POPULATION, HOUSING AND EMPLOYMENT PROJECTIONS TO 2046

Loyalist
TOWNSHIP

FINAL REPORT

HEMSON Consulting Ltd.

September 18, 2019

EXECUTIVE SUMMARY

The Township of Loyalist retained Hemson Consulting Ltd. to prepare a Population, Housing and Employment Projections Study. A key purpose of the study is to re-evaluate and update the population, housing and employment projections prepared for the Township in 2008 using the most currently available data. The study involves examining demographic and economic growth and change in the Township within the context of recent trends and current Census, development and land supply information. It is undertaken in a manner consistent with the Provincial Policy Statement, 2014. Study results will provide a basis for planning for future growth and development in Loyalist. Forecasts of population, housing and employment have been prepared for the Township from 2016 to a 2046 horizon, along with local allocations of forecast growth to each of the Amherstview, Bath and Odessa communities, Amherst Island and the rural area.

Key study findings include:

- Loyalist has continued to experience moderate growth in population and households over the last three Census periods. The Township added 2,250 residents and 1,300 households over the 2001 to 2016 timeframe. The rate of housing growth in Loyalist has been outpacing population growth since 2001, owing to declining average household size, which is a result of demographic change underway in the Township.

- The aging population results in a declining average household size as older populations generally have households with more "empty nesters", fewer children, and more single people due to divorce and widowing. The effect is that a greater number of housing units is required to house the same amount of population than if that population were younger. Within the context of an aging population, the population would stabilize and begin to decline in the absence of in-migration.

- Loyalist is most strongly linked with the City of Kingston and is part of the Kingston Census Metropolitan Area (CMA). Many Loyalist residents work in Kingston and to a lesser extent Greater Napanee, The Township also provides employment opportunities to residents from these areas and the broader Central Eastern Ontario region.

- The Township's employment base increased by 460 net jobs between 2001 and 2016 within the context of a shifting economic base and employment decline

in both Census periods between 2001 and 2011, followed by significant growth over the most recent Census period. Most of the Township's employment base continues to be in population-services with traditional industries also comprising a significant proportion the local job base.

- The distribution of growth within Loyalist has been largely influenced by the location of communities in relation to the City of Kingston, with which the Township has significant commuting and resident migration flows. Within Loyalist, the community of Amherstview is the largest population settlement area and the focal point of residential growth. The Bath community also experienced growth over recent Census periods, while population in Odessa has remained relatively stable.

- Three forecast scenarios were prepared incorporating varied assumptions about the Township's future economic outlook – a low, reference and high growth scenario based on assumptions about varying levels of future in-migration to Loyalist. The reference scenario represents the most likely outcome and an appropriate basis for planning.

- The forecast results indicate moderate growth in population over the period from 2016 to the 2046 planning horizon. Housing growth is anticipated to continue to out-pace population due to declining average household size. Modest employment growth is expected to continue over the forecast horizon, reflecting changes in labour force participation related to the aging population and a continued shift to services-based sectors and some growth in traditional industry employment.

- The historical pattern within Loyalist is anticipated to continue through the forecasts, reflected in the local allocations of growth.

Summary results by forecast scenario for population, households and total place of work employment are shown below.

Summary Results by Forecast Scenario Loyalist Township, 2016-2046				
	2016	2046		
		Forecast Scenario		
		Low	Reference	High
Population*	17,390	18,320	**22,600**	23,280
Households	6,430	7,240	**9,730**	10,360
Employment	4,710	4,960	**6,140**	6,330

*Total Population Including Census Net Undercoverage

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I INTRODUCTION

Loyalist Township is one of four lower-tier municipalities, along with the Town of Greater Napanee and the Townships of Stone Mills and Addington Highlands, located within the County of Lennox & Addington in central Eastern Ontario. The Township is 340 square kilometres and comprises the residential communities of Amherstview, Bath and Odessa, a large rural agricultural area and Amherst Island.

Map 1: Loyalist in a Central Eastern Ontario Context
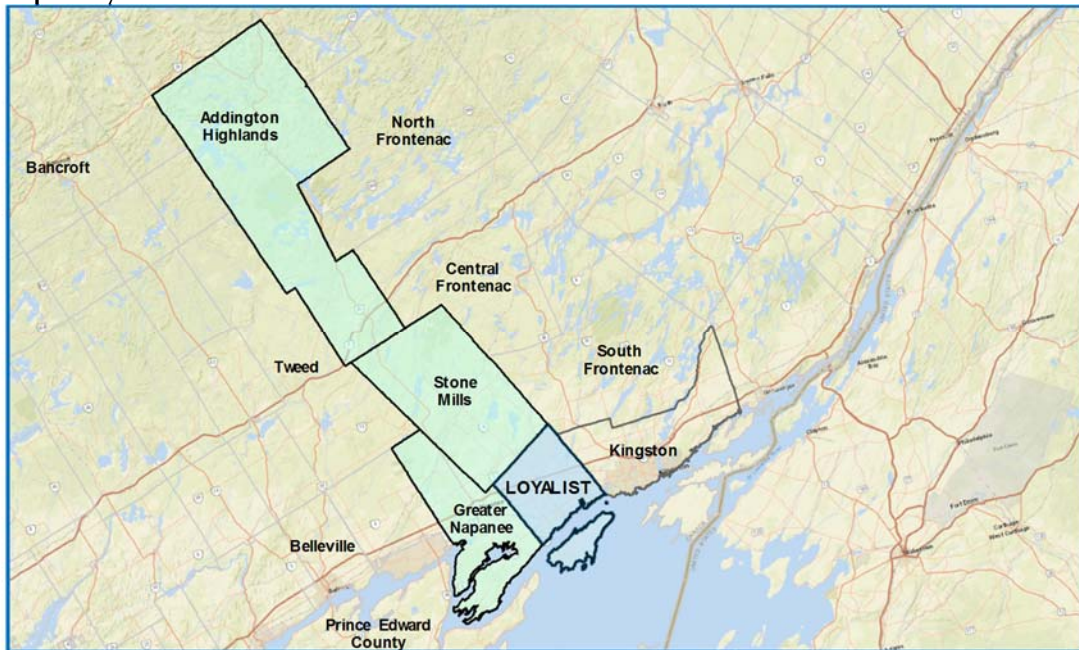
In 2016, Loyalist reached a population of 17,380 (including Census net undercoverage) residing in 6,430 households with an employment base of 4,700 jobs. Highway 401 runs through the Township abutted by the Odessa community and providing linkages to Greater Napanee, the City of Kingston and the rest of eastern Ontario. Loyalist is part of the Kingston Census Metropolitan Area (CMA) and neighbours the City to the west, exhibiting strong economic ties to the City where many Loyalist residents are employed. The Town of Greater Napanee to the west, which is the County seat of Lennox & Addington is also an important employment centre for the Township. Many residents from these areas benefit from employment opportunities in Loyalist as well.

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A. PLANNING POLICY FRAMEWORK

Planning and growth management in Lennox & Addington and the Township is undertaken in the context of the Provincial policy framework, and must be consistent with Provincial land use planning policies and priorities, notably those set out in the Provincial Policy Statement (PPS), 2014.

The PPS provides direction for land use planning and appropriately managing growth and urban development in Ontario while protecting and enhancing natural heritage features. The Province released an updated PPS in 2014, including a number of strengthened policies for directing the distribution of growth, the protection of natural and agricultural lands, planning for employment lands and other key growth management policies. The PPS 2014 also placed greater emphasis on the unique characteristics and planning challenges for rural communities.

Municipal official plans are the implementing vehicles of Provincial planning direction. The County of Lennox and Addington adopted the first County Official Plan on September 30, 2015. The plan establishes a broad, upper tier policy framework that provides guidance to local Official Plans, Official Plan Amendments and zoning by-laws. As a lower-tier municipality within the County, Loyalist's growth projections and planning account for the County's updated policy framework.

The Township of Loyalist formed on January 1, 1998, through the amalgamation of Amherst Island Township, Ernestown Township, and Bath Village. The *Loyalist Township Official Plan* consolidated the prior official plans for the former Townships and sets out local priorities and guidance for managing growth and development within Loyalist. The Township is currently undertaking an official plan review that, among other matters, will update the planning document for consistency with the County Official Plan and the PPS, 2014. The Population, Housing and Employment Projections study will provide a key input to updating the forecasts that provide a basis for the Official Plan, as well as extending the growth outlook for Loyalist Township over the longer-term to a 2046 horizon.

B. BACKGROUND AND STUDY PURPOSE

The Township of Loyalist retained Hemson Consulting Ltd. to prepare the Population, Housing and Employment Projections Study. A key purpose of the study is to re-evaluate and update the population, housing and employment projections last prepared for the Township in 2008, using the most currently available data, including

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results of the 2016 Census. The City of Kingston has also very recently updated the projections and extended the growth outlook for the broader Kingston CMA to a 2046 horizon. This recent update was partly in response to forecasts prepared in 2013, which did not appear to be accurately capturing the growth picture for the region, notwithstanding but also highlighting the inherent uncertainty in forecasting and importance of regular review of long-range growth projections, based on the most current understanding of demographic and economic trends and data.

The Loyalist projections study involves examining demographic and economic growth and change in the Township within the context of recent trends and current Census, development and land supply information. Results of the study will provide a basis for planning for future growth and development in Loyalist. Population, housing and employment forecasts from 2016 to a 2046 horizon have been prepared for the Township. Three forecast scenarios – a low, reference and high – were prepared for consideration by Township Staff and Loyalist Council. Local allocations of forecast growth to each of the Odessa, Bath and Amherstview communities, Amherst Island and the rural area were also prepared based on the reference scenario.

