

Ottawa Employment Land Review

Draft Report

April 20th, 2016

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INTRODUCTION

The team of Hemson Consulting Ltd., Urban Strategies Inc. and Stantec Engineering was retained by the City of Ottawa to undertake an Employment Land Review. The assignment built on significant work undertaken by the City related to understanding and planning for employment and designated Employment Lands. The study took a fresh look at the City's objectives for employment from a "one-city" perspective, evaluating and developing strategies to ensure an adequate, suitable and on-going supply of lands for employment.

More specifically, the scope of the study included:

- a critical examination of current conditions in Ottawa and the economic and policy context in which the City is planning for jobs and Employment Lands;
- a supply and demand analysis which looked at the City's future Employment Land needs and current designated supply in a market context;
- a review of Official Plan policy for managing growth, in particular as relates to planning for employment and Employment Lands;
- examination of rural area and interchange opportunities; and
- identification of strategic approaches to economic development.

Employment Land in the context of this planning study is the designated Employment Areas, as defined in the Provincial Policy Statement (PPS), such as industrial

business parks and subdivisions. These areas are considered within the broader job base and economic development objectives of the city. The work did not specifically address issues related to other lands that accommodate employment, such as the downtown or retail areas.

The City of Ottawa is the centre of a larger economic region and metropolitan area that includes Gatineau and other parts of eastern Ontario and western Quebec. Ottawa is unique among Canadian metropolitan centres, being the nation's capital, and is unlike the industrial centres in the rest of Ontario from an economic base and land planning perspective.

Ottawa is a large and complex municipality with many distinct urban and rural communities. It is the fourth largest city in Canada by land area with nearly 3,000 km² of urban, suburban and rural communities and includes a large federally-established greenbelt (Figure 1).

With a focus on Federal Government employment and high technology industries, a high proportion of the city's jobs are accommodated in office buildings. These offices are concentrated in the downtown area, the federal office campuses and high-tech focused business parks in Kanata. The City plays an important role, not only as the nation's capital but as a key employment and economic centre serving much of eastern Ontario and western Quebec. Thirty-nine urban and sixteen rural area industrial business parks accommodate many of these services and support a significant employment base.

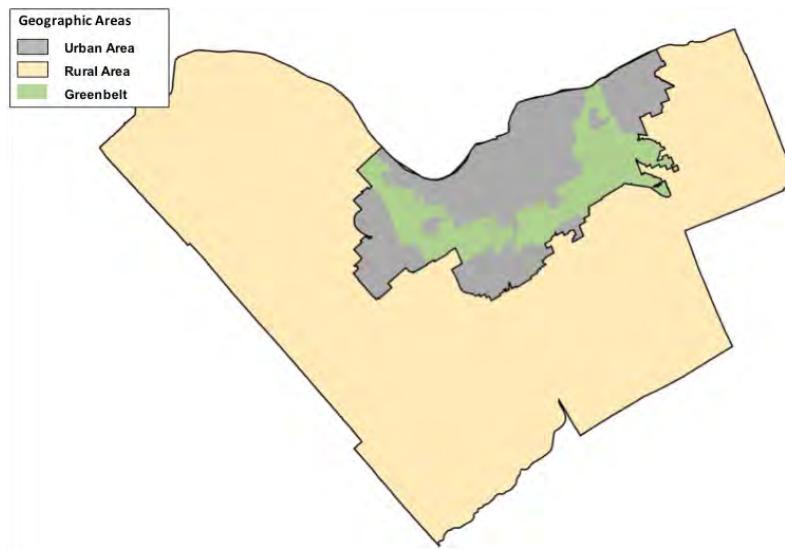


Figure 1: City of Ottawa Geography

About the Study

The Employment Land Review builds on the body of work already undertaken by the City related to Employment Area planning with a fresh focus, not only on what the City has and needs in the way of Employment Land, but also what it wants in terms of new economic activity and how to get it. The purpose of the study is four-fold, to:

1. Take a fresh look at the City's objectives for location of jobs and Official Plan policies for employment and employment land;
2. Estimate future employment land demand in rural and urban area designations;
3. Identify key issues, opportunities and strategies for achieving the City's employment and economic development goals; and
4. Recommend priority actions and an implementation plan.

The Employment Land Review included an examination of Ottawa's unique economic context and outlook for future employment and critically

reviewed the city's existing and planned geography for employment, in particular for Employment and Enterprise Areas. The study takes a one-city perspective while giving consideration to both urban and rural area issues and opportunities as well as addressing area-specific issues and proposals. The Employment Land Review looks at planning for the city's Employment Lands within the context of Ottawa's growth management, land use planning, economic development objectives and activities.

The study was initiated in October 2014 and involved a six-step study process culminating with this final Employment Land Review report in Spring 2016, including strategic recommendations for action and implementation by the City. The study process is illustrated below (Figure 2).

A variety of stakeholders have had direct and varying degrees of involvement in the Study, including the Core Group of the consulting team and City staff, a Sponsors Group comprised of City Councillors and a Working Group of industry stakeholders (Figure 3).

Employment Land Review Study Process						
Steps	1 Taking Stock	2 Meeting Future Needs	3 Defining the Challenge	4 Understanding Options	5 Proposing a Plan of Action	6 Putting it all together
Timing	Nov 2014 - Mar 2015	Mar - Apr 2015	Apr - Jun 2015	Jun - Oct 2015	Oct 2015 - Jan 2016	Jan - Mar 2016
Key Questions	<ul style="list-style-type: none">• Where do people work?• What are the City's goals?	<ul style="list-style-type: none">• What is the future economic outlook?• How much land do we need?	<ul style="list-style-type: none">• Where should future jobs go?• Are there barriers to development?	<ul style="list-style-type: none">• How can we address the challenges and achieve our objectives?	<ul style="list-style-type: none">• What strategies would be most effective for the City to meet its goals?• How are they implemented?	<ul style="list-style-type: none">• how should we plan for employment and employment land?

Figure 2: The Study Process

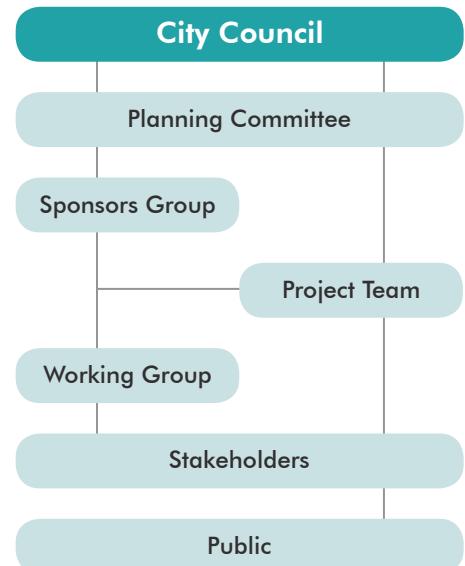


Figure 3: Governance Structure

Highlight: Issues and Opportunities

The study addresses some key issues facing the city in its planning for economic and employment growth and Employment Land. There are a number of challenges but also some key opportunities related to development of the City's Employment Land:

- Industrial lands along Highway 417 are the most attractive to the market, but the supply of available properties is low.
- Distance from the core and lack of highway access make Orléans and Riverside South less attractive to developers in the near-term.
- Mainstreets are becoming more attractive for offices.
- Industrial lands develop slowly, so patience is needed.
- Generally, Ottawa's Employment Areas are not marketed aggressively.

Regarding Ottawa's economy:

- Future growth in Ottawa's manufacturing sector may be limited.
- Future high tech jobs will likely cover more areas of the city.
- The Federal Government may be the key to significantly growing employment in Orléans and southern communities.

Regarding Official Plan policy:

- The 1.3 jobs to household target may no longer be relevant.
- Too much land is being planned for employment and not all in the best locations.
- The intent of the Enterprise Area designation has not materialized as envisaged on the ground.

The Employment Land Review expands on a substantive body of work undertaken in recent years related to Ottawa's economic development and Employment Lands:

- Partnerships for Innovation, 2015
- Danix, Employment Land Study, 2013
- Vacant Industrial Land Supply Inventory, 2012-13
- Partnerships for Prosperity, 2010
- Ottawa Employment Survey, 2012
- Employment Land Strategy, 2008

The current Employment Land Review benefits and builds on this wealth of information and critically examines what it means for the City in terms of its economic development and employment base goals in the future.

About the Report

This Final Report synthesizes the analysis, findings and recommendations culminating from the six phases of the Employment Land Review.

The balance of the report is divided into two sections:

- Following this introductory section, *Part I – Context and Analysis* provides an overview of the economic and policy context for the study, presents the method and results of a supply demand analysis and identifies key challenges and opportunities that the Study and the City will need to address in planning for sustainable economic growth and Employment Land.
- *Part II – Recommendations*, builds on the analysis and findings presented in Part I of the report and provides conclusions and recommended strategic directions for the City related to Official Plan policy, urban and rural land use designations and economic development.

PART I: CONTEXT AND ANALYSIS

This first section of the Report provides an overview of the economic and policy context of the Employment Land Review, describes the method and results of the demand and supply analysis and presents a set of key challenges and opportunities that the recommendations in Section II address.

Economic Context

The Employment Land Review considers the City's needs and objectives for jobs and Employment Land within the context of the broader economy and current and emerging trends that may impact the amount and nature of employment that the City will need to plan for. Planning for Ottawa's employment must be undertaken in a manner that is responsive to current trends but also grounded in a sound long-term economic outlook for the city, support a vision for how Ottawa should grow and develop and be consistent with Provincial policy. This section considers Ottawa's role within the broader eastern Ontario and Canadian economy and examines recent changes in the City's local employment base.

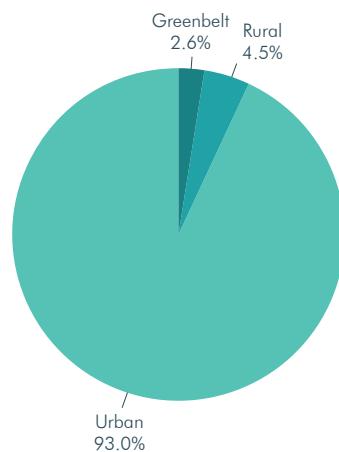
Overview of Ottawa's Economy and Employment Base

The broader economic landscape within which Ottawa is situated is evolving and has undergone important changes in recent years, marked by recession and a shifting economy. Following a sharp recession in 2008, Canada is experiencing a slow economic recovery in many sectors. More recently, oil price and currency devaluation have created some national uncertainties, but at the same time support a stronger recovery in Ontario's economy. For many Canadian municipalities, the period since the recession has involved increases in public sector employment with little recovery from the sharp decline in more traditional industries, especially manufacturing.

Because of Ottawa's unique economic base, however, the city's economy has run a different cycle. While there was a boom and bust cycle in high-tech related manufacturing in the 1990s and early 2000s, Ottawa's lower reliance on manufacturing, warehousing and transportation sectors has meant the city was not as affected by the industrial declines in the recent recession as other municipalities in the Province.

The largest factor in the Ottawa economy remains the Federal Government. Following the rapid expansion of the public sector in the mid-2000s and through the recession, the Federal Government has recently shifted to fiscal restraint, limiting growth in this sector for a few years, at least. The significant role played by the Federal Government in the local economic base, while on one hand buffering against private sector downturns, can also contribute to vulnerabilities associated with single-employer economies.

The City has a very large land area, however Ottawa's economic landscape is characterized by a central urban area where most economic and employment functions are concentrated (Figure 4). A large federal greenbelt runs through the urban area with more limited development and an extensive rural area surrounds the central city and accommodates both urban and rural economic activity. The vast majority of jobs are located within the city's urban area.



◀ Figure 4: Employment by Area (City of Ottawa, 2012)

Source: City of Ottawa, Employment Survey 2012

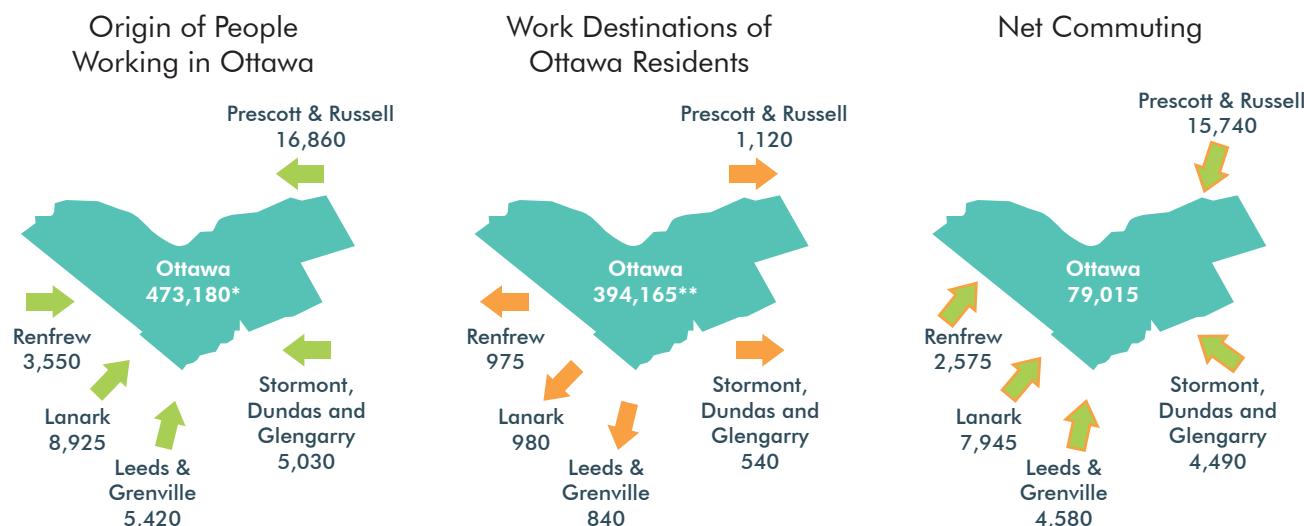
Federal Government Remains Key Economic Sector

Employment in Ottawa is largely centred on a few key sectors which reflect its role within the Nation's Capital, its high tech history and its central place function for the eastern Ontario economy. The key sectors are Federal Government public administration, high technology, education, health care and social services, and other population serving sectors (such as retail, accommodation and food services and municipal public administration). As the largest municipality within Canada's Capital Region, public administration is the top sector in the city and the Federal Government is Ottawa's largest single employer, directly accounting for nearly 25% of the city's total job base according to the City's 2012 Employment Survey. The proportion of federal jobs within Ottawa's total job base has continued to increase since 1996, most notably during the 2001–2011 period.

The most important non-Federal Government employment generators in the City include high technology, education and healthcare, and those related to the provision of central place functions for the surrounding region.

Aside from being central within Canada's Capital Region, Ottawa plays an important role as the economic centre of eastern Ontario, and to some extent, of western Quebec. A significant number of residents from surrounding communities come into the city to work and to a lesser extent, Ottawa residents commute out to job opportunities in other eastern Ontario municipalities, as shown in Figure 5. As part of the same metropolitan area, there is also a very significant commuting pattern in both directions between Ottawa and Gatineau.

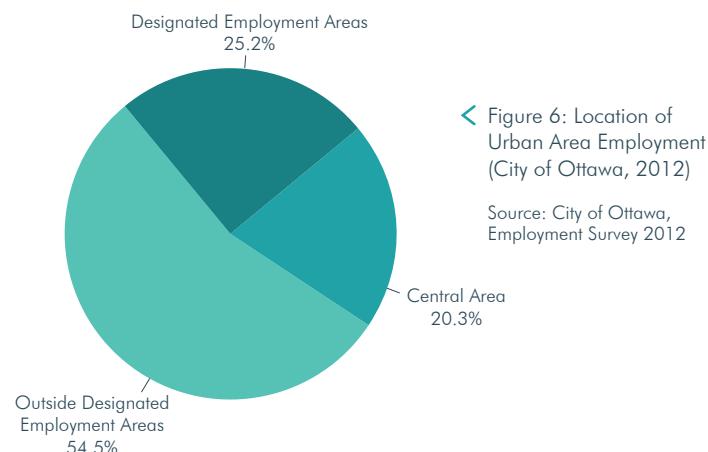
Figure 5: City of Ottawa, 2011 Commuting within Ontario



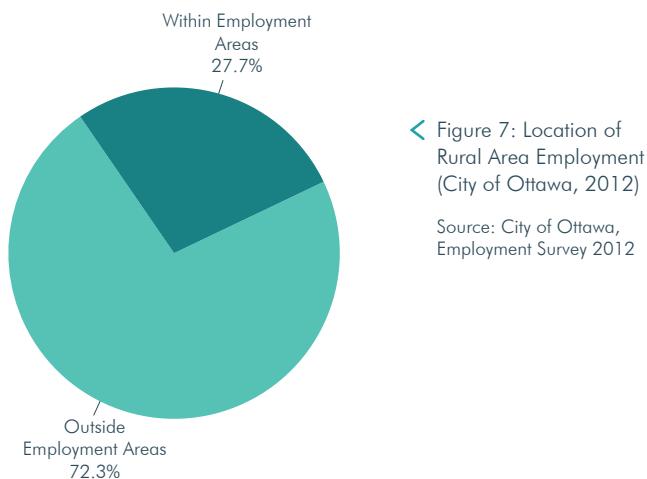
* This is the total number of people who work in the City regardless of where they live

** This is the total number of people who live in the City and have a usual place of employment (whether in the City or outside of it)

Ottawa's significant reliance on public sector employment affects many aspects of the local economy and land use. There is a much higher level of jobs in offices than elsewhere in the Province coupled with a much lower proportion of traditional industrial land and built space. Reflecting this, the city's jobs are largely located outside of traditional industrial areas. Within the urban area, roughly 75% of jobs are located outside of employment areas, mainly concentrations of offices in the Central Area and metropolitan population-serving functions throughout the urban area (Figure 6). As a point of comparison, the 25% of jobs located in designated Employment Areas in Ottawa compares with 40% in the more industrially-oriented economy of the Greater Toronto Area.



Within the City's expansive rural area, most employment is also located outside of Employment Areas, although here this is more reflective of a scattered low density development pattern based on private services (Figure 7).



Key Trends

Recent growth and change in the city continue to reinforce Ottawa's unique economy and job base. The city has not similarly experienced broader employment change as has affected other metropolitan areas within Ontario in recent years. Ottawa added nearly 70,000 jobs over last decade, continuing a long-term pattern of steady growth (Table 1). Its role as the Federal Capital has made the city less volatile than most other areas of the country that have a greater reliance on more traditional private sector employment, such as manufacturing. This has contributed to Ottawa's continued and increasing job growth despite the 2008 recession.

Table 1: Historical Total Place of Work Employment, City of Ottawa, 2001-2011

Year	Total Place of Work Employment	Net Change	Compound Annual Growth Rate
2001	474,400	-	-
2006	499,600	25,200	1.04%
2011	540,600	41,000	1.59%

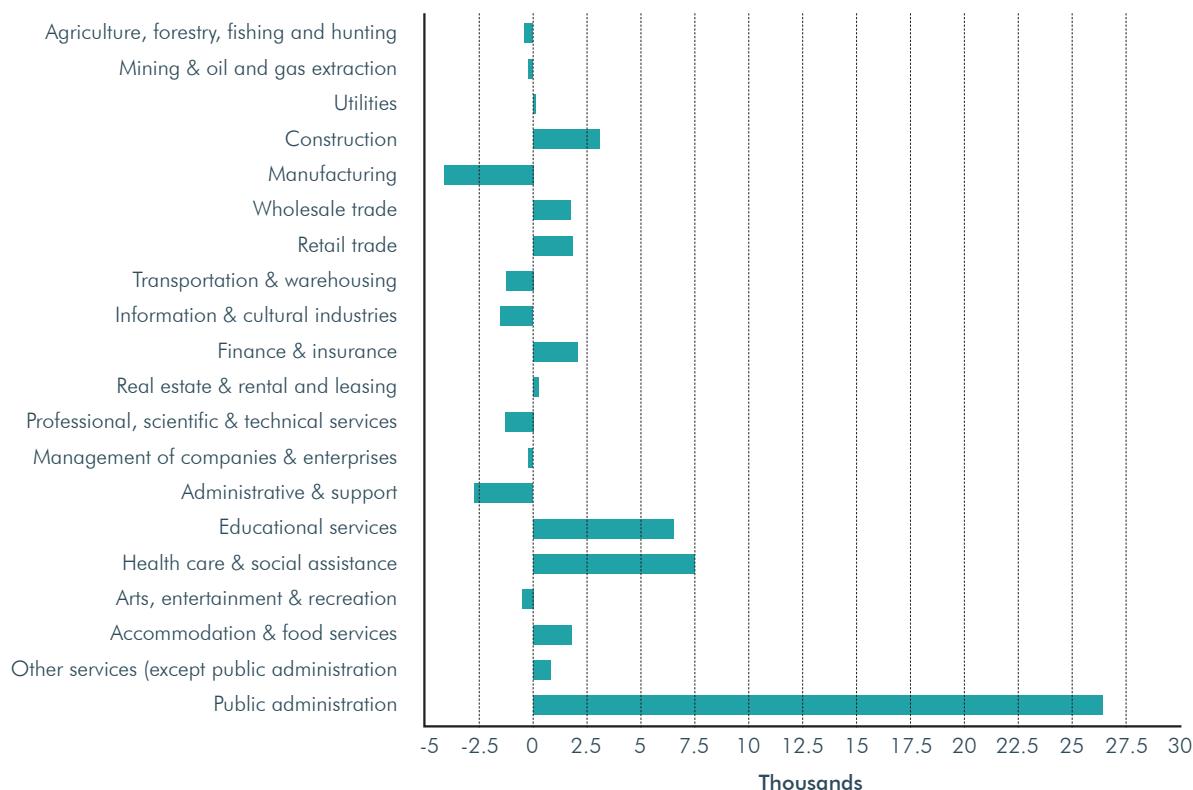
Source: Statistics Canada.

Within Ottawa, growth and change over recent Census periods has continued to reinforce a long-standing pattern of Federal employment dominance while other historically key sectors, notably high tech, have declined somewhat in relative importance. In the NAICS-based economic sectors, Ottawa's high-tech industries largely fall within 3 sectors: manufacturing; professional, technical and scientific; and information and cultural industries. All three of these declined in net jobs as well as in share of total employment in the City over the 2001 to 2011 period.

Most job growth over recent decades has been in public administration, primarily Federal Government, reflecting the City's role in the National Capital. Similar to other municipalities throughout Ontario, other components of the public sector have also been growing, while employment in the private sector, in particular traditional industries, has shown little change or has declined.

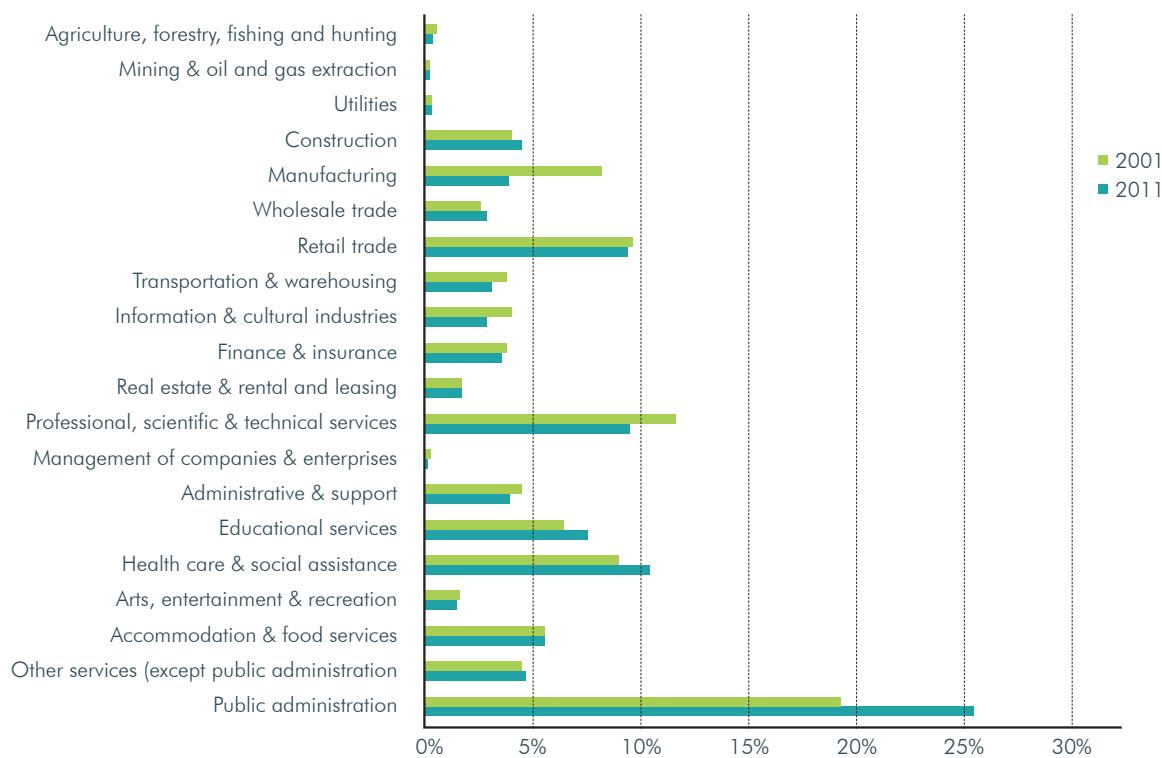
The change in employment by sector over the 2006 to 2011 period is shown in Figure 8, followed by the change in proportion of total employment by sector which occurred between 2001 and 2011 in Figure 9.

**Figure 8: Change in Place of Work Employment
City of Ottawa, 2006 - 2011**



Source: Hemson Consulting Ltd. based on Statistics Canada 2011 National Household Survey & 2006 Census of Canada

**Figure 9: % Share, Place of Work Employment
City of Ottawa, 2001 - 2011**



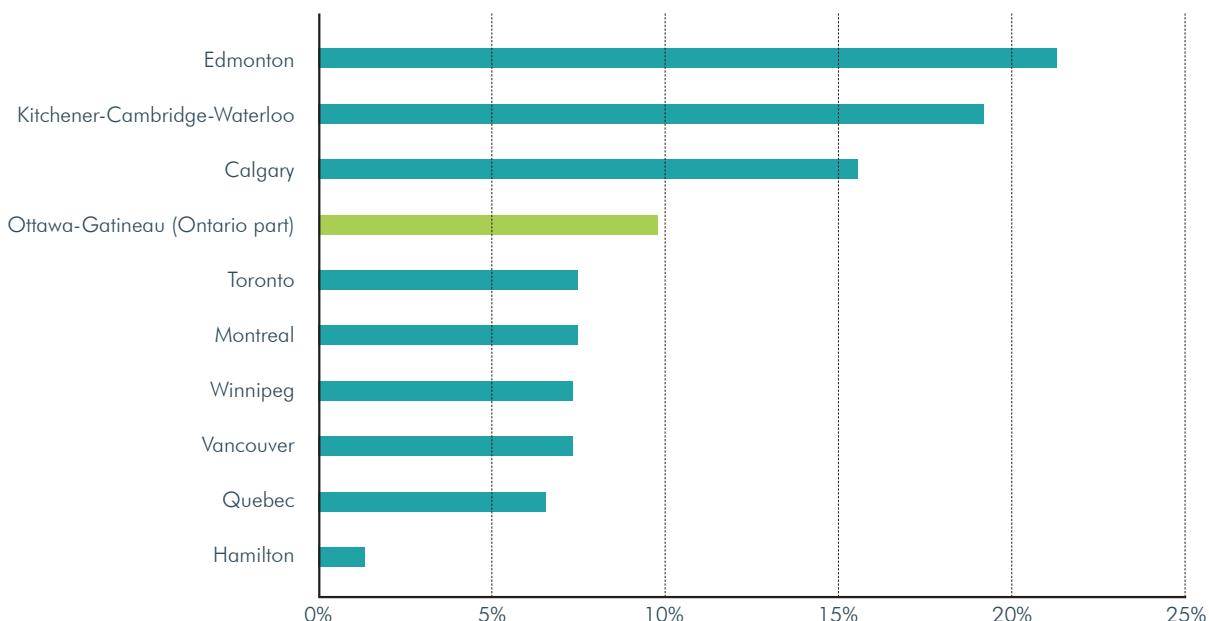
Source: Hemson Consulting Ltd. based on Statistics Canada 2011 National Household Survey & 2001 Census of Canada

- As shown, public administration was the highest growth sector, again, reflecting the predominance of Federal Government in Ottawa's employment base. This sector of employment increased in its proportion of the City's total employment base, from 18% in 2001 up to 25% in 2011. This is a very significant change in a large city's employment base in such a short period of time.
- The City also experienced growth in health care and social assistance and education sectors over the most recent Census period. These sectors have also come to represent greater shares of the City's jobs over the last decade.
- The high tech (especially the manufacturing component) once a boon to the City's economy, has declined relative to other sectors over the past decade, both in absolute terms and in its share of Ottawa's overall employment.

The City's 2012 Employment Survey confirms recent observed trends in Ottawa, in particular the significant growth in the public administration sector and the continued decline in the manufacturing, transportation and warehousing sectors, although given the unique characteristics of the National Capital, these have never been a mainstay of the City's local economy.

Overall, Ottawa's employment has fared quite well among Canada's largest CMAs since the recent recession, as shown in Figure 10. Outside of Alberta (which is also unique among Canadian economies) only Kitchener-Cambridge-Waterloo exceeded Ottawa's job growth rate during the recent recession recovery period.

