventory over the medium term, based on the following:

- Develop the North East Business Park; and
- Explore opportunities to service employment lands to the northwest of the Toyota Assembly plant to offer broader development opportunities for large-scale uses such as distribution/logistics.

Over the longer term, the County and the City of Woodstock should explore opportunities to extend servicing east from the Patullo Ridge Business Park to service designated employment lands to the east.

9.6 Employment Land Policy Recommendations

The purpose of this section is to provide Official Plan (OP) employment land policy recommendations which will assist in the implementation and monitoring of this study. OP policies need to be strengthened to establish a strategic vision and direction for employment lands. The recommendations provided, as outlined in Figure 9-8, are informed from the substantial planning, economic and demographic analyses completed throughout this study. These recommendations are provided within the provincial framework of the 2005 PPS.

Table 9-8Oxford CountyEmployment Lands Policy Recommendations

No.	Issue	Opportunity/Challenge	Policy Approach					
Econ	Economic Development and Growth							
1	Maintain Long-Term Sustainable and Diverse Economic Growth on Employment Lands	 Oxford County has an established diverse industrial base Oxford County is expected to experience moderate employment growth over the next three decades Oxford County's Employment Areas are competitive in relation to the surrounding market area Structural changes occurring in the macro economy pose potential challenges and opportunities for future growth on employment lands in Oxford County 	 Recognize the importance of employment lands to the economic potential of the County Continue to permit an appropriate mix of employment uses to meet the County's long-term needs. Focus employment lands development in the County's industrial and "export-based" target employment sectors Support opportunities for a diversified local economy based on the following recommendations: Ensure the County's Employment Areas adequately cater to the needs of identified existing and emerging industry clusters (e.g. location, access, parcel size, market character, infrastructure, green space, surrounding land uses, market character, amenities, etc.) Ensure that sufficient business park designated employment lands are provided to accommodate development potential in prestige industrial and business services Continue to capitalize on Oxford County's established automotive assembly/parts cluster 					
2	Attract and Stimulate Development in Employment Areas	 Oxford's recent employment lands absorption has been relatively weak in Ingersoll and Tillsonburg and the Serviced Villages due largely to a lack of shovel- ready employment land Tillsonburg has a number of large vacant industrial buildings Vacant employment lands along the Highway 401 corridor are highly competitive 	 Ensure that the County remains competitive in attracting and retaining businesses through fiscal measures (e.g. competitive industrial tax rates, development charges) and offering a wide range of market choice on employment lands Explore the use of municipal incentives and tools to promote absorption of vacant industrial buildings located within the County's more mature Employment Areas Promote the County's competitive position on employment lands by preparing a market profile (in both hard copy and web-based format) 					

No.	Issue	Opportunity/Challenge	Policy Approach
Long	-Term Employment Land Sup	pply	
3	Long-term Employment Land Supply	 The County's local municipalities, with the exception of Woodstock and Ingersoll, have sufficient designated employment lands to accommodate demand over the 2013-2033 period Woodstock and Ingersoll have a deficit of designated vacant employment land by 2033 totaling 36 gross Ha (89 gross acres) and 65 gross Ha (161 gross acres), respectively. 	 Oxford County should continue to protect all of its employment lands supply within established Employment Areas Encourage intensification of developed and vacant Employment Areas including the redevelopment of brownfield and underutilized sites and up-take of vacant buildings County, City of Woodstock and Town of Ingersoll should immediately begin pursuing the designation of additional employment lands totalling a minimum of 36 gross Ha (89 gross acres) and 65 gross Ha (161 gross acres), respectively, to meet forecast land needs to 2033.
4	Increased Need for Broader Market Choice on Employment Lands	 Ingersoll and Tillsonburg have limited shovel-ready employment land Woodstock's existing supply of larger vacant employment parcels is somewhat limited Woodstock has a limited amount of vacant prestige employment land (i.e. lands designated Business Park) 	 To ensure that the County's employment lands supply levels are not constrained, it is recommended that the a minimum designated and serviced employment land supply of at least five years be provided at all times This employment supply inventory should offer a range of site selection choices by parcel size, configuration, designation, zoning and location
Conv	ersion of Employment Lands	s	
5	Conversion of Employment Lands to Non-Employment Uses	 In very specific cases, through a municipal comprehensive review, the conversion of employment lands to non-employment uses may be justified from a land use planning and economic perspective 	 The Official Plan policies should clearly establish that a conversion of employment lands to non-employment uses can only occur through a Municipal Comprehensive Review which meets the following conditions: there is a demonstrated need for the conversion; the lands are not required over the long-term for the employment purposes for which they are designated; the conversion will not adversely affect the overall viability of the employment area;

No.	Issue	Opportunity/Challenge	Policy Approach
Imple	mentation and Monitoring		
12	How will the Employment Lands Component of this Study be Implemented and Monitored?	 The implementation of key recommendations from this study is fundamental to the long-term success of the County To properly manage growth in accordance with the PPS, revised Official Plan policies need to incorporate the findings of this study as its basis for the long-term planning of employment lands in Oxford County 	 It is important that future growth trends are monitored by economic development and planning staff on a five-year basis to allow the County the ability to evaluate its performance (related to employment growth) against the objectives of this study Furthermore, it is recommended that future employment land needs are regularly monitored and updated in conjunction with the County's five-year OP review

APPENDIX A FORECAST APPROACH AND METHODOLOGY

APPENDIX A - FORECAST APPROACH AND METHODOLOGY

A.1 Population and Housing Forecast Methodology

The population and household forecast methodology adopted for this study is based on a combined approach, which incorporates both the traditional "top-down" cohort-survival forecast methodology (i.e. population by age-cohort) and a "bottom-up" household formation methodology. This combined approach is adopted to ensure that both regional economic/demographic trends and local housing market conditions are adequately assessed in developing the County's long-term growth potential. Each of these two population growth methodologies are further described below.

- 1. Household Formation Methodology This "bottom-up" approach focuses on the rate of historical housing construction in the municipality and surrounding area, adjusted to incorporate factors such as servicing constraints and units in the development process. The population is then forecast by developing assumptions on average household size by unit type, taking into consideration the higher average occupancy of new units, and the decline in persons per unit over time within existing households. The housing market model approach is recognized in the Province's 1995 "Projection Methodology Guidelines," as the "Simpler Methodology."¹ The approach to the household formation model is graphically illustrated in Figure A-1.
- 2. Cohort-Survival Forecast Methodology This "top-down" approach uses, as its base, five-year population age groups by sex and ages each group over time, taking into consideration age-specific death rates and age-specific fertility rates for the female population in the appropriate years (to generate new births). To this total, an estimated rate of *net migration* is added (in-migration to the municipality less out-migration, by age group). The approach to the cohort-survival forecast methodology is graphically illustrated in Figure A-2.