Map 2: Loyalist Sub-Municipal Community Study Area
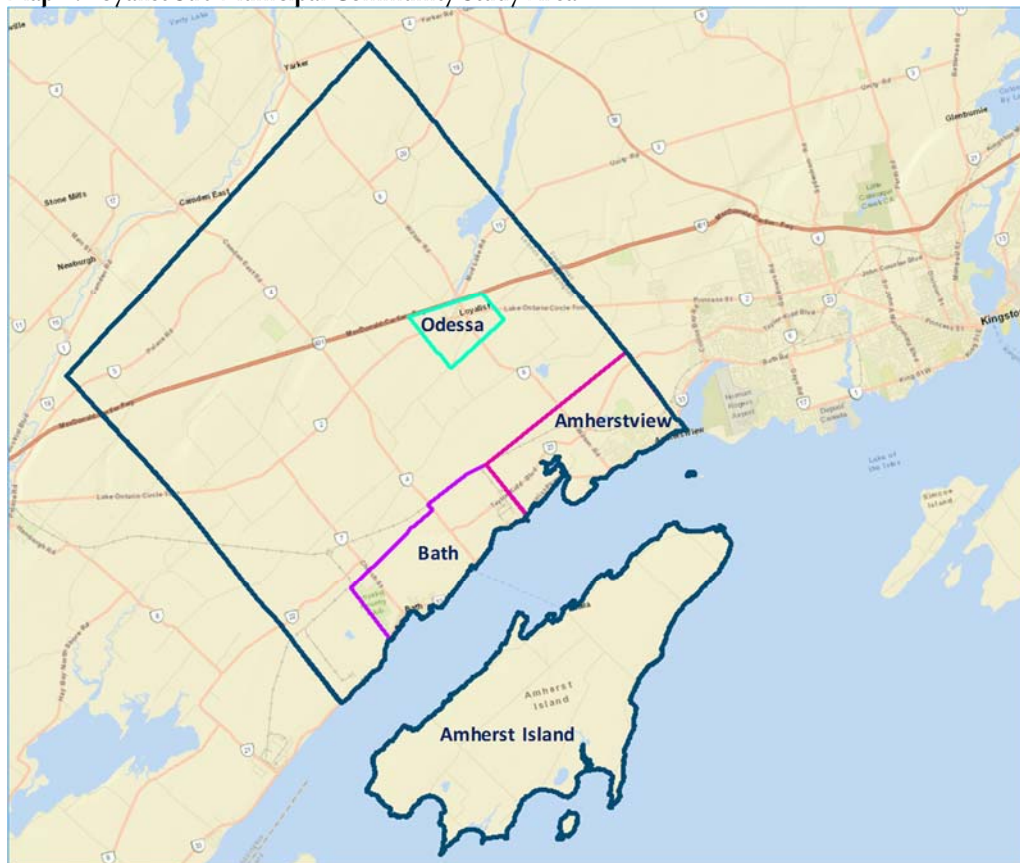
C.   REPORT CONTENTS

Following this introductory section, the balance of this report is organized into three sections:

- **Section 2** examines the level and distribution of recent residential and employment growth and discusses demographic and economic trends affecting the future growth outlook for Loyalist. An overview of recent growth and change within Loyalist communities is also provided;

- **Section 3** provides an overview of the forecast methodology and assumptions that underpin the growth outlook and the results of the population, housing and employment forecast for three growth scenarios as well as allocations of the reference scenario growth forecasts to communities within Loyalist; and

- **Section 4** concludes the Loyalist Population, Housing, and Employment Projections Study report.

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II GROWTH IN LOYALIST OCCURING AMIDST DEMOGRAPHIC AND ECONOMIC CHANGE

This section provides an overview of residential growth and demographic change occurring within the Township, which are key considerations in assessing the future growth outlook in Loyalist.

A. LOYALIST ADDED POPULATION AND HOUSEHOLDS DURING EACH CENSUS PERIOD SINCE 2001

Loyalist experienced moderate growth in population and households over the last decade. The Township added 2,250 residents and 1,300 households over the three Census periods since 2001, as shown in Tables 1 and 2 below. Population growth picked up significantly during the ten-year period from 2006 to 2016, relative to more modest growth in the early 2000s. Growth in households has remained relatively constant over the last three Census periods, while the average annual rate of household growth has been faster than of population for reasons described later in this section.

Table 1: Historical Population Growth, Loyalist Township, 2001-2016

| | | Growth | |
Year	Total Population[1]	Net Change	Average Annual Growth Rate
2001	15,140		
2006	15,570	430	0.6%
2011	16,630	1,060	1.3%
2016	17,390	760	0.9%
2001-2016		2,250	1.0%

Historical Population Loyalist Township, 2001 - 2016

[1] Total population including Census Net Undercoverage

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Table 2: Historical Occupied Household Growth, Loyalist Township, 2001-2016

		Growth	
Historical Households			
Loyalist Township, 2001 - 2016			
Year	**Occupied Households**	**Net Change**	**Average Annual Growth Rate**
2001	5,130		
2006	5,560	430	1.6%
2011	5,970	410	1.4%
2016	6,430	460	1.5%
2001-2016		1,300	1.7%

Source: Statistics Canada.

As of 2011, Loyalist become the largest population centre within the County of Lennox and Addington, modestly surpassing the Town of Greater Napanee in total population. The Township had a 2016 population of nearly 17,400 residents (total population including Census net undercoverage), which represents 40% of the County's population base. Greater Napanee, still however, maintains the largest housing and employment base in the County. The balance of the County Townships are more rural in nature by comparison to Loyalist and Napanee. The figures below illustrate total population, household and employment in Lennox & Addington from 2001 to 2016.

Figure 1: Total Population, Lennox & Addington County by Local Municipality, 2001-2016

Source: Statistics Canada.

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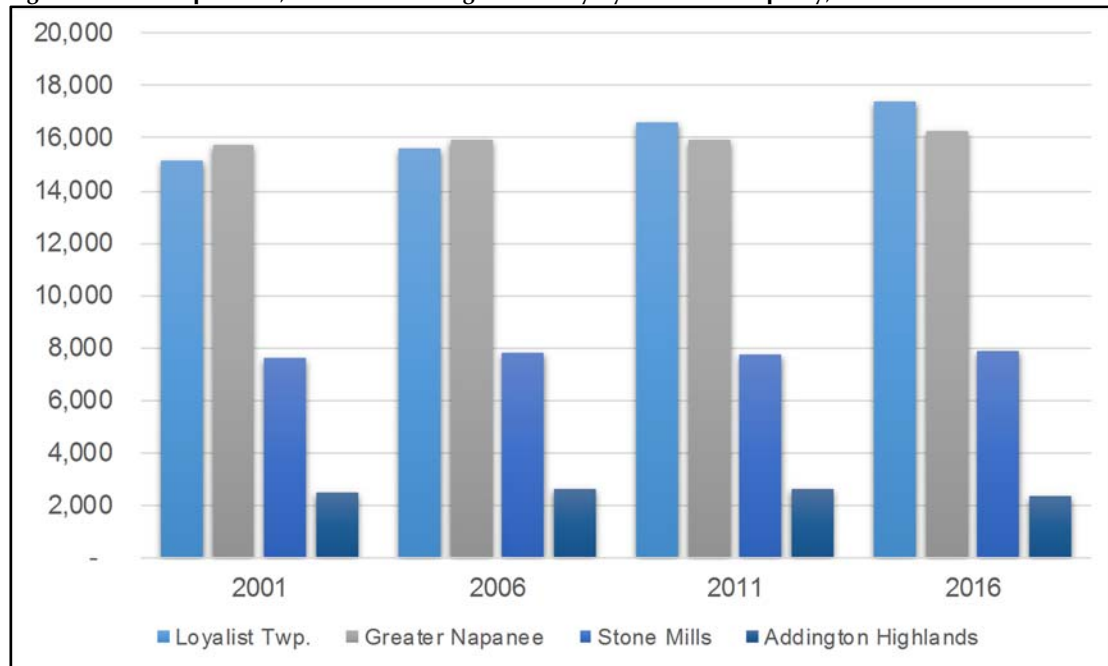
Figure 2: Total Households, Lennox & Addington County by Local Municipality, 2001-2016
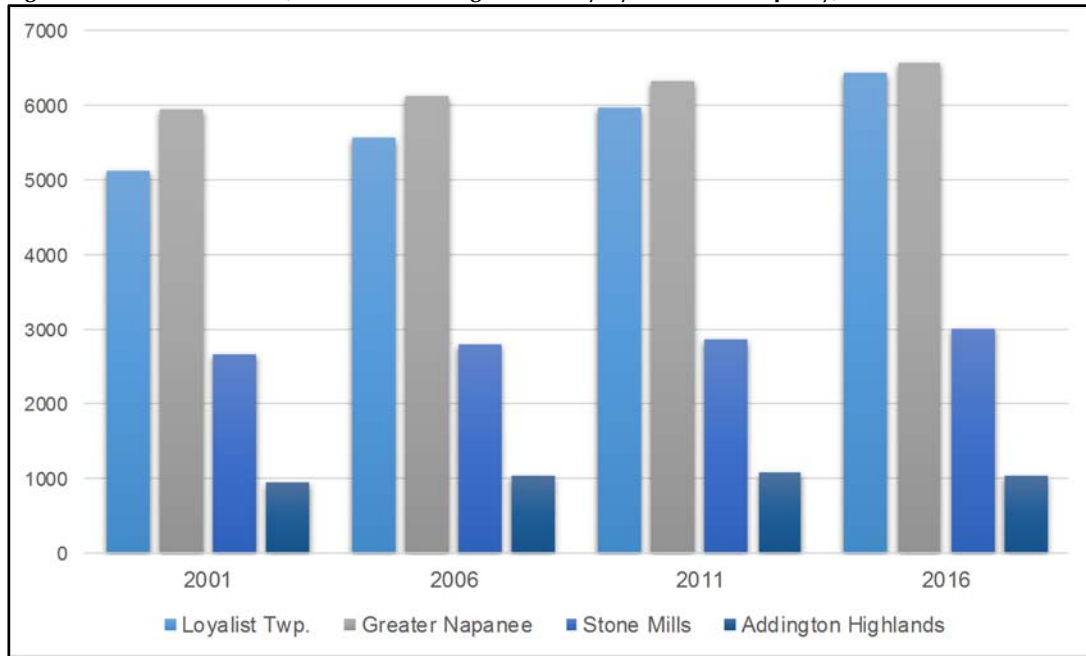
Source: Statistics Canada.