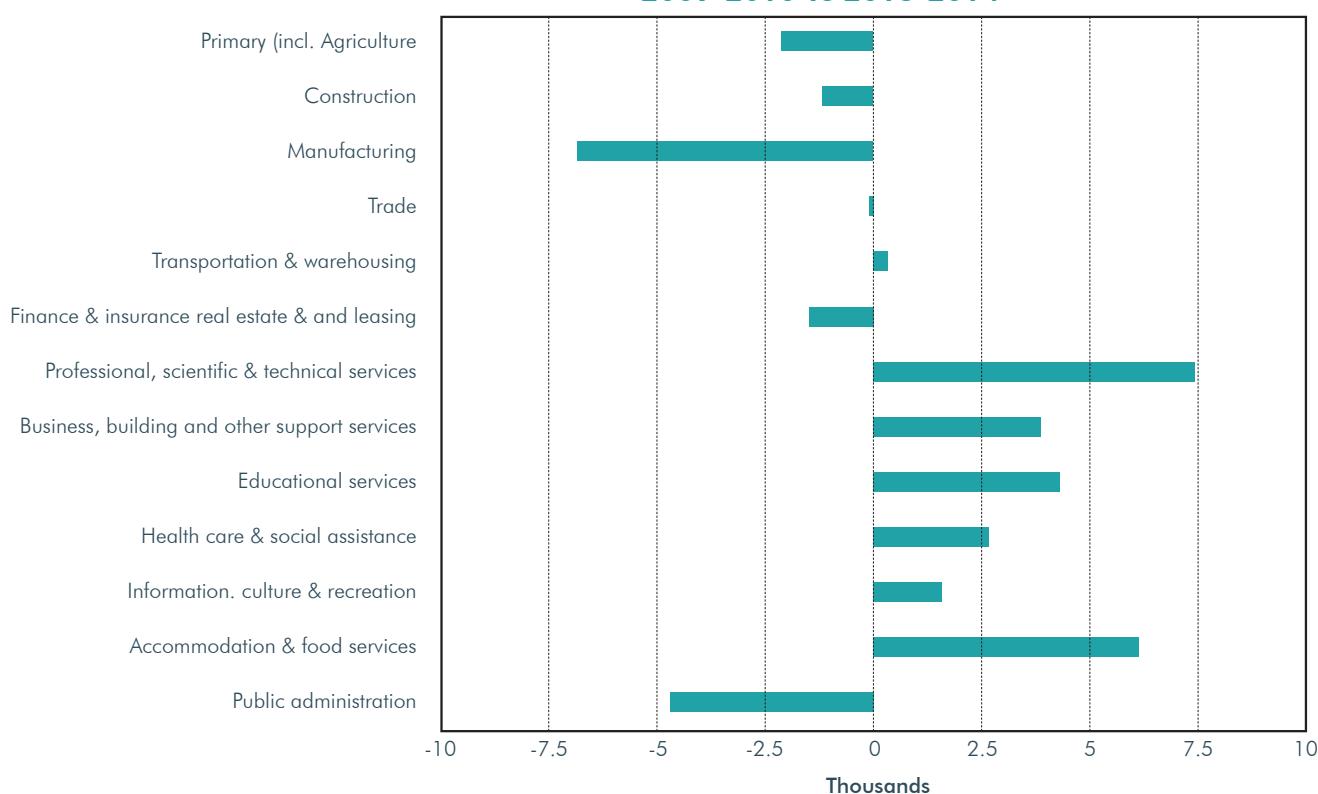
**Figure 10: Employment Growth Since Recession
Selected Canadian CMAs, 2009 - 2014**



Source: Hemson Consulting Ltd. based on Statistics Canada, Labour Force Information 2009 - 2014 (Catalogue no. 71-001-X)

While overall the City is faring well, more recent growth by sector suggests a different economic pattern may now be afoot. As shown in Figure 11, the growth which has occurred since 2009 has been characterized by declining Federal employment, a continued shift away from manufacturing, especially the high technology component of this sector. The most significant growth has been in the professional, scientific and technical services sector as well as accommodation and food services. Most services sectors have been growing, in particular educational services and health care and social services, suggesting some continued reliance on the public sector, although not at the Federal level.

**Figure 11: Employment Growth Since Recession
Ottawa CMA
2009-2010 vs 2013-2014**



Source: Hemson Consulting Ltd. based on Statistics Canada - Labour Force Information (Cansim Table #2820130).

Employment Forecasts

Looking forward, Ottawa is planning for significant employment growth over the long-term. The City's forecasts of population, housing and employment growth were updated in 2009 through Official Plan Amendment (OPA) 76 and extended from 2021 to a 2031 planning horizon. These forecasts provide the basis for this Employment Land Review and are a key input in assessing the City's future Employment Land needs to accommodate planned growth.

The City's Official Plan projections anticipate growth in total employment of 173,000 jobs City-wide over a 25-year horizon from 2006 (Table 2). The City is planning for total employment of 703,000 jobs at 2031.

Table 2: Forecast Total Place of Work Employment, City of Ottawa, 2006-2031

Year	Total Place of Work Employment	Growth	Compound Annual Growth Rate
2006	530,000	–	–
2011	578,000	48,000	1.75%
2021	640,000	62,000	1.02%
2031	703,000	63,000	0.94%

The forecasts have been reviewed in light of more recently available data to ensure a sound basis for this Employment Land Review. The forecasts in the Official Plan are tied to the City's Employment Survey. The 2012 Employment Survey showed 565,000 jobs and applying a factor for undercoverage (to account for missed and non-responses) is about 575,000 jobs in 2012. This is a year later than the 2011 Official Plan figure and is just a few thousand jobs short. Given

the slow recovery from the recession, the Official Plan outlook to this point appears sound. The continuation of the moderate growth rates in population and employment to 2031 is not brought into question by current data and remains a reasonable basis for long-term planning in the City.

These forecasts are also consistent with the broader economic outlook for the City. While operating on cycles that do not always follow the economy, the largest employer in the City, the Federal Government, can over the long run be expected to average out to rates of growth in employment that respond to the general growth in the population of Canada and the growth in the Canadian economy. This outlook points to the moderate levels of growth seen in the forecast. Likewise, a substantial proportion of jobs in Ottawa, as in any City, are jobs that provide services to the local and surrounding populations. With continued moderate population growth rates in Ottawa and the Ottawa area, the employment forecast in the Official Plan is consistent with expectations for these types of jobs. The less certain part of the economic outlook for Ottawa surrounds high tech and related sectors, given its more volatile economic history. There is little basis to suggest a return to the rapid growth in high tech of the late 1990s. At the same time, it would be selling short the prospects of Ottawa-based firms and the skilled high technology labour force to suggest continued decline in high tech following the difficult period of adjustment out of the much of the manufacturing function in this sector. Again, moderate growth is a reasonable long-term outlook, recognizing that more volatile cycles are likely in this sector than in others.

Policy Context

Ottawa's Employment Lands are governed by policies at both the provincial and municipal levels. This section highlights the most relevant policies from the Provincial Policy Statement and the City of Ottawa's Official Plan. While the City of Ottawa may amend the former to optimize the location and size of Employment Land throughout the City, the Provincial Policy Statement and the directions therein need to be respected. This section first examines the policy framework governing employment and Employment Land in Ottawa, in both the urban and rural area.

Provincial Policy Statement, 2014

The Planning Act requires all decisions on land use planning and development to be consistent with the Provincial Policy Statement (PPS). The 2014 PPS provides clear policy direction for strong communities, a clean and healthy environment, and economic growth. It encourages efficient development patterns and intensification efforts to make optimal use of land, resources and public investment. This entails land use development to accommodate housing mix, a range of employment and institutional opportunities, as well as parks and open spaces to meet projected needs for up to 20 years. Development patterns should be cost-effective and minimize land consumption and servicing costs.

In order to promote greater economic competitiveness, Policy 1.3.1 of the PPS states that planning authorities shall:

- a) provide for an appropriate mix and range of employment and institutional uses to meet long-term needs;
- b) provide opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses which support a wide range of economic activities and ancillary uses, and take into account the needs of existing and future businesses;
- c) encourage compact, mixed-use development that incorporates compatible employment uses to support liveable and resilient communities; and
- d) ensure the necessary infrastructure is provided to support current and projected needs.

Protection of Employment Lands

A significant number of employment and institutional uses are carried out on Employment Land. They are governed by Policy 1.3.2.1, which states that "planning authorities shall plan for, protect and preserve employment areas for current and future uses and ensure that the necessary infrastructure is provided to support current and projected needs." To convert these areas for any other use, planning authorities must undertake a comprehensive review that, firstly, demonstrates that the land is not required for Employment purposes over the long term and, secondly, that there is a need for the conversion. Employment Areas close to major goods movement facilities and corridors for Employment uses requiring these specific locations shall also be protected. Planning authorities may plan beyond 20 years for the protection of Employment Areas provided that the lands are not designated beyond this time horizon.

Rural Areas

The Provincial Policy Statement acknowledges that urban areas and rural areas are interdependent and highlights the importance of rural areas in the economic success of the Province. To this end, the PPS promotes healthy, integrated and viable rural areas that use infrastructure and public service facilities efficiently, promote the diversification of the economy and job opportunities, and provide opportunities for sustainable tourism. According to the PPS S. 1.1.5.2, permitted uses on these lands include:

- The management or use of resources;
- Resource-based recreational uses;
- Limited residential development;
- Home occupations and home industries;
- Cemeteries; and
- Other rural land uses.

Built-up lands with an existing concentration of development (i.e. settlement areas), shall be the focus for more growth in the rural area. Planning authorities shall give consideration to rural characteristics, the scale of development and the provision of appropriate service levels when such new development is proposed. Importantly, planned development shall be appropriate for the infrastructure which is planned or available, and avoid the need for unjustified or uneconomical infrastructure expansion.

City of Ottawa Official Plan

At the municipal level, the Ottawa Official Plan is the primary planning tool that guides land use, growth and development in the city. With regard to Employment Land, it provides a vision and strategic directions for managing employment uses efficiently and developing complete, liveable communities.

Based on a statutory, comprehensive five-year review of the Official Plan, the City developed Official Plan Amendment 150. Though approved by the Minister of Municipal Affairs and Housing in April, 2014, the existing Official Plan is still in effect. Policies that differ between the two plans are identified below.

Although the policies applicable to designated Employment Areas are most relevant to the Employment Land Review, other policies respecting Employment uses throughout the city, are also highlighted.

Urban Area Policies

In Ottawa's Official Plan, the urban area policies permit employment uses throughout the City. The Official Plan aims to ensure that these jobs are well distributed throughout the city by setting a ratio of 1.3 jobs per household for all the urban communities. This target promotes employment and residential uses in close proximity, aims to create complete communities, and limits the ability of urban communities to sprawl. The Official Plan is also specific with regard to the kinds of employment uses that are encouraged in different areas of the city. It requires office uses to locate close to higher-order transit services, leading to a concentration of these uses in the Central Area, as well as in the federal office parks. Smaller-scale offices and other Employment uses are intentionally targeted to the City's Employment Land, within the urban communities. These lands are reserved for business and economic activities that are ideally located on lands that provide proximity to other enterprises, are isolated from more sensitive uses, and offer more convenient parcel sizes. The Official Plan policies related to growth and development as well as Employment uses are further explored below.

Section 2.2.2 – Managing Growth within the Urban Area

In order to manage growth in a sustainable manner, Ottawa's Official Plan promotes intensification of both residential and employment uses within the city's urban area at key locations along the transportation network. The City projects a population increase from 871,000 to 1,136,000 people between 2006 and 2031, and an increase in employment from 530,000 to 703,000 jobs. This intensification will occur within nodes and corridors, with the Central Area as the main focus with the greatest building density. The other target areas for intensification are designated Mixed Use Centres, Town Centres, Traditional Mainstreets and Arterial Mainstreets, as well as Employment and Enterprise Areas. More compact, mixed-use development as well as a stronger series of urban centres are intended to anchor the transit system.

Housing-Employment Balance

In addition to managing overall growth within the city, Ottawa's Official Plan aims to balance housing and job opportunities within the urban communities outside of the Central Area. A ratio of at least 1.3 jobs per household is to be reflected in the amount of land designated for employment and residential development in each of the five urban communities outside of the Greenbelt.

Major Office

The Official Plan also directs Major Office Development (i.e. development with over 10,000m² of gross leasable area), to areas with existing or planned higher order transit service, including Light Rail and Bus Rapid Transit. Major Office is intended to play a key role in both supporting and increasing ridership on the Rapid Transit Network. In terms of their location, Major Office Development is permitted in:

- The Central Area
- Mixed-Use Centres
- Town Centres
- Traditional Mainstreets and Arterial Mainstreets with access to the rapid transit network. OPA 150 permits Major Office Development on Mainstreets if they are Transit Priority Corridors or if the development is within an 800-metre walking distance to an existing or planned Rapid Transit Station.

- Employment Areas or Enterprise Areas with access to the rapid transit network or which are located adjacent to a 400 series highway. OPA 150 states that major office development may be located in these areas if the majority of the site is within an 800-metre walking distance of an existing or planned Rapid Transit station or 400 metres walking distance of a Transit Priority Corridor. This policy does not apply to Employment and Enterprise Areas in Kanata North and South until the adoption of a Secondary Plan.

Protection of Employment Lands

In addition to promoting the growth of Employment uses, Policy 31 of the Official Plan also aims to protect current and future Employment Land. The Plan discourages their removal, unless a comprehensive review demonstrates that there is a need for the conversion. Such a review considers:

- a) The direction and information within the Employment Land Strategy (In OPA 150, this is to be replaced with “Whether the employment lands being proposed for conversion are unsuited for employment purposes and whether there are practical means to make them suitable.”);
- b) The availability of land already accommodating the proposed non-employment use in terms of designation or zoning (Within OPA 150, it is proposed that this be replaced with “Whether the lands are suitable for the uses being proposed and whether there is a need for those uses”);
- c) The supply of land to be developed within the urban boundary, how it is distributed within the city and its potential to be developed for housing, employment, and other purposes;
- d) The distribution of Employment Land throughout the city, and what this means for achieving the job and housing balance within all urban communities outside the Central Area;
- e) The opportunities for similar employment uses to cluster;
- f) The appropriateness of the existing Employment Land parcels for a range of Employment uses;
- g) The preservation of Employment Land in proximity to the 400 series highways, within 600m of an existing or proposed station on the Rapid Transit Network, arterial road frontage and accessibility to rail and the airport (OPA 150 defines the need to preserve employment land in proximity to “interchanges, or with accessibility to rail and airports [...] to maintain opportunities that recognize the potential for the development of transport and freight handling uses”);
- h) The preservation of Employment Land near important linkages such as supply chains, service providers, markets, necessary labour pools, etc.;
- i) The preservation of a diversity of Employment Land for a variety of employment uses, such as business parks, industrial areas;
- j) The demand of the non-employment uses on municipal amenities and services and the cost of providing these;
- k) The negative impact of non-employment uses on the viability of surrounding Employment Land with regard to:
 - i. Compatibility;
 - ii. Buffering;
 - iii. Affordability of land and lease costs;
 - iv. Market acceptance and competitiveness in terms of how attractive the Employment Land will be;
- v. Removal of key locations for Employment use;
- vi. Reduction or elimination of the visibility of existing Employment uses;
- vii. Reduction in the ideal size of Employment Areas;
- viii. Interference with the operation of Employment Land (i.e. whether operating hours or delivery times are affected);
- ix. Level of accessibility to Employment Land;
- x. Ability to provide for a variety of Employment options and parcels;
- xi. Maintenance of the identity of the Employment use or area.

Section 3 – Designations and Land Use

Section 3 of the Official Plan lays out a series of land use designations that specify permitted uses throughout the city. Employment uses are permitted in the General Urban Area (3.6.1), Mixed-Use Centres (3.6.2), Mainstreets (3.6.3), Employment Area and Enterprise Areas (3.6.5), Villages (3.6.6), General Rural (3.7.2), the Carp Road Corridor Rural Employment Area (3.7.5), Ottawa Macdonald-Cartier International Airport (3.10.1), and Carp Airport (3.10.2). The locations of these designations are illustrated on Schedule B of the Official Plan.

Section 3.6.1 – General Urban Area

Policies for the General Urban Area are permissive with respect to Employment uses. The General Urban Area designation allows for a wide variety of housing types, along with employment, retail, service, cultural, leisure, entertainment and institutional uses. The intent of this land use designation is to set the stage for the development of complete and sustainable communities. As such, uses with large land area needs for outdoor storage, sale or servicing are generally discouraged within this area. Industrial uses not compatible with residential uses are also not permitted.

Section 3.6.2 – Mixed-Use Centres

Lands located at strategic locations on the rapid-transit network as well as on major arterial roads have been designated as Mixed-Use Centres (MUCs) or Town Centres. Permitted uses within Mixed-Use Centres are transit-supportive and include offices, schools, hotels, institutional buildings, entertainment uses, and high- and medium-density residential uses. In order to ensure that these areas are bustling areas of activity, the Plan establishes minimum employment targets of at least 5,000 jobs for MUCs and 10,000 jobs for Town Centres. Development within these areas should also be compact, and zoning as well as community design plans ensure that there a mix of uses within a building or nearby buildings, that employment targets are met, and that highest density development will occur within 400 metres of a rapid transit station.

Section 3.6.3 – Mainstreets

Several streets are identified as Traditional and Arterial Mainstreets within the Official Plan. Traditional Mainstreets being the more pedestrian-oriented type, developed prior to 1945, and Arterial Mainstreets being the more car-oriented ones, developed after 1945. Mainstreets are meant to act as significant areas of intensification, achieving compact, mixed-use and pedestrian-friendly development along them. A broad range of uses are currently permitted on Traditional and Arterial Mainstreets, including retail and service commercial uses, offices, residential and institutional uses. On Arterial Mainstreets, future development is planned to occur in a manner that allows for a transition to a more intensive land use pattern, that includes residential and high density employment uses. The Official Plan provides density targets, measured as people and jobs per gross hectare, for several Arterial Mainstreets within the city.

Section 3.6.5 – Employment Areas and Enterprise Areas

Though employment-related land uses are permitted in almost every urban area in the Official Plan, they are meant to be focused in the Central Area, Mixed-Use Centres and Mainstreets, as well as in Employment and Enterprise Areas. The designation of Employment and Enterprise Areas is essential to supporting a key objective of the Official Plan: to ensure that sufficient land is reserved primarily for business and economic activity, within offices, manufacturing, warehousing, distribution, and research and development facilities.

Employment Areas provide large parcel sizes that accommodate storage, parking, and floor plate needs, and are close to major roads. The City is careful not to permit non-employment uses on these lands, as it creates the risk that Employment Lands may develop for primarily non-employment purposes. The Plan protects these lands so that they can remain affordable for employment purposes and develop without conflict from other land uses. Designating Employment Areas is also important for ensuring that noxious industrial uses, incompatible operations, and prestigious uses that prefer locating near similar operations or have privacy concerns are appropriately accommodated.

Employment and Enterprise Areas are designated based on their ability to accommodate at least 2,000 jobs (1,000 jobs in the case of the Iber Road Employment Area as per OPA 150) and be located on 400 series highways and multi-lane arterials, or other locations with good truck, rail or air access. With the intent of balancing jobs and housing to create complete communities, Employment and Enterprise Areas are located throughout the urban fabric, with at least one such designated area in each urban community outside of the Greenbelt.

In both Employment and Enterprise Areas, a wide range of uses are permitted, including:

- a. A variety of industrial and related uses, such as warehousing and distribution, manufacturing, communications, storage, construction, office, institutional, and research and development uses;
- b. Uses that store most products outdoors and require a large land area devoted to external storage, sale or service of goods or for vehicle sales and service;
- c. A variety of ancillary uses such as recreational, health and fitness uses, child care, and service commercial uses (e.g. convenience store, doctor and dentist office, restaurant, bank, dry-cleaning outlet, service station or gas bar) on a small, individual parcel of land, within a building with a permitted use, or in groups as part of a small plaza. These ancillary uses should serve the employees of an Employment Area and Enterprise Area, the general public in the immediate vicinity and the passing traffic. These accessory uses should not be of a size or nature that draws clientele beyond the local area.
- d. Sample and showroom uses, as a secondary use, in association with a warehouse or other permitted use in the same building.

Enterprise Areas

Enterprise Areas differ from Employment Areas in that they are intended to provide opportunities to combine both housing and employment uses, including a high proportion of higher density offices. At least 50% of the land in an Enterprise Area is to be used for Employment. Residential uses must be in the form of townhouses, stacked townhouses or apartments and be functionally integrated with Employment uses through such means as:

- The sharing of sites or buildings;
- Occupying sites adjacent to Employment uses;
- Common linkages (such as roads and pathways);
- The strategic location of parks;
- The central location of employment uses;
- The opportunity to share parking;
- Convenient transit routing;
- Mutual accessibility to convenience uses, amenities and services.

Section 3.6.6 – Central Area

Ottawa's Central Area is the economic and cultural hub of the city, through its mix of jobs, government, retail, housing, entertainment and cultural activities. The Plan recognizes that the Central Area's employment image and identity will be enhanced through new mixed-use development and reinvestment that creates a sense of human scale and vitality through retail uses at grade and additional hotel and residential uses. The Plan promotes working with federal agencies to encourage the government to maintain its concentration of administrative functions within the Central Area.

Discussion

In planning for urban jobs, Ottawa's Official Plan stands apart from those of other municipalities in the Greater Toronto Area in three notable respects:

- Although it is common for regional municipalities in Ontario to designate employment areas and distribute employment allocations to achieve a balance of housing and jobs in each lower-

tier municipality, Ottawa is the only single-tier municipality in the province to attempt through policy to achieve such a balance within each of its distinct communities. Since the City's economy is viewed in singular terms, and the infrastructure that supports it is planned city-wide, this policy approach may create unnecessary tensions as Ottawa promotes economic development and more transit-oriented development patterns.

- Ottawa is also unique in how it structures its Employment Land hierarchically. Most large municipalities in Ontario divide their Employment Land into multiple tiers to separate heavy industrial uses, more general and light industrial uses, and office or other prestigious uses from one another. The intent generally is to both protect and isolate noxious and unsightly uses to minimize their adverse impacts and to cluster cleaner, more attractive uses to enhance the image of the community. Ottawa's more simplistic approach, however, makes sense in the context of its economy, which is primarily office-based and has relatively little heavy or large-scale industrial uses. Office jobs are located throughout the city, with much if it located outside Employment Areas, either in the Central Area, in federal office parks or other Mixed Use Centres, and the Official Plan encourages employment intensification in these areas. Ottawa also makes good use of Secondary Plans and Community Design Plans to introduce land use hierarchies within designated Employment Areas, where appropriate.
- The Official Plan's Enterprise Area designation does indicate a hierarchy among Employment Areas, but in permitting residential uses this designation is also unique to Ottawa. It recognizes opportunities to integrate higher density employment uses, i.e., office buildings, with higher density residential uses, i.e., apartment buildings and townhouses. However, the successful implementation of such a designation relies on resolving potential conflicts between Employment and residential uses and achieving a cohesive development pattern that does not fragment land uses and constrain the growth of business parks.

Rural Area Policies

There are a range of Employment uses in Ottawa's rural area. The General Rural Area designation permits a variety of uses, from manufacturing operations, to new recreational uses, to sand and gravel pits. Meanwhile, the Carp Road Corridor Rural Employment Area designation is more specific about the permitted employment-type uses. On lands within this designation, only industrial-type uses, which complement the existing business cluster in this area, are permitted. The rural area is also home to the Ottawa-Macdonald Cartier International Airport designation which permits a broad range of employment uses. The section below further unpacks the rural area employment designations.

Section 3.7.1 – Villages

Schedule A of the Official Plan identifies the 26 Villages that are scattered throughout Ottawa's rural area. Historically, these areas developed at the intersections of major roads and railways, with development traditionally occurring on smaller lots with private wells and septic systems. Villages functioned as service centres for surrounding rural areas and continue to do so. In these areas, the City encourages the delivery of community programs and facilities, the development of residential uses, as well as job opportunities in the form of commercial, tourism, and small-scale industrial development. A wide range of employment uses are permitted, including retail and commercial facilities with a maximum of 10,000 m² gross leaseable area, restaurants, offices, personal service establishments, institutional uses and light industrial uses. However, industrial uses with characteristics that negatively impact on adjacent residential uses by through noise, fumes, heavy equipment movement, or external storage or large amounts of materials are not permitted in a Village and will be directed to an appropriate urban location or General Rural Area.

Section 3.7.2 – General Rural Area

The General Rural Area contains diverse land uses, including farms, housing, forests, small industries and small clusters of residential and commercial development. Permitted uses also include agricultural uses, forestry and conservation, residential uses on existing lots and those created by severance, animal boarding, breeding and training facilities, bed and

breakfast businesses, open spaces and cemeteries. Through a zoning amendment process, this designation might also accommodate new industrial and commercial uses that would not be better located within a Village, such as farm equipment and supply centres, machine and truck repair shops, building product yards, landscape contractors and nurseries, uses that are noxious, new recreational commercial and non-profit uses (e.g. driving ranges, campgrounds and theme parks), new sand and gravel pits, other new, and non-residential uses. If considering whether to permit a new use, the City must ensure that the use would not be better located in a Village or urban area, the volume of traffic anticipated will not interfere with the local road network, the privacy of adjacent landowners can be achieved, adverse impacts can be buffered, the development is in character with the surrounding context, and there is no impact on the tree cover and on local wildlife movement.

Section 3.7.5 – Carp Road Corridor Rural Employment Area

The Carp Road Corridor Rural Employment Area is located north of the Highway 417 interchange at Carp Road, south of the Carp Airport. It contains a variety of industrial establishments, including manufacturing, agriculture, construction and high technology businesses. The Official Plan states that any new development applications will conform to the policies of the Community Design Plan (CDP) for this area, and that this Plan will influence the zoning by-law for the corridor. The CDP permits the following in each of the Plan's land use designations:

- Light Industrial: light manufacturing plants distribution, recycling and assembly plants, warehouses, service and repair shops, research, design and testing facilities, storage uses, transportation depots, contractor or construction related uses, compatible public and institutional uses.
- Heavy Industrial: heavy industrial uses involving the manufacturing of products from local primary materials, quarry, abattoirs, salvage yards, sawmills.
- Highway Commercial: uses that require large parking areas, extensive displays, and buildings designed to capture the attention of the passing public. They also house establishments for automobile sale and repair. Convenience commercial uses such as stores, restaurants, banks, gas bars will not be permitted.

- Convenience Commercial: permitted uses are those that provide services to local residents, employees in the corridor, and the traveling public. Examples include convenience stores, professional offices, business offices, gas bars, banks, and restaurants.

Section 3.10.1 Ottawa Macdonald-Cartier International Airport and Section 3.10.2 Carp Airport

The Ottawa Macdonald-Cartier International Airport is made up of a passenger terminal building, airfield system and surrounding lands under long-term lease from Transport Canada. The airport includes additional leased parcels south of the airfield, in the rural areas. On lands designated Ottawa Macdonald-Cartier International Airport, which excludes the rural parcels, permitted uses include civilian and military airports with a broad range of aviation related uses, as well as those uses permitted in Employment Areas, along with hotels and related commercial uses. Section 3.10.2 of the Official Plan permits development of an aerospace business park on the Carp Airport Lands, and requires uses to be consistent with the Carp Airport master land use and servicing plan.

Discussion

Ottawa's Official Plan states that the City will provide for a wide range of rural economic activities but does not articulate strategic directions for the Rural Area, implying that significant change is not planned there. The intent of Ottawa's policies for designated agricultural, resource and environmental areas is quite clear—to protect them for farming, resource development and natural features, respectively. Under the General Rural Area and Village designations, however, there is the potential for a wide variety of employment uses to be added to the Rural Area and a lack of clarity about the specific types of uses that are appropriate in General Rural Areas.

The intent of the General Rural Area policies is to provide a location for agriculture and non-agricultural uses that would not be more appropriately located within the Urban Area or Villages. Although General Rural Areas may contain the most suitable sites for certain heavy, odorous or unsightly uses, the Official Plan does not provide any guidance as to the strategic locations for such uses, which have adverse impacts generally wherever they are located. In addition, limited

amounts of residential and other rural and tourist service uses are also permitted. Prior to approving industrial or other less traditional rural uses, the City will “consider” their impacts and whether or not they would be better located in a Village or the urban area. The criteria to be considered, however, are open to interpretation.

The flexibility in Ottawa’s General Rural Area policies stands in contrast to the rural area policies of comparable Ontario municipalities, which reveal an emphasis on the protection of environmentally significant areas and agricultural lands and strict limitations on other uses to those serving and complementing the rural area:

- In the Regional Municipality of York, the Official Plan states that development will be limited to retain the rural character of the landscape and protect existing agriculture, agriculture-related and secondary agricultural uses. In the Rural Area, permitted uses include existing and new agricultural uses, agriculture-related uses, forestry, conservation, land extensive recreational uses, and resource-based commercial and industrial uses. The Official Plan directs non-resource industrial, commercial and institutional uses to the Urban Areas, Towns, Villages and Hamlets.
- Waterloo Region protects the region’s countryside and supports agriculture as the dominant land use within it. In the countryside, land uses are designated as Prime Agricultural Area, Rural Area, and Protected Countryside. In the former two designations, the primary permitted land uses include agricultural and agriculture-related uses and secondary uses. Renewable energy systems are also permitted, while recreational and tourism uses, rural institutional uses and limited infill residential uses may be permitted.
- In Hamilton’s Rural Official Plan, land use designations include: Agriculture, Specialty Crop, Rural, Rural Settlement Area, Open Space and Utilities. Within all these designations, conservation uses (e.g. forests), transportation facilities, existing electrical facilities, municipal infrastructure and mineral aggregate resource operations are permitted.

In the Rural designation, the Plan’s intent is to protect farm operations and preserve these lands for agricultural use.

- The Town of Whitchurch/Stouffville has a Rural Commercial/Industrial/Institutional Area designation. As part of this designation, the Town permits uses that are small-scale and primarily related to and designed to serve rural, agricultural, environmental areas or use the products of these areas. Residential uses, shopping centres or major retail commercial uses and industrial subdivisions are prohibited.

In the municipalities above, new industrial and commercial uses, except those that are resource-based or related to agriculture, are generally not permitted. This policy approach recognizes that in municipalities that are both urban and rural, there should be ample opportunities to accommodate non-rural employment and commercial uses in urban areas, where transportation access is good and municipal services exist. Non-rural industrial and tourist-oriented commercial uses that do not rely on municipal services might exist in the rural areas of the above municipalities, due to historic or other special circumstances, but generally the goal is to limit them and contain such uses in strategic locations near supportive infrastructure or complementary uses.

It is important to note that the policies in the municipalities cited above were developed in the context of the Greenbelt Act, the Oak Ridges Moraine Act and the Growth Plan for the Greater Golden Horseshoe. No similar policy context yet exists for Ottawa, but this may change and does not prevent the City from adopting more restrictive rural land use policies. This approach will reinforce the intent to focus non-rural employment uses in the Urban Area and limit development outside of Villages to only that which supports the rural economy or is otherwise suitable to a rural context (e.g., large-scale heavy industrial uses not compatible with urban development).

The Existing Geography of Employment in Ottawa

To determine the best locations for future office and industrial employment in Ottawa, it is critical to understand where those types of jobs are located today, where the City plans future jobs and key locational characteristics that influence the geography of employment. This section examines existing and planned employment nodes, and their potential for change, beginning with a look at the overall distribution of jobs and the transportation infrastructure behind it. All job figures cited below are from the City's 2012 Employment Survey. Map 1 identifies the city's urban employment nodes; it and the other maps below can also be found in Appendix A.