¹ Projection Methodology Guideline: A Guide to Projecting Population, Housing Need, Employment and Related Land Requirements, 1995.

Watson & Associates Economists Ltd.

FIGURE A-1 APPROACH TO HOUSEHOLD FORMATION MODEL

DEMAND

SUPPLY





APPENDIX B SUPPLEMENTARY DEMOGRAPHIC AND ECONOMIC PROFILE DATA



Figure B-1 Oxford County Dwelling Units by Density Type, 1996-2011

Source: 1996-2011 Census

1. Low density is comprised of singles and semi-detached, movable and other detached dwellings.

2. Medium density is comprised of townhomes and apartments in a duplex

3. High density is comprised of triplexes and apartments

Figure B-2 Oxford County and Ontario Dwelling Units by Density Type, 2011



Source: 2011 Census

- 1. Low density is comprised of singles and semi-detached, movable and other detached dwellings.
- 2. Medium density is comprised of townhomes and apartments in a duplex
- 3. High density is comprised of triplexes and apartments

Figure B-3a Oxford County Historical Residential Building Permit Activity Annual Activity (New Units) 2006-2012



Source: Statistics Canada 2006-2012, catalogue 64-001-XIB. Note: Building permits are unadjusted for demolitions.

Figure B-3b

Oxford County

Historical Residential Building Permit Activity by Local Municipality

Woodstock Summary	SFD	SEMI	ROW	APT	Total
2006	135	8	31	151	325
2007	176	14	69	11	270
2008	155	8	56	130	349
2009	163	2	0	43	208
2010	192	18	26	46	282
2011	150	10	26	0	186
2012	170	6	81	208	465

Ingersoll Summary	SFD	SEMI	ROW	APT	Total
2006	42	6	0	0	48
2007	46	2	10	0	58
2008	21	0	20	0	41
2009	35	0	0	0	35
2010	35	4	22	0	61
2011	34	3	0	8	45
2012	43	4	9	0	56

Tillsonburg Summary	SFD	SEMI	ROW	APT	Total
2006	72	2	0	0	74
2007	97	0	0	0	97
2008	49	2	0	0	51
2009	41	0	2	15	58
2010	59	1	3	0	63
2011	46	1	6	64	117
2012	59	0	3	0	62

Source: Oxford County Planning Department

Note: building permits are unadjusted for demolitions

Figure B-3c

Oxford County

Historical Residential Building Permit Activity by Local Municipality

Blandford-Blenheim Summary	SFD	SEMI	ROW	APT	Total
2006	46	0	0	0	46
2007	39	0	0	0	39
2008	29	0	0	0	29
2009	18	0	0	0	18
2010	21	0	0	0	21
2011	20	0	0	3	23
2012	32	0	0	0	32

East Zorra-Tavistock Summary	SFD	SEMI	ROW	APT	Total
2006	17	2	0	0	19
2007	24	2	0	0	26
2008	23	2	0	0	25
2009	14	8	0	0	22
2010	32	4	0	0	36
2011	13	0	0	0	13
2012	19	0	0	0	19

Norwich Summary	SFD	SEMI	ROW	APT	Total
2006	32	0	0	0	32
2007	41	4	0	0	45
2008	28	2	0	0	30
2009	27	0	0	0	27
2010	41	0	0	0	41
2011	33	0	0	0	34
2012	45	0	0	0	45

Source: Oxford County Planning Department

Note: building permits are unadjusted for demolitions

Figure B-3d

Oxford County

Historical Residential Building Permit Activity by Local Municipality

South-West Oxford Summary	SFD	SEMI	ROW	APT	Total
2006	26	0	0	0	26
2007	11	0	0	0	11
2008	16	0	0	0	16
2009	19	0	0	0	19
2010	19	0	0	0	19
2011	16	0	0	0	16
2012	28	0	0	0	28

Zorra Summary	SFD	SEMI	ROW	APT	Total
2006	26	0	0	0	26
2007	30	0	0	0	30
2008	24	0	0	0	24
2009	29	0	0	0	29
2010	22	0	3	0	25
2011	19	0	0	0	19
2012	17	0	0	0	17

Oxford County Summary	SFD	SEMI	ROW	APT	Total
2006	396	18	31	151	596
2007	464	22	79	11	576
2008	345	14	76	130	565
2009	346	10	2	58	416
2010	421	27	54	46	548
2011	331	14	32	75	452
2012	413	10	93	208	724

Source: Oxford County Planning Department

Note: building permits are unadjusted for demolitions

Figure B-4 Oxford County Percent Population by Age, 1991-2011





Source: Watson & Associates Economists Ltd. 2013. Derived from the Office of the Registrar General; Statistics Canada Demography Division



Figure B-6 Oxford County Net Migration by Major Age Cohort 1991-2011



Figure B-7 Oxford County Total Employment, 2001-2011

Source: 2001-2006 Statistics Canada employment. 2011 employment adapted from OMAFRA EMSI 13.1 dataset.

