Growth Projections for Ottawa

Prospects for Population, Housing and Jobs

2006-2031

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Prospects for Population, Housing and Jobs

City of Ottawa
Department of Planning, Transit and the Environment
Planning Branch
Research and Forecasting Section
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EXECUTIVE SUMMARY

Projections of Ottawa's long term growth in population, housing and employment provide a basis for thinking about and planning how we want our city to evolve, and how we will respond to emerging challenges. They are also a cornerstone of the City's long-range land use, infrastructure and financial planning.

Council adopted the current projections for 2021 in November 2001 as the basis for the new Official Plan (OP). Population growth in Ottawa has been lagging the 2001 projection since 2003 by a steadily-widening margin. In 2007, with the launch of a review of the Official Plan, revised projections are warranted. As part of the update to the Plan, the projections are being extended from 2021 to 2031.

The purpose of this report is to:

• Explain the methodology and key assumptions used for the revised projections;

• Present the results of the scenarios developed, including the projection recommended as the **Reference Scenario** (the one that will be used in the Official Plan review and subsequently incorporated in the Official Plan).

This report builds on an earlier *Background Report*[1] released for the information of Councillors and the public in June 2007, and the first draft of this report, which was released for public consultation in September 2007.

Population

The methodology used for the revision is the Cohort-Survival Model. This is in place of the econometric model used in the 2001 projections, simply because Cohort-Survival has a better record of accuracy. Cohort-Survival applies annual birth and death rates by age group and adds net in-migration by age group to the starting year population to arrive at projected populations for future years. In a growing city such as Ottawa, in-migration, specifically international immigration, is the most important driver of future population growth. Consequently, the draft projection scenarios are strongly focused on immigration.

[1] Available on the City web site at: http://www.ottawa.ca/city_services/statistics/new_growth/background_report/index_en.html

For the base year of the new projections, 2006, a mid-year 2006 population of 870,800 is used since staff believe this figure most accurately represents the population for which the City provides services. It is based on the mid-2001 post-censal population estimate to which is added the estimated population living in new dwelling units built and occupied between mid-2001 and mid-2006. These are adjusted to account for demolitions and vacancies, and for variations in average household size in different dwelling types. A final adjustment is made to account for ongoing declines in average household size across the city.

The number is higher than Statistics Canada's preliminary 2006 post-censal estimate of 840,000, but staff believe the "dwelling occupancy" method provides the best estimate of the actual population since it is based on the number of units that are known to have been built and occupied.

A range of scenarios has been tested, which are summarized below.

- **Low Scenario:** Assumes that Ottawa's share of international immigrants to Canada remains the same as in recent years. This results in an average annual net migration of 5,600 persons, which is 7% below the 25-year average to 2004-05, and yields a 2031 population of **1,057,000.** Population growth between 2006 and 2031 under this scenario would be 186,000.
- **Reference Scenario:** Assumes that annual average net migration increases by four per cent every five years, meaning net migration increases from 7,600 to 8,900 annually through the projection period. This results a 2031 population of **1,136,000**. Growth between 2006 and 2031 is 265,000.
- **High Scenario:** Assumes annual net migration increases by eight per cent every five years, meaning net migration grows from 7,800 to 12,500 through the period. This results a 2031 population of **1,207,000**, coincidentally close to the current projection figure but ten years later. Growth between 2006 and 2031 is 336,000.

The current population projection for 2021 in the Official Plan is 1,192,000. Although not in the OP, that projection also extended to 2031 and forecast a population for that year of 1,274,000, an increase of 403,000 from the 2006 estimate. The most recent Ontario government projection for Ottawa, published in 2005, calls for a growth of 266,000, almost identical to the draft Reference Scenario. Another

comparison is provided by the Centre for Spatial Economics' most recent Ontario regional forecast,[2] issued in 2007, which projects growth of 240,000 people for Ottawa during the 2006-2031 period, a slightly lower number than the Reference Projection and that of the Ontario government.

Another way of weighing the reasonableness of the draft Reference Projection is to view it in terms of the historical trend in the share of the Canadian population accounted for by the city of Ottawa. That share has increased at virtually every Census interval since 1951, the only decline being during the recessionary period of 1976-81. In 2006, Ottawa represented 2.67 per cent of the country; 25 years ago, in 1981, it had 2.27 per cent; 25 years hence, based on the Reference Projection, it would stand at 2.91 per cent.

Greater Ottawa-Gatineau Area

The projections also look at the entire Greater Ottawa-Gatineau Area to take into account the magnitude of the metropolitan economy and the extent of the commutershed. Detailed consultations with the Ville de Gatineau were undertaken in the preparation of forecasts for that municipality.

Based on long-term trends, the distribution of population across the greater metropolitan area is projected to show a stable share for Ottawa, a slight decrease in Gatineau's share, and slightly increased shares for adjacent areas in Ontario and Quebec (OMATO and QMAG) to reflect expanding road access and lower housing costs in outlying municipalities.