The Distribution of Jobs

Ottawa's 566,000 jobs are distributed across the city, but over 80% of jobs are located inside the Greenbelt.

15% are located in the urban communities outside the Greenbelt and less than 5% in the rural area. Half of the jobs in the communities outside the Greenbelt, approximately 49,000, are located in Kanata. Inside the Greenbelt, employment nodes are well distributed. While there are approximately 162,000 jobs in the core of the city, there are approximately 136,000 jobs in the cluster of nodes west of the core, 158,000 in the cluster to the east, and 15,000 in the cluster to the south, which includes the airport (see Map 2).

The job concentration within the Greenbelt results in a high jobs-to-household ratio of 1.9:1. In comparison, there are 0.4 jobs per household in Barrhaven, 0.2 in Riverside South, 1.2 in Leitrim and 0.5 in Orleans. The concentration of high tech employment in Kanata results in a ratio of 1.3 jobs per household.

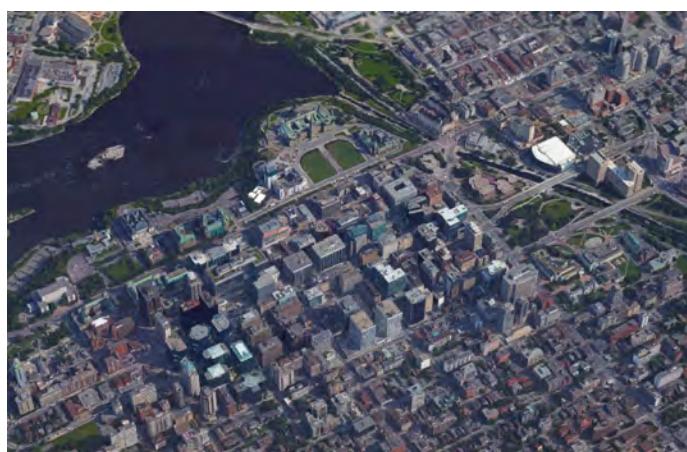
Ottawa's transportation network supports a concentration of office jobs in the core of the city while also facilitating the broad distribution of overall employment.

As a historic city and national capital, it is not surprising that Ottawa's greatest job concentration is downtown. Although office jobs have become more dispersed

as federal office and research parks and private-led business parks have been developed over the past several decades. 84% of office jobs, and 93% of federal government jobs are still located inside the Greenbelt.

The city's road and transit networks have supported job centralization as Ottawa has grown outward. Highways 417 and 174 deliver commuters from Kanata in the west and Orleans in the east, and major roads such as Greenbank Road, Woodroffe Avenue, Prince of Wales Drive and Bank Street, along with Highway 416, link communities to the south with the inner city. The spines of Ottawa's extensive transit network are Transitways and the O-Train, also all leading to the city's core. This network will be significantly enhanced with completion of the Confederation LRT Line in 2018, which will extend from Tunney's Pasture in the west to Blair Station in the east. The Confederation Line is planned to be extended further west as far as Bayshore Shopping Centre and east to Place d'Orléans, and an LRT line to Riverside South is also planned, all by 2023. Map 1 highlights the relationship of the city's transportation network to the employment nodes.

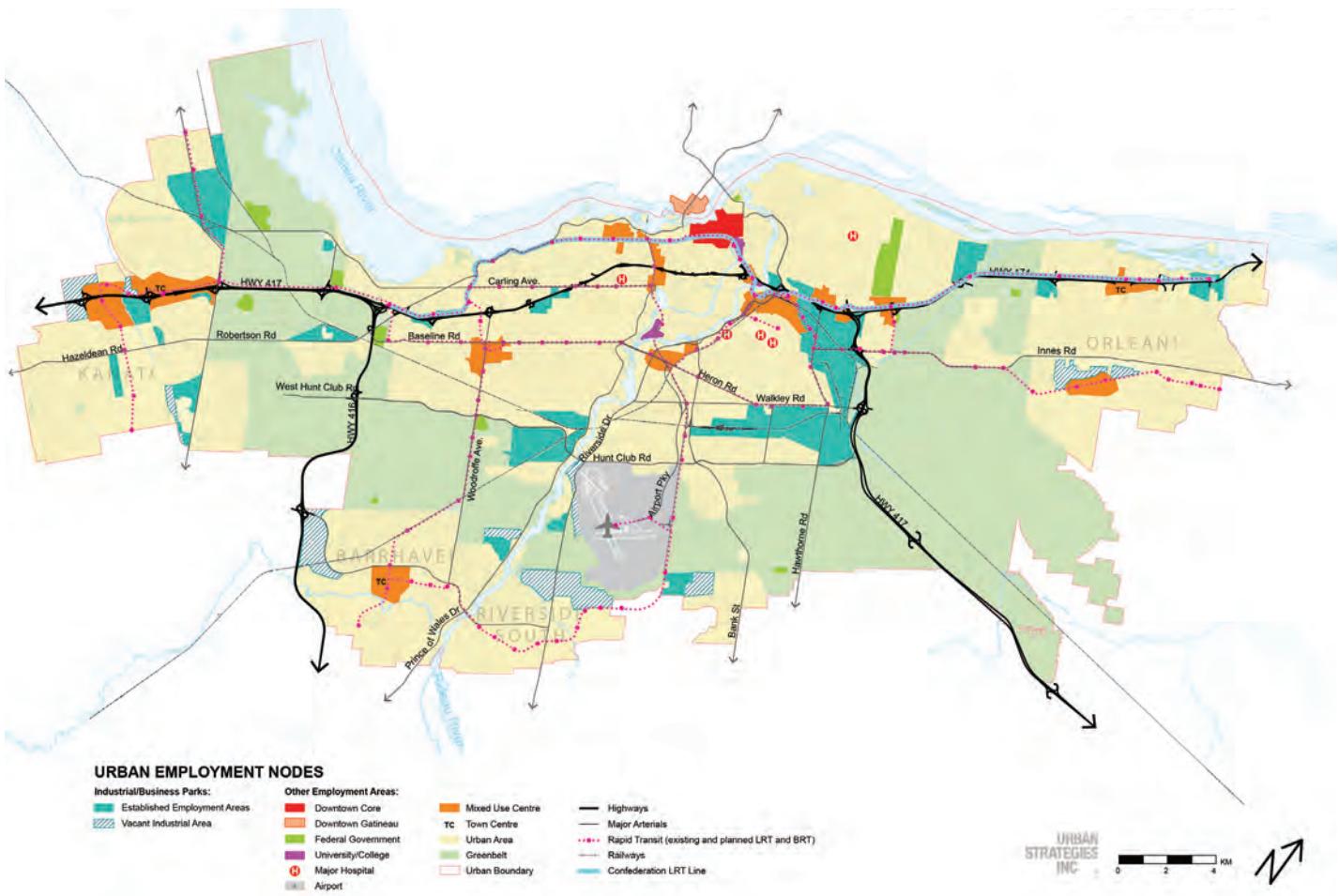
The rail network in Ottawa also has had a major influence on the location of the city's long-established industrial parks, such as Merivale, South Walkley-Albion, Hawthorne-Stevenage and Sheffield. As the movement of goods by truck has increased, the city's network of highways and major roads has allowed a broad distribution of industrial uses, mostly along the Highway 417/Highway 174 corridor.



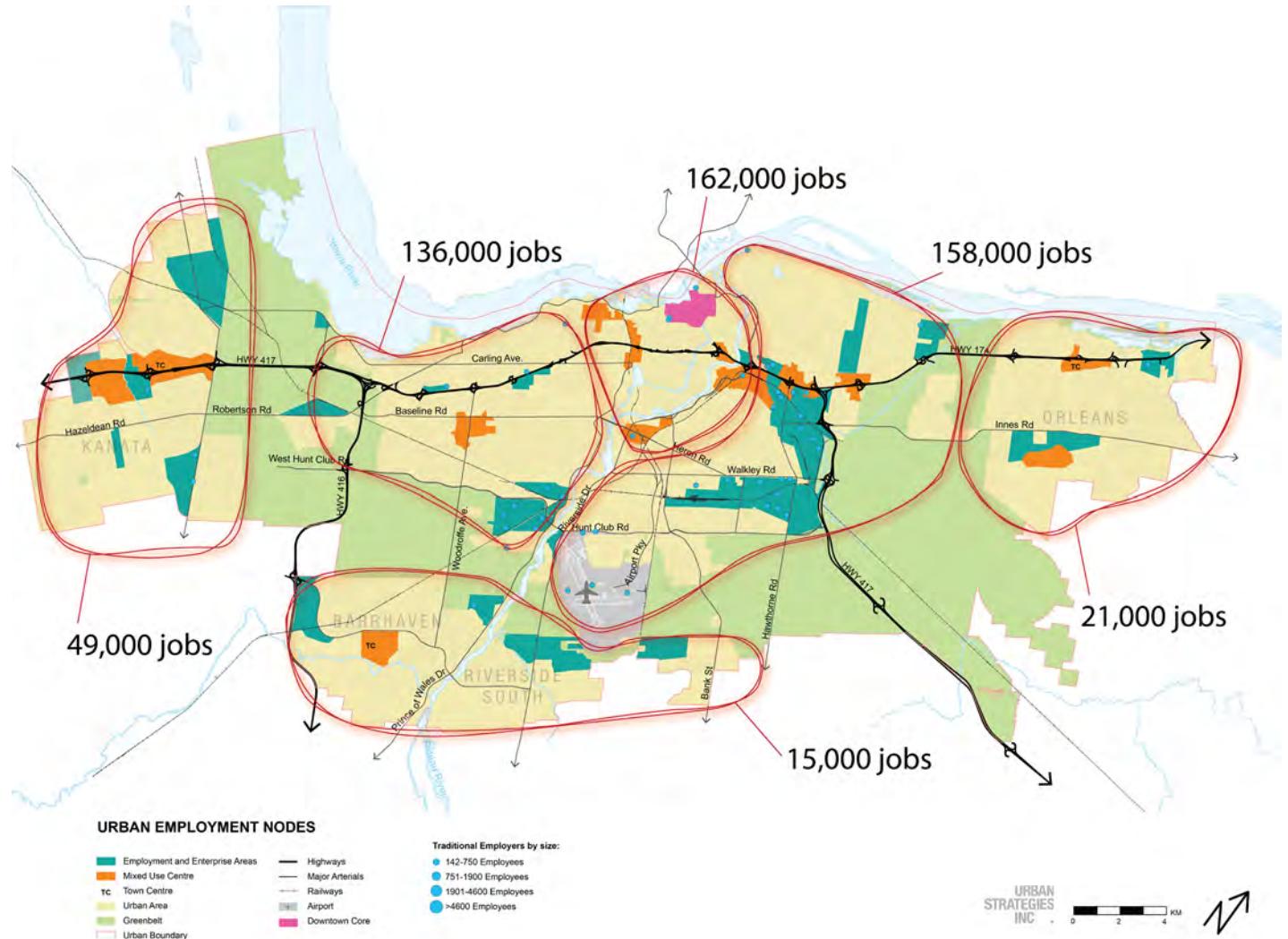
Downtown Ottawa

Map 1: Ottawa's Employment Nodes

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Map 2: Employment Clusters



Residents inside and outside the Greenbelt have good access to a range of job opportunities.

The concentration of overall employment within the Greenbelt and their broad geographic distribution mean that these residents have convenient access to job opportunities. As well, the city's transportation system provides good access to those "inside jobs" for residents in the communities outside the Greenbelt.

Most of the city's jobs are located in the nodes described below, where accessibility is generally good and employers can cluster with other commercial, industrial or government uses. Nevertheless, 24% of the city's jobs, or approximately 134,000, are scattered throughout the "General Urban Area", including 14% of the city's office jobs and 11% of its industrial jobs. The integration of small-scale, population-serving office and compatible light industrial uses within largely residential areas supports the concept of complete communities, where residents have opportunities to live close to their work.

Urban Employment Lands and Nodes

Office & Institutional Nodes Inside the Greenbelt

Downtown and the larger Central Area contain almost a third of the city's office jobs and will continue to attract employment.

The presence of the Federal Government, along with the city's strong radial transit system, has cemented Downtown Ottawa as the primary location for major office buildings. The Central Area is home to approximately 82,000 office jobs, 32% of the 257,000 office jobs across the city. Two thirds of these, or almost 56,000, are Federal Government jobs. The tables show the job distribution of Federal and other professional sectors (see also Maps 3 and 4).

Public Works and Government Services Canada has indicated that there is every intention to maintain a high concentration of Federal office jobs downtown, even as the government plans growth at Tunney's Pasture, Confederation Heights and a future office campus at Tremblay Road and St. Laurent Boulevard.

The number of non-federal jobs in the Central Area decreased by approximately 3,500 between 2006 and 2012, the 2008-2009 recession likely being the major cause.

FEDERAL EMPLOYMENT

Area	Jobs in 2012
Central Area	55,631
Inner Area	10,785
Inside Greenbelt	46,708
Inside Greenbelt West	18,298
Inside Greenbelt East	28,410
Outside Greenbelt	2,684
Kanata	25
Orleans	50
South Nepean	2,600
Riverside South	9
Letrim	0
Total Employment	115,808

PROFESSIONAL EMPLOYMENT

Area	Jobs in 2012
Central Area	22,389
Inner Area	9,485
Inside Greenbelt	39,144
Inside Greenbelt West	20,276
Inside Greenbelt East	18,868
Outside Greenbelt	19,747
Kanata/Stittsville	16,405
Orleans	2,206
South Nepean	966
Riverside South	48
Letrim	122
Total Employment	90,765

While local real estate professionals are concerned about the level of office vacancy downtown, the long-term prospects for job growth are positive. New tenants like Shopify and trends in cities around the world are evidence that major high-tech employers are increasingly locating their office functions in core locations, where many of their young workers prefer to live and spend their leisure time, and where there is a high level of transit service. As the residential population of the Central Area increases, the Confederation Line is completed, and more cultural and recreational amenities are added, downtown will only become more attractive to major office employers.

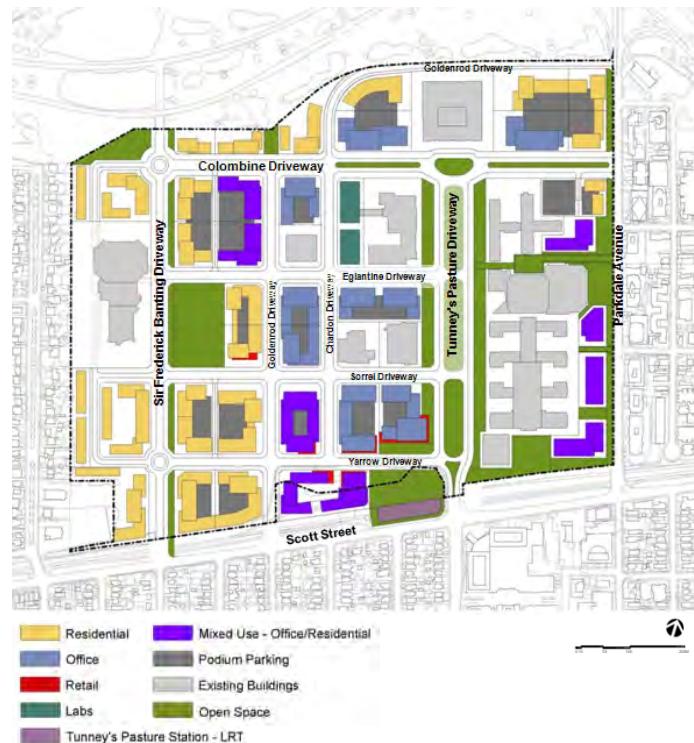
The capacity for job growth in the Central Area is significant. Although there is not much vacant land in the Central Area, there are many parking lots, sites occupied by older low-rise or mid-rise office buildings, and other under-utilized properties with the potential for redevelopment, such as LeBreton Flats. The density of employment downtown will also increase as offices become more efficient and the amount of floor area per employee decreases.

The major Federal office and research parks in the city are significant employment nodes well served by public transit and can accommodate much growth.

Federal government jobs are scattered across Ottawa, but the major concentrations of jobs outside downtown are found in Tunney's Pasture and Confederation Heights. With large buildings added to the NRC/CMHC campus for CSIS and CSEC and the Department of National Defense occupying the former Nortel campus, these areas have also emerged as significant Federal employment nodes.

Public Works and Government Services Canada recently completed a master plan for Tunney's Pasture, which has identified the potential to accommodate at least 10,000 more jobs on the property. Vacant and under-utilized land at Confederation Heights and the NRC/CMHC campus suggests there is also capacity for thousands of more jobs in those locations. In addition, PWGSC's plan for the future Tremblay Road campus shows capacity for more than 200,000 square metres

of office development, which could accommodate 7,500 to 10,000 employees.



Tunney's Pasture Master Plan

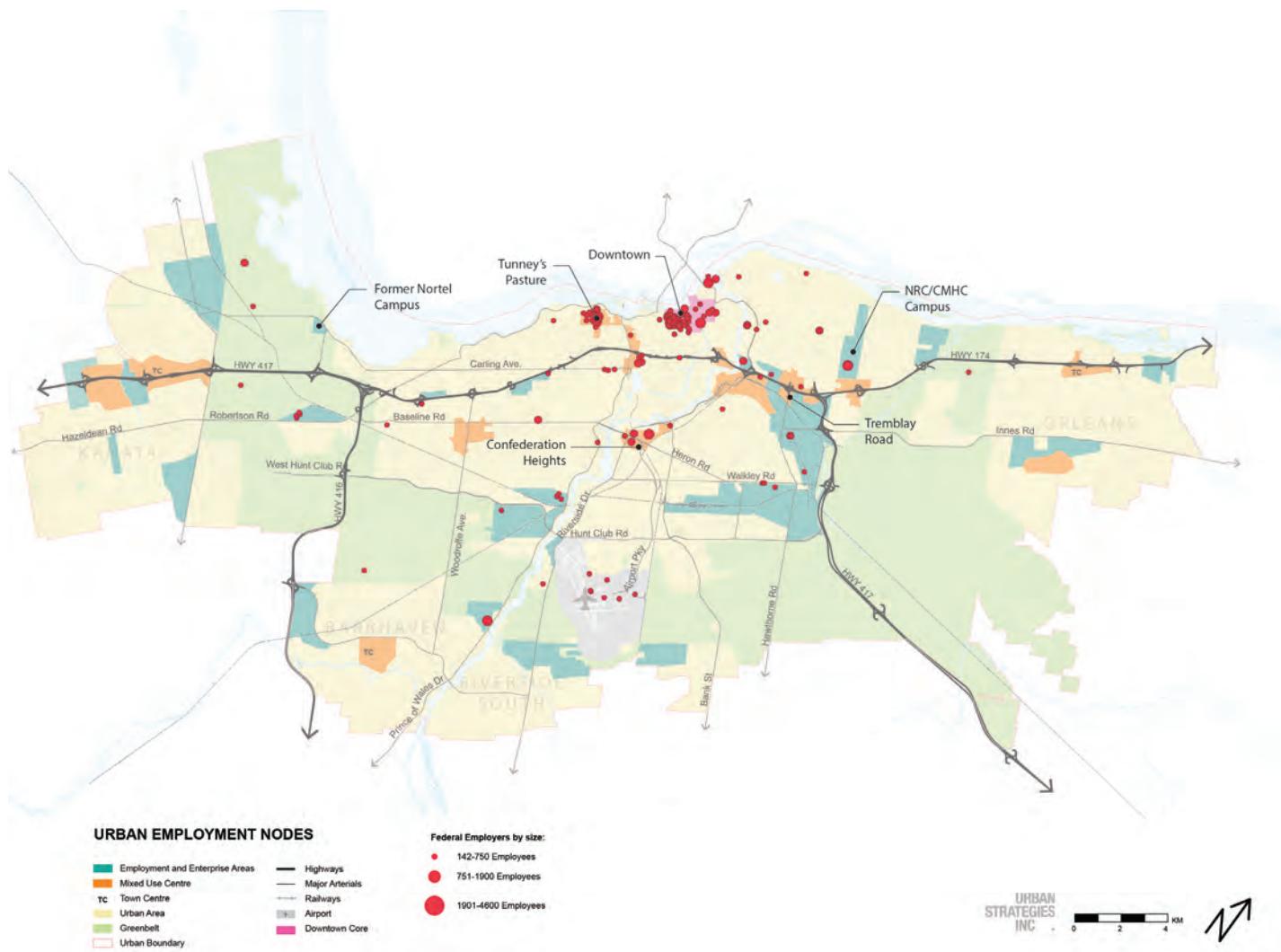
Ottawa's major hospitals and educational institutions, all located inside the Greenbelt, will continue to grow, regardless of land constraints.

Ottawa's six largest hospitals, two universities and Algonquin College are distinct employment nodes that will steadily grow to meet the needs of a growing population. For the most part, they will seek to expand on their existing land base. There is the potential for new health care institutions and satellite campuses for higher education in communities outside the Greenbelt; however, since major institutions generally serve the entire city and rely on good transportation access, including by public transit, locations inside the Greenbelt likely will be preferred.

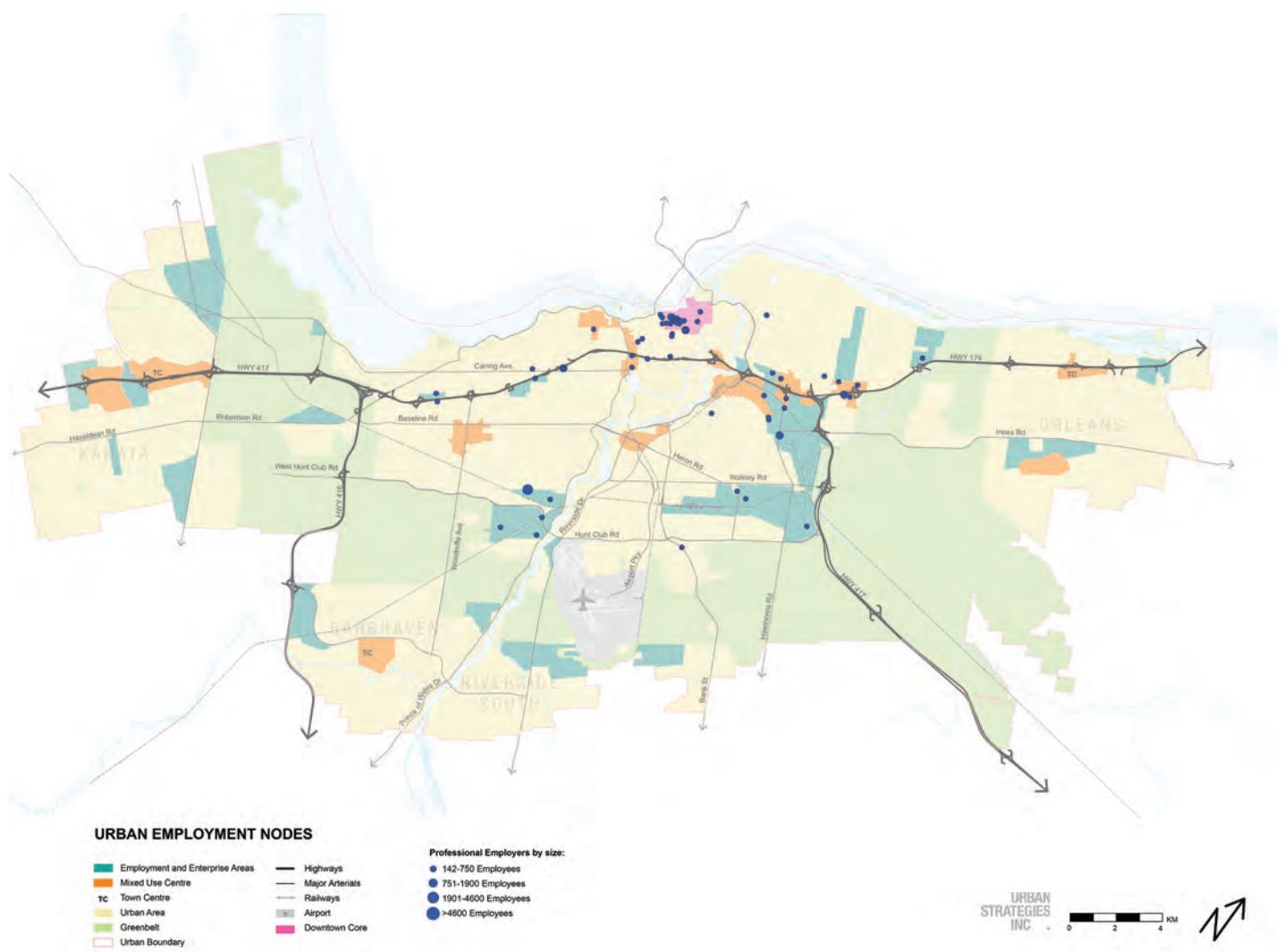
There is also the potential to accommodate high-tech or other employers on university-owned land, where there is a mutual benefit to the institution and the employers. The University of Ottawa, however, abandoned the concept of a bio-tech park on its land in the Ottawa Health Sciences Complex, and Carleton University has

Map 3: Geography of Federal Employment

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Map 4: Geography of Professional Employment



no plans to establish a technology park. High-tech employers in the city have shown a clear preference to locate in private business parks or downtown.



Illustration of vision for the Lee Station Area from the University of Ottawa Campus Master Plan

Established Business Parks

Large, older, mostly industrial business parks have little vacant land and some are constrained by the Greenbelt.

Ottawa's oldest, more traditional industrial parks, where railways converge and the city's heaviest industrial uses as well as light industry can be found, are almost fully occupied (see Map 5). The Merivale, Sheffield, Newmarket-Cyrville and Industrial Avenue industrial parks all have a land vacancy rate of less than 5%, while South Walkley-Albion is 85% occupied.

The Hawthorne-Stevenage area is three-quarters occupied, with most of the vacant parcels being less than four hectares each. Other urban development and the Greenbelt currently prevent the expansion of these major industrial nodes.

TRADITIONAL EMPLOYMENT

Area	Jobs in 2012
Central Area	2,847
Inner Area	1,896
Inside Greenbelt	41,941
Inside Greenbelt West	13,753
Inside Greenbelt East	28,188
Outside Greenbelt	16,989
Kanata/Stittsville	12,076
Orleans	1,897
South Nepean	1,142
Riverside South	122
Letrim	1,752
Total Employment	63,673

Ottawa's older prestige office parks adjacent to its largest industrial parks—Colonnade and Ottawa South—are also essentially built out, each having only a handful of small sites available for development. Smaller, mixed-use business parks are spread out along the Highway 417/Highway 174 corridor. From the Terry Fox Business Park in Kanata to the Cardinal Creek Business Park in Orleans, most of Ottawa's other active industrial parks are located near interchanges along the 417/174 corridor. Nearly all of them contain a mix of light industrial and office uses, and many also contain retail and services uses, such as hotels and restaurants. With the exception of the employment node at Highway 174 and Trim Road, most of these business parks have few vacant sites.

The Kanata North Business Park has retained its unique status as a high tech hub and can continue to grow and evolve.

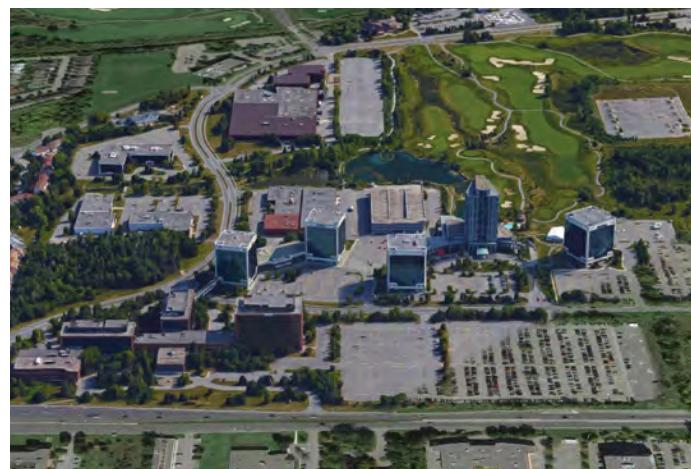
The Kanata North Business Park is unique in Ottawa—developed as the hub of the city's booming communication and information technology sector in the 1980s and 1990s and still a stellar example of economic clustering, as high-tech companies continue to be attracted to its suburban setting. Approximately two-thirds of the jobs in Ottawa's high-tech sector are located in Kanata, with the vast majority of those located in the Kanata North Business Park (see Map 6).

Though much of the land in the park is developed, there are many vacant parcels (covering 20% of the park) and a great deal of surface parking that could gradually give way to new office buildings and parking structures. The conversion of former manufacturing space to higher-density office space can also be expected on some sites. The number of prestigious employers in the park and the quality of its buildings and landscapes will likely ensure it continues to grow and evolve, despite the desire of some high-tech employers to locate their offices in more urban settings.

The business parks within Enterprise Areas are like other Employment Lands and have not been integrated with other uses.

Half of the Kanata North Business Park is designated Enterprise Area, which permits up to half of the designated area to be used for higher density residential uses (townhouses or apartment buildings), but to date employment uses dominate the park.

The Bells Corners Enterprise Area has a small residential community in the middle, commercial uses along Robertson Road, and office and light industrial uses spread across the area, with no integration among the different uses. The Kanata South Enterprise Area has a clustering of light industrial and office uses at its north end, vacant lands along Terry Fox Drive, retail uses on Eagleson Road and a townhouse community at its core; again, there is little integration among the uses.



Kanata North Business Park

Several of the planned employment areas in the communities outside of the Greenbelt do not have good highway access.

Planned Business Parks

Among the planned Employment Areas outside the Greenbelt, the Kanata West Business Park and 416 Business Park are both located at highway interchanges, which in time should make them attractive to a range of Employment uses. Both areas are already under development pressure for retail uses with a regional and local draw.

Other planned Employment Areas not close to either Highway 416 or Highway 417 are less visible and accessible. The South Merivale Business Park is approximately seven kilometres from Highway 416, via Fallowfield Road. The planned employment area in Riverside South is bisected by Limebank Road but has no direct connection to Highway 416, ten kilometres to the west. The Albion-Leitrim Business Park is nine kilometres from Highway 417 to the east.

The employment areas around the north end of the airport are somewhat better located, having good access to Hunt Club Road. The South Orléans Industrial Area is also not easy to access, being separated from Highway 174 by residential communities and located almost ten kilometres from Highway 417. Consequently, these areas may attract industrial uses serving the local population (or related to the airport) but will be less attractive to businesses that draw employees from across the city or which rely on moving goods far.