Figure B-8



Figure B-9






APPENDIX C SUPPLEMENTARY POPULATION, HOUSING AND EMPLOYMENT FORECAST ANALYSIS, 2011-2041

	Population (Including Census Undercount)							
Cohort	2006	2011	2016	2021	2026	2031	2036	2041
0 - 4	6,120	5,940	5,640	6,230	6,500	6,440	6,070	5,700
5 - 9	6,580	6,230	6,250	5,980	6,480	6,740	6,680	6,310
10 - 14	7,480	6,900	6,690	6,740	6,330	6,820	7,090	7,020
15 - 19	7,600	7,630	7,410	7,260	7,160	6,740	7,230	7,500
20 - 24	6,920	6,990	7,690	7,500	7,350	7,250	6,830	7,320
25 - 29	6,110	6,390	6,900	7,610	7,450	7,310	7,210	6,800
30 - 34	6,610	5,970	6,330	6,850	7,570	7,420	7,280	7,180
35 - 39	7,090	6,530	5,930	6,300	6,830	7,550	7,400	7,260
40 - 44	8,810	7,170	6,600	6,000	6,390	6,920	7,630	7,490
45 - 49	8,350	8,960	7,410	6,810	6,250	6,640	7,170	7,880
50 - 54	7,350	8,310	9,090	7,530	6,970	6,420	6,810	7,340
55 - 59	6,470	7,340	8,420	9,160	7,670	7,120	6,580	6,970
60 - 64	5,090	6,330	7,320	8,350	9,080	7,640	7,120	6,610
65 - 69	4,270	4,880	6,080	7,010	7,990	8,730	7,380	6,900
70 - 74	3,800	3,980	4,540	5,640	6,520	7,490	8,200	6,980
75 - 79	3,290	3,360	3,520	4,010	4,980	5,830	6,740	7,430
80 - 84	2,640	2,550	2,720	2,900	3,330	4,200	4,970	5,810
85 - 89	1,340	1,720	1,760	1,950	2,110	2,490	3,180	3,860
90+	660	1,050	1,430	1,650	1,860	2,150	2,610	3,400
Total	106,580	108,230	111,730	115,480	118,820	121,900	124,180	125,760

Figure C-1 Oxford County, Population Forecast by Age Cohort, 2011 to 2041

Source: 2006 and 2011 population derived from Statistics Canada Census

Forecast prepared by Watson & Associates Economists Ltd., 2013

Note: Forecast population includes an estimated net Census undercount of approximately 2.4%



Figure C-2 Oxford County Population Composition by Age Cohort, 2011-2041



Figure C-4a Oxford County Historical Net Migration Estimates (1991 - 2011)

1 Net Migration E	991-1996 stimates by Age Cohort
Cohort	Estimated Migration
0-18	810
19-34	12
35-54	355
55-74	474
75+	(140)
Total	1,511

1996-2001 Net Migration Estimates by Age Cohort		
Cohort	Estimated Migration	
0-18	848	
19-34	(285	
35-54	476	
55-74	313	
75+	109	
Total	1,462	

2001-2006 Net Migration Estimates by Age Cohort			
Cohort	Estimated Migration		
0-18	904		
19-34	(322)		
35-54	818		
55-74	617		
75+	73		
Total	2,090		

2006 - 2011 Net Migration Estimates by Age Cohort		
Cohort	Estimated Migration	
0-18	797	
19-34	(1,224)	
35-54	398	
55-74	464	
75+	258	
Total	694	

Figure C-4b Oxford County Forecast Net Migration Estimates (2011-2041)

2011-2016 Net Migration Estimates by Age Cohort			
Cohort	Estimated Migration		
0-18	1,583		
19-34	(156)		
35-54	728		
55-74	629		
75+	316		
Total	3,100		

016-2021 stimates by Age Cohort
Estimated Migration
1,747
(113
636
465
166
2,900

Net Migration	2021-2026 Estimates by Age Cohort
Cohort	Estimated Migration
0-18	1,270
19-34	(42)
35-54	719
55-74	463
75+	118
Total	2,529

	2026-2031			
Net Migration	Estimates	by	Age	Cohort

Cohort	Estimated Migration
0-18	1,261
19-34	(27)
35-54	720
55-74	470
75+	116
Total	2,540

2031-2036
Net Migration Estimates by Age Cohort

Cohort	Estimated Migration
0-18	1,260
19-34	(33)
35-54	722
55-74	475
75+	116
Total	2,540

2036-2041 Net Migration Estimates by Age Cohort

Cohort	Estimated Migration
0-18	1,240
19-34	(35)
35-54	712
55-74	470
75+	114
Total	2,500

Figure C-5 Historical Age Specific Fertility Rates Oxford County Births Per Population

Year	15-19	20-24	25-29	as per 1,000 rei 30-34	iiales by Majoi 35-39	Age COILOIL 40-44	45-49	Total
1990	0.0217	0.1006	0.1337	0.0725	0.0241	0.0025	0.0004	1.7777
1991	0.0248	0.0976	0.1259	0.0770	0.0238	0.0024	0.0008	1.7617
1992	0.0225	0.0877	0.1407	0.0727	0.0231	0.0036	0.0004	1.7533
1993	0.0249	0.0875	0.1372	0.0753	0.0173	0.0033	0.0003	1.7289
1994	0.0262	0.0869	0.1294	0.0820	0.0232	0.0040		1.7588
1995	0.0252	0.0912	0.1402	0.0805	0.0253	0.0034		1.8286
1996	0.0272	0.0869	0.1428	0.0841	0.0231	0.0027	0.0003	1.8354
1997	0.0229	0.0782	0.1260	0.0795	0.0241	0.0026		1.6673
1998	0.0221	0.0802	0.1239	0.0804	0.0201	0.0046	0.0003	1.6582
1999	0.0168	0.0802	0.1274	0.0706	0.0234	0.0038	0.0003	1.6120
2000	0.0192	0.0804	0.1211	0.0816	0.0251	0.0030	•	1.6516
2001	0.0151	0.0691	0.1396	0.0991	0.0261	0.0031		1.7606
2002	0.0165	0.0682	0.1216	0.0932	0.0292	0.0024		1.6551
2003	0.0127	0.0693	0.1254	0.0894	0.0277	0.0051	•	1.6483
2004	0.0151	0.0688	0.1295	0.1003	0.0258	0.0034		1.7153
2005	0.0098	0.0528	0.0941	0.0828	0.0273	0.0013		1.3403
2006	0.0107	0.0545	0.1000	0.0836	0.0266	0.0034		1.3936
2007	0.0116	0.0671	0.1107	0.0827	0.0289	0.0029	-	1.5195
2008	0.0130	0.0616	0.1301	0.1018	0.0304	0:0030	-	1.6998
2009	0.0092	0.0551	0.1186	0.0964	0.0313	0.0016		1.5609
2010	0.0113	0.0546	0.1357	0.0972	0.0275	0.0017		1.6399
2011	0.0117	0.0563	0.1398	0.1001	0.0283	0.0017		1.6891
2012	0.0119	0.0574	0.1426	0.1021	0.0289	0.0018		1.7229
2013	0.0120	0.0580	0.1440	0.1031	0.0291	0.0018		1.7401
2014	0.0121	0.0586	0.1454	0.1042	0.0294	0.0018		1.7575
2015	0.0123	0.0591	0.1469	0.1052	0.0297	0.0018		1.7751
2016	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2017	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2018	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2019	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2020	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2021	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018	1	1.7786
2022	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2023	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2024	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2025	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2026	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2027	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2028	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2029	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2030	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2031	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2032	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2033	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2034	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2035	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2036	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2037	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2038	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2039	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018	1	1.7786
2040	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786
2041	0.0123	0.0593	0.1472	0.1054	0.0298	0.0018		1.7786

Fertility Rates per 1,000 Females by Major Age Cohort

Source: Office of the Registrar General; Statistics Canada Demography Division Forecast Provided by Watson & Associates Economists Ltd.