Figure 3: Total Employment, Lennox & Addington County by Local Municipality, 2001-2016
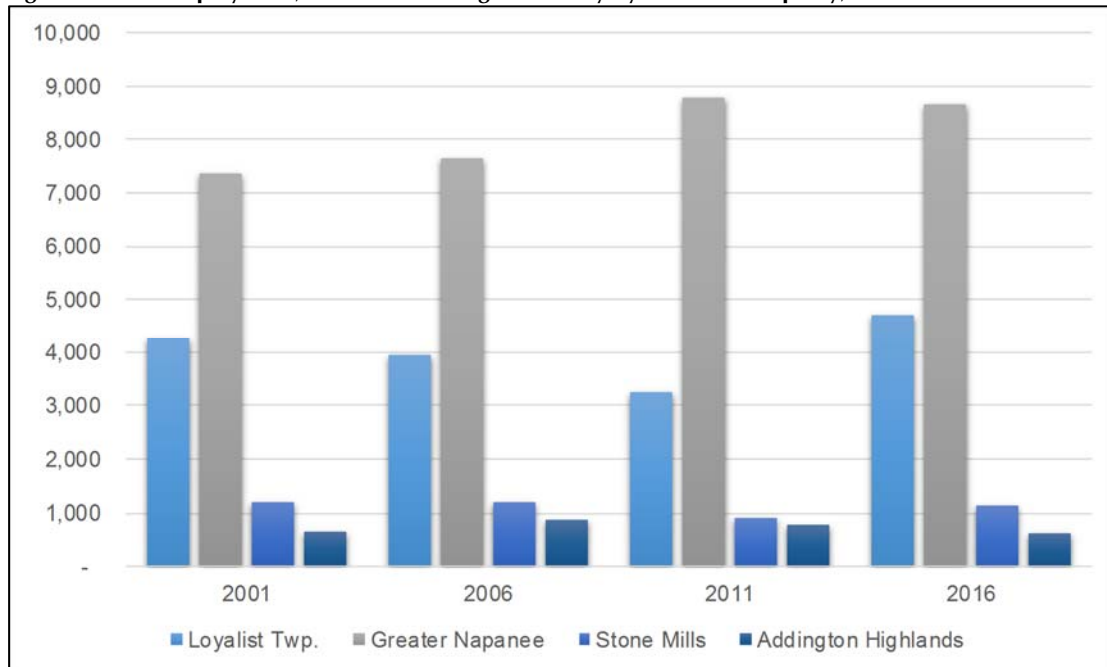
Source: Statistics Canada.

B.   HOUSING GROWTH OUTPACING GROWTH IN POPULATION

The rate of housing growth in Loyalist has been outpacing population growth since 2001, owing to declining average household size, which is a result of demographic change underway in the Township. The different growth rates between population and households, as shown in Figure 4 is due in large part to an aging population, a demographic feature of Loyalist that mirrors most of Ontario, particularly in communities outside major urban centres. The aging population results in a declining average household size as older populations generally have households with more "empty nesters", fewer children, and more single people due to divorce and widowing. The effect is that a greater number of housing units is required to house the same amount of population than if that population were younger. The sustained fall in average household size that has occurred in Loyalist is highlighted in Table 3.

Figure 4: Residential Growth Rates by Census Period, Loyalist Township, 2001-2016
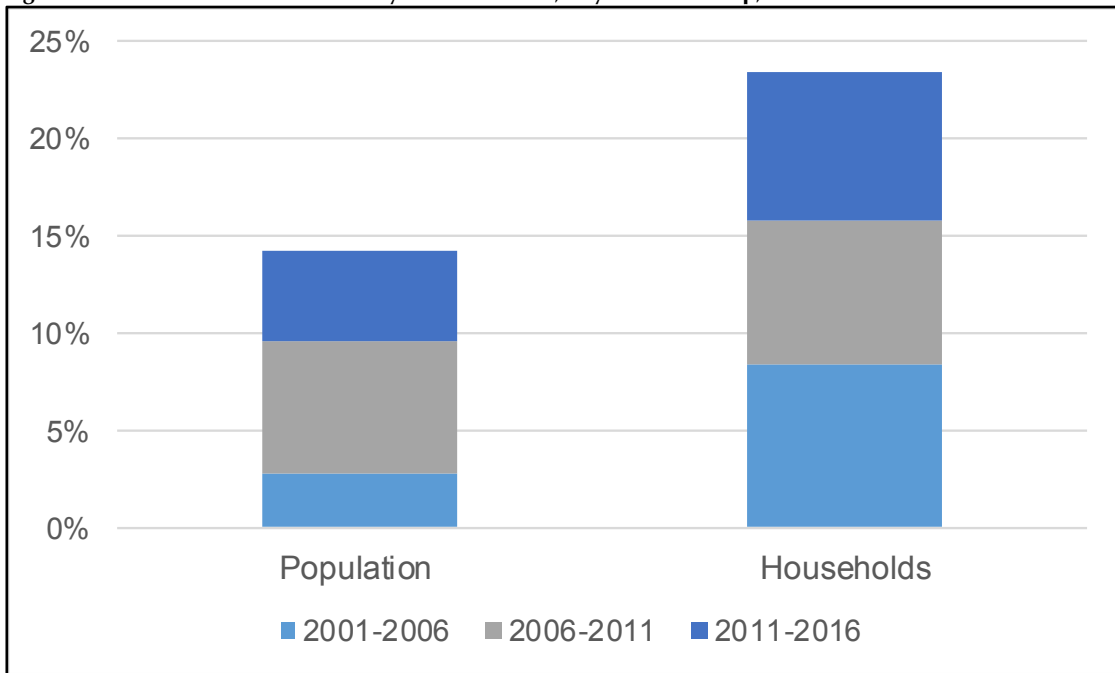
Source: Hemson Consulting based on Statistics Canada information.

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Table 3: Historical Average Household Size (Persons Per Unit)

Historical Average Household Size (Persons Per Unit), Loyalist Township, 2001-2016	
Year	Persons Per Unit
2001	2.66
2006	2.57
2011	2.53
2016	2.47

Source: Statistics Canada.

Figure 5 illustrates the change in the age structure of the population Loyalist since 2006. The aging demographic trend is anticipated to continue and is a key determining factor when forecasting future growth and change in the Township. Within the context of an aging population, the population would stabilize and begin to decline in the absence of in-migration.

Figure 5: Population Age Structure, Loyalist Township, 2006-2016
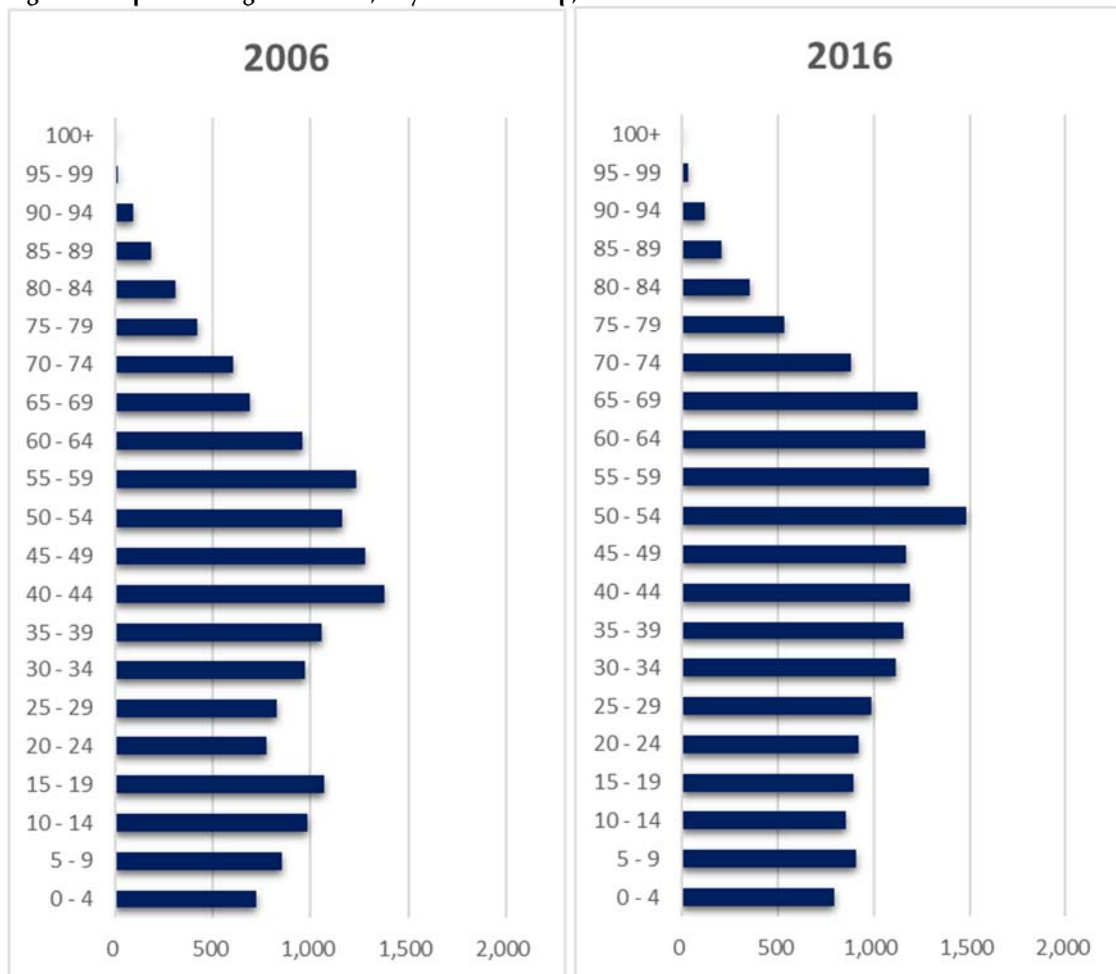
Source: Hemson Consulting based on Statistics Canada information.