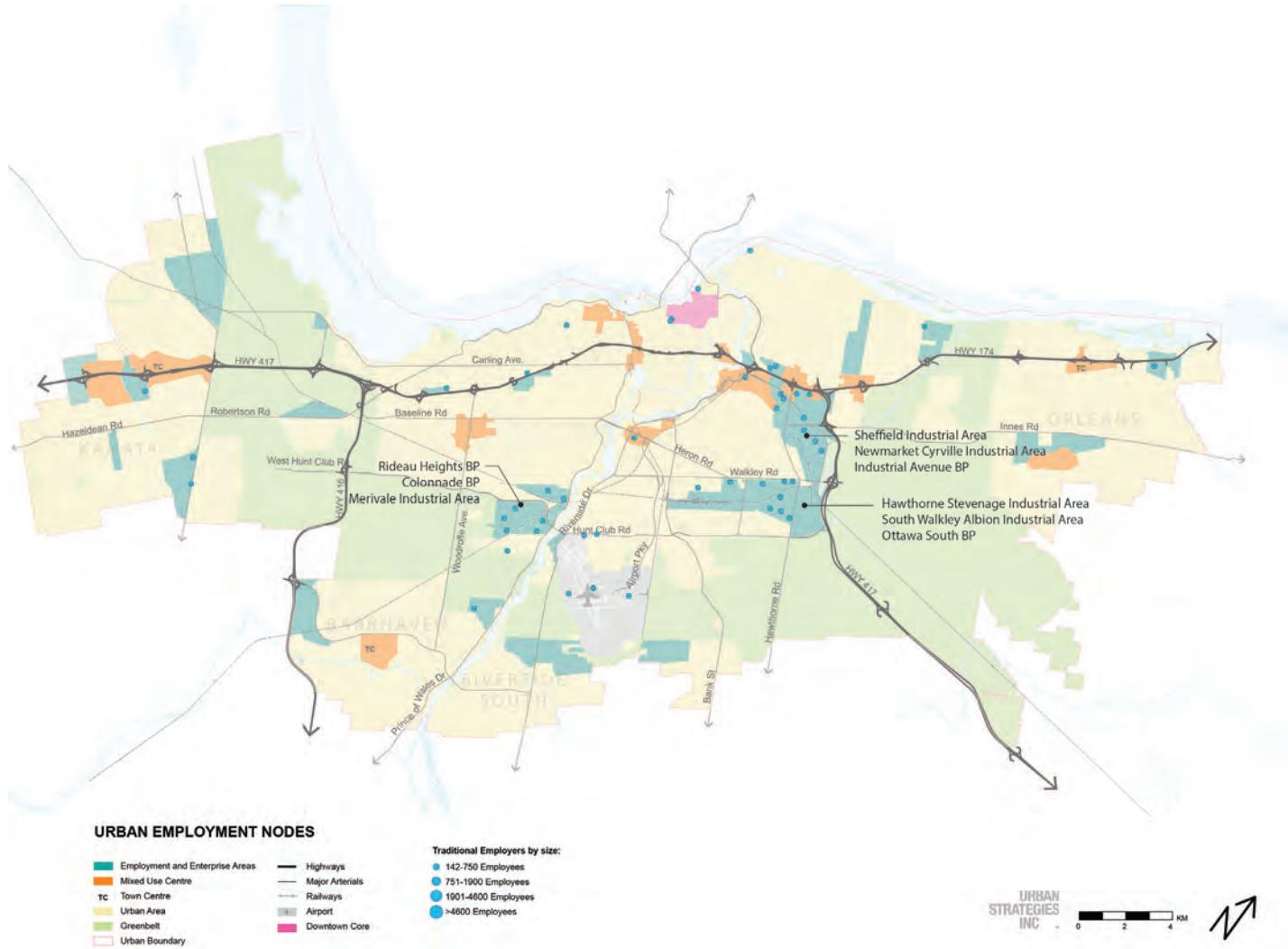
Mixed-Use Centres and Mainstreets

The city's designated Mixed-Use Centres have varying employment characteristics today and varying opportunities to accommodate more jobs.

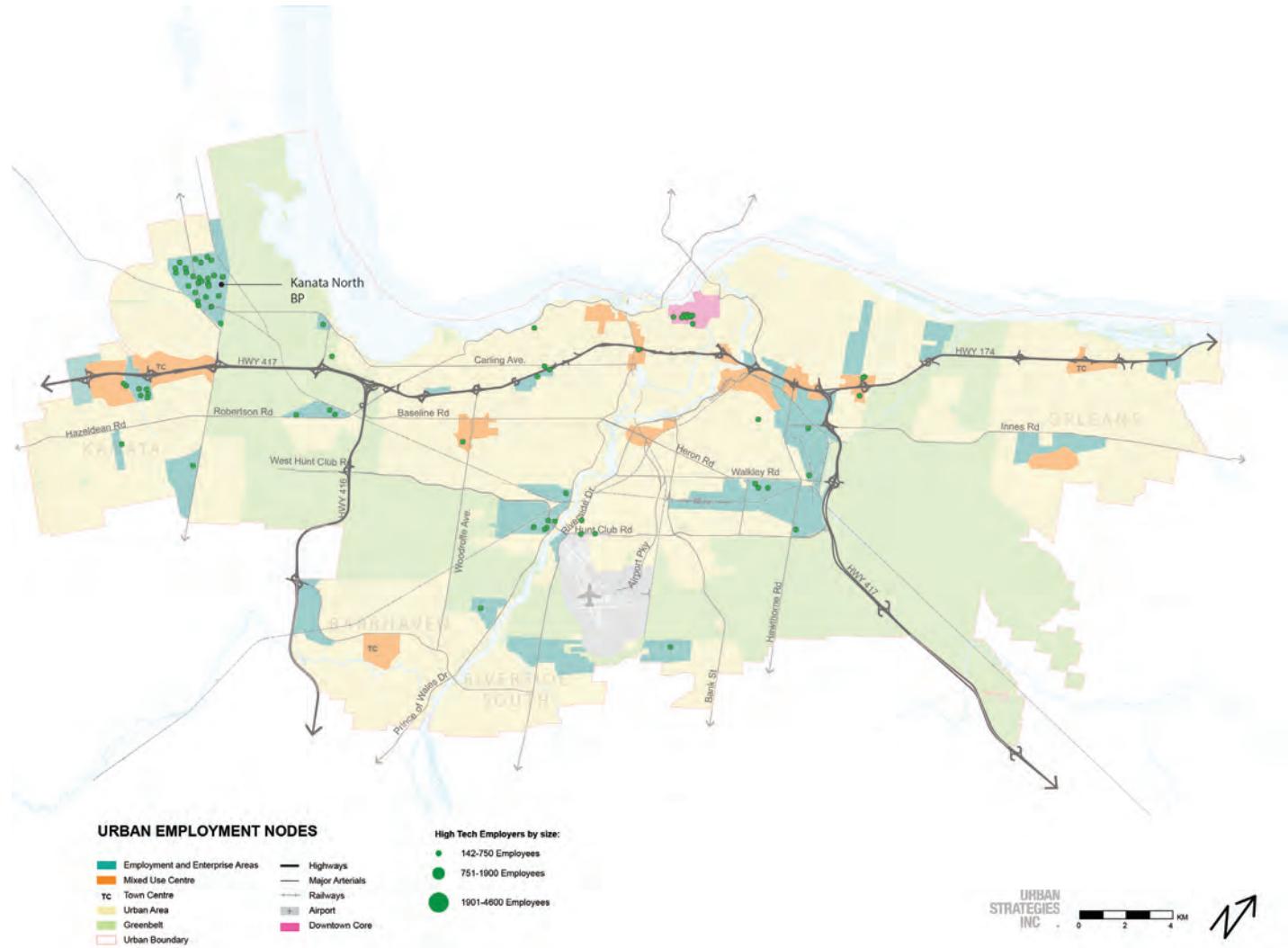
With the goal of promoting intensification, encouraging transit use and creating well-designed, mixed-use hubs of activity, the City has designated a number of "Mixed-Use Centres" (MUCs) and "Town Centres" around on transit stations. Some are in older parts of the city inside the Greenbelt and others are in newer communities outside the Greenbelt.

Map 5: Geography of Traditional Employment

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Map 6: Geography of High Technology Employment



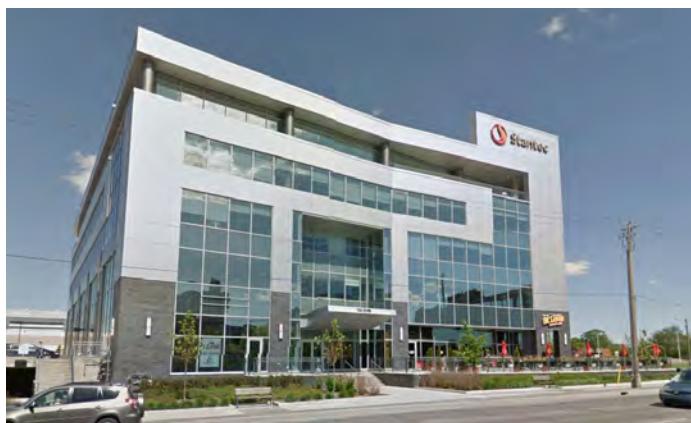
While these centres are not considered Employment Lands, most of them contain a significant number of jobs.

The two most job-intensive MUCs capture the Federal office parks of Tunney's Pasture and Confederation Heights; these MUCs contain approximately 14,100 and 9,400 jobs, respectively. The Lees and Mer Bleue MUCs, in contrast, currently have almost no jobs. Job levels in the other MUCs and Town Centres range from 2,000 to 9,000. The Official Plan target for jobs in each MUC is 5,000 and in each Town Centre, 10,000.

Overall, every sector of urban employment is represented in MUCs and Town Centres. Since several of the centres, including the three Town Centres (Kanata, Barrhaven and Orléans), are centred on a shopping centre, retail jobs outnumber those in other sectors, except Federal administration. Office uses generally are the most desirable employment uses in centres, since they are compatible with both retail and residential uses and support transit.

Because the Mixed-Use and Town Centres are at various stages of development and each has a unique land use mix, their potential to accommodate more office employment varies:

- The MUCs centred on the future Lees, Hurdman, Tremblay, St.Laurent, Cyrville and Blair stations on the Confederation Line were all subject to transit-oriented development (TOD) studies and upzoned to encourage intensification. The Confederation Line should improve the market conditions for office development in each area, but if this does not occur, the City should consider other incentives.



Stantec Building at Baseline Rd & Clyde Ave.

- Other MUCs inside the Greenbelt, including Bayview-Preston, Baseline-Woodroffe, Tunney's Pasture and Confederation Heights, as well as the Kanata and Orléans Town Centres, are heavily developed with active commercial, government and/or institutional uses. However, they each contain opportunities for intensification and or redevelopment over time. Employment growth is planned at Tunney's Pasture and Confederation Heights, and office uses should be included in future plans for redevelopment and infill sites on public lands in the Bayview-Preston and Baseline-Woodroffe MUCs.
- The Kanata West MUC and Barrhaven Town Centre, being only partially built out, contain greenfield sites that could accommodate office buildings. Secondary plans and community design plans for these areas provide opportunities to identify sites for office uses.

Arterial Mainstreets also have significant capacity for job growth but also face challenges.

While the city's Traditional Mainstreets will continue to accommodate mostly population-serving employment, growth will be limited by the size of properties and their neighbourhood contexts. Large retail sites along Arterial Mainstreets, on the other hand, have much greater potential to accommodate office uses, either through intensification on existing parking lots or through redevelopment. The opportunities for such developments will be stronger in older commercial areas along Merivale Road, Bank Street and St. Laurent Boulevard. The new Stantec office building at Baseline Road and Clyde Avenue is a good example of this type of development.

Rural Employment

There is a diversity of employment across Ottawa's rural area, although commercial and industrial uses are generally clustered near villages, as well as in rural business parks in the General Rural Area. There are more than 25,000 jobs in Ottawa's rural area, representing all sectors of employment. Construction jobs, at 6,000, outnumber those in other sectors by a wide margin. In comparison, there are approximately 1,200 jobs in primary industries, including farming and resource extraction, approximately 2,100 retail jobs and about 2,700 jobs in entertainment and recreation.

While jobs are scattered throughout the rural area, clusters can be found in Villages and rural business parks. A quarter of the rural employment, or 6,600 jobs, are located in Villages, and 10% of these (661 jobs) are located in the three industrial parks inside Village boundaries. Of the 18,600 rural jobs located outside of the Villages, 8,500, or almost half, are located in designated General Rural Areas, and more than 80% of these jobs (7,000) are located in rural business parks.

Established business parks in the rural area include the Moodie Drive Industrial Area at Highway 416 and Fallowfield, the South Gloucester Industrial Area at Hawthorne Road and Rideau Road as well as the IndCum Industrial Area at Highway 417 and Boundary Road. West of Kanata, at the intersection of Highway 417 and Carp Road, is the A.G Reed Industrial Area and the south end of the Carp Road Corridor Rural Employment Area.

The Carp Road Corridor, home to about 3,400 jobs, is a unique rural business park and the only one designated a Rural Employment Area in the Official Plan. The park contains a range of industrial and commercial uses, including a limestone quarry and associated uses, transportation and logistics, manufacturing, waste management, food services (catering), recreation (indoor playing fields), and convenience commercial uses. At the top end of the corridor is the Carp Road Airport.



Carp Road Corridor

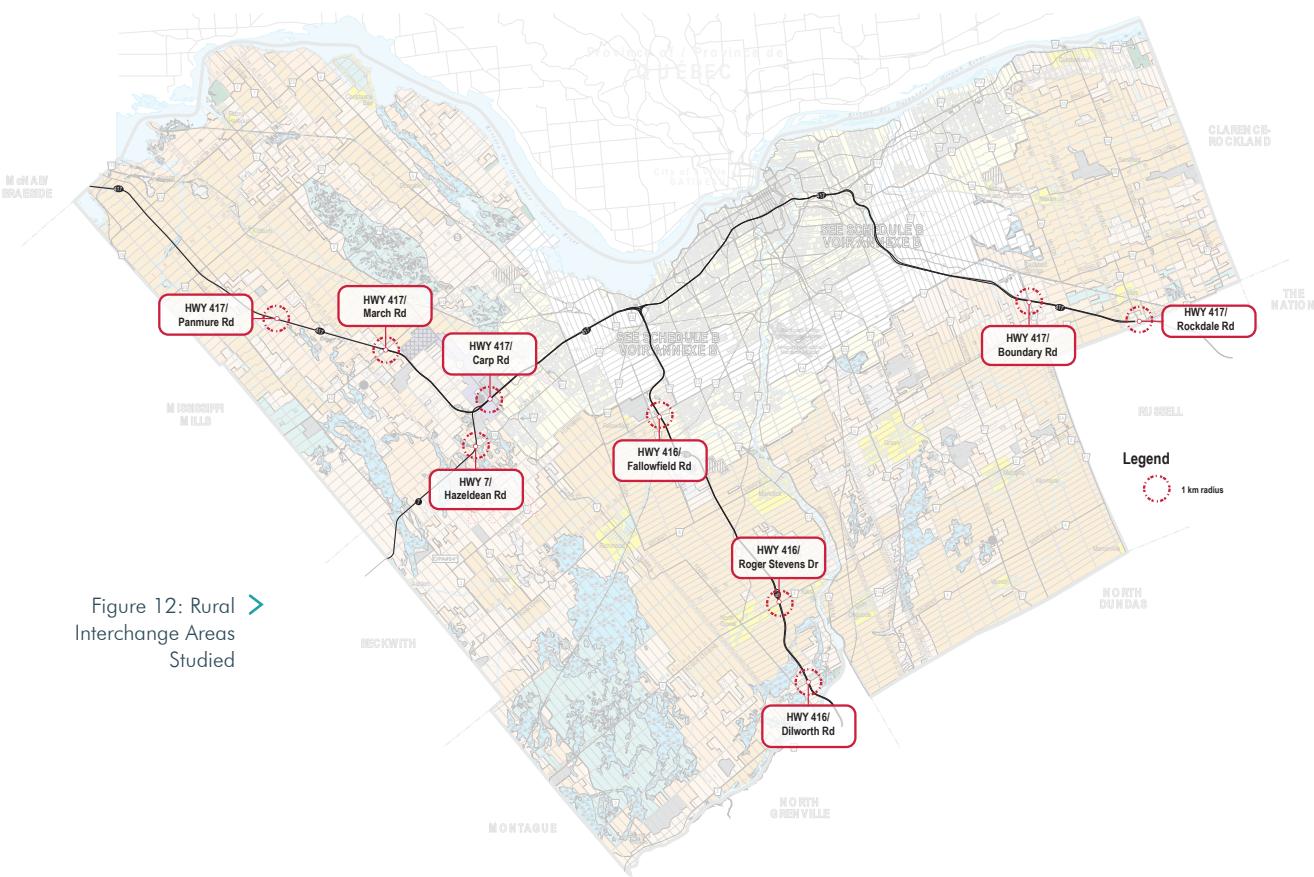
Rural Interchanges

Employment Opportunities at Rural Interchanges

As noted in the previous section, approximately 7,000 jobs are located in rural business parks in designated General Rural Areas, and most of these parks are located near highway interchanges. Because of their access and visibility to a highway, lands at rural interchanges will continue to be attractive and appropriate for certain traditional industrial uses and commercial uses catering to rural industries, as well as businesses catering to the traveling public and unique recreational or entertainment uses with unusual site requirements (e.g., a theme park). The primary advantages of locating such uses at rural interchanges, rather than in the urban area, are proximity to a rural customer base (resource industries, farmers, highway travelers) and greater compatibility with surrounding uses; i.e., some noxious industrial uses (and theme parks) might not be compatible with an urban setting.

Not all of Ottawa's rural highway interchange areas will offer the above advantages or be appropriate for employment uses. Areas that meet the following criteria will be most conducive to accommodating and attracting employment growth:

- The area is not constrained by designated Agricultural Resource Areas or significant environmental features, both of which are to be protected.
- There is an established cluster of employment uses at or near the interchange. This will enhance the opportunities for synergies among related businesses.
- The area is relatively close to the urban area. This is particularly important for construction-related businesses that provide materials or equipment for urban development and businesses whose employees live in the urban area.



Below is an overview of the existing conditions at the rural interchanges on Highways 416 and 417 illustrated on Figure 12. Each of them is then considered against the above criteria.

Highway 417 at Panmure Road: The area around this interchange is predominantly vacant, with an estate lot subdivision in the south quadrant. Only the west quadrant is designated General Rural Area; the other quadrants contain natural features, including significant woodlands and linkage features as well as areas of unevaluated wetland. Given these factors and the interchanges distance from the urban area (approximately 20 kilometres), the area has very limited opportunities for Employment uses.

Highway 417 at March Road: The area surrounding this interchange is predominantly vacant. The few existing uses include a municipal works yard and farming operations. The bulk of the lands surrounding this interchange are designated for farming or rural natural features. The latter includes significant woodland areas and unevaluated wetlands within one kilometre of the interchange. With the large supply of vacant land in the nearby Carp Airport lands and Carp Road Corridor Employment Area, and their ability to accommodate a range of rural employment uses, additional lands for large-scale Employment uses are not required in this area. The most appropriate commercial or industrial uses for the General Rural Area adjacent to this interchange area are those that support either agriculture or the resource uses to the south or which serve travelers to and from Carp Airport.

Highway 417 at Carp Road: The Carp Road Corridor, which stretches north from this interchange, is intended to be promoted as a rural employment area that is an attractive base for a wide range of commercial and industrial uses. Other objectives for the area, as stated in the Carp Road Corridor Community Design Plan, include maintaining the rural landscape, ensuring the area continues to be a place where people work, live and play and enjoy a rural lifestyle, and ensuring servicing in the corridor is adequate. The corridor is home to many generally small-scale

industrial buildings for the production, sale and/or distribution of automotive parts and other goods or the storage and distribution of construction materials. The corridor also contains a landfill and is adjacent to a quarry on the north side of Highway 417, and it includes the A.G. Reed Business Park on the south side. The Rural Employment Area designation over this area in the Official Plan recognizes the existing cluster of uses and the potential for further employment growth, which will be encouraged by the area's close proximity to the urban area.

Highway 417 at Boundary Road: The Greenbelt stretches to this interchange in the northwest quadrant, and in the northeast quadrant is a golf course. On the south side is a cluster of small-scale industrial businesses and an equipment rental establishment located in the planned IndCum Business Park. Also proposed in the business park, adjacent to the interchange, is a depot for large commercial vehicles together with a gas station and a restaurant. The interchange is relatively close to the developed urban area (approximately 10 kilometres), which might encourage further development in the business park. Other recreational or unique tourist-oriented uses would also generally be appropriate near the interchange.

Highway 417 at Rockdale Road: This area contains an auto dealer/auction yard, equipment sales enterprise, a gas station, bus depot and offices as well as a rural business park located south of the city boundary, in the Township of Russell. The rural commercial zoning in the area might attract additional small-scale uses that serve the nearby village of Vars, surrounding farms or the traveling public, but the distance from Ottawa's urban area (20 kilometres) makes the area less suitable for larger-scale industrial uses.

Highway 416 at Fallowfield Road: This interchange, at the urban-rural boundary, touches the 416 Business Park lands on the east side (in the urban area) and Moodie Drive Business Park on the west side. The latter contains rural industrial businesses associated with the limestone quarry on the west side of Moodie Drive, a FedEx depot and a large City of Ottawa surface

operations yard. The cluster of existing uses and the proximity to the urban area indicate that the northwest quadrant of the interchange should continue to grow and evolve as a rural business park. The southwest quadrant is designated Agricultural Resource Area.

Highway 416 at Roger Stevens Drive: The lands around this interchange are farmed, in keeping with the Agricultural Resource Area designation that applies in three quadrants. The still vacant Jordel Agri-Industrial Park, within the village of North Gower, reaches the interchange in the southwest quadrant. The lands around the interchange also face several environmental constraints, including significant woodlands and an extensive floodplain. Given this fact, the vacancy in the industrial park, and the distance to both the urban area (12 kilometres) and resource areas, the opportunities for Employment uses will be limited.

Highway 416 at Dilworth Road: Most parcels around the interchange are vacant but are designated General Rural Area, where certain Employment uses are permitted. However, given the distance to the Urban Area (over 20 kilometres) and the fact that much of the area is within a floodplain and contains significant wetlands, this area is generally not suitable for Employment uses.

Based on the above analysis, among all of the rural highway interchange areas, three are the most appropriate locations generally for rural Employment uses and have the greatest economic development potential: Highway 417 and Carp Road, Highway 417 and Boundary Road, and Highway 416 and Fallowfield Road. Each of these areas contains a cluster of existing industrial uses and land use designations that support such uses; they are not constrained by designated agricultural lands or significant environmental features; and they are relatively close to the urban area. Where lands at other rural interchanges are designated General Rural Area, significant employment growth will be challenged and less appropriate. These areas will be most appropriate for small-scale commercial or industrial uses that support agriculture or serve the traveling public, or, where these areas are farmed, agriculture might be the most appropriate use.

Servicing Analysis

The provision of full municipal water and wastewater services can be essential to harnessing new economic development opportunities. The above analysis of opportunities at rural highway interchanges, however, assumes future Employment uses near the interchanges will not require municipal services. One of the fundamental characteristics of the rural area is the lack of municipal services; low rural population and employment densities generally make them inefficient and cost-prohibitive. The Provincial Policy Statement states that full municipal services are the preferred form of services in settlement areas and requires services to be feasible and financially viable. In addition, the PPS generally does not permit partial services.

Policy 5 in Section 2.3.2 (Water and Wastewater Services) of the City's Official Plan states that the City may provide for the creation of new Public Services Areas (i.e., those areas with full municipal services) in the rural area where public services have been deemed to be the appropriate solution in the following circumstances:

- To support growth in Villages based on a boundary change or intensification of use and the recommendations contained in a Village community design plan;
- To remedy a public health or environmental problem in a privately serviced area;
- To support economic development in unique situations in the rural area, such as for the Carp Airport.

In each of the above circumstances, municipal services may only be provided where:

- The community design planning process has included a comprehensive servicing study which uses standardized criteria including costs and benefits to evaluate a range of servicing options and innovative technologies to deliver public water and/or wastewater services;
- The community design plan establishes a definition of a Public Service Area boundary and the terms of provision of service;
- The mechanisms for financing capital costs, operating costs and infrastructure replacement reserve costs are established to the satisfaction of City Council.

Notwithstanding the challenges of extending municipal services into the rural area, Policy 5 summarized above includes a provision that may allow such services to “support economic development in unique situations.” In light of the potential for such opportunities, a servicing analysis was undertaken for the three interchange areas with the greatest potential to accommodate additional Employment uses, as well as two other areas not constrained by agricultural or environmental lands—Highway 417 and Rockdale Road and Highway 416 and Barnsdale Road (Figure 13).

The area near Rockdale Road is located immediately north of an existing business park in the Township of Russell. The Town is serviced by water from the City of Ottawa, and is intending to extend both water and wastewater services to the business park. This may create an opportunity for a City-Township partnership to provide full municipal services to the north and south sides of the interchange to support the development of employment uses. With the intent of also including the

rural interchanges shown on Schedule G in OPA 150, the Barnsdale interchange was included as part of the servicing analysis. The lands around the interchange are partially designated General Rural Area and, except for a nearby sand and gravel pit, are vacant.

Extending services to any of the identified rural interchange areas would hinge on the benefits to the city of a distinct business activity that (a) requires interchange access for its regional share of employment or economic growth; (b) cannot locate or is inappropriate in the urban area; and (c) faces a constraint in terms of private services. The costs of extending municipal services were studied in order to provide a high-level estimate should these conditions be met. The study assessed the options of applying communal or central servicing to each area and provided a cost analysis of the alternatives. Prior to the approval of any uses requiring municipal services and the provision of such services, a detailed feasibility study by the proponent would be required.

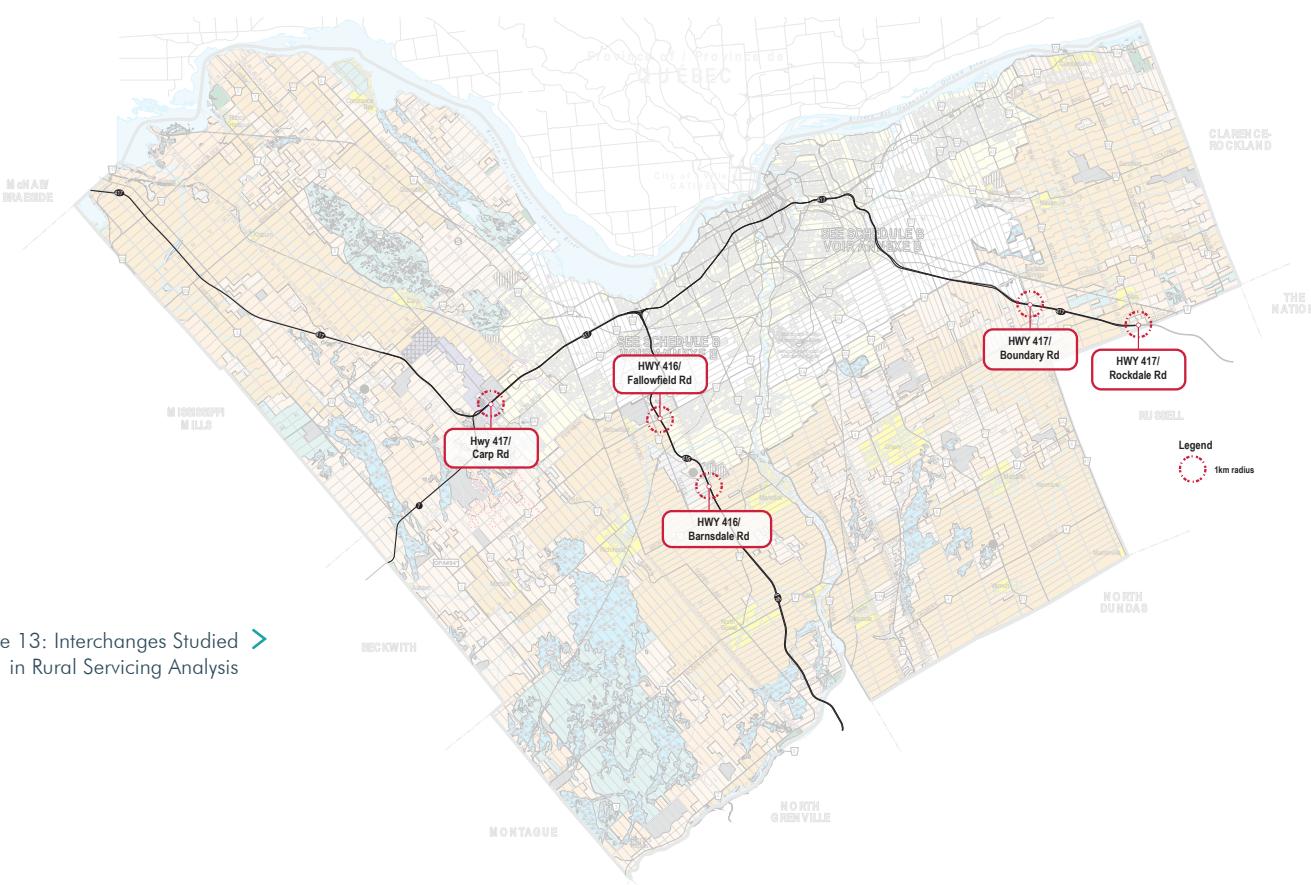


Figure 13: Interchanges Studied >
in Rural Servicing Analysis

The findings from the servicing analysis for each interchange area are summarized below, and the complete report is contained in Appendix B. Note, the high-level costs outlined below do not include an allowance for internal servicing (watermains and sanitary sewers along local roadways within the development areas); these costs, which can be significant, would depend on the distribution of development within each area and the corresponding road layouts. Operating and maintenance costs also have not been included and also may be significant; these would need to be considered in any further area-specific feasibility studies. Note, in all areas except Highway 416 and Fallowfield Road, a well system for water services would be the least costly alternative.

Highway 417/Carp Road: The potential capital costs for water servicing of these lands range from \$8.3M to \$52.8M and, for sanitary servicing, from \$31.1M to \$59.2M. The least costly central water servicing option would appear to involve constructing a single watermain from Campeau Drive with local storage for balancing, fire and emergencies, at a cost of \$21.5M capital cost or \$33,000/ha. The most cost-effective solution for wastewater would be a connection to central servicing at Castlefrank Drive and Lord Byng Way. This alternative would have a capital cost of \$31.1M, which is equivalent to \$47,000/ha.