Table C-6 Oxford County Historical Five-Year Average Mortality Rates Deaths per 1000 population

	1986-	-1991	1991-	-1996	1996-	-2001	2001-	-2006	2006	-2011
Age Group	Male	Female								
Under 1	8.71	6.95	6.55	4.78	5.64	3.81	5.07	3.56	4.95	3.44
1-3 Years	0.20	0.41	0.09	0.19	0.29	0.30	0.42	0.21	0.52	0.18
4-8 Years	0.28	0.06	0.11	0.17	0.27	0.28	0.05	0.15	0.05	0.11
9-13 Years	0.24	0.06	0.05	0.45	0.32	0.15	0.10	0.15	0.08	0.15
14-18 Years	0.94	0.47	0.63	0.36	0.54	0.17	0.79	0.11	0.93	0.10
19-24 Years	1.00	0.35	1.39	0.11	0.75	0.38	1.05	0.11	1.21	0.07
25-29 Years	1.04	0.33	0.73	0.82	0.54	0.46	0.95	0.34	1.37	0.32
30-34 Years	1.20	0.49	1.34	0.57	0.71	0.46	0.46	0.49	0.41	0.51
35-39 Years	1.11	0.81	1.70	0.36	1.43	0.76	1.40	1.15	1.39	1.45
40-44 Years	2.32	1.23	1.84	1.25	2.08	1.04	2.53	0.84	2.80	0.76
45-49 Years	4.12	1.65	2.70	2.22	3.13	1.85	2.35	1.52	2.17	1.42
50-54 Years	7.36	3.00	6.40	3.32	3.39	3.78	3.96	3.75	4.22	3.73
55-59 Years	10.20	4.86	8.55	6.40	8.62	4.51	5.65	3.73	4.87	3.41
60-64 Years	15.21	7.73	15.36	8.72	13.36	9.16	12.67	9.45	12.41	9.60
65-69 Years	26.52	13.76	24.86	12.87	21.21	12.07	19.20	12.51	18.48	12.74
70-74 Years	36.84	23.66	40.51	21.13	32.84	19.19	33.23	19.92	33.39	20.30
75-79 Years	61.07	44.78	60.63	34.65	50.98	35.82	51.01	35.98	51.01	36.06
80-84 Years	101.33	70.56	101.58	65.26	110.06	60.39	87.13	55.82	75.33	53.71
85-89 Years	141.20	137.58	167.25	113.98	157.13	101.85	157.15	95.42	157.16	92.41
90+	204.28	282.57	264.97	191.12	260.15	208.35	194.71	206.49	177.57	205.57

Table C-7Oxford CountyForecast Five-Year Average Mortality RatesDeaths per 1000 population

	2011·	-2016	2016-	2021	2021-	2026	2026-	-2031	2031-	-2036	2036-	-2041
Age Group	Male	Female										
Under 1	4.92	3.38	4.91	3.35	4.91	3.34	4.91	3.33	4.91	3.33	4.91	3.33
1-3 Years	0.58	0.17	0.61	0.16	0.63	0.16	0.64	0.16	0.65	0.16	0.65	0.16
4-8 Years	0.05	0.10	0.05	0.10	0.05	0.09	0.05	0.09	0.05	0.09	0.05	0.09
9-13 Years	0.07	0.15	0.07	0.15	0.06	0.15	0.06	0.15	0.06	0.15	0.06	0.15
14-18 Years	1.00	0.10	1.03	0.10	1.04	0.10	1.05	0.10	1.05	0.10	1.05	0.10
19-24 Years	1.29	0.06	1.32	0.05	1.34	0.05	1.34	0.05	1.34	0.05	1.34	0.05
25-29 Years	1.73	0.32	2.01	0.32	2.20	0.32	2.32	0.32	2.40	0.32	2.45	0.32
30-34 Years	0.40	0.52	0.39	0.52	0.39	0.52	0.39	0.53	0.39	0.53	0.39	0.53
35-39 Years	1.39	1.64	1.39	1.75	1.39	1.81	1.38	1.84	1.38	1.85	1.38	1.86
40-44 Years	2.96	0.72	3.03	0.71	3.08	0.70	3.10	0.69	3.11	0.69	3.11	0.69
45-49 Years	2.12	1.38	2.11	1.36	2.10	1.35	2.10	1.35	2.10	1.35	2.10	1.35
50-54 Years	4.33	3.72	4.37	3.72	4.39	3.72	4.40	3.72	4.40	3.72	4.40	3.72
55-59 Years	4.60	3.26	4.50	3.19	4.46	3.16	4.45	3.14	4.44	3.13	4.44	3.13
60-64 Years	12.30	9.68	12.26	9.72	12.25	9.74	12.24	9.75	12.24	9.75	12.24	9.75
65-69 Years	18.20	12.86	18.09	12.92	18.05	12.95	18.03	12.96	18.02	12.97	18.02	12.97
70-74 Years	33.45	20.49	33.48	20.59	33.49	20.64	33.49	20.66	33.49	20.67	33.50	20.68
75-79 Years	51.02	36.10	51.02	36.12	51.02	36.13	51.02	36.14	51.02	36.14	51.02	36.14
80-84 Years	68.70	52.70	64.77	52.20	62.36	51.95	60.85	51.83	59.90	51.77	59.28	51.74
85-89 Years	157.16	90.95	157.17	90.23	157.17	89.87	157.17	89.70	157.17	89.61	157.17	89.56
90+	172.10	205.11	170.25	204.88	169.60	204.76	169.38	204.71	169.30	204.68	169.27	204.66