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The age-structure of migrants is also a key consideration in understanding recent growth and change in Loyalist and assessing the future growth outlook. Figure 6 sets out annual net-migrants by age group over the 2006 to 2016 period. As shown, there is significant out-migration of younger aged adults, who are drawn to education and employment opportunities in larger urban centres. The pattern of some young adults leaving for the "big city" is common throughout the province with the recipient communities largely limited to the Greater Toronto Area and Ottawa.

Figure 6: Historical Migration (Number of Net Migrants by Age Cohort), Loyalist Township, 2006-2016
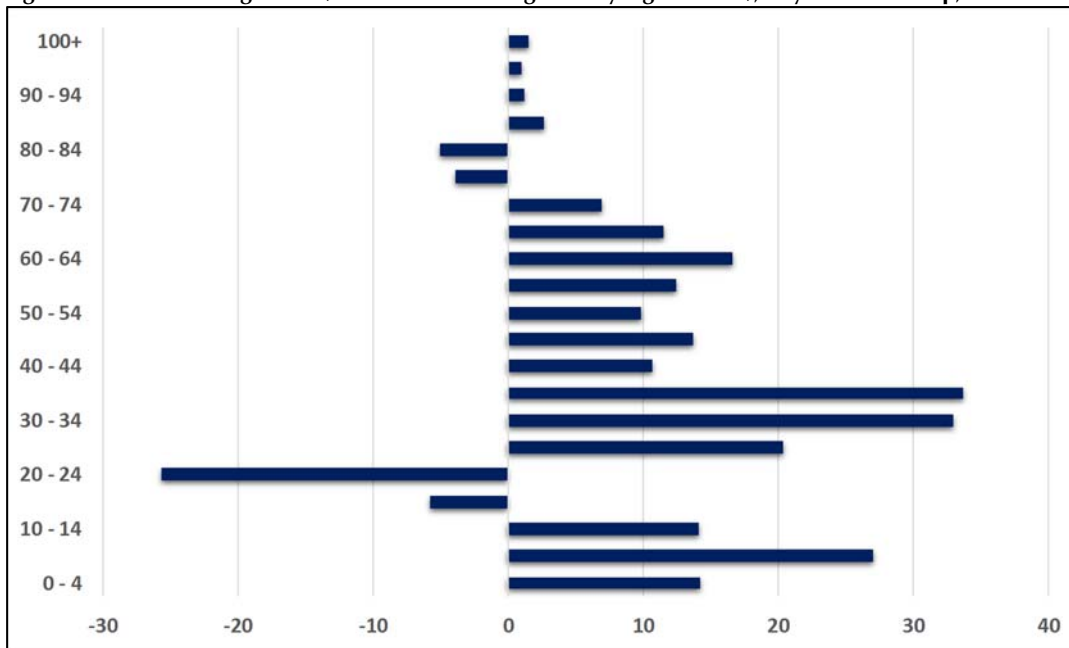
Source: Hemson Consulting based on Statistics Canada information.

C. TOWNSHIP EXPERIENCED MODERATE NET EMPLOYMENT GROWTH SINCE 2001 WITHIN SHIFTING ECONOMIC BASE

Employment in Loyalist has been variable over the last three Census periods, with significant declines in total employment in the 2000's followed by significant growth in total employment over the most recent 2011 to 2016 period. Following the publication of Loyalist's last projections in 2008, Ontario was impacted by the 2008 to 2009 global recession and the significant economic shifts that followed. The changes over this period resulted in noteworthy shifts in employment activity, which have had significant implications on the outlook for various economic sectors and employment land uses within Loyalist and the broader County of Lennox & Addington and Kingston CMA.

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Table 4 indicates change in total employment in Loyalist since 2001. As shown, the Township's employment base increased by 460 net jobs between 2001 and 2016 within the context of a shifting economic base and employment decline in both Census periods between 2001 and 2011, offset by the notable growth over the most recent Census period.

Table 4: Historical Place of Work Employment, Loyalist Township, 2001-2016

Historical Total Place of Work Employment Loyalist Township, 2001 - 2016		
Year	**Total Place of Work Employment**[1]	**Growth**
		Net Change	**Average Annual Growth Rate**
2001	4,250		
2006	3,940	(310)	-1.5%
2011	3,260	(680)	-3.7%
2016	4,710	1,450	7.6%
2001-2016		460	0.7%

[1] Place of Work employment refers to the number of jobs in Loyalist, irrespective of w here the employee resides

As demographic change is affecting Loyalist's population and housing base, so too is economic change affecting opportunities for employment within the Township. Similar to communities throughout Ontario, Loyalist has experienced a significant increase in population-serving employment sectors, such as retail trade and healthcare. Growth in the public administration sector has also continued and accounts for Loyalist's largest employment sector, with over 900 jobs, most of which are related to correctional institutions located in Bath. Other sectors of note include Finance, Insurance and Real Estate, which more than tripled in terms of the number of total jobs since 2006, and Education, which declined by nearly one-third, losing over 100 jobs. The graphic below indicates net change in employment by sector for the three Census periods since 2001.

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Figure 7: Change in Place of Work Employment by NAICS[1], Loyalist Township, 2006-2016
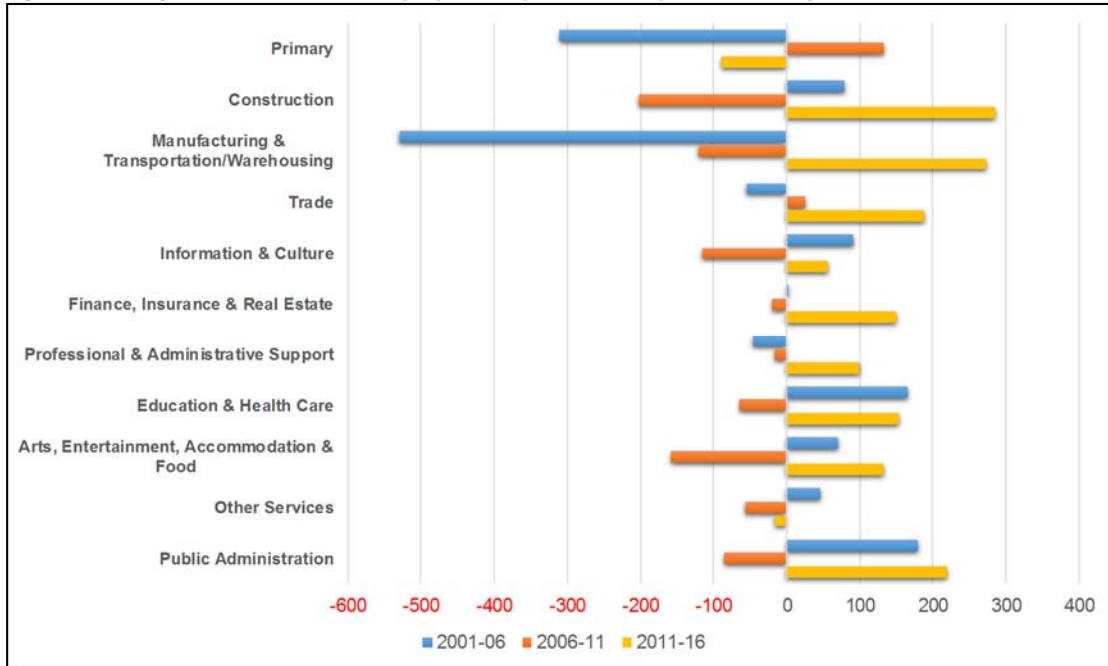
Source: Statistics Canada.
[1]North American Industry Classification System.

For the purposes of assessing and forecasting employment growth and associated land needs, employment is divided into three land-use-based categories:

- Population-related Employment, which is employment that primarily serves a resident population and includes retail, education, healthcare, and local government. This generally grows in line with population growth and is located on a range of commercial and community area designations.