Highway 417/Boundary Road: The potential capital costs for water servicing of these lands range from \$8.3M to \$102.0M and from \$28.3M to \$67.9M for sanitary servicing. Central water servicing for this area would be extremely costly (\$24.2M or \$105,000/ha) due to its remote location. A single 203mm feed from the Leitrim Pumping Station with local storage would be the least costly approach. Mechanical (CAS) treatment for sanitary services could be achieved at a cost of at \$28.3M (\$123,000/ha).

Highway 417/Rockdale: The potential capital costs for water servicing of these lands range from \$6.9M to \$120.9M and from \$20.3M to \$54.2M for sanitary servicing. Due to the area's remote location, central water servicing for this area would be extremely costly (\$29.8M or \$266,000/ha). A single 203mm feed from Zone 2E with local storage would be the least costly approach. Mechanical (SBR) treatment for sanitary services could be achieved at a cost of \$20.3M, which is equivalent to \$181,000/ha.

Highway 416/Fallowfield: The potential capital costs for water servicing of these lands range from \$1.8M to \$6.1M and from \$5.5M to \$10.6M for sanitary servicing. Central water servicing for this area could be provided by a looped watermain through the development lands from the existing watermain on Fallowfield Road, which could be constructed for approximately \$1.8M, or \$35,000/ha. The construction of the South Nepean Collector would provide an opportunity for this area to connect into existing wastewater infrastructure. This would be the most cost effective solution at a capital cost of \$5.5M, which is equivalent to \$108,000/ha.

Highway 416/Barnsdale: The potential capital costs for water servicing of these lands range from \$6.3M to \$7.9M and from \$1.6M to \$12.1M for sanitary servicing. Central water servicing for this area would be extremely costly (\$7.9M or \$123,000/ha). A looped watermain from the existing Barrhaven South area combined with local pumping to provide adequate pressures would be required. The proposed wastewater infrastructure from the South Barrhaven MSS is located near this development area and would provide an opportunity for connection into existing infrastructure. This alternative is estimated to have a total capital cost of \$1.6M, which is equivalent to \$25,000/ha.

Tables 3 and 4 further outline the servicing alternatives considered for each interchange area and their associated capital costs. Note, all costs include 75% contingency allowance and 45% allowance for engineering, property, utilities & City costs.

Table 3: Water System Cost Estimates

	Feedermain1		Feedermain2		Storage m3	Local PS L/min	Existing PS Upgrade L/min	Well System Treatment L/min	Total Cost (incl contingency)
	Length (m)	Diam (mm)	Length (m)	Diam (mm)					
Highway 417/Carp Road									
Single Feed (no storage)	6,500	610							\$ 24,493,219
Single Feed (local storage)	6,500	406			2,333	11,854			\$ 21,531,240
Looped (no storage)	6,500	610	7,500	610					\$ 52,754,625
Well System					2,333	11,854		1,854	\$ 13,626,318
Highway 417/Boundary Road									
Single Feed (no storage)	15,000	610					10,648		\$ 56,811,605
Single Feed (local storage)	15,000	203			1,792	10,648	648		\$ 24,174,163
Looped (no storage)	15,000	610	12,000	610			10,648		\$ 102,029,855
Well System					1,792	10,648		648	\$ 8,322,790
Highway 417/Rockdale Road									
Single Feed (no storage)	20,000	610							\$ 75,363,750
Single Feed (local storage)	20,000	203			1,642	10,318			\$ 29,807,443
Looped (no storage)	20,000	610	12,000	610			10,318		\$ 120,868,439
Well System					1,642	10,318		318	\$ 6,863,165
Highway 416/Fallowfield Road									
Single Feed (no storage)	n/a								\$ -
Single Feed (local storage)	n/a								\$ -
Looped (no storage)	1,500	305							\$ 1,807,969
Well System					1,565	10,144		144	\$ 6,094,839
Highway 416/Barnsdale Road									
Single Feed (no storage)	n/a								\$ -
Single Feed (local storage)	n/a								\$ -
Looped (no storage)	2,000	406				10,180			\$ 7,894,600
Well System					1,581	10,180		180	\$ 6,253,956

Note: 2016 Costs include 75% contingency allowance and 45% allowance for engineering, property, utilities & City costs

Table 4: Wastewater System Cost Estimates

Development Area	Central Servicing	Mechanical Communal Servicing	
		SBR	CAS
Hlghway 417/ Carp Road	\$31.1M	\$59.2M	\$54.6M
Highway 417/ Boundary Road	\$67.9M	\$28.8M	\$28.3M
Highway 417/ Rockdale Road	\$54.2M	\$20.3M	\$20.9M
Highway 416/ Fallowfield Road	\$5.5M	\$10.5M	\$10.6M
Highway 416/ Barnsdale Road	\$1.6M	\$12.1M	\$12.1M

Demand and Supply Analysis

As described earlier, the focus of the Employment Land Review is on designated Employment Areas, being the places reserved primarily for employment uses. The Provincial Policy Statement (PPS) defines Employment Areas as:

those areas designated in an official plan for clusters of business and economic activities including, but not limited to, manufacturing, warehousing, offices, and associated retail and ancillary facilities.

Other areas planned for employment growth, such as the downtown and mixed-use areas generally, are also considered in assessing opportunities for employment uses city-wide, for intensification opportunities and for their important role in supporting the City's broader long-term economic development and land use policy objectives. This section considers the city's outlook for employment growth and associated employment land demand and examines the land supply available to accommodate future employment growth in the city within the context of a land-use based employment outlook.

Employment Growth Outlook

As described earlier, the City is planning for significant job growth over the long-term. As part of OPA 76, Ottawa's forecasts of population, housing and employment growth were updated and extended from 2021 to a 2031 planning horizon; the Official Plan projections anticipate growth in total employment of 173,000 jobs city-wide over a 25-year horizon from 2006 to a total employment of 703,000 jobs at 2031.

Employment Forecast by Type

The employment forecast by type provides the basis for understanding the city's Employment Area land needs to accommodate forecast employment growth to 2031 and beyond. The demand for specific locations for employment types is determined through the distribution of total employment growth to land-use based employment categories. Since many economic sectors occur in a range of built forms and locations, sectoral forecasts are helpful for a general economic outlook but less so for land use planning. The land-use based method of classification of employment is a well-established industry standard approach since the

late 1980s. The method divides employment land use into 4 categories — major office, population-related, Employment Land employment and other rural-based employment. Each category is described below.

- Major office employment is defined as employment in free-standing office buildings of 20,000 sq.ft. or greater. Major office occurs at much higher densities than other employment types, therefore the supply of land is considered to be unlimited. Development can occur in virtually any location, whether it be in downtowns, centres or employment areas. As a result, the location of major office development is driven by market desires and is often challenging to influence through land-use planning. However, transportation infrastructure is a key characteristic of successful office areas.

The office market plays an important role in the Ottawa economy because it accommodates a very significant amount of employment, due in large part to the presence of the Federal Government. The high density employment provided by major offices allows for the development of mixed-use areas, including retail, commercial, and in some cases residential. Proportionally, the size of the office market in Ottawa is large, when compared to the more industrially-oriented centres in south central and western Ontario: at about 35% of Ottawa's employment, this is much higher than the 25% of employment in major office space in the Greater Toronto Area and Hamilton (GTAH) or the 17% of employment in Waterloo Region.

- Population-related employment is defined as employment which provides services to a resident population, primarily in commercial and institutional establishments. It also includes those who work from home. Most population-related employment occurs locally in response to resident population growth. Planning for this growth already occurs in the normal secondary planning and development planning process for the retail and institutional uses that occur in newly developing areas or mixed use environments. A portion of this category takes the form of higher order uses which tend to concentrate in the central city, such as downtown shopping and specialty retail, universities, specialised medical services, and other high order services. In the case of Ottawa, there is relatively high proportion of

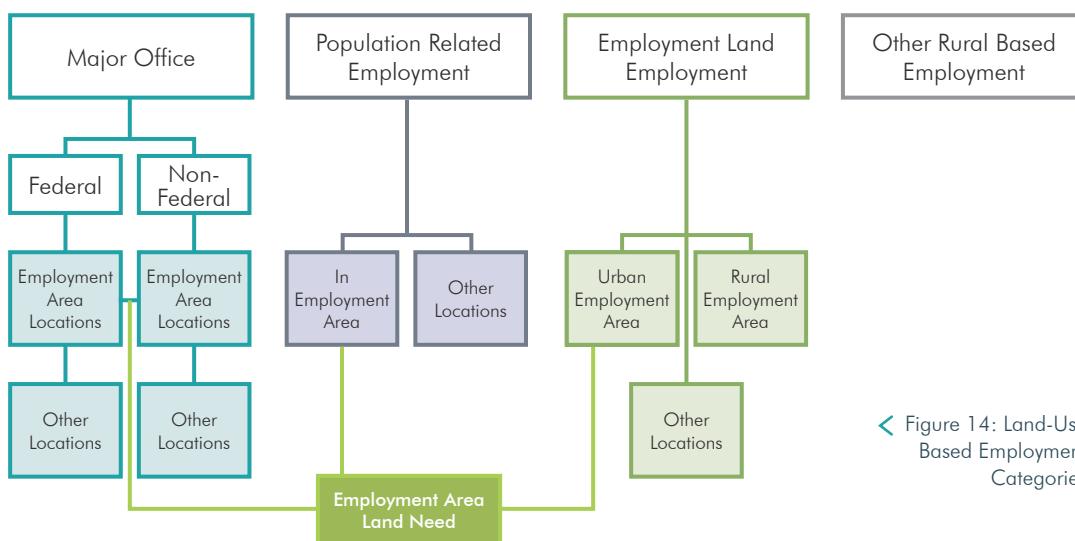


Figure 14: Land-Use Based Employment Categories

employment in this category as there are some central place functions provided for Eastern Ontario and Western Quebec. In addition, Ottawa has the unique characteristic of providing some of these types of uses to a national base through such institutions as the national museums and the National Arts Centre.

- Employment Land employment is the range of employment uses primarily in industrial-type buildings, typically concentrated in Employment Areas. Nearly all of the employment growth in this category occurs in new space in employment areas. The location of employment land employment growth is driven primarily by the availability of well-located greenfield employment land. Buildings in older, developed employment areas are almost always recycled and reused by the market, but these areas rarely accommodate significant additional net employment growth in the process. It is important to understand the geography of this category of employment. Within a given employment area, there will be substantial amount of employment land employment, but there may also be major office employment and retail or service employment, which may be considered population-related. It is, however, the accommodation of employment land employment that drives the need for land development as these uses are far more land extensive than denser office uses.
- Other Rural-based employment is employment scattered throughout the rural area that is generally related to primary industries and agriculture or other businesses such as small construction or trade contractors. In all of the rural areas of Ottawa about 30% of the employment is of this type; the other 70% of employment in the rural area is in rural Employment Areas or the rural villages. This also includes 10% which is recreationally-oriented, notably golf course employment.

City of Ottawa Land-Use Based Employment Categories

For the purposes of looking at future growth in a manner responsive to the unique local economy of Ottawa, major office employment is sub-divided into Federal and other major office employment, since the Federal Government is such a large employer and one with its own set of market attributes sought for new development and accommodating growth. The sub-categories are illustrated in Figure 14.

As illustrated, the forecast of land need for Employment Areas arises from an outlook for growth in each of the four employment categories. Within each of these categories consideration is given to the proportion of the employment that would be accommodated in urban Employment Areas (the focus of the Employment Land Review) versus other areas accommodating employment. In determining Ottawa's land needs, further sub-categories are required to reflect the City's unique economy, in particular the high number of federal office jobs.

The land-use based employment categories are the basis for the employment outlook within the overall forecast provided by the Official Plan. Using the Official Plan planning horizon of 2031, the portion of jobs in each category that would be accommodated in urban designated Employment Areas can then be allocated. The sum of these allocations provides the total employment to 2031 for the urban Employment Areas. Land demand to accommodate this growth in Employment Areas is estimated by applying employment densities to the Employment Areas.

Where is Ottawa's Employment Located Now?

In order to understand and forecast the location of Ottawa's future employment, we need to understand where it is today in the context of our land-use based categories. The analysis of Employment Land need is based on a variety of data sources, but is primarily founded on the City of Ottawa Employment Survey. The survey collects data for most establishments in the City and provides a job count, location and economic sector of the business. The survey data and its employment definitions are the basis for the city's Official Plan employment projections.

Recent Employment Surveys were completed in 2001, 2006 and 2012. The 2012 survey is the primary basis of this analysis, with the 2001 and 2006 surveys providing background and context.

Jobs by geographic area in the city is provided in Table 5. The shift in share of growth by location between the earlier and later periods is quite striking. However, the low share in Employment Areas in the 2001-06 period is largely the result of the decline in parts of the high-tech sector during that period. The strikingly high share of job growth in Employment Areas in the 2006-12 period is

partly the result of the large growth in federal jobs during the period accommodated in part by the government leasing large amounts of space within Employment Areas. Taking the whole 2001-12 period together Employment Areas accounted for 29% of growth and the other urban (including downtown) accounted for 60% of growth; a share relationship that is in keeping with expectations given the two areas relative shares of the total jobs in the city.

The Employment Survey plus a database of office space are the primary sources of information used to establish the land use based categories of employment. Economic sectors are provided according to the North American Industrial Classification System (known as NAICS codes).

The office data base provided by the City is a sound and complete listing of the privately owned office buildings of 20,000 sq.ft. (1,828 m²) or more. It is an incomplete listing of federally owned buildings, not purporting to capture all of the space particularly in the federal office campuses such at Tunney's Pasture or Confederation Heights. It does, however, appear to be complete for the federal buildings in employment areas which are key to the current analysis.

Table 5: Employment and Employment Growth by Geographic Area

	Urban Employment Areas	Other Urban (incl. Downtown and Airport)	Greenbelt	Rural Area (incl. Business Parks and Villages)	Total
Employment					
2001	113,900	351,100	6,900	18,100	490,000
2006	124,700	375,200	8,000	22,100	530,000
2012	138,600	402,400	8,200	25,800	575,000
Employment Growth					
2001-06	10,800	24,100	1,100	4,000	40,000
2006-12	13,900	27,200	200	3,700	45,000
Share of Employment Growth					
2001-06	27.0%	60.3%	2.8%	10.0%	100.0%
2006-12	30.9%	60.4%	0.4%	8.2%	100.0%

The approach to the employment categorization is as follows:

- In the urban Employment Areas, the jobs accommodated in both the federal and private office buildings is determined from aligning the employment survey and office database by address. This determines both the Federal and Other office jobs within the Employment Areas.
- The remaining employment in the employment areas is allocated to the other two categories essentially by sector, where the Retail and Accommodation and Food Services sectors along with a portion of Arts, Culture and Entertainment sector are attributed to population-related employment. This accounts for the retail and service built space that is often at the edges of the Employment Areas.
- The remaining jobs in the Employment Areas are accommodated in the industrial-type buildings which are dominated by manufacturing, warehousing, construction and scientific and technical companies along with a small amount from nearly every other sector. Even the Federal Government has some activities in these building types.

- A similar allocation process is followed for the Other Urban (including Downtown) where first the office is determined (from office space for the private and leased Federal space and just from the employment survey for the Federal offices not included in the office database).
- In the case of the Other Urban, once the major office employment is determined, the remainder is largely population-related employment. This category is dominated by retail, education, health and social services. There is a small amount of Employment Land employment in scattered locations throughout the City (e.g. the industrial-type uses on Catherine Street backing onto Highway 417 or the Royal Canadian Mint, which is a manufacturer).
- The allocation of the employment by category in the Greenbelt and the rural areas is done by economic sector, since there are no large office buildings and the other categories of employment tend to be more mixed geographically within the rural area.

Based on this analysis, the employment by land-use based employment category is shown in Table 6.

Table 6: Employment and Employment Growth by Land-Use Based Employment Category

	Major Office		Employment Land Employment	Population-Related Employment	Other Rural Employment	Total
	Federal	Other				
Employment						
2001	87,100	74,100	94,200	229,700	4,900	490,000
2006	97,800	79,300	97,000	249,700	6,200	530,000
2012	115,400	83,300	101,600	267,600	7,300	575,000
Employment Growth						
2001-06	10,700	5,200	2,800	20,000	1,300	40,000
2006-12	17,600	4,000	4,600	17,900	1,100	45,000
Share of Employment Growth						
2001-06	26.8%	13.0%	7.0%	50.0%	3.3%	100.0%
2006-12	39.1%	8.9%	10.2%	39.8%	2.4%	100.0%

Note: Other rural employment as a land-use based category is scattered rural employment including farms; rural business park and village employment is part of Employment Lands and Population related in this chart.

Location of Future Employment Growth

Working within the Official Plan employment projection at 2031 of 703,000, the job categories cannot be independently forecast while assuring this control total is reached. Recognizing this approach, the following are the basis, by category for the employment growth forecast:

- Federal jobs have grown rapidly in the recent historic period shown in the forecast. This is not expected to repeat over the forecast for two reasons. Firstly, Canada will be growing relatively slowly over the coming decades, which will ultimately affect government employment growth. Secondly government growth has its own cycles. The later part of the last decade is known to be a period of uncharacteristically high growth in the Federal public service. Since the 2012 survey, the Federal Government has been reducing overall employment, and the process not yet complete to date. As a result, the forecast is based on an annual growth rate from 2012 to 2031 of 1.1% for Federal office jobs. This is just slightly faster than the anticipated growth in the Canadian population of 1.0% over the period.
- Other office employment has grown more slowly over the historic period, suppressed by the retrenchment in high-tech in the early 2000s. Looking forward, however, the continued shift in the economy to the service sector and not repeating the earlier high-tech experience, major office is expected to grow at a faster rate than the job growth overall. The forecast is for a growth rate of 1.3%, a rate somewhat higher than the total job growth rate of 1.1%.
- Employment Land employment will grow somewhat more slowly than overall employment, a trend anticipated nearly everywhere in Ontario. This is, in part, the mirror of the rising service sector jobs discussed in the major office forecast above. The forecast at 0.7% is lower than the City-wide growth of 1.1%, but consistent with the growth in the 2001-12 period of 0.6% which included the high-tech industry restructuring.
- Population-related employment is typically treated as a ratio to population for the purposes of forecasting. There are currently 3.42 persons per population related job in Ottawa. This ratio is forecast to remain steady over the period to 2031. There are two key trends in this category which broadly compensate for each other. It is expected that there will continue to be increases in the education, health and social services sector, particularly in health as the population ages. At same time, it is becoming increasingly clear that traditional retail jobs are likely to decline in relationship to the population it serves; Target, Blacks and Future Shop being recent examples of job declines that are not likely to be fully replaced by others.
- Finally, the small Other Rural-Based employment category (which is only about one-quarter of the total employment in the rural area) is forecast to grow at the same rate as City-wide employment.

The resulting forecast with the growth rates discussed above is shown in Table 7. Table 8 provides the growth and share of growth by category as another way of stating the forecast outlook.

Table 7: Forecast Employment by Land-Use Based Employment Category

	Major Office		Employment Land Employment	Population-Related Employment	Other Rural Employment	Total
	Federal	Other				
Employment						
2001	87,100	74,100	94,200	229,700	4,900	490,000
2012	115,400	83,300	101,600	267,600	7,300	575,000
2031	141,700	106,900	117,000	328,500	8,900	703,000
Employment Growth Rate (Compound Annual)						
2001-12	2.6%	1.1%	0.7%	1.4%	3.6%	1.5%
2012-31	1.1%	1.3%	0.7%	1.1%	1.1%	1.1%

Note: Other rural employment as a land-use based category is scattered rural employment including farms; rural business park and village employment is part of Employment Lands and Population related in this chart.

Table 8: Forecast Employment by Land-Use Based Employment Category

	Major Office		Employment Land Employment	Population-Related Employment	Other Rural Employment	Total
	Federal	Other				
Employment Growth						
2001-12	28,300	9,100	7,400	37,900	2,300	85,000
2012-31	26,300	23,700	15,500	60,900	1,600	128,000
Share of Employment Growth						
2001-12	33.3%	10.7%	8.7%	44.6%	2.7%	100.0%
2012-31	20.5%	18.5%	12.1%	47.6%	1.3%	100.0%

Note: Other rural employment as a land-use based category is scattered rural employment including farms; rural business park and village employment is part of Employment Lands and Population related in this chart.

Using the employment outlook as a base, the employment likely to be accommodated in the urban Employment Areas can be estimated, as follows:

- A small decline in Federal office jobs are accounted for in the outlook for designated Employment Areas. This is based on the notion that as the Federal Government continues with development plans for its properties, such as Tunney's Pasture or Tremblay Road, it will absorb some of its existing leases in privately-owned office buildings. Likewise, the same effect will arise from the Federal Government's "Workplace 2.0" initiative to reduce average space per worker.
- Other major office is forecast to have 25% of growth accommodated in Employment Areas, consistent with the existing base of development and recent trends.

- 85% of Employment Land jobs growth is attributed to urban Employment Areas, with the remaining amount in the rural area and other scattered urban area locations.
- 6.6% of population related jobs are allocated to Employment Areas consistent with the current share. The role of the Employment Areas in accommodating these types of jobs are not expected to change significantly one way or the other over the forecast period.
- Finally, the Other Rural category is by definition, not accommodated in urban Employment Areas.

Table 9 provides these assumptions in tabular form and provides the forecast employment growth for the Employment Areas.

Table 9: Estimated Urban Employment Area Forecast Employment Growth

	Major Office		Employment Land Employment	Population-Related Employment	Other Rural Employment	Total
	Federal	Other				
2012-2031 Growth	26,300	23,700	15,500	60,900	1,600	128,00
Share in Urban Employment Areas	25.0%	25.0%	85.0%	6.6%	0.0%	23.2%
Growth in Urban Employment Areas	6,600	5,900	13,200	4,000	0	29,700

How Much of the Employment in Urban Employment Areas Will Be Accommodated in New Space?

Not all of the employment growth in Employment Areas will generate the need for new space. In the case of the office market, the space that might be vacated by the Federal Government could be used to absorb growth in the other Major Office sectors. In addition, there is some existing vacant and under-utilized office space in the Employment Areas which are likely to accommodate growth. As a result, it is assumed that 70% of the growth in other major office employment will be in new space and the remaining 30% will be accommodated within existing space.

All of the Employment Land employment growth is assumed to be in new space. This may be a conservative assumption in that most of the existing base industrial-type buildings tend to be stable to declining in employment as the buildings age.

Finally, a small 10% portion of population-related jobs are assumed to be accommodated in existing space, but 90% generating new space.

These assumptions and results are shown in Table 10.

Table 10: Urban Employment Area Growth to be Accommodated in New Space

	Major Office		Employment Land Employment	Population-Related Employment	Other Rural Employment	Total
	Federal	Other				
2012-2031 Growth in Urban Employment Areas	6,600	5,900	13,200	4,000	0	29,700
Share of Growth in New Space	0.0%	70.0%	100.0%	90.0%	0.0%	70.4%
Employment Growth in New Space	0	4,100	13,200	3,600	0	20,900

Note: The 0.0% Federal Major Office is based on an assumption some existing leased space will be vacated and there will be a future 8,500 National Defence Employees in the former Nortel Campus.

Land Need: How Much Employment Land Is Required to Accommodate the Forecast Growth?

Employment growth is translated into land demand by way of applying an employment density to the employment growth in new space. Table 11 estimates the current employment densities for the urban Employment Areas. The major office and population-related employment densities are estimates based on standard measures and observation of some typical existing densities in Ottawa. The densities have been vetted and refined in consultation with City staff. The residual for the calculation of the Employment Land employment density is the key statistic to be drawn from this table. At 39.2 employees per net ha, this figure is comparable to other urban communities in Ontario. At the high end of the range, for example, the comparable figure in York Region is 46 employees per net ha. At the lower end for major urban communities are those whose Employment Areas include significant space devoted to the distribution and logistics sector which is highly-automated with a very low employment density. Brampton, for example has a City-wide Employment Land employment density of about 33 employees per net ha.

With the Employment Land density of 39.2 determined for the existing base, a range for the forecast has been applied of 35 to 40 employees per net ha. The midpoint of the forecast density range is lower than the current city-wide average (i.e. current 39.2 compared to 37.5 as the midpoint of the 35 to 40 range) to recognize a shift to greater automation and the expectation that there will be some (though not a large amount) of the low density distribution and logistics uses. Office and population-related employment job densities are based on a typical range for new buildings, which is somewhat higher than the average for the standing stock. Table 12 provides the resulting Employment Area land demand to accommodate forecast urban Employment Area job growth to 2031 in a range from 398 to 470 ha.

This is a forecast of the developed land demand for the period to 2031; it is not a final planning-based conclusion on long-term land need. The next section describes the land supply available Ottawa. This is followed by a section which compares the demand and supply, but also accounts for a longer time period and other key factors in planning such as long-term vacancy and land use changes.

Table 11: Estimated Current Densities in Urban Employment Areas

	Employees	Density	Occupied (net ha)
Major Office	43,100	125.0	340.0
Population-Related	17,700	60.0	300.0
Employment Land	77,800	39.2	1,980.0
Total	138,600	52.8	2,620.0

Table 12: Urban Employment Area Forecast Land Demand to 2031

	Major Office	Employment Land Employment	Population-Related Employment	Total
Employment Growth in New Space	4,100	13,200	3,600	20,900
Low End of Density Range`				
Density (employees per ha)	125	35	60	44
Net Land Need (ha)	33	377	60	470
High End of Density Range				
Density (employees per ha)	175	40	80	52
Net Land Need (ha)	23	330	45	398

Land Supply

Amount and Distribution of Vacant Supply

The City keeps a detailed inventory of its vacant Employment Land supply, and has just updated the published 2012-13 Inventory of Vacant Industrial and Business Park Lands (VILS) to a 2015 base. The inventory identifies the Employment Land supply across the 39 Urban and 14 Rural industrial or business parks, which comprise the City's Employment Area land supply. A detailed profile of these Employment Areas was prepared based on GIS provided by the City, the VILS and data from the City's 2012 Employment Survey. A site by site review was undertaken in order to verify the land supply as well as to identify any recent changes to vacant and non-vacant land areas since the 2013 VILS was prepared. This was reviewed with City staff and updated based on input received, in particular as related to recent changes in designated land use.

As shown in Table 13, the review has determined a vacant supply of roughly 1,758 net ha of Employment Land, across the City's urban and rural Employment Areas. As shown in the table, most of the supply – 994 net ha representing 57% of Ottawa's vacant Employment Lands – is within the City's urban area.

Supply for Intensification

While there may be some opportunity for redevelopment in Employment Areas, it is not anticipated that intensification will play a large role in meeting forecast Employment Area demand; at least not to the extent that this may be expected in other central and mixed use areas of the City for residential or commercial uses. While Infill and intensification of the building stock do occur over time in Employment Areas as additions are constructed and, rarely, site redevelopment for a new employment use, however this infill and intensification rarely, if ever, result in growth in the total jobs in an Employment Area, since most Employment Lands experience stable to declining employment as they age. A trend toward increasing vacancy rates of office buildings is also common over the longer term, for both smaller and major office buildings. Overall, at best infill and intensification operate to keep the level of employment in an Employment Area stable, but it cannot be relied on to accommodate significant job growth. This is different than residential intensification or employment in other parts of the City but is the observation for designated employment areas.

**Table 13: Employment Land Supply
City of Ottawa Employment Areas, 2015**

Geography	Developed Land (ha)		Net Vacant (ha)	Total Net Supply ³ (ha)
	Built Parcel ¹	Expansion Land/ Vacant Building ²		
Urban Area	2,624	73	994	3,668
Rural Area	1,043	245	764	2,053
City-wide	3,667	319	1,758	5,720

Source: Hemson Consulting Ltd. based on information provided by the City of Ottawa.

Note: All figures above are rounded.

¹ Parcels that contain a physical structure and are occupied.

² Parcels that contain a structure which is unoccupied.

³ Total net supply is the sum of the above. This does not include any parcels that are undevelopable were included in the Non-Vacant part of the City of Ottawa's Vacant Industrial Study, 2013

Capacity to Accommodate Employment Growth

The analysis considers the City's long term employment land needs to a 2031, 2036 and 2041 horizon. The demand for lands for new development to 2031 was determined to be in the range of 570 to 640 net ha from a 2013 base which results in an overall potential surplus of between 306 and 376 net ha at a 2031 planning horizon, as shown in Table 12 below. The 2014 PPS enables municipalities to plan beyond a 20-year horizon for the long-term protection of Employment Land. Consistent with this policy direction, the analysis also considers the City's needs over the longer-term to 2036 and 2041.

In considering the City's needs to 2031 and longer term, two key factors have been added to the long-term land supply planning. A factor for long-term vacancy has been added at a 5% of the base. This factor accounts for the observed existence of long term land vacancy where parcels do not come to market for a very long time, if ever. These are often parcels with unusual configuration or limited access. They may also be parcels that an owner simply decides not to sell or not sell except at a very high price. Finally, some owners also hold parcels in the hopes of conversion to an alternative use. 5% is a common assumption for this and is consistent with other Employment Land related work undertaken by the City.

Over the longer-term there will also be changes in use in the existing developed base of land or parcels which are highly under-utilized. Over a long time frame some conversion or alternative use of existing developed lands are bound to occur, whatever the policy environment. This is distinct from the conversion of undeveloped vacant lands. In addition, there may also be long-term under-utilization. While most industrial buildings that are vacated are re-occupied by another use, some buildings will stay unused or under-used for a very long time. This might include specialized buildings that are not amenable for re-use and sites that end up being used for truck storage or some other use with few or no on-site employees. A 3% structural vacancy of the existing occupied land is used as the assumption for this factor.

The development time frame has been extended by an additional ten years to estimate need to 2036 and 2041. The ten years beyond 2031 is based on a continued land demand at the same annual rate as is being forecast for the period to 2031. At some future date, the City will update its Official Plan and prepare full demographic-based forecasts for that work. For the current purpose of thinking about urban employment areas beyond 2031, this land-based outlook is sufficient.

Incorporating the assumptions above, the following tables indicate the results of the employment land need analysis to 2031, 2036 and 2041 horizons respectively.