	Population	Population			Housing L	Jnits		
	(Excluding Census Undercount)	(Including Census Undercount) ¹	Singles & Semi- Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households	Person Per Unit (PPU)
2001	99,270	103,200	29,320	2,650	4,800	495	37,265	2.77
2006	102,760	106,540	30,885	2,950	5,035	450	39,320	2.71
2011	105,720	108,230	32,450	3,150	5,460	495	41,555	2.60
2016	1 09,1 50	111,740	34,170	3,420	5,890	495	43,975	2.54
2021	112,810	115,480	35,930	3,740	6,250	495	46,415	2.49
2026	116,060	118,810	37,440	4,030	6,550	495	48,515	2.45
2031	119,070	121,890	38,790	4,310	6,810	495	50,405	2.42
2036	121,290	124,170	39,810	4,520	7,030	495	51,855	2.39
2041	122,830	125,740	40,560	4,680	7,190	495	52,925	2.38
2006	3,490	3,340	1,565	300	235	-45	2,055	
2011	2,960	1,690	1,565	200	425	45	2,235	
12016	3,430	3,510	1,720	270	430	0	2,420	
12021	7,090	7,250	3,480	590	260	0	4,860	
1 2026	10,340	10,580	4,990	880	1,090	0	6,960	
12031	13,350	13,660	6,340	1,160	1,350	0	8,850	
12036	15,570	15,940	7,360	1,370	1,570	0	10,300	
i 2041	17,110	17,510	8,110	1,530	1,730	0	11,370	
00+010000	Economicto I tal	0010						

Figure C-8 Oxford County Population and Housing Growth Forecast Summary, 2011-2041

Source: Watson & Associates Economists Ltd., 2013. Note: Figures may not add precisely due to rounding. 1. Census undercount estimated at approximately 2.4%. Note: Population including the Cenus undercount has been rounded. 2. Includes townhomes and apartments in duplexes. 3. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Notes: 1. Historical Building Permits are adjusted for demolitions

3/4/2014

		PPU		_	2.61	2.56	2.46	2.40	2.36	2.33	2.30	2.29	2.27		
F		Total	Docidontio	Residentia	13,180	14,385	15,695	17,075	18,375	19,495	20,455	21,160	21,645	4,760	5,950
, 2011-204	splods		Apartments		2,665	2,830	3,105	3,440	3,745	3,995	4,215	4,375	4,485	1,110	1,380
Forecasts	House		Multiples		1,685	1,945	2,025	2,220	2,435	2,585	2,735	2,825	2,870	710	845
Household		Singles &	Semi-	Detached	8,830	9,610	10,565	11,415	12,195	12,915	13,505	13,960	14,290	2,940	3,725
ulation and h	Population	(Including	Undercount) ¹		34,370	36,785	38,650	41,035	43,340	45,395	47,125	48,395	49,195	8,475	10,545
Рор	Population	(Excluding	Undercount)		33,060	35,480	37,755	40,080	42,335	44,345	46,040	47,270	48,050	8,285	10,295
		Year			2001	2006	2011	2016	2021	2026	2031	2036	2041	2011 - 2031	2011 - 2041

City of Woodstock Population and Household Forecasts, 2011-20

Figure C-9

Source: Watson & Associates Economists Ltd., 2013

1. Forecast population includes a net Census undercount of approximately 2.4%

Note: Figures may not add precisely due to rounding. PPU calculated based on population including undercount

		РРU		2.72	2.67	2.60	2.54	2.49	2.46	2.42	2.40	2.38		
		Total	Residential	4,190	4,575	4,780	5,025	5,280	5,510	5,720	5,880	5,990	940	1,210
, ZU11-ZU4 1	sholds	Anartments		495	560	570	615	625	635	645	655	665	75	95
Forecasts	House	Multiples	1410110100	365	375	380	405	445	505	555	590	610	175	230
Tousenoid		Singles & Semi-	Detached	3,330	3,640	3,830	4,005	4,210	4,370	4,520	4,635	4,715	069	885
ulation and r	Population	(Including Undercount) ¹		11,410	12,195	12,435	12,765	13,160	13,530	13,855	14,115	14,275	1,420	1,840
dor	Population	(Excluding		10,975	11,760	12,145	12,470	12,855	13,215	13,535	13,790	13,945	1,390	1,800
		Year		2001	2006	2011	2016	2021	2026	2031	2036	2041	2011 - 2031	2011 - 2041

Town of Ingersoll Population and Household Forecasts, 2011-2041

Figure C-10

Source: Watson & Associates Economists Ltd., 2013

1. Forecast population includes a net Census undercount of approximately 2.4%

Note: Figures may not add precisely due to rounding. PPU calculated based on population including undercount

		РРО		2.46	2.41	2.30	2.26	2.23	2.20	2.19	2.17	2.16			
		Total Residential		5,945	6,375	6,815	7,155	7,495	7,785	8,095	8,305	8,455	1,280	1,640	
, 2011-2041	sholds	Apartments		1,145	1,180	1,335	1,395	1,430	1,470	1,515	1,545	1,580	180	245	
Forecasts,	House	Multiples		460	440	500	535	575	605	640	665	695	140	195	
Household		Singles & Semi-	Detached	4,340	4,755	4,980	5,225	5,490	5,710	5,940	6,095	6,180	096	1,200	
ulation and F	Population	(Including Undercount) ¹		14,605	15,365	15,665	16,155	16,695	17,160	17,705	18,035	18,240	2,040	2,575	
Popula	Population	(Excluding Undercount)		14,050	14,820	15,300	15,780	16,310	16,765	17,295	17,615	17,820	1,995	2,520	
		Year		2001	2006	2011	2016	2021	2026	2031	2036	2041	2011 - 2031	2011 - 2041	

Town of Tillsonburg pulation and Household Forecasts, 2011-2041

Figure C-11

Source: Watson & Associates Economists Ltd., 2013

1. Forecast population includes a net Census undercount of approximately 2.4%

Note: Figures may not add precisely due to rounding. PPU calculated based on population including undercount

		РРU	3.10	2.98	2.88	2.81	2.75	2.70	2.66	2.64	2.62		
		Total Residential	2,555	2,485	2,615	2,725	2,855	2,975	3,085	3,165	3,240	470	625
, 2011-2041	sholds	Apartments	100	95	75	52	75	75	75	75	75	0	0
Forecasts	House	Multiples	70	35	55	60	65	75	85	100	105	30	50
Household		Singles & Semi- Detached	2,385	2,355	2,485	2,590	2,715	2,825	2,925	2,990	3,060	440	575
ulation and h	Population	(Including Undercount) ¹	7,930	7,415	7,535	7,670	7,855	8,045	8,220	8,355	8,485	685	950
Popu	Population	(Excluding Undercount)	7,630	7,150	7,360	7,490	7,675	7,860	8,030	8,160	8,290	670	930
		Year	2001	2006	2011	2016	2021	2026	2031	2036	2041	2011 - 2031	2011 - 2041