- Employment-land Employment, which refers to traditional industrial-type employment primarily accommodated in low-rise industrial buildings in business parks and employment areas. This is the type of employment that would locate on designated industrial lands.

- Other Rural-based Employment, which refers to jobs scattered throughout the rural area, primarily related to agricultural and primary industries.

Most of the Township's employment base continues to be in population-services with traditional industries also comprising a significant proportion the local job base. Table 5 indicates estimated employment by land use category in Loyalist since 2006 and Figure 8 illustrates the relative shares of employment by land-use based category in 2011 and 2016.

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Table 5: Estimated Historical Employment by Type, Loyalist Township, 2006-2016

	Population Related	Employment Land	Other Rural Based	Total
Estimated Historical Employment by Type				
Loyalist Township, 2006 - 2016				
2006	2,300	1,320	320	3,940
2011	1,960	970	330	3,260
2016	2,750	1,570	380	4,710
2006-16	450	250	60	760
Annual				
2006-16	45	25	6	76
2006-16	2.0%	1.9%	1.9%	2.0%

Figure 8: Employment by Population-Serving, Traditional Industry and Rural-based, Loyalist Township, 2011 & 2016
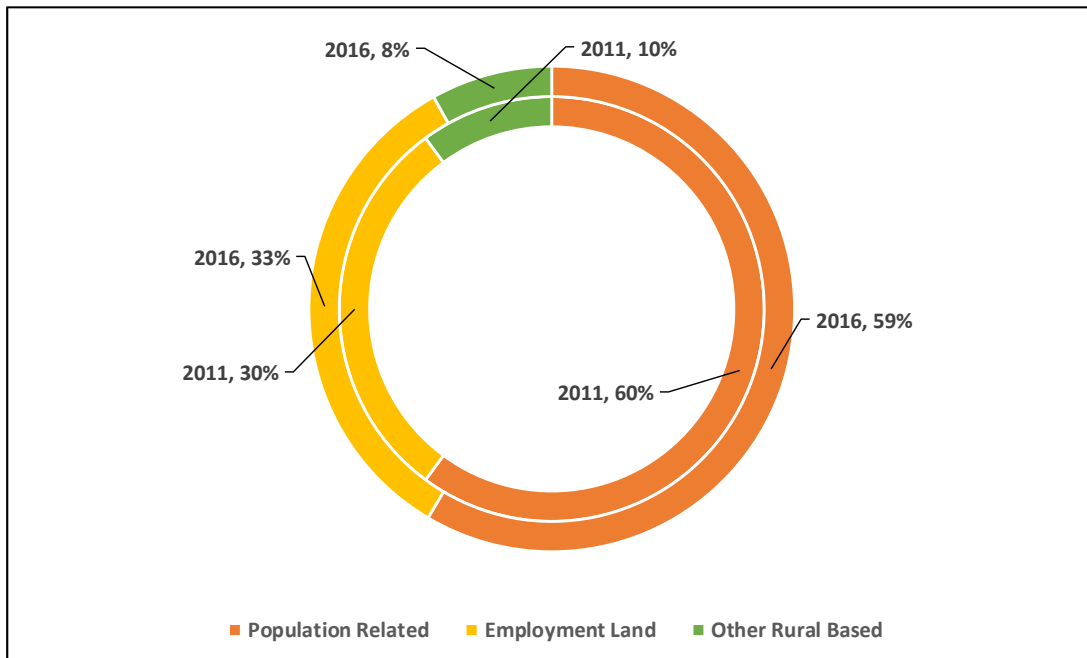
Source: Hemson Consulting based on Statistics Canada information.

Loyalist exhibits a strong relationship with the surrounding region, most notably with the City of Kingston, and within Lennox & Addington, the Town of Greater Napanee. The Township experienced net out-commuting with the greatest number of Loyalist residents working in the City of Kingston. The next largest commuting flow is between Loyalist and Greater Napanee, the two most populous of Lennox & Addington municipalities. Table 6 and Figure 9 below indicate the largest commuting flows into and out of Loyalist in 2016.

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Table 6: Commuting Patters, Loyalist Township, 2016

2016 Commuting Patterns, Loyalist Township			
Area	Number of People Commuting to Loyalist for Work	Destination of Loyalist Residents for Work	Net Commuting Flow
Belleville	75	100	**-25**
Greater Napanee	235	510	**-275**
Kingston	1,110	4,755	**-3645**
Ottawa	0	35	**-35**
Prince Edward	530	25	**505**
South Frontenac	170	40	**130**
Stone Mills	170	15	**155**
All Other Remaining Areas	165	180	**-15**
Total Commuters	2,455	5,660	**-3205**
Live and Work in Loyalist	990	990	**0**
Total Usual Place of Work	3,445	6,650	**-3205**

Source: Hemson Consulting based on Statistics Canada information.

Figure 9: Top Community Flows, 2016
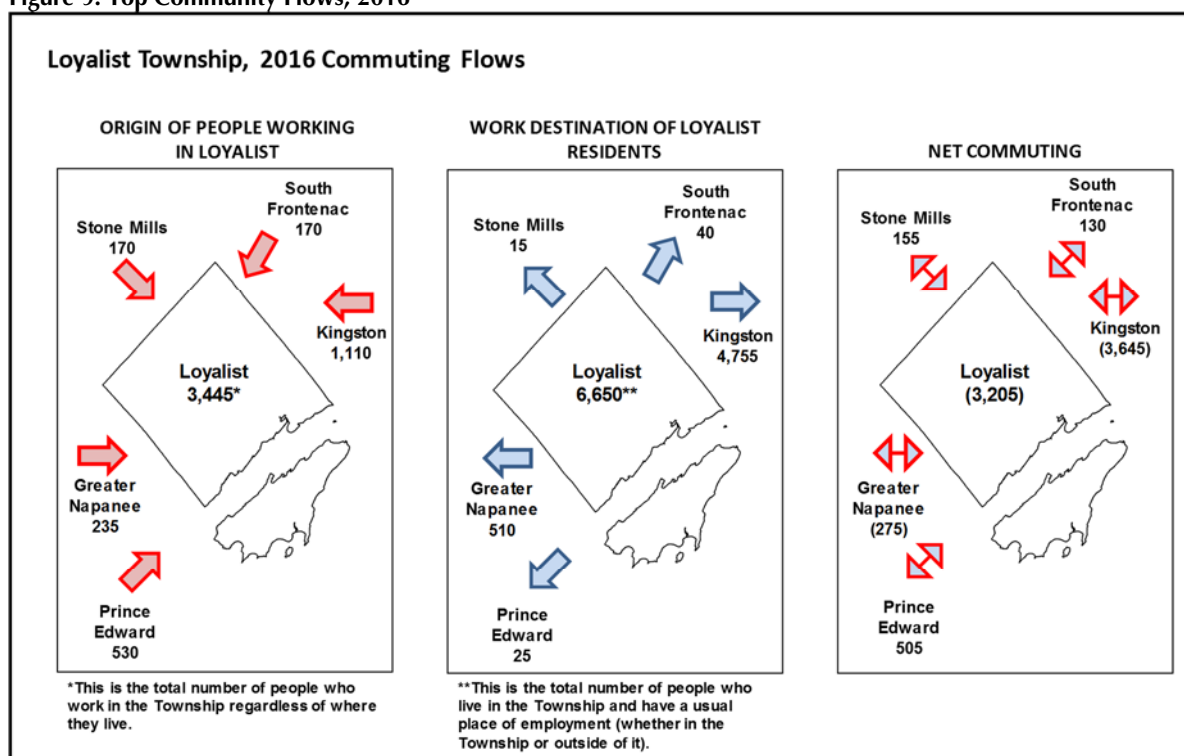
Source: Hemson Consulting Ltd. based on Statistics Canada Place of Work and Resident Employment Labour Force data.
The graphic illustrates the most significant flows of commuters into and out of the Township. 900 Loyalist residents both live and work within the Township. Note: Work at home employment is excluded from the above figures.

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D.   LOCAL DISTRIBUTION OF RECENT GROWTH WITHIN LOYALIST REINFORCES HISTORICAL PATTERNS

A key task of the projections study is to allocate forecast Township growth to community areas within Loyalist. Analysis was undertaken of recent growth and change within the communities of Amherstview, Bath and Odessa based on analysis of Census data at the Dissemination Area (DA) level, employing the sub-municipal study areas provided by the Township. Results are discussed below for population, households and employment at the local level within Loyalist.

The distribution of growth within Loyalist has been largely influenced by the location of communities in relation to the City of Kingston, with which the Township has significant commuting and resident migration flows. Within Loyalist, the community of Amherstview is the largest population settlement area and has continued to be the focal point of residential growth in the Township, accounting for roughly 70% of the net growth in population and household over the 2006-2016 timeframe. The Bath community also experienced growth over the last two Census periods, much more moderately during the latter 2011 to 2016 Census period. Odessa has remained relatively constant in total population between 2006 and 2016.

Background review of servicing and land supply in Loyalist suggests the housing supply in the Township has historically been affected by local public infrastructure and servicing constraints, some of which may have been alleviated in recent years, enabling future development should the market demand be realized. In particular, this may positively affect the future growth prospects for the Odessa community, where the adjacency to the Highway 401 would suggest an ideal location, particularly for residents commuting to Kingston and other parts of Lennox & Addington and central Eastern Ontario; as well as for employment lands.