Table 14: Land Need Analysis for Long-Term Planning Purposes to 2031

	Lower Density (net ha)	Higher Density (net ha)
Developed Land 2013	2,624	2,624
Estimated New Development to 2031	470	398
Developed Land 2031	3,094	3,022
Factor for Long-Term Vacancy (5% of total occupied and vacant)	163	159
Change in Use and Under-Utilization in Existing Base (3% of 2012 occupied land)	79	79
Estimated Total Planning Land Need to 2031	3,336	3,260
Net Needed	710	640
Current Supply	994	994
Difference	284	354

Table 15: Land Need Analysis for Long-Term Planning Purposes to 2036

	Lower Density (net ha)	Higher Density (net ha)
Developed Land 2013	2,624	2,624
Estimated New Development to 2031	470	398
Developed Land 2031	3,094	3,022
Estimated Additional Absorption to 2036	125	105
Development Extended to 2036	3,219	3,127
Factor for Long-Term Vacancy (3% of total occupied and vacant)	99	97
Change in Use and Under-Utilization in Existing Base (3% of 2012 occupied land)	79	79
Estimated Total Planning Land Need to 2036	3,397	3,303
Net Needed	770	680
Current Supply	994	994
Difference	224	314

Table 16: Land Need Analysis for Long-Term Planning Purposes to 2041

	Lower Density (net ha)	Higher Density (net ha)
Developed Land 2013	2,624	2,624
Estimated New Development to 2031	470	398
Developed Land 2031	3,094	3,022
Estimated Additional Absorption to 2041	250	210
Development Extended to 2041	3,340	3,230
Factor for Long-Term Vacancy (5% of total occupied and vacant)	176	170
Change in Use and Under-Utilization in Existing Base (3% of 2012 occupied land)	79	79
Estimated Total Planning Land Need to 2041	3,595	3,479
Net Needed	980	860
Current Supply	994	994
Difference	14	134

Potential Surplus

The city appears to have more than sufficient overall urban Employment Area supply in numeric terms at the 2031, 2036 and 2041 planning horizons. A reasonable total supply that the City should have to meet its 2031 Official Plan horizon would amount to between 3,260 and 3,336 ha; to a 2036 horizon, the total land need identified is in the range of 3,299 and 3,393 ha. This would require a range of 680 to 770 ha from the vacant supply. Deducting the vacant supply leaves a potential surplus of between 224 and 314 ha in the city at a 20-year planning horizon to 2036. Given the surplus identified, some conversions of land to alternative uses have been considered through the Employment Land Review, as appropriate to meet the City's objectives for urban development.

Rural Area

The focus of the Employment Land needs analysis is primarily on Ottawa's urban area as this is where most future growth will occur. More limited growth will occur in the rural area, marginal in relation to an expansive rural Employment Land supply. As this rural supply is outside of the designated urban area and is privately serviced, it would run counter to the PPS as well as the City's growth management objectives to direct any significant amount of future growth to the rural area through policy. Given a vacant designated Employment Land supply of more than 750 net hectares in the rural area, it is highly unlikely that supply will ever constrain demand within a foreseeable future. To the extent to which growth does occur in the rural area, particularly of urban economic uses locating outside of the urban area, demand for urban Employment Lands would be diminished however, this is not anticipated or recommended to alter the conclusions of the supply demand analysis as relates to the city's urban Employment Areas.

There are other specific policy issues associated with the rural Employment Land supply that will be addressed in other parts of the report. In particular, the study is recommending recognition of existing zoning permissions and built uses through the formal designation of selected Rural Employment Areas in the Official Plan. This will not add or alter the amount of overall Employment Land supply for the City, but rather is acknowledging what is already on the ground and permitted in other City policy documents.

Market Characteristics of Urban Employment Land Supply

Location, Accessibility and Servicing of the Urban Land Supply

The key characteristics of the 39 urban industrial areas and business parks in Ottawa are provided in the Employment Area profiles in Appendix A to the report. The key general attributes of Employment Lands are their location, accessibility to highways and servicing. As this section is only addressing urban Employment Lands, so all of these lands are serviced or planned for servicing. It is understood that there are no specific long-term servicing constraints to any of these areas. The key characteristics of the areas in terms of the location and accessibility can best be described by grouping them by general geographic area:

- Employment Areas inside the greenbelt are just under half of all of the urban Employment Area in the city, but well over half (57%) of the occupied lands in the city. The lands inside the greenbelt are mostly developed with only 7% of the area still remaining vacant. About half of the vacant lands are in Hawthorne-Stevenage with good access to Highway 417 and should be attractive to the market for development in the near term. The remaining vacant lands inside the greenbelt are single parcels in scattered locations among the Employment Areas. Many of these scattered remaining parcels will be within the long-term vacancy where new development is uncertain due to access, configuration or ownership.
- Outside of the Greenbelt to the west (Kanata, Stittsville and Bells Corners) is the next largest grouping of industrial areas and business parks with about 25% of the city's occupied land and a similar 24% of the vacant supply. All areas are either on Highway 417 or have very good access to Highway 417. The primary occupants of most of these areas are office or high technology oriented, with little general industrial use. The remaining vacant lands in these areas will continue to be attractive locations for growth occurring in the high technology sectors. Despite the highway access, these are not likely to be as attractive for warehousing and general industrial uses involving goods movement. These uses favour eastern Ottawa locations, where available and may not be suitable or compatible (or even permitted) in the high technology oriented business parks of Kanata.
- Outside of the Greenbelt to the east are several smaller Employment Areas (Youville, Cardinal Creek, Taylor Creek and Ottawa River) all of which are largely developed, but have remaining vacant parcels that will be attractive to the local market in the east. These parks have good highway access to central Ottawa via Highway 174, but have poor access to Highway 417 east. The bulk of the urban Employment Lands east of the Greenbelt are in South Orleans, about two-thirds of which are vacant. These vacant lands form about 10% of the City's vacant supply. Accessibility is the primary concern with these lands from a market perspective as the location has neither good access to Highway 174 nor Highway 417. The most likely market for these lands is the smaller more locally-oriented business requiring industrial-type space, much like the existing development in Youville and the areas to the east on Highway 174. The market question here is not so much that there is no demand for lands in the east due to accessibility, but rather that there is unlikely to be sufficient demand to require the large existing vacant supply.
- Outside of the Greenbelt to the southwest is the Highway 416 Business Park, well located on Highway 416 at the Fallowfield Road interchange. The area is just beginning development now, so is largely vacant with over 100 net ha of vacant land, over 11% of the city's supply. The area is currently planned for high technology and office oriented uses. Despite its excellent highway access, the current planning permissions for the area do not permit most warehouse and industrial uses that rely on goods movement, so this area cannot play a major role in meeting the anticipated demand for lands for those uses.
- The remaining Employment Areas outside of the Greenbelt are to the south of central Ottawa in the general vicinity of the Airport. These include Merivale South and Riverside South southwest of the airport, the Airport Authority's own lands, mostly around the north end of the airport site and the Albion-Leitrim area, just southeast of the Airport. Collectively, these areas are currently about 12% of the occupied Employment Lands in the City but are 44% of the vacant supply. As a result, much of the

future employment growth occurring in the industrial areas and business parks in the city will be in the vicinity of the Airport. One on hand, all of these areas have the attractive feature of easy access to the airport. On the other hand, the highway access for goods movement purposes is much more constrained. Highway 417 eastwards is directly accessible, but at a distance, via Hunt Club Road or Leitrim Road. Highway 416 is also accessible, but also at a distance, via Hunt Club, Fallowfield or Strandherd Roads. These lands will be attractive for a range of industrial and business park uses, given the airport location and may be attractive to some uses requiring goods movement. For those uses relying on significant volumes of goods movement all of these areas are farther from the highways than would typically be considered as an ideal location.

Relationship of Urban Supply to Demand

If the supply were available, continued strong demand for Employment Land inside the Greenbelt, especially in the eastern areas with good Highway 417 access, would be anticipated. Once available, the National Capital Commission lands near Hunt Club and Highway 417 would be expected to be absorbed quickly. These can only meet a very small portion of long-term demand.

Out of the necessity of a simple lack of supply, the land demand will need to shift to areas outside the Greenbelt over the longer term. As the most desirable locations build-out, demand will push outward. This means that over the long term, demand will need to be met in places where there is currently little demonstrated demand; areas to the south and east of the Greenbelt.

Notwithstanding that many employers would like highway access, only a small portion of the Employment Land demand (likely about one-third) definitely requires good highway access. This would be suitable for the NCC lands, the Highway 416 Business Park and Kanata West if the use permissions are widened. Among these uses would be distribution centres and manufacturers, though neither of these are large sectors in Ottawa. With current use permissions there are few urban

locations within the City that can meet the highway-oriented development needs.

The remaining demand is for more locally-oriented businesses that occupy industrial-type buildings. While many of these businesses would prefer highway locations, good arterial road access is often acceptable, as can be seen today in many of the existing employment areas in the City.

South Merivale, Riverside South and the lands around the airport and Orléans will be capable of meeting some of this demand in the longer term. The issue is more about when than if development will occur. While developer timelines tend to be relatively short-term by nature and land use planning operates within fixed planning time horizons the timing of demand for employment land development is often much longer term than either land owners or planning policy would desire.

Summary of Challenges and Opportunities

The review of Ottawa's existing Employment Lands, in the context of the Official Plan and employment growth projections, reveals a number of challenges and opportunities, as described below. These provide a basis for the recommendations contained in Part 2 of this report.

Recognizing and planning the city as one community from an employment perspective

Although Ottawa is comprised of distinct communities inside and outside the Greenbelt, none of them function independently from the others. Just as the city's major infrastructure is planned holistically, its major employment nodes also need to be considered through a "one-city" lens. Each community should be designed to be as complete as possible, i.e., offer a range of housing choices, commercial and public amenities, and employment opportunities. However, most households have multiple job holders and changing jobs is more frequent for many, and in our mobile society, people make housing choices based on many factors, job location being just one of them. In addition, while retail and service establishments might draw most of their employees from the local population, major employers generally will draw their workforces from across the city and therefore will prefer central locations or other locations with good access from many parts of the city. These trends suggest that the concept of balancing jobs and housing within each community is unlikely to have the desired impact on commuting distances and may result in designated Employment Lands in some outer communities remaining vacant long beyond the planning horizon.

The Official Plan policy requiring that communities outside the Greenbelt be planned to accommodate 1.3 jobs per household has informed land use designations but has not to date resulted in a balancing of jobs and housing in each community. In Kanata, which in 2012 had 1.3 jobs per household, the clustering of high-tech employers fueled population growth, but even if there continues to be job growth in the community, it is not expected to keep pace with planned residential growth, so the balance will be hard to maintain. Similarly, Leitrim has a high jobs-to-household ratio owing to historical circumstances but will not be able to maintain it given the amount of residential growth planned in the community. For Barrhaven, Riverside South and Orleans to achieve the 1.3 target,

most of Ottawa's future job growth would need to occur in these communities. Yet, much of the city's future jobs are targeted to Mixed-Use Centres inside the Greenbelt.

A "one-city" approach to planning for employment would target most future jobs to areas with good access by transit and highways, while maintaining a supply of vacant Employment Lands in each suburban community for businesses whose customers and suppliers are more locally based.

Aligning the distribution of office employment with the City's planned transportation network

Ottawa's job growth will continue to be primarily office based, which suggests that jobs will continue to be distributed across the city in areas suitable for office development, including the Central Area, Mixed-Use Centres, Arterial and Traditional Mainstreets, the General Urban Area and Employment Areas. Some new major office tenants may choose to locate in suburban business parks with good highway access, while others will seek more central, urban locations, where access by public transit is convenient. The Federal Government is expected to reinforce its major office clusters inside the Greenbelt and establish a new one at Tremblay Road and St. Laurent Boulevard. Since there is ample vacant Employment Land for the growth of suburban office parks and flexible policies supporting them, no incentives are needed to encourage this type of development. On the other hand, promoting infill office development in Mixed Use Centres within the Greenbelt, where transit usage will always be highest, will be more challenging and in some locations may require policy and/or financial incentives from the City.

Reconsidering Enterprise Areas

The City's goal of integrating higher-density employment and residential uses in Enterprise Areas is not being achieved as envisaged. The policies for Enterprise Areas have opened the door to townhouse developments in isolated pockets of the Kanata North and Kanata South business parks, but these developments have not been coordinated with or linked to Employment development. Effectively, the policies divide an Enterprise Area into two equally sized land use areas, one for Employment and one for

residential uses, but without indicating where the lines between the two should be drawn. This has led to confusion among landowners about whether the 50/50 split applies to individual properties or the area as a whole. Eliminating the Enterprise Area designation and replacing it with designations that draw the lines, or with policies that explain how the lines will be drawn, will prevent confusion and ensure the properties most suitable for Employment uses are protected.

Protecting vacant employment areas with good highway access

Industrial districts have always relied on convenient access to major transportation infrastructure, be it ports, railways, highways or a combination of these. As Ottawa's economy has evolved, highway access has become more critical for both industrial areas and office parks. Increasingly, businesses in the former rely on goods movement by truck, while employers in the latter may draw their staff from across the region (when the city was mostly contained within the Greenbelt, commuting distances were shorter and highways were less vital for moving people).

Since the supply of vacant Employment Land within the Greenbelt is limited, and most available parcels are constrained by their size, shape or accessibility, there is a need to maintain vacant Employment Lands outside the Greenbelt, particularly for industrial businesses and employers requiring large sites. The most attractive and suitable Employment Lands likely will be those adjacent to highway interchanges, namely the planned Kanata West and 416 business parks, which should be protected. On the other hand, designated Employment Areas in Riverside South, Leitrim and Orléans will be less attractive and may remain so even as the communities around them continue to develop. Since there is an excess supply of vacant Employment Land to meet the projected need city-wide to 2036 (and possibly to 2041), and given their access challenges, it is not vital to protect these areas for employment. Indeed, there are opportunities in Riverside South, Leitrim and Orleans to re-designate portions of Employment Areas to achieve other planning objectives.

Reinforcing existing rural business parks as the preferred location for rural industrial uses

Since many Employment uses prefer locations with easy access, some may seek to locate near one of the highway interchanges in Ottawa's rural area. However, providing full municipal services to these areas would be cost-prohibitive and counter to growth policies in the Provincial Policy Statement and Ottawa Official Plan, so there is a limited range of potential uses. For those uses that do not require full or partial municipal services, there are currently several established rural business parks, some within Villages and others in General Rural Areas, with capacity for growth. The latter include the Carp Road Corridor Employment Area, the Moodie Drive Industrial Area at Highway 416 and Fallowfield, the South Gloucester Industrial Area at Hawthorne Road and Rideau Road, and the IndCum Industrial Area at Highway 417 and Boundary Road, only one of which is a currently designated Employment Area. Applying a Rural Employment Area designation to the other three would acknowledge the current uses and highlight the areas as destinations for new rural industrial uses.

Clarifying the policies related to employment uses in General Rural Areas

Under the Official Plan, a wide range of land uses may be permitted in Ottawa's General Rural Areas, through rezonings, subject to a number of criteria being satisfied. Although more land use flexibility is appropriate in General Rural Areas versus other rural designations, the current policies do not reflect a holistic planning approach and create uncertainty for landowners. The result over time could be a dispersed and seemingly random pattern of Employment uses in the rural area that is inefficient in terms of transportation and diminishes the qualities of the rural environment for rural living, recreation and conservation. The designation of additional rural Employment Areas will reinforce these areas as the most suitable locations for large-scale or noxious industrial and storage uses. In addition, refinements to the General Rural Area policies to further restrict uses not directly related to the primary uses intended for the rural area (agriculture, forestry and conservation, and resource extraction) would reinforce the primary uses while directing most other uses to Villages, Rural Employment Areas or the Urban Area. As per the Official Plan, Villages are intended to function as service centres for surrounding rural areas, accommodating commercial, tourism, and smaller-scale industrial uses.

PART II: RECOMMENDATIONS

Building on the analysis and results presented in part one, this section provides land use designations and policy recommendations aimed at supporting the City's growth management, land use planning and economic development objectives.

Proposed Official Plan Amendments - Urban

This section evaluates the Employment Lands that are considered for re-designation with the intent of supporting effective development patterns while retaining a healthy supply of Employment Land in Ottawa.

Conversion Criteria

Planning in Ottawa is guided by the Provincial policy framework for growth management and land use planning, notably the PPS. The Employment Land Review is undertaken within this context. Decisions made around changes to designated land uses, in particular for Employment Lands, must be consistent with the PPS direction for assessing proposed changes to employment areas. Section 1.3.2.2 states that:

Planning authorities may permit conversion of lands within employment areas to non-employment uses through a comprehensive review, only where it has been demonstrated that the land is not required for employment purposes over the long term and that there is a need for the conversion.

While generally, the test of "need for the conversion" is firstly a quantitative exercise based on a municipality's overall land budget and the associated quantum of land need or shortage for employment and non-employment uses, there may be a range of more qualitative rationales for need which also represent good planning.

The City of Ottawa Official Plan expands on the PPS test, with a fulsome set of criteria to be considered when contemplating employment land conversions.

City of Ottawa Official Plan

The City's stated intent is to plan for, protect and preserve lands for current and future employment uses and (to) discourage the removal of employment lands for other purposes (s.2.2.2{24}). Through OPA 150, the City has updated the matters to be considered in assessing conversions of employment lands to other uses. While still under appeal, the updated policy direction indicates the City's intent for ensuring the supply of employment lands is not undermined by conversions.

A comprehensive review to assess requests to convert employment lands to other purposes will consider such matters as:

- a. Whether the employment lands being proposed for conversion are unsuited for employment purposes and whether there are practical means to make them suitable;
- b. Whether the lands are suitable for the uses being proposed and whether there is a need for those uses;
- c. The current supply of developable land within the urban boundary, its distribution within the city, and its potential to be developed for housing, employment, and other purposes;
- d. The distribution of employment land throughout the city, including the desire of the City to create complete communities by balancing job and housing opportunities in all urban communities outside the Central Area.
- e. The ability to provide sufficient opportunities for the clustering of areas of like employment;
- f. The sufficiency of the supply of optimum-sized employment land parcels for the range of employment uses anticipated by this Plan;

- g. The preservation of employment lands in areas proximate to 400 series highway interchanges or with accessibility to rail and airports, is intended to maintain opportunities that recognize the potential for the development of transport and freight handling uses;
- h. The preservation of employment lands proximate to essential linkages, such as supply chains, service providers, markets, necessary labour pools, etc.;
- i. The preservation of a diversity of employment lands for a variety of employment uses (e.g. light and heavy industrial, business park, research campus, etc.);
- j. The demand that proposed non-employment use(s) will create for additional municipal amenities and services in addition to those required by employment uses and the cost of providing same, including any mitigation deemed necessary to address any negative effects on employment uses in matters such as those listed in 'k' below;
- k. Whether the proposed use(s) would enhance or detract from the viability of any remaining employment lands or existing employment uses with regard to matters such as:
 - i. Incompatibility of land use,
 - ii. The ability to provide appropriate buffering of employment uses from surrounding non-employment uses on and off-site,
 - iii. Affordability (e.g. land and lease costs) for employment purposes,
 - iv. Market acceptance/competitiveness (attractiveness of the employment lands in the marketplace for continued development for employment uses),
 - v. Removal of key locations for employment uses,
 - vi. Reduction or elimination of visibility of employment lands or uses,
 - vi. Reduction in optimum size (of either individual employment land parcels or the overall Employment Area),
 - vii. Interference with the function of the employment lands (e.g. restricting operating hours or delivery times or affecting the capacity of the transportation network due to characteristics of

- the employment uses such as noise or emissions or heavy equipment operation),
- viii. Accessibility to the employment lands,
- ix. Ability to provide for a variety of employment options, parcels, and
- x. Maintenance of the identity of the employment uses or area. (s.2.2.33)

The updated policy from OPA 150 revises the matters to be considered in assessing proposed conversions; however, both the original and revised criteria are extensive, supporting the notion of a protectionist approach to Employment Lands planning in the City. This approach is consistent with Provincial policy which recognizes significant pressure in most large urban centres in Ontario to convert Employment Lands for commercial or residential uses; and acknowledges the deleterious effect that a less stringent approach to protecting Employment Lands can have on the long-term economic development potential of a municipality. The policy framework allows the City to carefully examine proposed designation changes which would bring lands out of an employment designation and to be strategic in its planning for employment and other land uses.

The assessment of proposed changes to Enterprise Area designations is somewhat distinct from Employment Area conversions. The City's official plan excludes applications to permit residential uses in Enterprise Areas from the criteria listed in s.2.2.33 above. (s.2.34). Since residential uses may be permitted within Enterprise Areas, they do not fit as explicitly within the meaning of employment area under the PPS. When considering potential changes in designated land uses as part of the Employment Land Review, the presence of residential use permissions through an Enterprise Area designation provides an additional criterion in assessing whether or not the proposed change constitutes – and is subject to the tests for – a conversion of employment area lands under the PPS.

Proposed Land Use Designation Changes

The Employment Land Review has identified a number of areas where a change in land use designation is appropriate and defensible within the context of the PPS and criteria to be considered through the City's Official Plan (Figure 15). The recommended changes will help to rationalize the land supply to support effective development patterns and broader planning objectives. The proposed changes would eliminate the Enterprise Area designation; acknowledge existing approvals which have effectively already altered permissions out of employment use; provide for rational land use patterns; and support the City's vision for communities under CDP processes.

- Where Enterprise Area designations are rescinded, the recommendations either:
 - divide the remaining vacant Enterprise Area lands for employment and other uses;
 - or retain the land use permissions under the former designation through a new policy.
- In both cases, significant areas for employment uses are maintained.
- Given that the supply demand analysis undertaken as part of the Employment Land Review identified a surplus of lands needed to accommodate the 2031 employment forecast, the City can convert some lands from an Employment Area designation, meeting the first test of the PPS wherein the lands are not needed to meet the employment forecast. As such, a number of changes to Employment Area designated lands are proposed, taking into

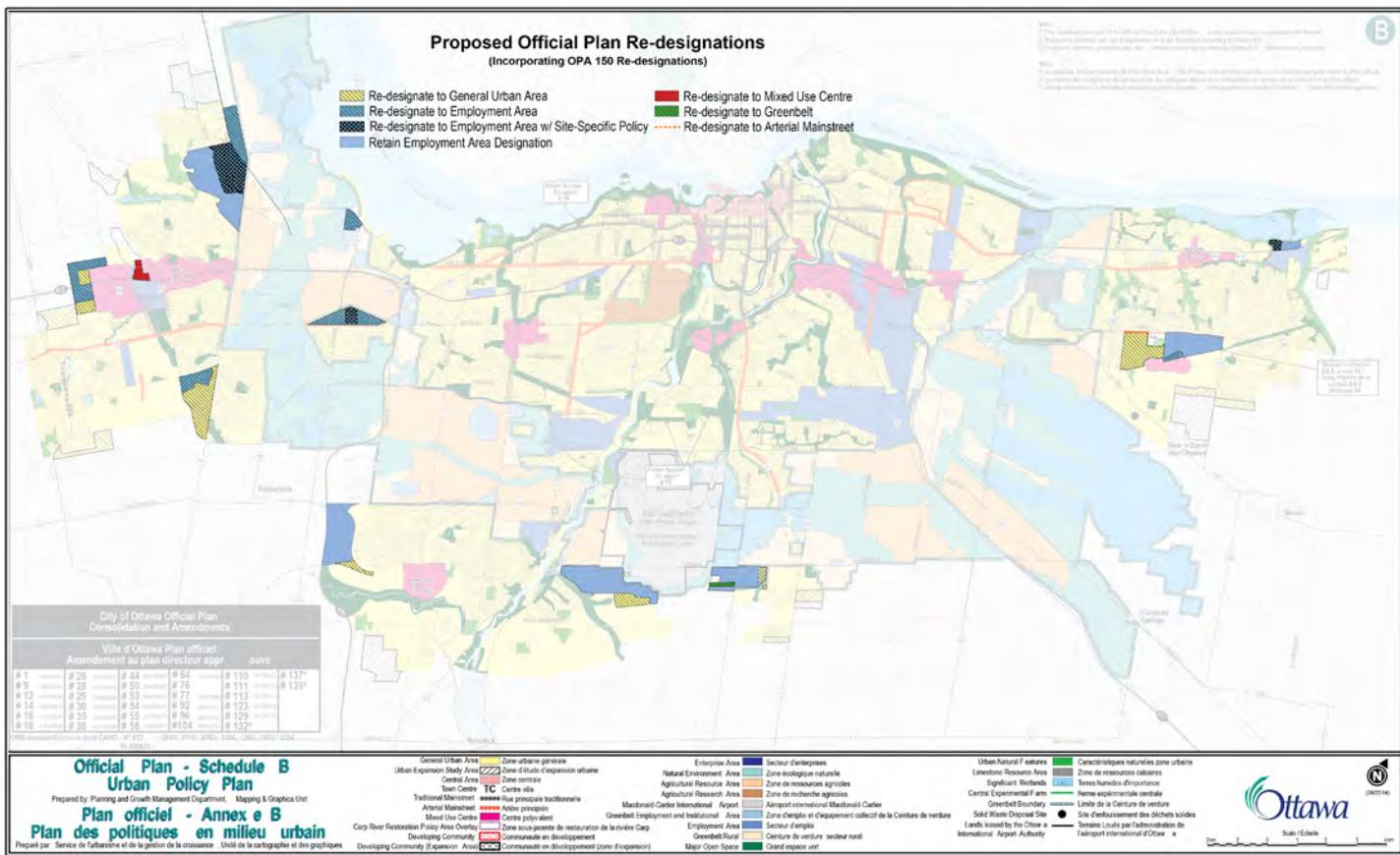


Figure 15: Proposed Official Plan Redesignations

consideration the matters identified in City of Ottawa Official Plan s.2.2.2(33) and in locations where a demonstration of need for the alternate use exists, supporting a rational pattern of land uses and the development of complete communities.

- Lastly, recommendations are made for the re-designation of some lands currently under CDP processes, where determinations have been made about the appropriate amount and locations for employment in these evolving communities.

This section provides an overview of recommended changes to land use designations in the following areas:

Enterprise Areas

- Kanata West Enterprise Area
- Kanata South Enterprise Area
- Kanata North Enterprise Area
- Bells Corners Enterprise Area
- Ottawa River Enterprise Area

Employment Areas

- Albion-Leitrim Employment Area
- 416 Business Park

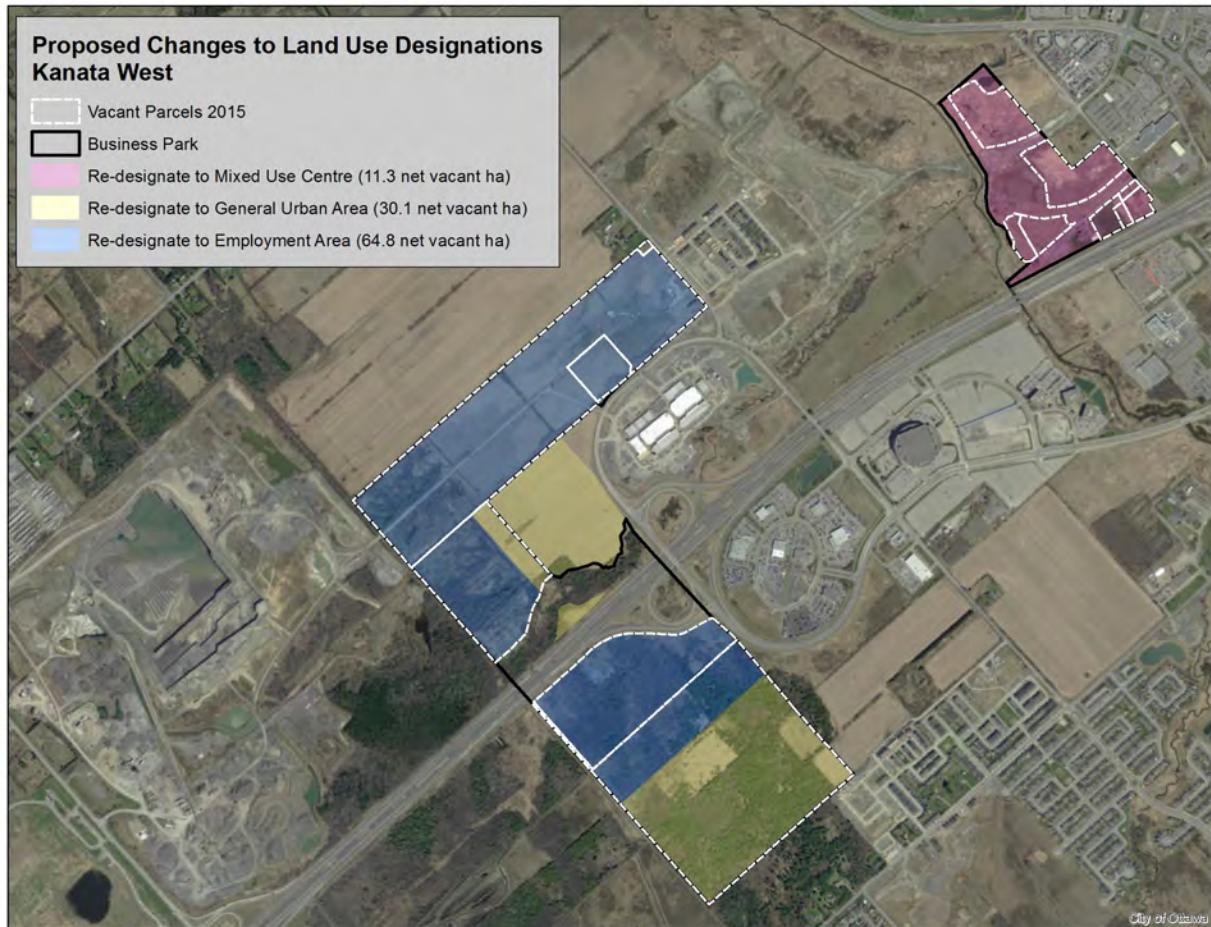
Employment Areas Subject to Community Design Plan Processes

- Riverside South CDP Area
- South Orleans Employment Area and Enterprise Area

Taken together, the designation changes being considered would have the net effect of updating the City-wide Employment Land supply to 807.3 net ha. This is within the threshold for maintaining a surplus to 2036 and for a twenty-year planning period to 2041.

Enterprise Areas

The establishment of need for change of land use from the City's Enterprise Area designation derives primarily from an observed ineffectiveness of the Enterprise Area designation itself. As described earlier, the intent of the Enterprise Area designation to create a balance and integration of employment and residential uses has not been realized on-the-ground and has, for many Enterprise Areas, functioned to fragment and limit viability for employment uses in these areas. The Employment Land Review is recommending the City rescind this designation. As such, those areas currently designated Enterprise Area need to be planned for under a different official plan designation going forward. The intent with re-designating Enterprise Areas is to provide for a balance of employment, mixed use and general urban designations in such a manner that generally supports the intent initially underlying the Enterprise Area concept – that is to provide for a range and rational distribution of employment and other land uses throughout the City that are compatible with surrounding uses and supportive of the City's goals for complete communities. The recommended redistribution of Enterprise Area lands to other Official Plan designations presented herein has been determined in an iterative process working in consultation with City staff and key stakeholders. The proposed designation changes, rationale and associated vacant land areas are indicated on the following maps.