Figure C-12 Township of Blandford-Blenheim opulation and Household Forecasts, 2011-20

Source: Watson & Associates Economists Ltd., 2013

1. Forecast population includes a net Census undercount of approximately 2.4%

Note: Figures may not add precisely due to rounding. PPU calculated based on population including undercount

		PPU	3.01	2.97	2.78	2.72	2.66	2.62	2.58	2.55	2.52			·
		Total Residential	2,500	2,565	2,515	2,615	2,725	2,815	2,900	2,965	3,020	385	505	
, 2011-207	splods	Apartments	225	180	170	170	170	170	170	170	170	0	0	
1 01 600010	House	Multiples	25	50	65	65	75	85	105	110	140	40	75	
		Singles & Semi- Detached	2,250	2,335	2,280	2,380	2,480	2,560	2,625	2,685	2,710	345	430	
	Population	(Including Undercount) ¹	7,525	7,620	6,995	7,115	7,260	7,370	7,470	7,570	7,625	475	630	
	Population	(Excluding Undercount)	7,240	7,350	6,835	6,950	7,090	7,200	7,295	7,395	7,450	460	615	
		Year	2001	2006	2011	2016	2021	2026	2031	2036	2041	2011 - 2031	2011 - 2041	

Figure C-13 Township of East Zorra-Tavistock Population and Household Forecasts. 2011-2041

Source: Watson & Associates Economists Ltd., 2013

1. Forecast population includes a net Census undercount of approximately 2.4%

Note: Figures may not add precisely due to rounding. PPU calculated based on population including undercount

		DPU		3.18	3.14	3.04	2.96	2.89	2.84	2.79	2.75	2.73		
		Total	Residential	3,425	3,465	3,605	3,740	3,895	4,020	4,150	4,255	4,355	545	750
, 2011-204	splods	Apartments		110	85	100	100	100	100	100	100	100	0	0
Forecasts	House	Multiples		20	55	80	85	06	105	115	130	140	35	60
Household		Singles & Semi-	Detached	3,245	3,325	3,425	3,555	3,705	3,815	3,935	4,025	4,115	510	690
ulation and I	Population	(Including Undercount) ¹		10,895	10,865	10,975	11,080	11,265	11,400	11,570	11,715	11,880	595	905
Рор	Population	(Excluding Undercount)		10,480	10,480	10,720	10,825	11,005	11,135	11,300	11,445	11,605	580	885
		Year		2001	2006	2011	2016	2021	2026	2031	2036	2041	2011 - 2031	2011 - 2041

Township of Norwich opulation and Household Forecasts, 2011-2041

Figure C-14

Source: Watson & Associates Economists Ltd., 2013

Note: Figures may not add precisely due to rounding. PPU calculated based on population including undercount 1. Forecast population includes a net Census undercount of approximately 2.4%

		РРU	3.14	3.05	2.98	2.91	2.83	2.77	2.73	2.68	2.65		
		Total Residential	2,580	2,580	2,590	2,635	2,690	2,735	2,775	2,815	2,845	185	255
, 2011-2041	sholds	Apartments	0	30	25	25	25	25	25	25	25	0	0
Forecasts	House	Multiples	15	15	20	20	25	30	30	40	40	10	20
Household		Singles & Semi-	2,565	2,535	2,545	2,590	2,640	2,680	2,720	2,750	2,780	175	235
ulation and H	Population	(Including Undercount) ¹	8,090	7,870	7,725	7,660	7,615	7,575	7,565	7,555	7,550	-160	-175
Popul	Population	(Excluding Undercount)	7,780	7,590	7,545	7,485	7,440	7,400	7,390	7,380	7,375	-155	-170
		Year	2001	2006	2011	2016	2021	2026	2031	2036	2041	2011 - 2031	2011 - 2041

Figure C-15 Township of South-West Oxford opulation and Household Forecasts, 2011-2041

Source: Watson & Associates Economists Ltd., 2013

1. Forecast population includes a net Census undercount of approximately 2.4%

Note: Figures may not add precisely due to rounding. PPU calculated based on population including undercount

	Pop	ulation and F	Household	Forecasts	, 2011-204	1	
	Population	Population		House	eholds		
Year	(Excluding	(Including	Singles &			Totol	РРՍ
	Undercount)	Undercount) ¹	Semi-	Multiples	Apartments	l otal Decidential	
			Detached			Residential	
2001	8,050	8,370	2,720	40	65	2,825	2.96
2006	8,125	8,425	2,780	30	75	2,885	2.92
2011	8,060	8,250	2,835	20	80	2,935	2.81
2016	8,070	8,260	2,905	25	80	3,010	2.74
2021	8,100	8,290	2,985	30	80	3,095	2.68
2026	8,140	8,335	3,055	35	80	3,170	2.63
2031	8,185	8,380	3,115	45	80	3,240	2.59
2036	8,235	8,430	3,160	55	80	3,295	2.56
2041	8,295	8,490	3,205	70	80	3,355	2.53
2011 - 2031	125	130	280	25	0	305	
2011 - 2041	235	240	370	50	0	420	

Township of Zorra opulation and Household Forecasts, 2011-2041

Figure C-16

Source: Watson & Associates Economists Ltd., 2013

1. Forecast population includes a net Census undercount of approximately 2.4%

Note: Figures may not add precisely due to rounding. PPU calculated based on population including undercount