Employment within in the Township is also largely concentrated in the Amherstview community, which accounted for nearly half of the net growth in employment in Loyalist between 2006 and 2016; however each study area within the Township did experience employment growth over the latter 2011-2016 period. The net decline in employment during the 2001 to 2011 period were more than compensated for over the most recent Census period. Much of the employment based in Loyalist is attributed to the significant institutional uses within the Township. Tables 7, 8 and 9 below indicate estimated total population, households and employment as well as net change during the last two Census periods, average annual growth and growth rates.

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Table 7: Historical Total Population, Loyalist Township by Sub-Municipal Areas, 2006-2016

	Amherstview	Bath	Odessa	Rural*	Loyalist Township
Historical Total Population **Loyalist Township by Sub-Municipal Areas, 2006 - 2016**					
2006	7,890	2,760	1,270	3,650	15,570
2011	8,410	3,340	1,250	3,640	16,640
2016	9,150	3,420	1,270	3,540	17,380
2006-2011	520	580	-20	-10	1,070
2011-2016	740	80	20	-100	740
Annual Avg. 2006-16	126	66	0	-11	107
Avg. Annual 10-yr Growth Rate	1.6%	2.4%	0.0%	-0.3%	1.2%

*Rural inculdes Ernstow n and Amherst Island

Source: Hemson Consulting based on Statistics Canada Information.

Table 8: Historical Occupied Households, Loyalist Township by Sub-Municipal Areas, 2006-2016

	Amherstview	Bath	Odessa	Rural*	Loyalist Township
Historical Occupied Households **Loyalist Township by Sub-Municipal Areas, 2006 - 2016**					
2006	2,870	950	460	1,290	5,570
2011	3,150	1,030	470	1,320	5,970
2016	3,450	1,150	490	1,340	6,430
2006-2011	280	80	10	30	400
2011-2016	300	120	20	20	460
Annual Avg. 2006-16	58	20	3	5	40
Avg. Annual 10-yr Growth Rate	2.0%	2.1%	0.7%	0.4%	1.5%

*Rural inculdes Ernstow n and Amherst Island

Source: Hemson Consulting based on Statistics Canada Information.

Table 9: Estimated Historical Total Employment, Loyalist Township, 2006-2016

	Amherstview	Bath	Odessa	Rural*	Loyalist Township
Estimated Historical Total Employment **Loyalist Township by Sub-Municipal Areas, 2006 - 2016**					
2006	1,820	910	420	770	3,920
2011	1,510	750	350	640	3,250
2016	2,180	1,090	510	920	4,700
2006-2011	-310	-160	-70	-130	-670
2011-2016	670	340	160	280	1,450
Annual Avg. 2006-16	36	18	9	15	-67
Avg. Annual 10-yr Growth Rate	2.0%	2.0%	2.1%	1.9%	2.0%

*Rural inculdes Ernstow n and Amherst Island

Source: Hemson Consulting based on Statistics Canada Information.

Analyses of local demand, land supply and servicing capacities to accommodate growth helped to inform allocations of forecast growth within the Township, provided later in this report. The allocations are based on the results of the evaluation and taking into account consultation with key stakeholders and Township staff.

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III FORECASTS ARE FOR MODERATE RESIDENTIAL AND EMPLOYMENT GROWTH TO 2046

This section sets out the method and key assumptions that were used in the Loyalist Township forecast and provides the results of the population, household and employment forecasts by five-year Census intervals, from a 2016 base to 2046. The forecasts for Loyalist are considered in the larger context of trends influencing growth, change across the economic region, and incorporate all currently available data on existing development, population and employment in the Township.

The growth forecasts were prepared using Hemson's well-established forecast modeling techniques based on Provincial forecasting and planning policy guidelines and rooted in the broader economic and demographic outlook for the Province and Eastern Ontario. This is combined with a locally-based economic and demographic outlook that takes account of local conditions. Taking into account prior forecasts and the role of Loyalist within the Kingston Census Metropolitan Area (comprising Loyalist, the Frontenac Islands, South Frontenac and the City of Kingston), the County of Lennox & Addington and the broader Eastern Ontario region, projections of population, housing and employment growth to a 2046 horizon have been prepared.

Three forecast scenarios were prepared incorporating varied assumptions about the Township's future economic outlook – a low, reference and high growth scenario – based on assumptions about varying levels of future in-migration to Loyalist. The reference scenario represents the most likely outcome and is, in our view, an appropriate basis for planning.

A.   FORECAST METHOD AND ASSUMPTIONS

The forecasts of population, households and employment are based upon the well-established standard cohort-survival forecast model. The forecast method is illustrated in Figure 10 below.

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Figure 10: Forecast Method
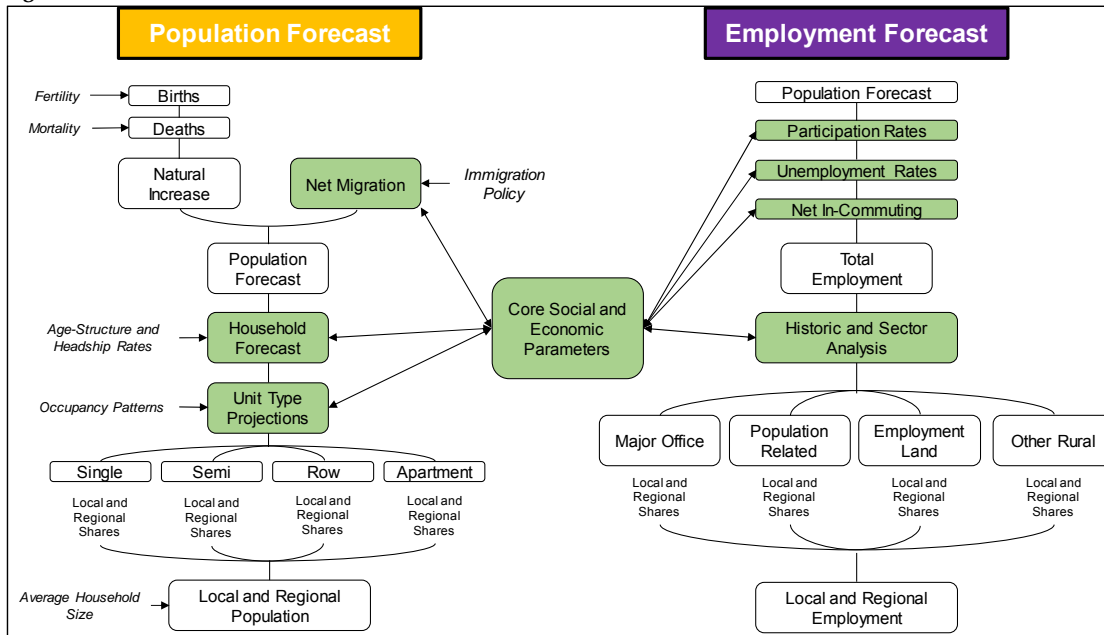
The approach begins by forecasting population, housing and employment for the Kingston CMA, Lennox & Addington and Loyalist based on national and provincial economic and demographic trends. The results of the forecast are then distributed to communities within Loyalist based on households and shares of Township-wide housing growth.

The forecasts are prepared by applying a set of principal assumptions within the forecast model related to Ontario's economic future and its social context. This set of core economic and social parameters include: the broader outlook and composition of the Ontario economy; migration and settlement patterns, such as national immigration policies and increasing concentration in urban centres; and demographic change, such as aging of the population. The forecasts of Loyalist's population, household and employment growth begin with these core economic and social parameters.

The current broad economic and demographic trends are expected to continue over the forecast horizon. The Ontario economy is expected to continue to grow at a moderate pace over the coming decades, consistent with average rates of growth over recent decades. This growth will occur within the context of a continued small shift towards a population-related employment in a more service-sector-based economy, owing to higher levels of population growth and the transition in the broader Ontario

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economy to services. At the same time, in Loyalist, employment land employment is expected to continue to represent a significant share of the employment base.

Migration has come to represent the largest share of population growth throughout Ontario; levels of natural increase continue to decline and in many areas are now negative. This is due to the decrease in fertility rates and the general aging of the population. However, the baby boom echo (millennial) population is now entering its peak child-bearing years, so there will be a significant number of births as the "echo-echo" generation is born. Once that is complete, there is little natural increase likely in most populations.

Growth in Loyalist will continue to be largely dependant on intra-provincial migration and most greatly influenced by the Townships's proximity to the City of Kingston and adjacency to Ottawa Region. By the 2030s, due to the aging demographic and fertility rates below replacement, the population of Loyalist would decline without net in-migration. The natural decrease in the base population will in part, counterbalance the population growth generated by in-migrants seeking new housing.

While Loyalist and Lennox & Addington as a whole are likely to continue to experience the out-migration of some young adults, it will be balanced by in-migration of that age group from other areas and by a large net in-migration of those in their 30s and 40s, seeking (mostly) family-oriented housing. The Township is forecast to experience modest net in-migration over the forecast.

The forecast results which follow represent a best estimate of future growth and change based on the most current available data and assumptions about past and future economic and demographic conditions. Given an inherent uncertainty in long-term demographic and economic forecasting, regular reviews are prudent and it is recommended that the forecasts be revisited at each five-year official plan review. The forecasts are prepared by five-year intervals corresponding with the Census from a 2016 base to a 2046 horizon.

The forecast results indicate moderate growth in population over the period from 2016 to the 2046 planning horizon. Housing growth is anticipated to continue to out-pace population due to declining average household size.