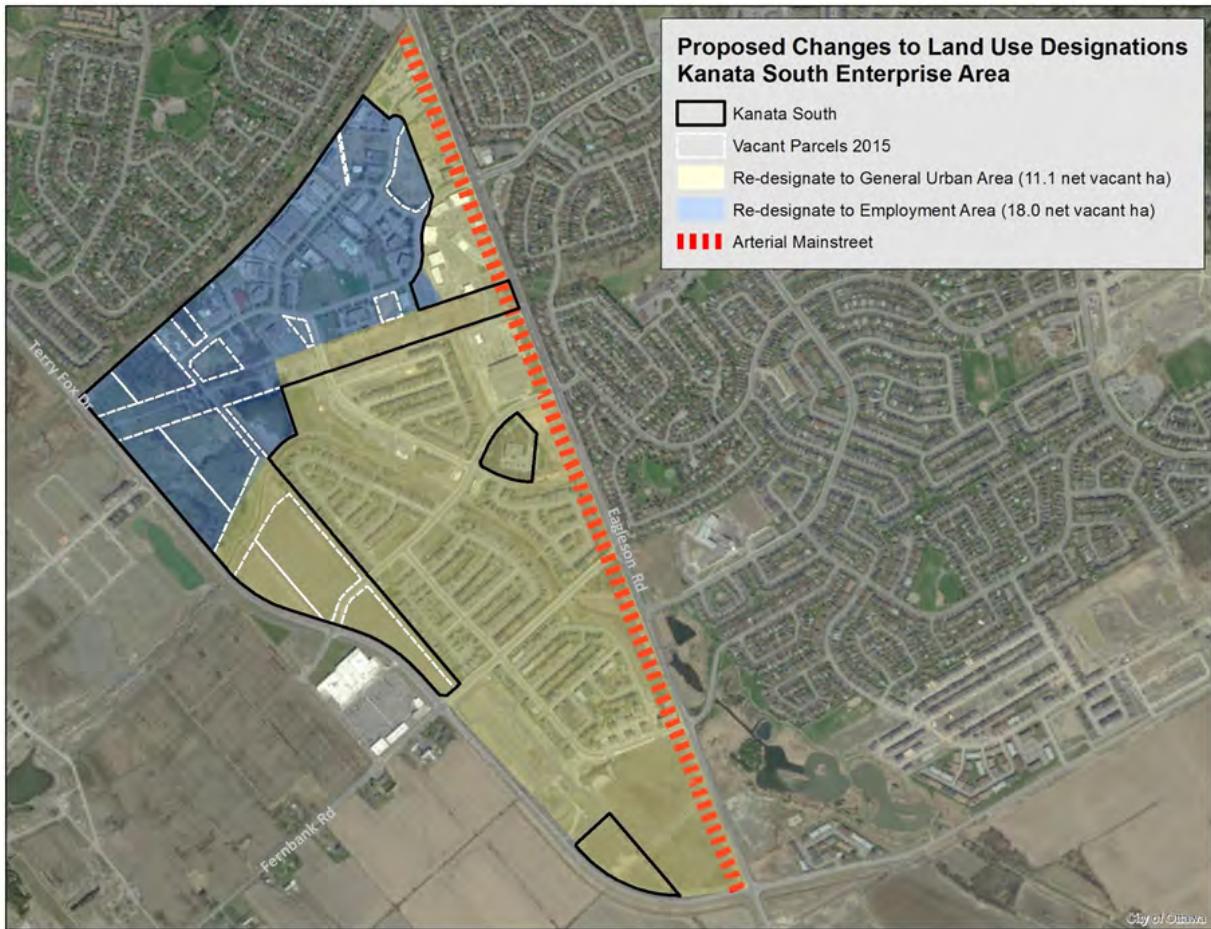


Kanata West Enterprise Area

Recommendation and Rationale

The recommended re-designation of land uses in Kanata West provides for a relatively even split of employment and other uses on the remaining vacant parcels, supporting the intent for a mix of uses in the area. The distribution recognizes existing permissions from zoning changes undertaken in recent years to permit retail uses in the area and provides for contiguous, compatible uses within the context of the existing developed areas. Approximately 67 vacant net ha are retained for future employment use.



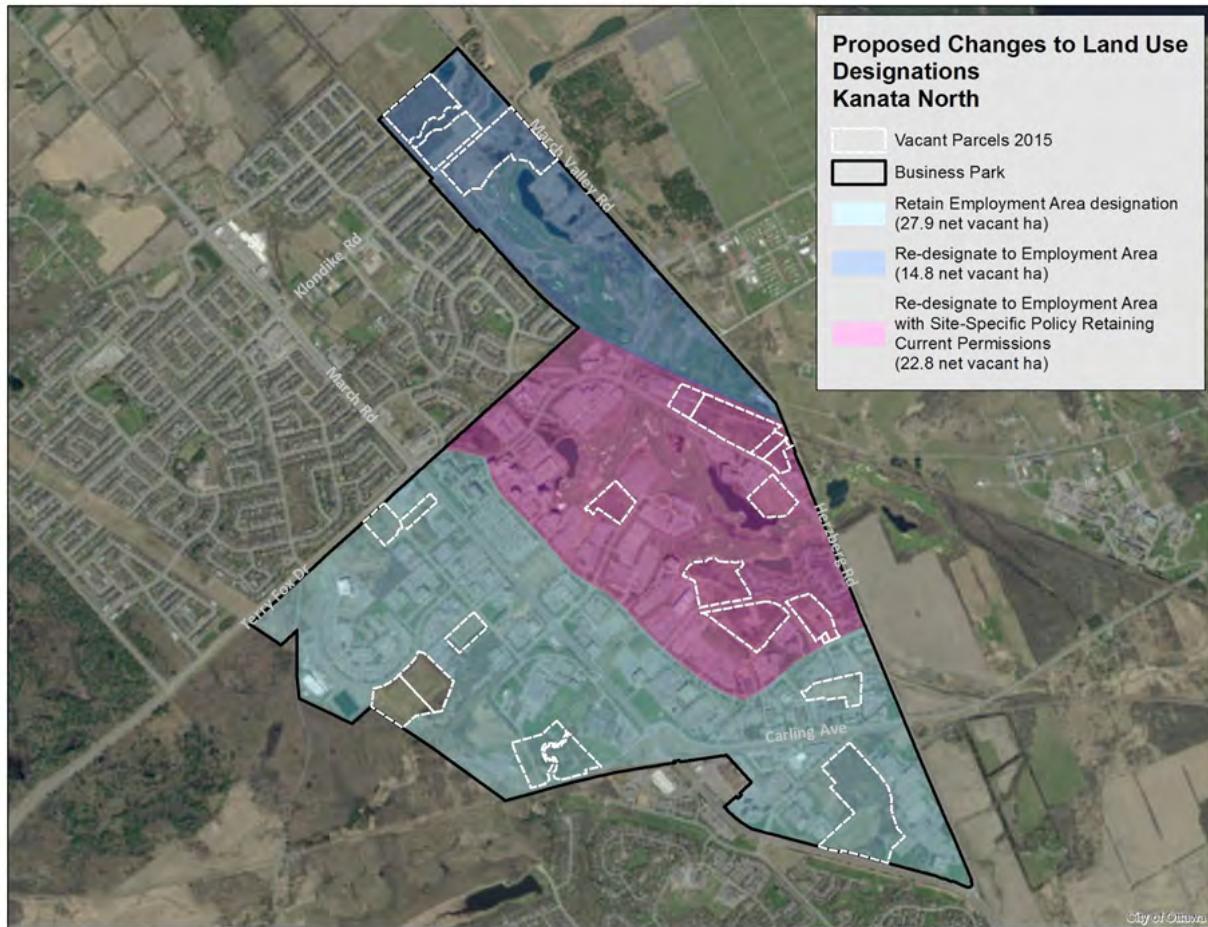


Kanata South Enterprise Area

Recommendation and Rationale

The recommended re-designation of land uses in Kanata South rationalizes designations based on existing and planned uses, maintaining a sizeable Employment Area where the existing business park is located north of the hydro corridor and allowing for its expansion on both sides of the corridor. A General Urban Area designation is recommended over the existing residential and commercial development as well as the remaining vacant parcels along Terry Fox Drive, which are separated from the existing business park. Approximately 18 net vacant ha are retained for employment use.





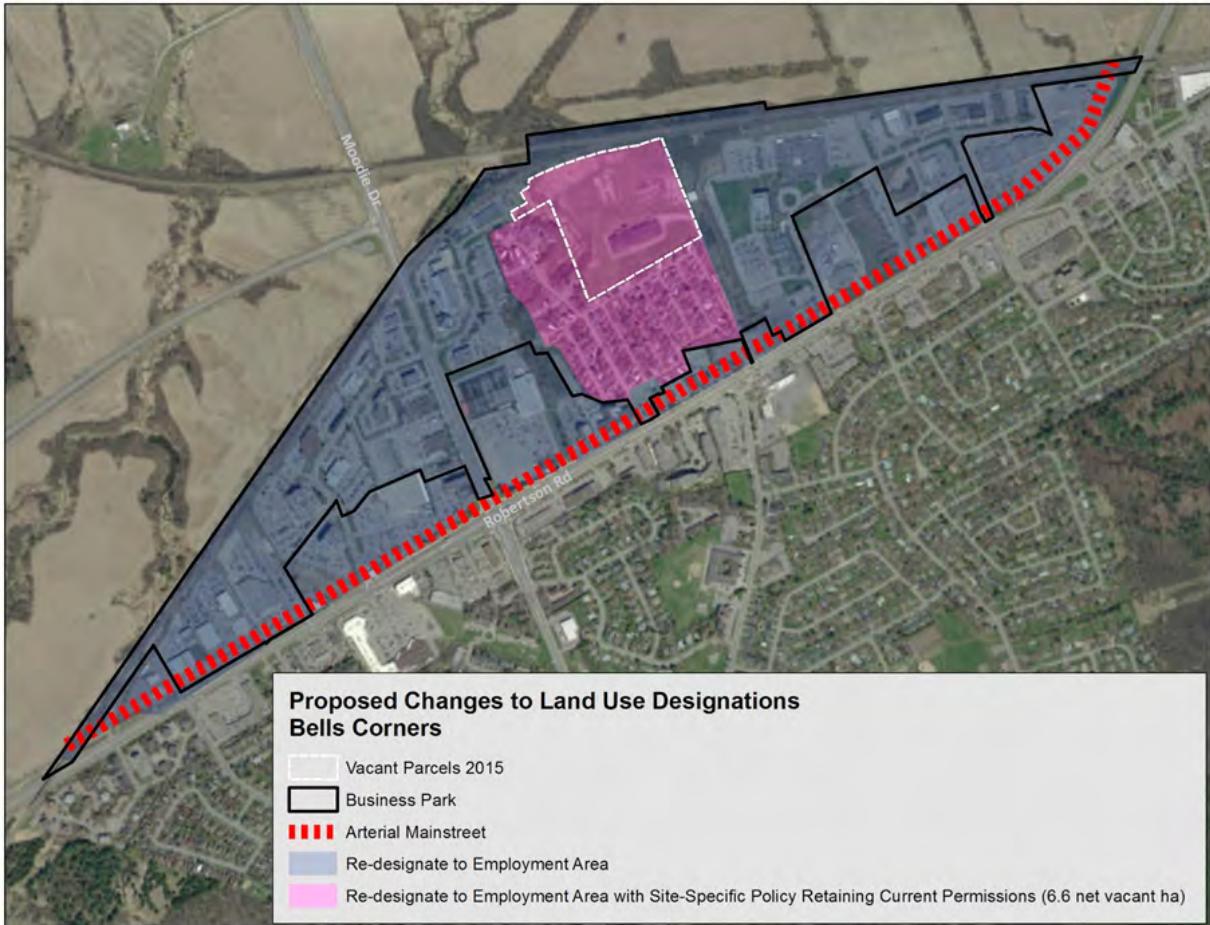
Kanata North Enterprise Area

Recommendation and Rationale

The recommended re-designation of land uses in Kanata North retains the remaining vacant lands for future employment use primarily and does not limit the ability of land owners to complete planned development in a manner consistent with the surrounding character and uses. The proposed Employment Area designations would include a site-specific policy to maintain existing residential permissions on the portion of the former Enterprise Area south of the rail line; a master plan will be required for the entirety of this area prior to future residential development to ensure there is an appropriate and compatible physical relationship between employment and residential uses.

The proximity of the DND rifle and demolitions range east of March Valley Road prevents residential uses north of the rail line; therefore, an Employment Area designation there without an area-specific policy imposes no new land use restrictions. The net effect of the proposed re-designations is to dedicate approximately 15ha of former Enterprise Area lands to future employment use.





Bells Corners Enterprise Area

Recommendation and Rationale

The recommendation for Bells Corners is to designate its entirety to Employment Area, with site-specific policy provisions to retain current permissions for residential uses on the site of the existing mobile home neighbourhood and the adjacent vacant lands to the north. The notion here is to transition away from the Enterprise Area designation without limiting development potential on the remaining 6.6 vacant net ha, taking into consideration City and landowner intents for the area and compatibility with the character of surrounding uses.





Employment Areas

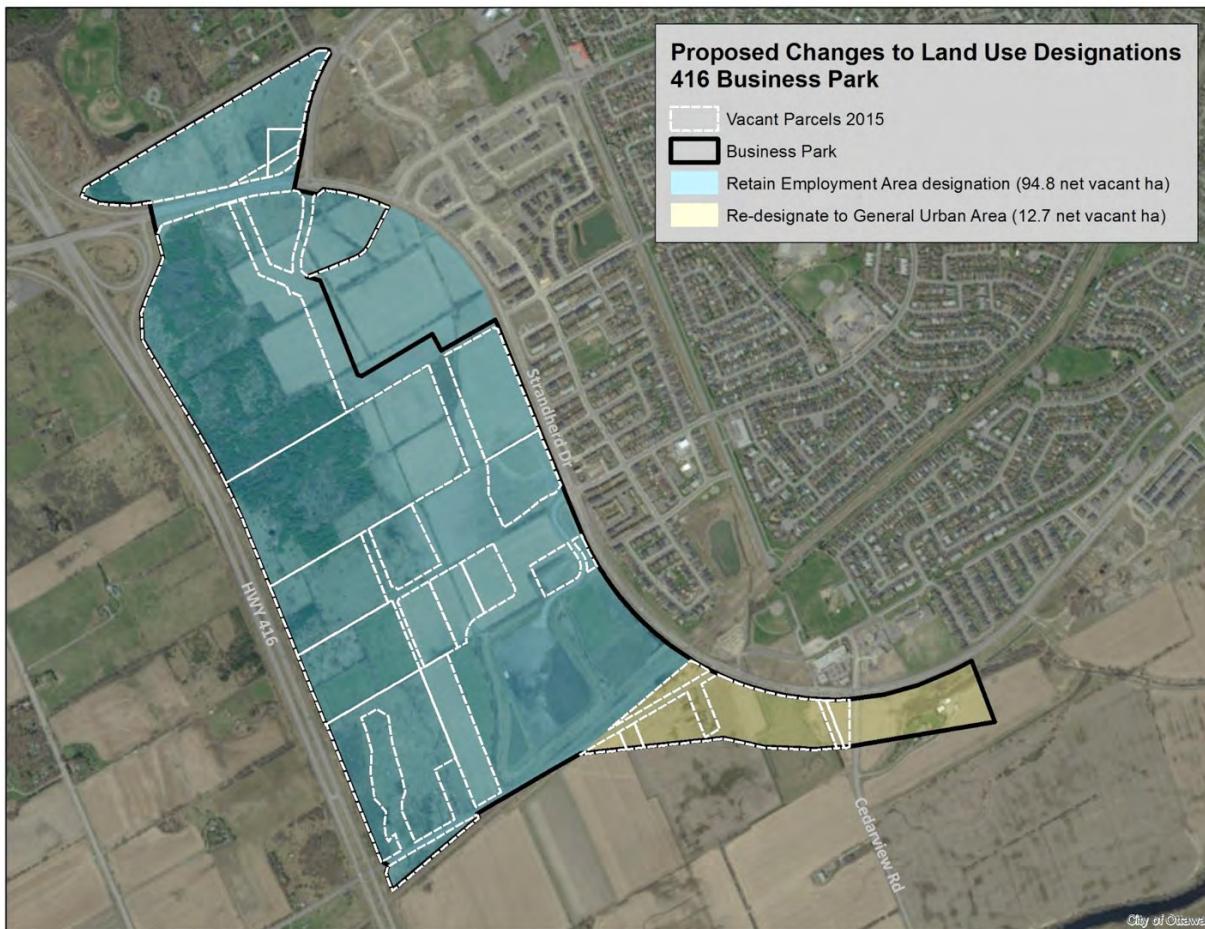
The supply demand analysis has identified a surplus in the amount of designated Employment Land required to accommodate the growth forecasts, meaning the City can consider some change in land use designations from Employment Area to other uses, should the need for the alternate use be demonstrated. From a quantitative perspective, the City does not need all of the 994 net ha vacant Employment Land for employment use. The city also has a sufficient quantum of urban designated lands to meet overall demand for residential and general urban uses. The changes to Employment Area designations proposed herein are based on a qualitative approach to rationally planning land uses, have a minimal effect on the overall supply of Employment Lands and reflect a suitable land use pattern and an acknowledgment of existing development.



Albion-Leitrim

Recommendation and Rationale

The recommendation for Albion-Leitrim considers the distribution of existing and planned uses, within context of the matters in Official Plan Section 2.2.24 and the future of the evolving community layout. The area is currently in transition due to the planned re-alignment of Leitrim Road which will run through the existing Employment Area. A rational, balanced land use pattern that makes sense for the future growth and evolution of the area is proposed. This would involve lands west of the ultimate



Leitrim Road alignment being retained under Employment Area designation and those lands to the east of Leitrim Road being re-designated to General Urban, redesignating up to 27 gross vacant ha to a General Urban designation. An area-specific policy should ensure that vacant Employment Land west of the realigned road is sized to be viable for development, and no development should occur on either side of the realigned road until the alignment has been determined.

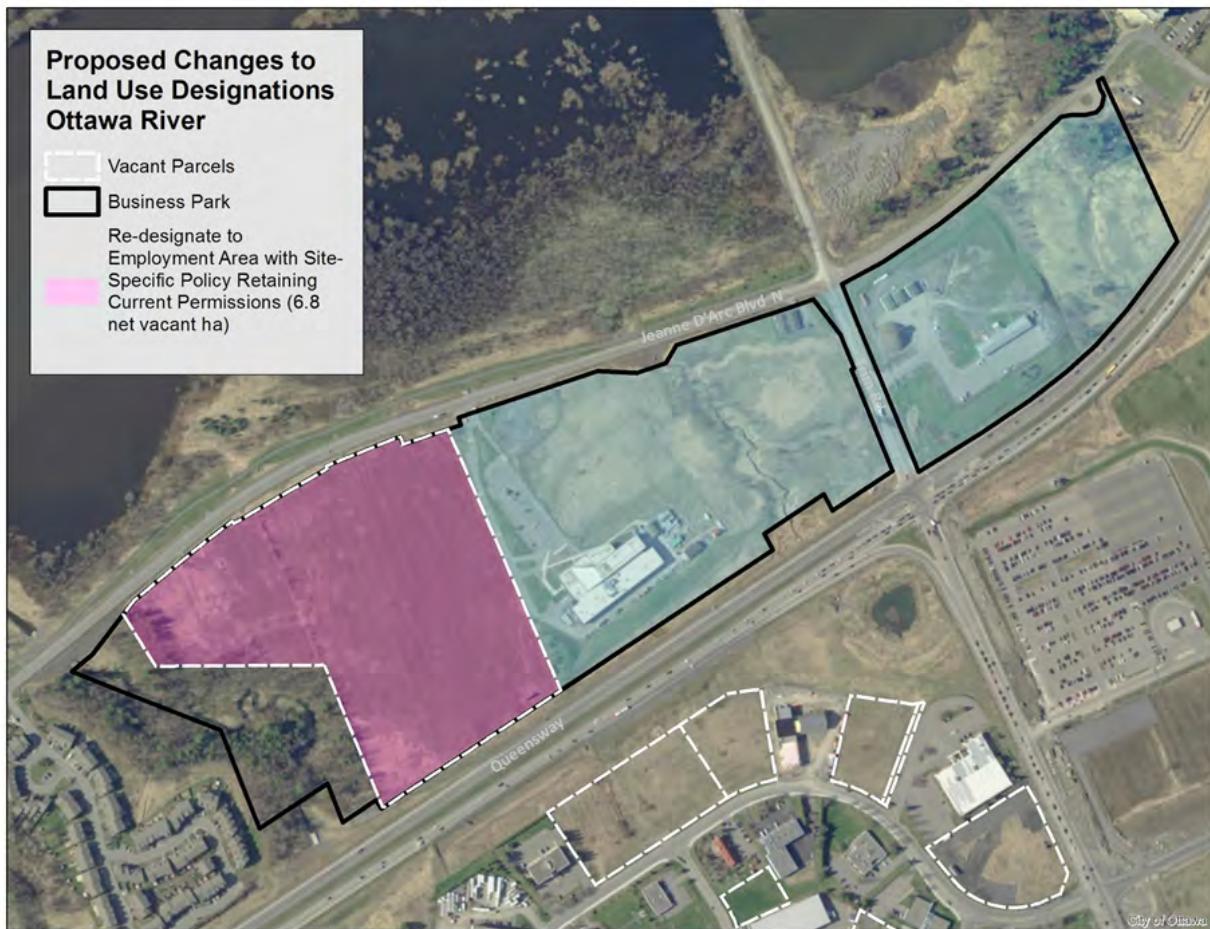
416 Business Park

Recommendation and Rationale

The recommendation for the 416 Business Park is to re-designate land southeast of the rail line to General Urban to provide for a more rational land use pattern in the larger area. This change would recognize that the rail line and a large stormwater management facility planned immediately south of McKenna Casey Drive will effectively isolate the area for re-designation from the Employment Land to the north. The parcels of land on either side of Cedarview Road would be further



constrained for employment uses by their size and shape. In addition, their development with such uses would separate the future community in the General Urban Area to the south from the community under development north of Strandherd Drive, which includes a park and commercial amenities.

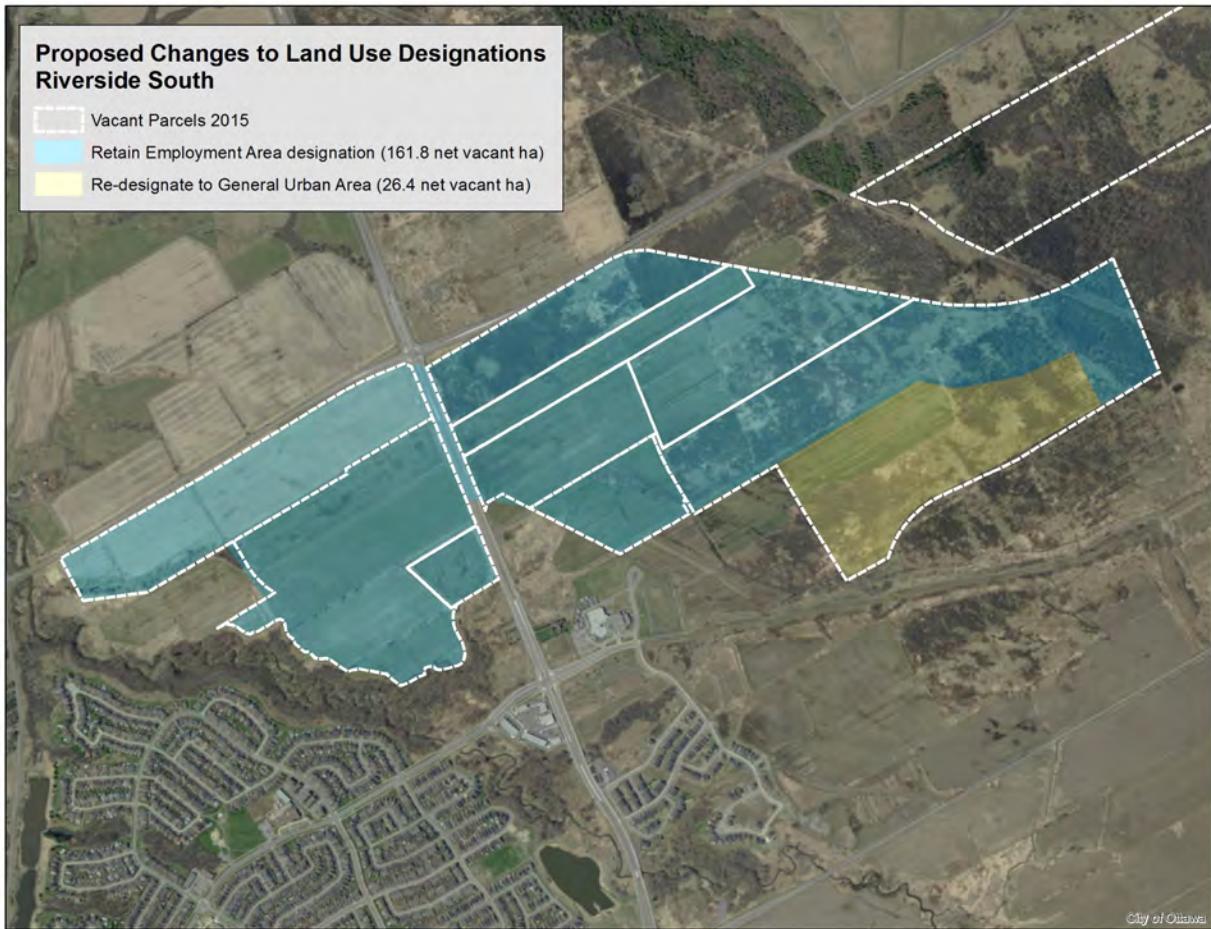


Ottawa River

Recommendation and Rationale

The proposed re-designation of a portion of the Ottawa River Business Park currently designated Enterprise Area is consistent with the recommendations for the Kanata North Business Park. The current permission for residential development on up to 50% of the land to be re-designated will be carried forward in a site-specific policy.





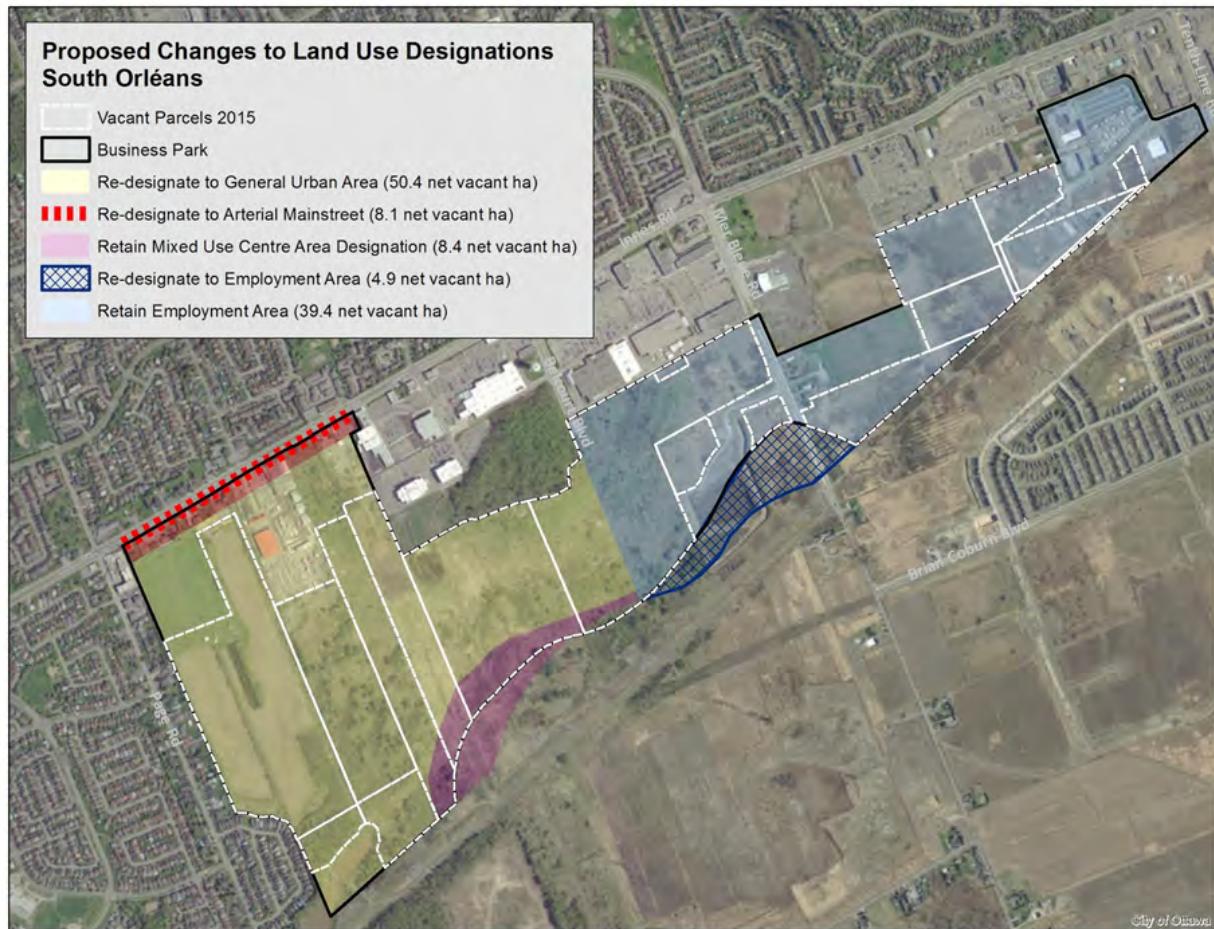
Community Design Plan Areas

Riverside South

Recommendation and Rationale

The recommended re-designation of land uses in Riverside South reflects the objectives of the Community Design Plan (CDP) for the area, and supports the intent of providing a mix of land uses in the most appropriate locations. Most of the Employment Area designation will be maintained in Riverside South to accommodate a mix of employment uses over time in an area that falls within the airport noise operation contours, which prevent sensitive land uses, i.e., residential and institutional. A General Urban Area designation is proposed on a portion of the existing Employment Area close to Earl Armstrong Road and Bowesville Road to complement the existing residential and mixed-use designations under the CDP and support a rational, transit-supportive land use pattern around the future transit station in this part of the growing community.