Given the growing interrelationships between the central cities of Ottawa and Gatineau and the adjacent municipalities, projections for the Greater Area are increasingly important for a big-picture view and for coordinated planning of transportation and other infrastructure.

Housing

Projections were also prepared for households and new dwellings by unit type for Ottawa and the Greater Area.

Two options for how to project Ottawa's future housing demand are presented. The first employs the conventional

[2] CSE, the consultants who prepared the forecast in 2001 which is used in the current Official Plan

method of replicating the housing choices reflected in the 2001 Census. Compared to what was actually built between 2001 and 2006, this significantly under-predicts townhouse construction and overstates apartment construction. The second option, using a forecast of future housing choices by age group, projects fewer apartments and single-detached houses and more townhouses, and may be a better predictor of the future housing market. Both options produce similar numbers of total dwellings, the primary difference being in the types of dwellings projected. The question of which housing projection the analysis of urban land requirements should be based on will be discussed in the coming months.

Employment

Employment growth will be constrained by the aging of the population, and the number of people entering retirement as the baby-boom reaches that point. Even with a higher percentage of older people continuing to work, this will have a significant effect, particularly in the latter part of the projection period.

The employment projection is based on the proportion of men and women in each age group who will be in the labour force, referred to as the participation rate. This used the age/sex structure from the Reference Projection and forecast changes in participation rates. Unemployment is expected to be low due to the impending labour shortage, and is forecast at five per cent through most of the next 25 years. This produced a projection of the employed labour force living in Ottawa. The number of jobs located in Ottawa was derived by applying trends in net commuting between Ottawa and surrounding municipalities. The results show a growth of approximately 173,000 new jobs located in Ottawa over the next 25 years. The previous 25 years, 1981 to 2006, produced about new 230,000 jobs, so the effects of slowing employment growth are evident.

Projection Implications

Overall, the projections foresee many changes to our community over the next quarter century. Some of the most significant changes include:

- The aging of the baby-boom, the leading edge of which first turns 65 in 2011, continues to be the most significant demographic force. In the draft Reference Projection, the population aged 65 and over will account for almost 50 per cent of our population growth to 2031. The share of

population 65 and over will increase from about 12 per cent in 2006 to slightly over 20 per cent by 2031. However, we will continue to be slightly younger than the national average, as Statistics Canada projects that 23.4 per cent of the Canadian population will be 65 and older by 2031.

- The very elderly population, those over 80, will more than double in number, from 29,000 to 59,000, placing high demands on health and long term care facilities in particular, and on many other services.

- Age groups 14 and younger are projected to increase by only 5.4 per cent by 2031, and to decline in total numbers over the coming decade. This will continue to put pressure on school closures and in the longer run will mean a smaller pool of replacements for the impending wave of retirees.

- The demographic dependency ratio - the number of children (14 and under) and seniors (65 and over) per 100 working age people (15 to 64) - will increase significantly, from 42 per 100 in 2006 to 54 by 2031. Statistics Canada projects that nationally the ratio will increase from 44 in 2006 to 61 in 2031, pointing again to Ottawa's relatively younger projected population. It should be noted that both locally and nationally, the major increases in the dependency ratio do not occur until after 2021.

Summary

The Reference Projection, which would become the basis for the OP review, is summarized as follows:

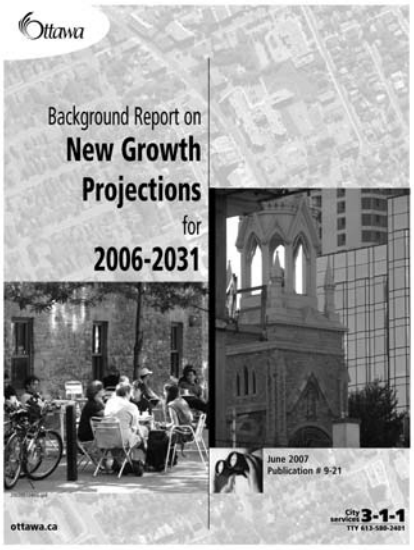
	2001	2006	2011	2016	2021	2026	2031
City of Ottawa							
Population	806,600	870,800	923,000	976,800	1,031,300	1,085,300	1,135,800
Households	319,400	351,200	381,800	413,000	443,600	471,700	497,400
Jobs	480,000	529,800	580,200	617,000	648,400	676,300	703,100
Greater Ottawa-Gatineau Area							
Population	1,205,200	1,307,100	1,385,000	1,472,400	1,561,600	1,650,300	1,733,800
Households	454,800	525,000	566,200	611,300	656,200	698,500	737,400
Jobs	n.a.	742,700	807,600	863,500	914,800	962,400	1,008,300

NOTE: Jobs by place of work.