A key consideration in forecasting future growth in Loyalist is the aging demographic trend. As described earlier, the Township, like many communities in Ontario, is experiencing an aging population, which has important implications in planning for

future growth and development and is a key consideration in the projection update for a number of reasons including: an aging population requires different forms of housing and age affects labour participation rates.

The graphic below illustrates the age structure of the population at 2016 and as anticipated at 2046[1].

Figure 11: Current and Forecast Population Age Structure, Loyalist Township, 2016 & 2046
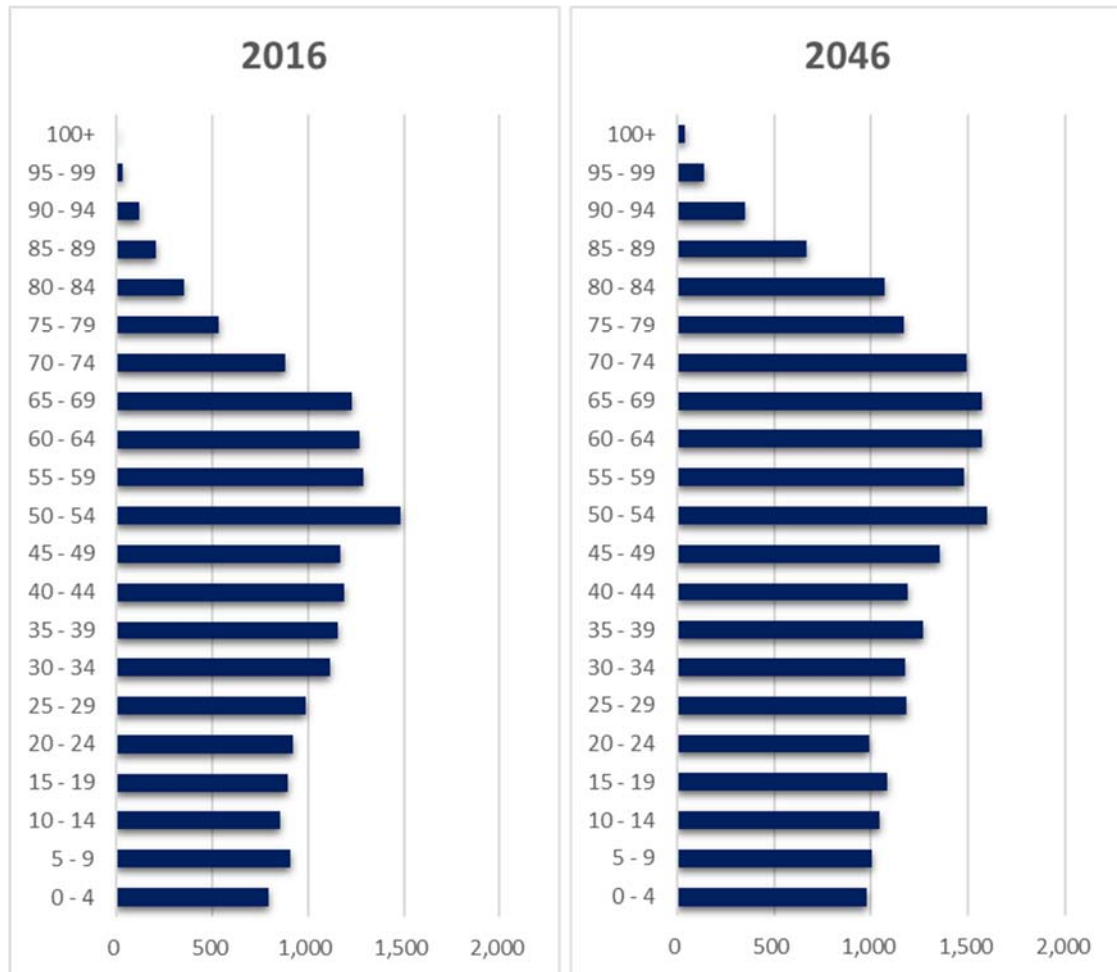
Source: Hemson Consulting Ltd. using data from Statistics Canada Census, 2016; Hemson, forecast.

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[1] *For the purpose of the age structure forecasts, the institutional populations of the Millhaven and Bath correctional facilities are treated separately in order to account for the disproportionate number of males in the 25-40 year age cohorts.*

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The aging demographic trend is anticipated to continue and is a key determining factor when forecasting future growth and change in the County. Within the context of an aging population, the population would stabilize and begin to decline in the absence of in-migration.

B. THREE FORECAST SCENARIOS HAVE BEEN PREPARED

Three forecast scenarios – a low, reference and high outlook – based on varied assumptions about future migration patterns and economic conditions, have been prepared. The reference is in our view, the most likely outcome and is based on an assumption of lower net out-migration of young adults than the Township has experienced over the recent decade. The high scenario was developed to test the effects of reduced out-migration of young adults and higher in-migration for most other age groups. The low scenario would represent a continuation of current out-migration patterns and reduced labour force participation over the forecast horizon.

The outlook for housing is affected by an aging population. However, housing will grow at a faster rate than population because more households are needed to accommodate the same population as it ages: there are more empty nesters and single elderly people and fewer families with children at home. This results in a gradual decline in the average household size over the forecast horizon. Table 10 below indicates historical and continued change in average household size anticipated to occur over the forecast horizon to 2046.

Table 10: Historical & Forecast Average Household Size (Persons Per Unit)

Historical and Forecast Average Household Size (Persons Per Unit) Loyalist Township, 2001 - 2046	
Year	**Persons Per Unit**
2001	2.66
2006	2.57
2011	2.53
2016	2.47
2021	2.42
2026	2.36
2031	2.29
2036	2.24
2041	2.20
2046	2.15

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Moderate employment growth is expected to continue over the forecast horizon, reflecting changes in labour force participation related to the aging population; and a continued shift to services-based sectors and continued most growth in traditional industry employment.

The results are provided below.

- From a current (2016) total population of 17,390, the Township's population in the first 20 years of the forecast to 2036 could range from a low of 18,310, to a mid-range total of 22,260 under the reference scenario, or even to a high of 22,500 should economic conditions and migration to the City, notably by young adults, significantly change.

- In the final 10 years of the forecast to 2046, the effect of aging and fewer births and death result in a slowing of growth in the low scenario to a population of 18,350 and in the reference scenario to 22, 600.

- The high scenario results in continued growth after 2036 with a 2046 population of 23,780.

Summary results by forecast scenario for population, households and total place of work employment are shown below.

Table 11: Summary Results by Forecast Scenario, Loyalist Township, 2016-2046

Summary Results by Forecast Scenario Loyalist Township, 2016-2046				
	2016	**2046**		
		Forecast Scenario		
		Low	**Reference**	High
Population*	17,390	18,320	**22,600**	23,280
Households	6,430	7,240	**9,730**	10,360
Employment	4,710	4,960	**6,140**	6,330

*Total Population Including Census Net Undercoverage

Detailed results of the reference scenario for population, households and employment are provided in the table that follows. Forecasted growth by community within Loyalist is further estimated by Census Tract within Loyalist for the purposes of local servicing and infrastructure planning. Results for the 2016 to 2046 forecast period is provided by Attachment.

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Table 12: Historical and Forecast Population, Occupied Households and Total Employment Reference Scenario, Loyalist Township, 2001-2046

	Total Population	Growth	Occupied Households	Growth	Total Employment	Growth
Historical and Forecast Population, Occupied Households and Total Employment Reference Scenario Loyalist Township, 2001 - 2046						
2001	15,140		5,130		4,250	
2006	15,570	430	5,560	430	3,940	-310
2011	16,630	1,060	5,970	410	3,260	-680
2016	**17,390**	**760**	**6,430**	**460**	**4,710**	**1,450**
2021	18,390	1,000	6,960	530	4,980	270
2026	19,450	1,060	7,570	610	5,260	280
2031	20,430	980	8,210	640	5,530	270
2036	21,260	830	8,740	530	5,760	230
2041	21,960	700	9,200	460	5,960	200
2046	**22,600**	**640**	**9,730**	**530**	**6,140**	**180**
2001-16		2,250		1,300		460
2016-31		3,040		1,780		820
2031-46		2,170		1,520		610
2016-46		5,210		3,300		1,430
Annual						
2001-16		150		87		31
2016-31		203		119		55
2031-46		145		101		41
2016-46		174		110		48
2001-16		1.0%		1.7%		0.7%
2016-31		1.2%		1.8%		1.2%
2031-46		0.7%		1.2%		0.7%
2016-46		1.0%		1.7%		1.0%

Note: Total Population includes Census Net-Undercoverage.

Table 13 below indicates historical and forecast housing by unit type. The general pattern of residential development is anticipated to continue over the forecast horizon, with single-detached dwellings continuing to be the dominant housing form, within the context of a moderate increase in the relative proportion of rowhouses in the overall housing unit mix at 2046, as shown in Figure 12.