Figure C-17 Oxford County Employment Forecast, 2011-2041

						Emplo	oyment		
Period	Popuation (Excluding Net Census Undercount)	Population (Including Net Census Undercount)	Activity Rate	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total
2001	99,270	103,200	44.5%	1,545	6,005	18,215	12,300	6,095	44,155
2006	102,760	106,540	47.1%	1,730	4,985	20,845	13,900	6,980	48,440
2011	105,720	108,230	49.2%	1,765	5,180	22,340	14,945	7,820	52,045
2013	107,080	109,620	49.6%	1,780	5,255	22,810	15,325	7,955	53,125
Mid 2016	109,150	111,740	50.4%	1,805	5,395	23,615	15,920	8,300	55,030
Mid 2021	112,810	115,480	51.8%	1,825	5,635	25,170	16,985	8,790	58,400
Mid 2026	116,060	118,810	52.5%	1,830	5,845	26,315	17,745	9,200	60,935
Mid 2031	119,070	121,890	52.8%	1,835	5,990	27,250	18,330	9,475	62,875
Mid 2036	121,290	124,170	53.0%	1,840	6,085	27,905	18,750	9,695	64,275
Mid 2041	122,830	125,740	52.9%	1,850	6,165	28,230	18,960	9,810	65,015
2011 - 2041	17,110	17,510	3.7%	85	985	5,890	4,015	1,990	12,970

Source: Watson & Associates Economists Ltd., 2013. 2001 and 2006 Employment data derived from Statistics Canada Place of Work data. 2011 and 2013 Employment figures are estimates derived by Watson & Associates Economists Ltd., 2013.



Figure C-18 City of Woodstock Employment Forecast, 2011-2041

	Population	Population				Emplo	yment		
Period	(Excluding Net Census	(Including Net Census	Activity Rate	Primary	Work at	Industrial	Commercial/ Population	Institutional	Total
	Undercount)	Undercount)		•	ноте		Related		
2001	33,100	34,400	0.476	36	735	6,530	5,290	3,095	15,740
2006	35,500	36,800	0.513	220	725	7,040	6,470	3,740	18,195
2011	37,800	38,700	0.586	235	795	9,640	7,125	4,335	22,125
2013	38,700	39,600	0.593	240	825	10,045	7,390	4,445	22,945
Mid 2016	40,100	41,100	0.599	240	860	10,530	7,735	4,650	24,020
Mid 2021	42,300	43,300	0.616	240	955	11,585	8,425	4,980	26,185
Mid 2026	44,300	45,400	0.619	240	1,030	12,255	8,895	5,230	27,645
Mid 2031	46,000	47,100	0.619	240	1,075	12,855	9,305	5,425	28,895
Mid 2036	47,300	48,400	0.619	240	1,110	13,255	9,600	5,595	29,795
Mid 2041	48,000	49,100	0.617	240	1,130	13,435	9,710	5,690	30,205
2011 - 2041	10,200	10,400	3.1%	2	335	3,795	2,585	1,355	8,080
Source: Watson & Associates Economists	eltd 2013								

courds: watison & Associates Economists Ltd., 2013. 2001 and 2006 Employment data derived from Statistics Canada Place of Work data. 2011 and 2013 Employment figures are estimates derived by Watson & Associates Economists Ltd., 2013.



Town of Ingersoll Employment Forecast, 2011-2041 Figure C-19

		()							
	Population	Population				Emplo	yment		
Period	(Excluding Net Census	(Including Net Census	Activity Rate	Primary	Work at Home	Industrial	Commercial/ Population	Institutional	Total
	Undercount)	Undercount)					Related		
2001	11,000	11,400	0.661	175	230	4,210	1,840	800	7,255
2006	11,800	12,200	0.707	45	300	5,215	1,975	780	8,310
2011	12,100	12,400	0.679	45	330	4,990	2,000	890	8,250
2013	12,300	12,600	0.682	45	345	5,040	2,045	890	8,365
Mid 2016	12,500	12,800	0.690	45	360	5,195	2,085	925	8,610
Mid 2021	12,900	13,200	0.708	45	385	5,445	2,215	975	9,060
Mid 2026	13,200	13,500	0.723	45	405	5,705	2,310	1,025	9,490
Mid 2031	13,500	13,800	0:730	45	425	5,875	2,350	1,055	9,750
Mid 2036	13,800	14,100	0.736	45	430	6,010	2,375	1,065	9,925
Mid 2041	13,900	14,200	0.736	45	435	6,100	2,380	1,060	10,025
2011 - 2041	1,800	1,800	5.7%	0	105	1,110	380	170	1,775
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Source: Watson & Associates Economists Ltd., 2013. 2001 and 2006 Employment data derived from Statistics Canada Place of Work data. 2011 and 2013 Employment figures are estimates derived by Watson & Associates Economists Ltd., 2013.



Figure C-20 Town of Tillsonburg Employment Forecast, 2011-2041

	Population	Population				Emplo	yment		
Period	(Excluding Net Census	(Including Net Census	Activity Rate	Primary	Work at	Industrial	Commercial/ Population	Institutional	Total
	Undercount)	Undercount)					Related		
2001	14,100	14,700	0.635	130	355	4,440	2,805	1,190	8,920
2006	14,800	15,300	0.629	75	490	4,180	3,070	1,515	9,330
2011	15,300	15,700	0.571	75	520	3,215	3,355	1,565	8,735
2013	15,500	15,900	0.567	75	525	3,220	362'8	1,565	8,780
Mid 2016	15,800	16,200	0.574	75	555	3,330	3,495	1,630	9,080
Mid 2021	16,300	16,700	0.582	75	585	3,510	3,635	1,695	9,500
Mid 2026	16,800	17,200	0.588	75	620	3,650	3,755	1,755	9,855
Mid 2031	17,300	17,700	0.587	75	615	3,755	3,835	1,775	10,050
Mid 2036	17,600	18,000	0.585	75	625	3,820	3,880	1,785	10,185
Mid 2041	17,800	18,200	0.582	75	630	3,855	3,920	1,790	10,270
2011 - 2041	2,500	2,500	1.1%	0	110	640	292	225	1,535
Source: Watson & Associates Economists	s trd 2013								

2001 and 2006 Employment data derived from Statistics Canada Place of Work data. 2011 and 2013 Employment figures are estimates derived by Watson & Associates Economists Ltd., 2013.



Figure C-21 Township of Blandford-Blenheim Employment Forecast, 2011-2041

		()							
	Population	Population				Emplo	yment		
Period	(Excluding Net Census Undercount)	(Including Net Census Undercount)	Activity Rate	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total
2001	7,400	7,700	0.286	160	670	520	690	110	2,130
2006	7,100	7,400	0.294	170	540	780	540	06	2,110
2011	7,400	7,600	0.293	170	570	780	540	110	2,160
2013	7,400	7,600	0.295	170	570	780	550	115	2,180
Mid 2016	7,500	2,700	0.302	170	580	790	580	125	2,250
Mid 2021	7,700	2,900	0.306	180	600	810	600	135	2,320
Mid 2026	7,900	8,100	0.310	180	620	830	620	145	2,390
Mid 2031	8,000	8,200	0.311	180	630	840	630	150	2,430
Mid 2036	8,200	8,400	0.311	180	640	850	630	150	2,450
Mid 2041	8,300	8,500	0.308	180	640	840	640	150	2,460
2011 - 2041	006	006	1.5%	10	70	60	100	40	300
Source: Watson & Associates Economist	ts Ltd 2013.								