South Orleans

Recommendation and Rationale

The proposed re-designations in the South Orleans Employment Area recognize that these lands will be challenged to attract employment uses seeking convenient access to highways and high visibility but nevertheless are an appropriate location for other, more flexible employment uses; therefore, a significant portion of the area should be protected as an Employment Area (approximately 50 ha). Given the existing employment uses at the east end of the area, the access provided by Mer Bleue Road and the presence of a snow dump on the west side of Mer Bleue Road, it is most appropriate to protect the east half of the area for employment. To reinforce this half for employment, and recognizing the impacts of the snow dump, it is also recommended that a portion of the Mixed Use Centre north of the hydro corridor be designated Employment Area but with an area-specific policy that ensures higher-density employment uses are located close to the future rapid transit station.



Retention of the Mixed Use Centre designation west of the snow dump noise buffer is recommended, while a General Urban Area designation is proposed for the remaining lands in the west of the existing Employment Area, except along the Innes Road frontage, where an extension of the Arterial Main Street designation is appropriate. Together, the proposed re-designations in the west half will support a rational land use pattern that responds to the access and visibility constraints imposed by the existing residential uses on the east side of Page Road and the hydro corridor.

Impact on City-Wide Employment Land Supply

As indicated in Table 17, the proposed re-designations recommended above will result in a net reduction in the city's total supply of vacant Employment Lands from 993.7 net vacant hectares to 817.4 net vacant hectares, a difference of 176.5 hectares. This supply will be adequate to meet the projected demand for a twenty-year planning period to 2036.

Table 17: Effect of Land Use Designations on Net Vacant Employment Land Supply

Area	Designate to:					
	Mixed-Use Centre	Arterial Mainstreet	General Urban	Greenbelt	Employment Area	Net Effect City-wide
Kanata West	11.3		30.1		64.8	
Kanata North					65.5	
Kanata South			11.1		18.0	
Bells Corners					6.6	
South Orleans		8.1	50.4		44.3	
Riverside South			26.4		161.8	
Albion-Leitrim			26.4		31.9	
Ottawa River					6.8	
416 Business Park			12.7		0	
Totals (Net vacant ha)	11.3	8.1	157.1	0	399.7	
Total Supply						993.9
less conversion						176.5
Updated City-Wide Total (Net vacant ha)						817.4

Proposed Policy Amendments

The proposed employment land conversions and re-designations would be implemented through amendments to Schedule B of the Official Plan but also a number of the policies in the plan. In addition, other minor amendments are proposed based on the findings summarized in Part 1 of this report. The amendments below are based on the Official Plan as amended by OPA 150.

Managing Growth Policies (Section 2.2)

In light of the challenges of achieving a balance of housing and jobs in communities outside the Greenbelt and the goal to promote office uses near rapid transit stations, it is recommended that Policy 25 in Section 2.2.2 of the Official Plan (Managing Growth within the Urban Area), which requires a ratio of 1.3 jobs per household in planning areas for employment and residential uses in these communities, be amended.

The following rewording of the policy is proposed:

In all urban communities outside the Central Area, areas will be planned for a range of employment opportunities. Within each of the five urban communities outside of the Greenbelt, as shown in Figure 2.5, employment areas will be designated to ensure an ongoing supply of vacant Employment Lands. The amount of employment land to be maintained in each community shall be determined at the time of the comprehensive review of the City's Employment Lands Strategy and this Plan.

The shift to a one-city approach to planning Employment Lands also necessitates amending conversion criteria (d) in Policy 31.d. to delete, "including the desire of the City to create complete communities by balancing job and housing opportunities in all urban communities outside the Central Area."

Since it is recommended that the City eliminate the Enterprise Area designation, the reference to same in Policy 32 in Section 2.2.2 should be removed, and Policy 34 should be deleted.

Employment Area Policies (Section 3.6.5)

The title of Section 3.6.5 should no longer include Enterprise Area.

The following should be deleted from the last sentence in the fourth paragraph in Section 3.6.5: "Because one of the objectives of this Plan is to balance housing and employment opportunities in all urban communities outside the Central Area."

The next paragraph regarding Enterprise Areas, along with Policies 5 and 6, should be deleted.

With the recommended re-designations in the Kanata West Business Park, Policy 9 under Site-Specific Exceptions should be modified to refer to the Employment Area at Highway 417 and Huntmar Drive, not the Enterprise Area, and Policy 10 can be deleted.

To maintain residential permissions in some of the former Enterprise Areas, the following policy should be added to the Site-Specific Exceptions:

In the areas designated Employment Area with a reference to this policy on Schedule B, in addition to the employment uses permitted under Policy 2 above, residential uses also may be permitted by amendment to the Zoning By-law, provided the following criteria are met:

- a) The applicable policies in Section 4 have been satisfied;
- b) The proposed housing is in the form of townhouses, stacked townhouses or apartments;
- c) Residential uses are linked to adjacent areas by roads and pathways;
- d) A master plan has been prepared to the City's satisfaction demonstrating how the residential uses will be functionally integrated with employment uses through such means as sharing sites or buildings occupied by employment uses, occupying sites adjacent to employment uses, provision of common linkages (roads, pathways), strategic location of parks so as to be mutually beneficial, central location of employment uses, opportunities to share parking, convenient transit routing, mutual accessibility to convenience uses, amenities and services, and any other means that may be appropriate;

- e) At least 50% of the developable land within the designated Employment Area with Site-Specific Policy will be devoted to employment uses, except in Bells Corners, where all of the developable land may be used for residential uses;
- f) Any demand that residential uses will create for additional amenities and services has been assessed and the means of addressing such demands has been identified;
- g) The amelioration of potential adverse impacts from adjacent non-residential lighting, noise, odour, dust or traffic can be achieved on-site as part of the development.

All other references to Enterprise Areas in Section 3.6.5 should be deleted.

To provide clarity regarding the future boundary of the Leitrim employment area, the following policy should be added to Section 3.6.5 under Site-Specific Exceptions:

The planned realignment of Leitrim Road will form the eastern boundary of the Employment Area in Leitrim. Lands west of the realignment are designated Employment Area while lands east of the realignment are designated General Urban Area. Development applications within the area shown on Schedule B shall not be considered until an Environmental Assessment has determined the location of the realigned road. The Environmental Assessment shall consider an alignment that maximizes the viability for Employment uses on vacant lands immediately west of the realignment.

To help ensure the lands in South Orleans proposed to be retained for employment uses will support a minimum of 2,000 jobs and be developed with higher density employment uses close to the future transit station at Mer Bleue Road, the following policy should be added to Section 3.6.5:

In the South Orleans Employment Area, employment uses within 400 metres of the planned rapid transit station at Mer Bleue Road shall have a minimum density of 200 jobs per hectare.

To provide further clarity regarding the appropriate scale of ancillary uses in Employment Areas, Policy 2(c) should limit the gross floor area of individual commercial establishments to 750 square metres. This restriction will allow a range of ancillary uses, including banks, restaurants, fitness facilities and medical offices, while preventing larger scale uses that would be more appropriate in a Mixed Use Centre or General Urban Area.

To help ensure employment uses that are visible from highways and major roads contribute positively to the image of the city, it is recommended that a new policy be added to Section 3.6.5, as follows:

In addition to supporting a strong and diverse economy, employment areas are intended to contribute positively to the image of the city. To that end, development adjacent to highways and major roads within Employment Areas shall be held to a high design standard. Secondary Plans and Community Design Plans affecting Employment Areas shall include policies and guidelines for such development.

Proposed Official Plan Amendments - Rural Area

By recognizing and promoting established industrial areas in the rural area and clarifying its General Rural Area policies, the Ottawa Official Plan will support a more coherent city-wide development pattern in which rural industrial and commercial uses are focused in Villages and existing business parks. This approach will reinforce the primary uses intended for the rural areas outside Villages—environmental conservation, farming, resource extraction and rural residential living.

Strategic Directions

The Official Plan does not currently have a policy in Section 2 addressing employment in the rural area, yet there continue to be development pressures in General Rural Areas and growth can be expected. It is recommended that a new policy be added under the Strategic Directions for Employment, after Policy 28 in Section 2.2, that states the following:

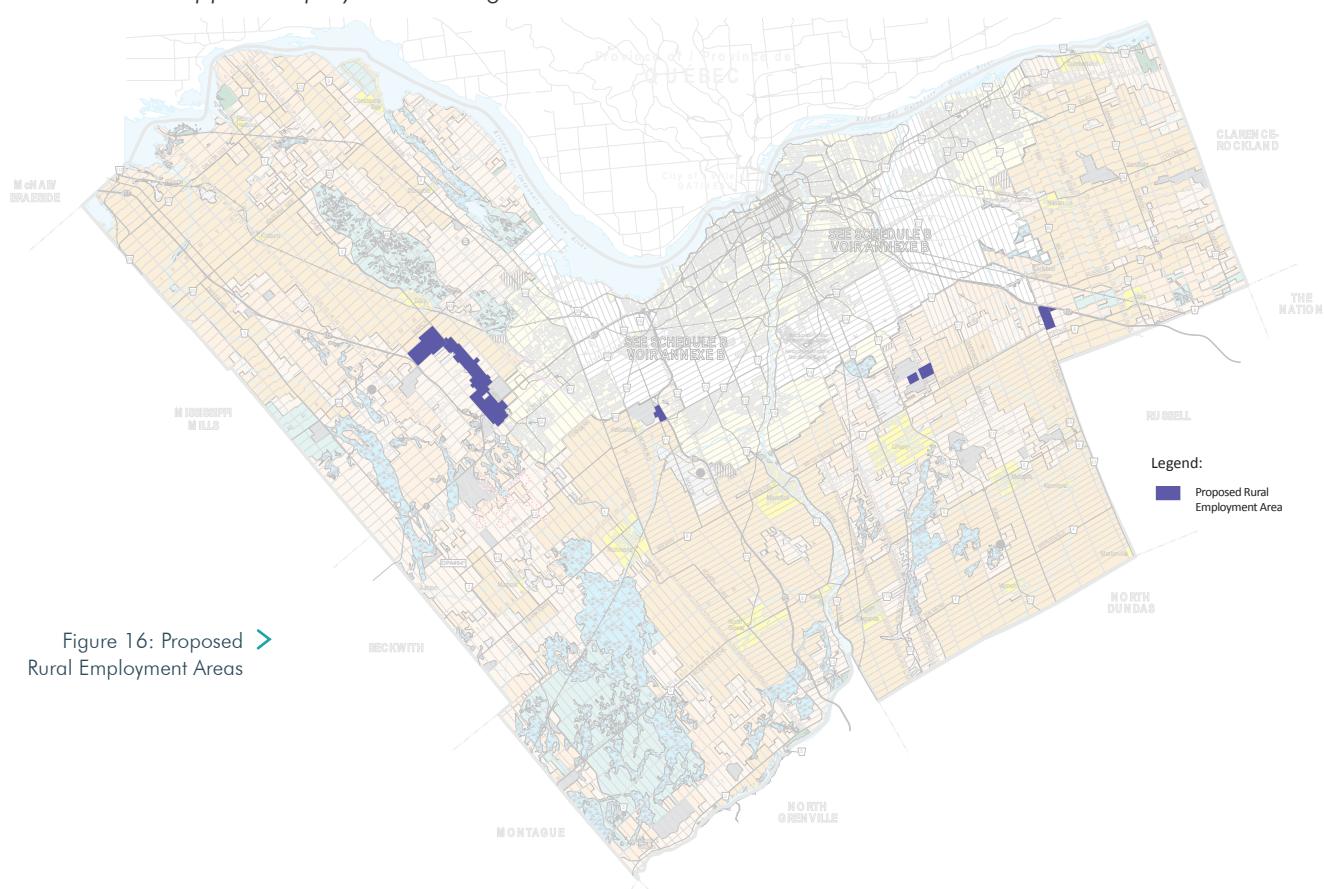
While it is the City's preference to locate most employment uses in the Urban Area and Villages, agriculture, aggregate resources and other industries will support employment throughout the

Rural Area. Industrial uses that are not appropriate in a Village due to their impacts, and which do not require municipal services, are encouraged to located in designated Rural Employment Areas.

Proposed Rural Employment Areas

In addition to the Carp Road Corridor Employment Area, there are three other well established rural industrial areas: the Moodie Drive Industrial Area at Highway 416 and Fallowfield, the South Gloucester Industrial Area at Hawthorne Road and Rideau Road, and the IndCum Industrial Area at Highway 417 and Boundary Road. These areas are well positioned to accommodate rural industrial growth since they are:

- Home to an existing cluster of employment uses;
- Close to a 400-series interchange and/or major arterial roads;
- Close to the Urban Boundary;
- Not constrained by Agricultural Resource Areas or environmental features.



Given the existing conditions in these areas and their potential to accommodate additional rural employment, it is recommended they be designated Rural Employment Areas (REAs) in Schedule A of the Official Plan. Figure 16 identifies the proposed boundaries of each REA.

The additional REA designations will more clearly distinguish these areas from the larger General Rural Areas, highlighting them as the most appropriate locations for heavy rural industrial uses related to aggregate resources or construction, as well as other industrial uses that do not require municipal services but do require proximity to a highway interchange. Focusing rural industrial growth in this way will help to manage and mitigate their adverse impacts on surrounding agricultural or environmental lands and on the rural character and existing uses in General Rural Areas.

In addition to the amendment to Schedule A, new policies should be added to Section 3.7 of the Official Plan, preceding Section 3.7.5, which applies to the Carp Road Corridor Rural Employment Area. The new general REA policies should state the intent to support and encourage in REAs the clustering of a range of primarily industrial uses not suitable in the Urban Area or General Rural Area and which do not require municipal water and wastewater services. Building from many of the uses conditionally permitted under the General Rural Area designation, the following uses should be permitted:

- agriculture-related industrial and commercial uses, such as farm equipment and supply centres, machine and truck repair shops, building products yards, landscape contractors, and nurseries
- noxious industrial uses, such as salvage or recycling yards, composting or transfer facilities, concrete plants, the treatment of aggregate products, and abattoirs
- gas stations
- manufacturing
- warehousing and distribution
- truck terminals
- environmental services
- construction yards

An additional policy should state that noxious or unsightly uses generally shall not be located on sites adjacent to a Provincial highway. Small-scale ancillary commercial uses that support the primary uses in the REA should also be permitted.

General Rural Area Policy Amendments

To help ensure Villages and Rural Employment Areas become a focus for industrial uses within the rural area, the General Rural Area policies should also be clarified to predominantly permit agriculture-related activities and limit commercial uses. The following proposed amendments will help to direct most rural commercial uses to Villages, supporting the goal of complete Villages, while directing larger retail uses serving both urban and rural populations to the Urban Area.

Amend the introduction to 3.7.2 and/or Policy 1 to state the intent to direct most rural commercial uses to Villages, most rural industrial uses to existing rural industrial areas, and commercial and industrial uses more appropriate in an urban location to the urban area.

Amend Policy 5 in 3.7.2 to permit only the following uses:

- agriculture-related industrial and commercial uses, such as farm equipment and supply centres, machine and truck repair shops, building products yards, landscape contractors, and nurseries
- salvage or recycling yards, provide they are limited in scale and outdoor storage areas are screened from public view
- composting facilities
- recreational commercial and non-profit uses, such as golf courses, driving ranges, mini putt operations, campgrounds, outdoor theme parks, sportsfields or similar uses that do not constitute Major Urban Facilities as described in Section 3.6.7
- New sand and gravel pits and underground mining for any mineral resources, subject to Section 3.7.4
- Commercial uses that meet the needs of the travelling public, such as a restaurant, gas station, motel and small-scale retail (up to 300 square metres gross leaseable area)

Economic Development

- Institutional uses such as places of worship and schools on sites close to a Village where Village land is insufficient or inappropriate
- Grandparented country lot subdivisions

Amend Policy 6(g) to state that, in the case of any noxious uses, the City will consider whether the use would be better located in a Rural Employment Area, and such uses will only be considered where suitable screening and buffering can be provided and generally will not be considered in locations within groundwater recharge areas or immediately adjacent to residential areas, scenic entry routes, or waterfront areas.

The primary focus of the Employment Land Review is on Ottawa's industrial-type employment areas, its land supply for these employment uses and the related official plan policies. The adequate provision of employment land in suitable locations, together with policies that support their development, is fundamental to the city's economic development. The recommendations that have been made in the Employment Land Review related to urban and rural official plan policy and land use designations are intended to support a complementary range of growth management, land use planning and broader economic development objectives. Based on analysis undertaken over the course of the review and consultation with City of Ottawa Planning and Economic Development and Innovation staff, this section provides some additional considerations for supporting the City's economic development objectives, in particular as they relate to planning for Employment Lands.

Ottawa's Economic Development and Innovation Department is responsible for the City's economic development initiatives with a mandate to "facilitate and promote Ottawa as a premier destination for talent, business investment, entrepreneurship, innovation and tourism." The department recently updated its Economic Development Strategy which sets out key directions for the 2015 to 2018 period and beyond. The document, Partnerships for Innovation, focusses the strategy on four key pillars, including: Investment Attraction, Business Expansion and Retention; Entrepreneurship; Tourism Development; and Research and Information Tools. The Employment Land Review can help to support these focus areas as they relate to opportunities for investment attraction, business expansion and tourism development.

Several key areas have been identified where the City can maximize its existing strengths and build on new opportunities to attract investment, retain employers and support emerging sector and tourism growth. The City should continue to foster its core sectors of government, office and high tech. At the same time, there are opportunities for encouraging emerging sectors such as clean-tech while also supporting traditional industrial users, airport-oriented employers as well as attracting new uses, such as theme parks to support growth in the City's tourism industry. A forward looking approach also involves examining long-term opportunities for expanding Ottawa's employment land base in strategic locations. Some considerations in this regard to support the ongoing efforts of the Economic Development and Innovation Department are discussed below.

Government, high tech and the desire for economic diversification

As described in detail earlier in this report, Ottawa's dominant employment sectors are government (mainly Federal), high-tech and other office-based professional service sectors. While some of this employment does occur on Employment Lands, most jobs associated with these key sectors are located outside of the city's designated Employment Areas. Largely concentrated in Tunney's Pasture and Confederation Heights (Federal), Kanata North (high tech) and the City's Central Area and Mixed Use Centres (Federal and other offices), from a land-based perspective, the City is well-positioned to continue to support growth in these sectors throughout the various office-oriented official plan designations.

The City's heavy reliance on Federal government employment may create vulnerabilities associated with "single employer" economies. However, it is a relatively stable employer and the very presence of the Federal government fosters a unique opportunity for the City in terms of attracting a skilled labour force. Partnerships for Innovation cites how dependence on this large employer can be problematic and seeks to strengthen the local economy and foster employment growth through diversification, in particular by supporting the advancement of knowledge-based sectors and

encouraging entrepreneurship. To this end, the high level of the Federal government functions is a key asset, since it attracts a large, educated work force to the city. This in turn provides a skilled labour pool to support growth in private sector ventures. It also works to attract employers to the city, given a large waiting talent pool, especially in times of reduced Federal government employment.

Much of the private sector economic growth and employment in Ottawa have been focussed on the high technology sector. Within this broad classification of high-tech, there is a great variety of business activities. Among the largest of the high technology activities in Ottawa has been telecommunications. After a period of rapid growth in the 1980s and 1990s, these industries restructured and much of the manufacturing function has moved off-shore. While remaining a key growing part of the economy, the experience of the telecom companies highlights the need to continue to foster diversity within the high-tech sectors and the broader knowledge based industries.

Given recent economic shifts, in particular related Federal government fiscal cycles, the focus from an economic development perspective is more on economic diversification and employer attraction, including broadening the range of high-technology sectors represented in Ottawa. Providing for an adequate and well-located supply of urban and rural employment lands to accommodate new businesses and business expansions is an important way that the City of Ottawa can support growth in the local economy and allow for further economic diversification.

Diversifying the tourism sector

A key target sector in the City's economic development strategy is tourism. Already an important economic and employment generator for the City, tourism is also a key growth sector with potential for expansion and diversification. Owing to Ottawa's unique history, geography and role within Canada's Capital Region, the city has a significant tourism base, attracted to the national institutions, national monuments and museums, historic architecture, the Rideau Canal and the many other attributes that make Ottawa, Ottawa. The Ontario Ministry of Tourism, Culture and Sport estimates that there are more than 4 million overnight visitors and more than 5 million day visits annually to the City. The Ministry's Regional Tourism Profiles further estimated that there are more than 10,000 tourism-related businesses, employing in excess of 62,000 employees as of 2012.

Building on a well-established tourism base, the City's Economic Development and Innovation Department has identified this as a target growth sector in its Economic Development Strategy and is actively pursuing new investment and development opportunities. In particular, the goal is to broaden the range of attractions in the city beyond those related to the national capital. The prospect of attracting a theme park or hotel waterpark facility to the city has been explored and may offer a key opportunity for growth in Ottawa tourism and associated employment. A recent study by JB Research further identified such key opportunities for the city in this regard and recommends the City pursue development of a regional theme park with complementary recreational vehicle park and /or a hotel waterpark. From a land-use planning perspective, such uses may be difficult to locate within existing traditional employment or commercial areas of the city, although there may be opportunities in rural employment areas or near interchanges along major highways.

The City should identify suitable areas where these types of uses could locate as-of-right and facilitate the project approvals process so that when an opportunity for a regional-scale project of this nature comes along, the City is able to accommodate it. The economic and employment associated with such a large-scale facility can help to support a range of employment opportunities outside of the City's dominant sectors and help to create a more diverse tourism sector.

Accommodating emerging sectors

Economic Development and Innovation is working to diversify Ottawa's economy, especially through encouraging growth in knowledge-based sectors. A major part of this is the diversification of the high-tech sector beyond the core telecom base in Ottawa to include more internet-based businesses (rather than the hardware and software focus of much of the existing high-tech sector). Many of these businesses are largely focussed in the office market and often prefer central city locations, so there is less of a role for employment areas in accommodating them. Some enjoy urban environments given restaurants, entertainment, shopping are highly valued amenities for employees working in these firms (who are often of a "younger" demographic), for example Shopify. Other firms, such as Ciena, prefer campus-like installations and gravitate towards suburban environments such as the Kanata North Business Park. A key opportunity in knowledge-based economic diversification in Employment Areas is the emerging clean technology sector, a small but growing component of Ottawa's technology sectors.

Clean technology generally includes renewable energy, recycling activities, green transportation and information technology aimed at making society function in a more environmentally conscious manner. This growing sector could provide economic opportunities for the city, in particular as the recent change in Federal government has resulted in an increased emphasis on green energy. Canada is seen as a growth market for clean tech. At a national level, Canada's clean technology industry revenue is currently estimated at \$11.3 billion and is projected to grow to \$26 billion by 2018.

Clean technology firms may locate in a range of city designations, including the Central Area and Mixed Use Centres for more office-oriented functions, but also in urban Employment Areas and the rural area for more industrial-oriented functions or for clean energy generation projects. The City should identify clean tech opportunities and the suitable lands to meet such needs.

Other emerging sector areas to consider include automotive software, autonomous vehicles, next generation networks and smart city technologies. Some of these sectors may seek to locate in employment areas, particularly those preferring campus-style developments or looking to establish R&D or tech-manufacturing facilities.

The profiling of available sites in Employment Areas could assist in streamlining the process for prospective investors and strengthen the attraction to the city of growth industries. The Employment Land profiles prepared as part of this study could be a basis for such a document, providing a single-point resource to potential investors with relevant information about Ottawa's available Employment Lands.

Providing for a range of employment uses and users

The Employment Land Review confirmed that the bulk of Ottawa's employment is in government and other office-based sectors. Most of the city's jobs are located outside of designated Employment Areas. The City is well-positioned to continue to provide for these types of users and uses throughout a range of urban designations and areas of the city. However, while not the mainstay of the Ottawa economy, more traditional industrial uses and employers, which do tend to locate in Employment Areas, in particular along highway corridors, may find a limited number of available sites to meet their needs, especially since the city's already limited highway-oriented employment land supply is exhausted.

As part of the Employment Land Review, analysis was undertaken of the roles played by surrounding competing jurisdictions in the employment land market. It was found that although still small in the context of the large Ottawa economy, some demand, in particular for such highway-oriented industrial uses, is being met in surrounding municipalities. For example, the Township of Russell has experienced significant uptake of vacant industrial land in its Highway 417 Industrial Park in recent years with its excellent access to Highway 417 and its location on the Ottawa boundary. Consultation with industry actors suggests this relative success is partly a result of a dwindling supply of affordable, vacant employment land in Ottawa with superior Highway 417 access.

The geography of the Greenbelt and Highway 417 means that lands suitable for traditional employment uses on the east side of Ottawa are some distance from the urban area, on rural services, whether in Ottawa or in the Township of Russell. The supply the City does have may have challenges coming to market relative to industrial land in surrounding municipalities, owing to higher land prices, tax rates and development charges in the City of Ottawa. Location as well as affordability, land use permissions and costs to service are all key considerations that influence the attractiveness of supply to developers. Industrial-type employment uses may increasingly need to locate in surrounding communities if the demand for highway-oriented industrial land cannot be met in Ottawa, given cost, location and site suitability factors. In the context of Ottawa's overall economy, however, the impacts of this trend will not be significant, since the types of employment uses in question generate relatively low numbers of jobs.

Nevertheless, in order to support the range of employment uses envisaged in Ottawa's economic development strategy, the City should endeavour to maintain a supply of attractive employment lands along the Highway 417 and Highway 416 corridors. The protection of Employment Areas in West Kanata, at the Palladium Drive interchange, and at Highway 416 and Fallowfield Road in Riverside South, as recommended, along with the proposed Rural Employment Areas, will help in this regard. Although highway-oriented industrial uses are not the primary focus of employment and economic development in Ottawa, these types of users are still a necessary part of the economy and contribute to the local economic and employment base.

Future opportunities on Highway 416

Some areas not currently within an urban designation may be suitable as potential longer-term Employment Areas, should and when additional urban employment lands be required in the future. In particular, areas along the Highway 416, a key goods movement corridor. Notable in this regard, is the area near Highway 416 and Barnsdale Rd., where a future interchange is identified in the Transportation Master Plan. Given the limited supply of superior-highway-access Employment Lands in the City, these lands could represent a good location for future employment uses. While not currently recommending the designation of these lands, the City should consider this possible use through a future comprehensive Official Plan review once the identified future interchange is built and the lands are required for Employment Land supply.

Airport Master Plan provides for long-term Employment Land development

The vicinity of major airports is often considered key growth locations for employment uses. The attraction is partly related to the Airport itself, but is also the result of piggybacking on the road transportation system which is typically well connected to airports. In addition, land use controls limit other forms of development within airport noise contours.

A significant amount of the planned Employment Lands in Ottawa are in the vicinity of the airport including Riverside South, South Merivale and Leitrim. Additionally, substantial Employment Lands in this area are part of the Ottawa International Airport land holdings. Some of these lands are on the airport site itself and are considered part of the airport site. Other of these airport lands are contiguous to the airport operation but are potential freely accessible from a public road. Some of these land holdings are within the urban designated area and, as a result, are included in servicing and infrastructure plans. Airport-held lands outside of the urban area are not currently subject to development planning by the City.

The Airport Authority has prepared a master plan for the long-term use of its lands. The master plan includes a potential expansion of the Airport as well as additional development on the airport site. Development on the airport site (within the security fence) is typically directly related to aviation and air cargo and needs to be within the secure area. The master plan envisions general employment uses outside the secure area on its developable lands within the urban area (mainly on the north and west sides of airport) as well as longer-term development of employment uses on lands outside the urban area, mainly on the eastern and southern flanks of the Airport.

Economic Development and Innovation staff have recommended that a process be initiated to introduce, where possible, elements of the Airport Master Plan into the City of Ottawa Official Plan to ensure that their current and future infrastructure needs are included in the City's infrastructure planning process. The City should maintain an open dialogue with the Ottawa Airport Authority going forward and continue to monitor uptake of designated Employment Lands, giving consideration to bringing lands to the south of the airport into the urban area at such time that the need is justified over the longer-term through a comprehensive Official Plan review.

Generally, the role of Planning in economic development is to ensure an adequate land base and permissions to meet the needs of a range of economic activities and employers. To this end, the City should maintain its protectionist approach to Employment Land, and not permit Employment Land conversions that would inhibit the City's overall economic development objectives. Consistent with Provincial and City planning, the City should continue to maintain an adequate and appropriately located quantum to support a range of employment uses. Regular review and update of the Employment Land inventory and policies supporting Employment Lands will help to ensure this.

CONCLUDING REMARKS AND NEXT STEPS

This final Employment Land Review report has presented the culmination of several stages of research and analysis undertaken over 2015 and early 2016.

Recommendations have been made relating to land use designation changes, urban and rural Official Plan policy amendments and economic development, with the intent of supporting long-term economic and job growth in Ottawa in a manner consistent with Provincial policy and the City's objectives for managing growth, land use, and a healthy economy and employment base.

Key findings and recommendations include the following:

- The city currently has an abundant supply of urban and rural lands for employment to meet the projected demand to 2041 and beyond.
- The City's current policy objective to achieve a balance of employment and housing in each community outside the Greenbelt is not aligned with the city's office-based economic geography. A "one-city" approach to planning for employment will better align existing and future employment nodes with the planned transportation network and emphasize strategic employment lands with good highway access.
- The re-designation of portions of less accessible, vacant employment lands in Riverside South, Leitrim and South Orleans is recommended to support more rational land use patterns in those communities. These re-designations will still leave the city with an adequate supply of employment land to meet the demand to 2036.
- The City's Enterprise Area policies have not fulfilled their objectives to date and are challenging to implement. It is recommended that this designation be replaced with an Employment Area designation that retains residential permissions where appropriate, i.e., in the business parks of Kanata North, Bells Corners and Ottawa River. In Kanata West and Kanata South, replacing the Enterprise Area designation with both Employment Area and General Urban Area designations, based largely on existing and approved uses, is more appropriate.
- A high-level analysis of the options for providing municipal services to five rural highway interchange areas identified the financial and policy challenges associated with each option.
- The designation of three additional Rural Employment Areas where industrial uses are currently clustered is recommended to clarify the preferred location for future rural industrial uses not appropriate within Villages or which require proximity to a highway interchange. Amendments to the City's General Rural Area policies are also recommended to clarify the intent of the current policies and direct employment uses not related to agriculture or aggregate resources to Rural Employment Areas.
- Over the long term, as the city's suburban communities grow and evolve, the City should ensure lands at highway interchanges are protected for employment.

In thoroughly examining Ottawa's employment lands, this report provides essential information for a Municipal Comprehensive Review, as defined in the Provincial Policy Statement. It should guide subsequent updates to Official Plan designations and policy, which will help the City achieve its objectives for sustainable growth and economic development.