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Table 13: Historical and Forecast Housing by Unit Type, Loyalist Township, 2001-2046

Historical and Forecast Housing by Unit Type, Loyalist Township, 2001-2046				
	Housing by Unit Type			
Year	**Single/Semi**	**Row**	**Apts**	**Total**
2001	4,160	400	570	5,130
2006	4,630	350	580	5,560
2011	4,990	400	580	5,970
2016	5,310	560	560	6,430
2021	5,590	790	580	6,960
2026	5,910	1,050	610	7,570
2031	6,270	1,310	630	8,210
2036	6,570	1,520	650	8,740
2041	6,830	1,700	670	9,200
2046	7,140	1,910	680	9,730
2016-2046	**1,830**	**1,350**	**120**	**3,300**

Figure 12: Current and Forecast Housing by Unit Type, Loyalist Township, 2016-2046

2016

560 , 9%
560 , 9%
270 , 4%
5,050 , 78%

■ Single ■ Semi ■ Row ■ Apartment

2046

670 , 7%
1,800 , 18%
350 , 3%
7,200 , 72%

■ Single ■ Semi ■ Row ■ Apartment

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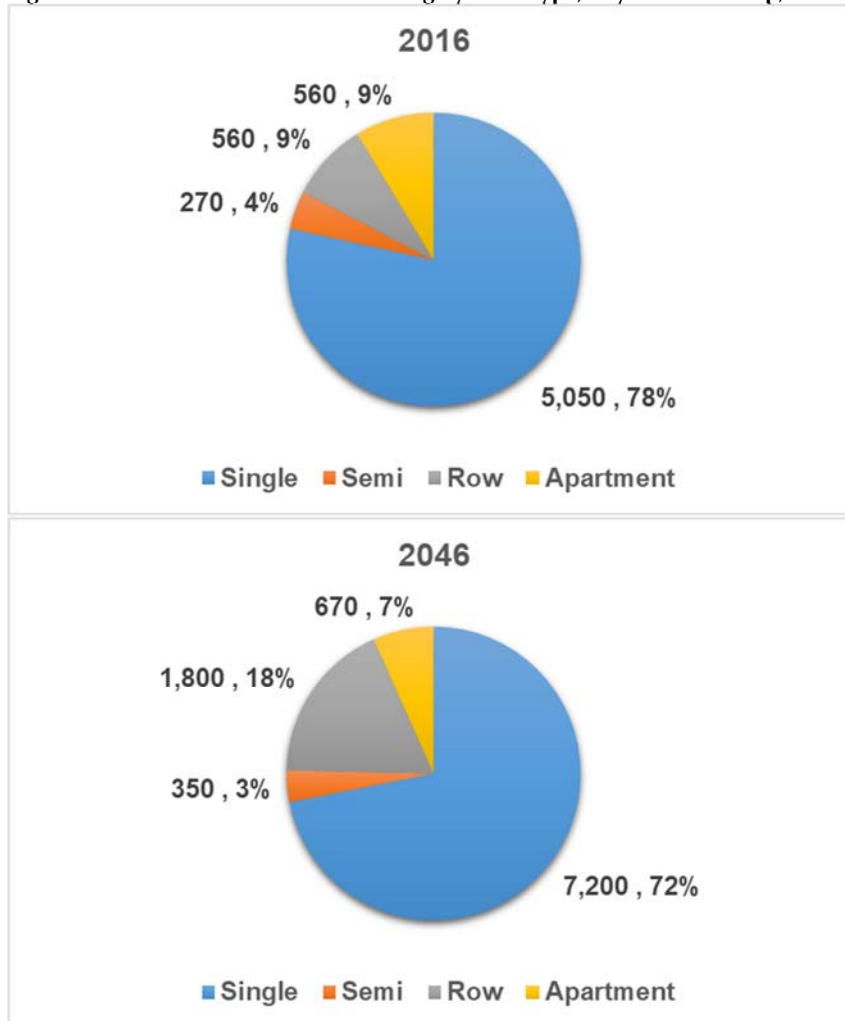
The forecasts are considered within the context of prior forecasts for the Township. In this regard, it is noted that:

- The forecasts prepared for the Township in 2009 were based on 2006 Census data and forecast a Census population of 16,380 (16,870 total including Census net undercoverage) at 2016 and 18,550 Census (19, 110 with undercount) at a 2031 forecast horizon, under a "medium" scenario.

- The current forecasts are based on 2016 Census data and extend the forecast horizon to 2046. As of 2016, the Township had a total population of 17,390. This is 520 residents more than was forecast for 2016 in the prior forecast study. The current reference forecasts are for 20,430 total population at 2031, higher than the prior forecasts but taking into account recent growth and development and based on the most current understanding of demographic and economic trends affecting the growth outlook for Loyalist.

C. SUB-MUNICIPAL GROWTH ALLOCATIONS

Allocations of the reference forecast scenario growth to community areas within Loyalist are presented below. The allocations take into account historical development patterns within the Township, recent growth and change and land supply and servicing capacity. The general distribution within Loyalist is anticipated to continue through the forecasts. The allocations were provided in draft for review by Township Staff and presented to Loyalist Council in June 2019. The local allocations of the Township-wide forecasts of population, households and total place of work employment are shown in Tables 14 to 17.

Table 14: Forecast Population, Households and Total Employment, Amherstview, 2001-2046

	Forecast Population, Occupied Households and Total Employment Reference Scenario Amherstview, 2016 - 2046					
	Total Population	Growth	Occupied Households	Growth	Total Employment	Growth
2016	9,150		3,450		2,180	
2021	9,760	610	3,770	320	2,330	150
2026	10,450	690	4,150	380	2,510	180
2031	11,040	590	4,510	360	2,640	130
2036	11,510	470	4,780	270	2,750	110
2041	11,960	450	5,030	250	2,830	80
2046	12,400	440	5,310	280	2,950	120
2016-31		1,890		1,060		460
2031-46		1,360		800		310
2016-46		3,250		1,860		770

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Table 15: Forecast Population, Households and Total Employment, Bath, 2001-2046

	Total Population	Growth	Occupied Households	Growth	Total Employment	Growth
Forecast Population, Occupied Households and Total Employment Reference Scenario Bath, 2016 - 2046						
2016	3,420		1,150		1,090	
2021	3,710	290	1,310	160	1,190	100
2026	3,980	270	1,480	170	1,290	100
2031	4,270	290	1,690	210	1,410	120
2036	4,540	270	1,890	200	1,490	80
2041	4,740	200	2,060	170	1,580	90
2046	4,890	150	2,250	190	1,630	50
2016-31		850		540		320
2031-46		620		560		220
2016-46		1,470		1,100		540

Table 16: Forecast Population, Households and Total Employment, Odessa, 2001-2046

	Total Population	Growth	Occupied Households	Growth	Total Employment	Growth
Forecast Population, Occupied Households and Total Employment Reference Scenario Odessa, 2016 - 2046						
2016	1,270		490		510	
2021	1,320	50	510	20	560	50
2026	1,370	50	540	30	600	40
2031	1,430	60	580	40	650	50
2036	1,480	50	620	40	690	40
2041	1,520	40	650	30	750	60
2046	1,550	30	690	40	760	10
2016-31		160		90		140
2031-46		120		110		110
2016-46		280		200		250

Table 17: Forecast Population, Households and Total Employment Reference Scenario, Amherst Island and Rural Area, 2001-2046

	Total Population	Growth	Occupied Households	Growth	Total Employment	Growth
Historical and Forecast Population, Occupied Households and Total Employment Reference Scenario Amherst Island and Rural Area, 2001 - 2046						
2016	3,540		1,340		920	
2021	3,600	60	1,370	30	900	(20)
2026	3,650	50	1,400	30	860	(40)
2031	3,690	40	1,430	30	830	(30)
2036	3,730	40	1,450	20	830	-
2041	3,740	10	1,460	10	800	(30)
2046	3,760	20	1,480	20	800	-
2016-31		150		90		(90)
2031-46		70		50		(30)
2016-46		220		140		(120)

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IV CONCLUSIONS AND RECOMMENDATIONS

This report provides an overview of growth and change in Loyalist and discusses key demographic and economic trends affecting the future growth outlook for the Township. The results of the population, housing and employment forecasts from a 2016 base to a 2046 horizon and local allocations of growth to the Amhersvtiew, Odessa, Bath communities, Amherst Island and the rural area have also been prepared.

Key study conclusions include:

- Loyalist experienced moderate growth in population and households over recent Census periods, adding 2,250 residents and 1,300 households between 2001 and 2016. The rate of housing growth has been outpacing population growth, owing to declining average household size, which is a result of key demographic change underway. Within the context of the aging population, population would stabilize and begin to decline in the absence of in-migration.

- The Township's employment base increased by 460 net jobs between 2001 and 2016 within the context of a shifting economic base and employment decline in both Census periods between 2001 and 2011, followed by significant growth over the most recent Census period.

- The forecasts are of moderate growth in population over the period from 2016 to the 2046 planning horizon. Housing growth is anticipated to continue to out-pace population due to declining average household size. Modest employment growth is also expected to continue over the forecast horizon, reflecting changes in labour force participation related to the aging population and a continued shift to services-based sectors and some growth in traditional industry employment

- The distribution of growth within Loyalist has been largely influenced by the location of communities in relation to the City of Kingston. Within Loyalist, the community of Amherstview is the largest population settlement area and the focal point of residential growth. The Bath community also experienced growth over recent Census periods, much more moderately between 2011 and 2016; while population in Odessa has remained relatively stable. The historical pattern within Loyalist is anticipated to continue through the forecasts, reflected in the local allocations of growth.

- The draft forecast results were presented at Public Information Centre and to Township Council on June 24, 2019. Minor refinements to the forecasts were made following however the overall growth outlook to 2046 remains consistent with the draft forecasts.

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The reference growth scenario provided herein represents the recommended population, housing and employment forecasts for planning and growth management in the Township.

Regular forecast review and update is prudent, given inherent uncertainty in forecasting. It is recommended that the Township continue to monitor growth and development and review the forecasts at regular intervals as new information becomes available.