2001 and 2006 Employment data derived from Statistics Canada Place of Work data. 2011 and 2013 Employment figures are estimates derived by Watson & Associates Economists Ltd., 2013.



Figure C-22 Township of East Zorra-Tavistock Employment Forecast, 2011-2041

	Population	Population				Emplo	yment		
Period	(Excluding Net Census	(Including Net Census	Activity Rate	Primary	Work at	Industrial	Commercial/ Population	Institutional	Total
	Undercount)	Undercount)					Related		
2001	7,200	7,500	0.338	255	815	505	200	370	2,445
2006	7,400	7,700	0.299	180	520	635	430	430	2,195
2011	6,800	7,000	0.327	180	520	650	455	435	2,240
2013	6,900	7,100	0.326	180	520	650	455	440	2,245
Mid 2016	7,000	7,200	0.333	185	535	660	470	455	2,305
Mid 2021	7,100	7,300	688.0	190	550	670	200	475	2,385
Mid 2026	7,200	7,400	0.342	190	565	680	515	490	2,445
Mid 2031	7,300	7,500	0.345	190	580	690	230	500	2,490
Mid 2036	7,400	7,600	0.348	190	595	700	540	515	2,545
Mid 2041	7,500	7,700	0.349	190	605	710	550	525	2,580
2011 - 2041	200	200	2.2%	10	85	60	36	06	340
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Source: Watson & Associates Economists Ltd., 2013. 2001 and 2006 Employment data derived from Statistics Canada Place of Work data. 2011 and 2013 Employment figures are estimates derived by Watson & Associates Economists Ltd., 2013.



Figure C-23 Township of Norwich Employment Forecast, 2011-2041

	Population	Population				Emplo	yment		
Period	(Excluding Net Census	(Including Net Census	Activity Rate	Primary	Work at	Industrial	Commercial/ Population	Institutional	Total
	Undercount)	Undercount)			нопе		Related		
2001	10,500	10,900	0.329	235	1,405	920	009	290	3,445
2006	10,500	10,900	0.333	285	980	1,355	262	280	3,490
2011	10,700	11,000	0.336	290	1,020	1,365	029	300	3,605
2013	10,800	11,100	0.337	295	1,020	1,365	640	305	3,625
Mid 2016	10,800	11,100	0.342	295	1,040	1,385	665	315	3,700
Mid 2021	11,000	11,300	0.347	300	1,065	1,415	969	330	3,805
Mid 2026	11,100	11,400	0.351	305	1,090	1,445	720	345	3,905
Mid 2031	11,300	11,600	0.353	310	1,115	1,465	740	350	3,985
Mid 2036	11,400	11,700	0.354	315	1,130	1,485	755	322	4,040
Mid 2041	11,600	11,900	0.353	320	1,145	1,495	770	360	4,090
2011 - 2041	006	006	1.7%	30	125	130	140	09	485

Source: Watson & Associates Economists Ltd., 2013. 2001 and 2006 Employment data derived from Statistics Canada Place of Work data. 2011 and 2013 Employment figures are estimates derived by Watson & Associates Economists Ltd., 2013.



Figure C-24 Township of South-West Oxford Employment Forecast, 2011-2041

		· · · · · · · · ·							
	Population	Population				Emplo	yment		
Period	(Excluding Net Census Undercount)	(Including Net Census Undercount)	Activity Rate	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total
2001	7,800	8,100	0.210	210	760	330	250	06	1,635
2006	7,600	206'2	0.286	270	630	810	430	30	2,170
2011	7,500	202'2	0.294	280	635	825	445	40	2,220
2013	7,500	202'2	0.298	285	640	830	445	40	2,240
Mid 2016	7,500	202'2	0.306	262	645	835	465	45	2,290
Mid 2021	7,400	209'2	0.311	262	660	835	475	50	2,315
Mid 2026	7,400	2,600	0.315	295	670	840	485	50	2,340
Mid 2031	7,400	2,600	0.319	295	680	845	490	55	2,365
Mid 2036	7,400	7,600	0.324	295	685	850	500	60	2,390
Mid 2041	7,400	2,600	0.327	295	695	855	510	60	2,420
2011 - 2041	-100	-100	3.3%	15	60	30	92	20	200
Source: Watson & Associates Economist	ts Ltd., 2013.								

2001 and 2006 Employment data derived from Statistics Canada Place of Work data. 2011 and 2013 Employment figures are estimates derived by Watson & Associates Economists Ltd., 2013.



Figure C-25 Township of Zorra Employment Forecast, 2011-2041

	Population	Population				Emplo	yment		
Period	(Excluding Net Census	(Including Net Census	Activity Rate	Primary	Work at Home	Industrial	Commercial/ Population	Institutional	Total
	Undercount)	Undercount)					Related		
2001	8,100	8,400	0.322	290	1,040	770	335	155	2,590
2006	8,100	8,400	0.326	490	800	840	395	120	2,645
2011	8,100	8,300	0.337	490	800	880	395	145	2,710
2013	8,100	8,300	0.339	490	810	880	405	150	2,735
Mid 2016	8,100	8,300	0.344	495	815	890	420	155	2,775
Mid 2021	8,100	8,300	0.349	200	830	006	440	155	2,825
Mid 2026	8,100	8,300	0.352	200	850	910	450	160	2,870
Mid 2031	8,200	8,400	0.355	200	860	925	460	165	2,915
Mid 2036	8,200	8,400	0.357	200	870	935	470	170	2,945
Mid 2041	8,300	8,500	0.358	500	880	940	480	170	2,970
2011 - 2041	200	200	2.2%	10	80	60	85	25	260
Source: Watson & Associates Economists	s Ltd 2013.								

2001 and 2006 Employment data derived from Statistics Canada Place of Work data. 2011 and 2013 Employment figures are estimates derived by Watson & Associates Economists Ltd., 2013.