Comments and questions on the projections can be addressed to:

Ian Cross, Program Manager, Research and Forecasting, Planning Branch, Department of Planning, Transit and the Environment, 613-580-2424 ext. 21595, ian.cross@ottawa.ca

Growth Projections for Ottawa
2006-2031



FOREWORD

In a report titled *"Background Report on New Growth Projections for 2006-2031"*, presented to the Planning and Environment Committee and Agriculture and Rural Affairs Committee on June 12 and 25, respectively, the need for revised projections was outlined and the Cohort Survival methodology proposed to be used for the revision.

This report presents the results of the three growth scenarios that were discussed in the Background Report, prepared based on the 2006 Census data on age and sex released in July 2007.

The first section of the report deals with population projections and elaborates on the three migration-based scenarios to produce population forecasts for Ottawa and the greater metropolitan area, including the distribution of growth between the city of Ottawa and surrounding areas.

The second section deals with households and housing. Projected household formation and associated housing requirements by dwelling unit type were calculated using the standard "propensity" method used by most large municipalities and also used in previous projections for Ottawa (and former Region). First, household projections are produced using historic headship rates for each of the three scenarios. Housing needs are then estimated by applying the proportion within each household age group who occupy single detached housing, multiples (semi-detached and townhouses, which in Ottawa is mostly townhouses), and apartments. This was based on the 2001 Census since results from the 2006 Census will not be available until 2008. There is also a forecast of changes in the propensities for each type of dwelling over time.

The third section deals with employment. Projections of employment are based on the population projection. Labour force participation rates by age and sex were applied to the age-sex structure of the projected population to produce an estimate of the resident labour force. This was then adjusted by an assumed unemployment rate to produce the number of employed residents. To that number was added an allowance for the number of net in-commuters from adjacent municipalities to jobs located in Ottawa.

1.0 Population Projections

Ottawa has weathered the high-tech downturn better than expected. By fortunate coincidence, the federal government embarked on an ambitious hiring program just as the high-tech sector crashed. Employment, therefore, kept growing through the bust, and the housing boom experienced a stutter-step before resuming its surge earlier this decade. Recent history suggests, therefore, that our city's economy is more resilient than fifteen years ago (the time of the last recession). It has become more diverse and therefore more capable of cushioning cyclical fluctuations.

Nevertheless, the population projections adopted in 2001, in the midst of the high-tech boom, have proven to be too high. Although Ottawa is and will remain a growing city and one of Canada's larger points of entry for international immigration, the population forecast must be revised to reflect more realistic growth prospects.

Growth projections for a major urban centre like Ottawa cannot ignore the fact that central cities do not exist in a vacuum. Ottawa is the largest central city of the fourth largest metropolitan area in Canada. It is one of the two central cities of this greater urban area, the other one being our sister city in Quebec, Gatineau.

The extent of our metropolitan sphere of influence and commutershed goes well beyond the boundaries of these two central cities. This is seen by the percentage of residents from neighbouring municipalities, in Ontario and Quebec, who work in the two central cities. In so doing, commuters make use of transportation and other infrastructure in the central cities, and they also partake in their cultural, social and commercial opportunities. There is an established and growing interdependence between the central cities and the outlying communities, an area that as of 2006 had a population of just over 1.3 million people.

This report presents 2006-2031 growth projections for Ottawa and its greater area. It will discuss assumptions regarding the distribution of growth across the greater area, and the evolution of housing preferences (both in location and dwelling type) that can be expected over the next quarter century.

For large cities to remain competitive as economic engines, cultural hubs and good places in which to live, their growth must be well planned and infrastructure investments well focused. By understanding the larger area's demographics

and growth dynamics, and offering scenarios on the possible direction of growth, these projections will serve as the basis for the updated Official Plan (OP), and the Transportation and Infrastructure Master Plans that will flow from the revised OP.

1.1 Determining the Extent of the Greater Ottawa-Gatineau Area

Statistics Canada defines a *Census Metropolitan Area* based on a number of indicators related to the interdependency of an outlying municipality's population with a central city's labour market. Usually, outlying municipalities join a Census Metropolitan Area when:

- Given a minimum of 100 commuters, at least 50% of the employed labour force **living** in the municipality **works** in the central municipality, as determined from the place of work question in the last census; or
- Given a minimum of 100 commuters, at least 25% of the employed labour force **working** in the municipality **lives** in the central municipality based on the last census.

There are a number of municipalities surrounding the city of Ottawa where those conditions do not yet exist but where a visible trend suggests that they soon will exist. The Census provides data on the employed labour force in each municipality and on place of work by place of residence. It is therefore possible to identify municipalities with strong ties to the Ottawa labour market.

The 2001 Census shows some municipalities now have over 25% of their employed residents commuting to Ottawa to work (2006 Census data will not be available until 2008).

Figure 1 lists municipalities that may be considered part of the greater Ottawa-Gatineau metropolitan area, with population and labour force indicators. These areas are mapped in Figure 2.

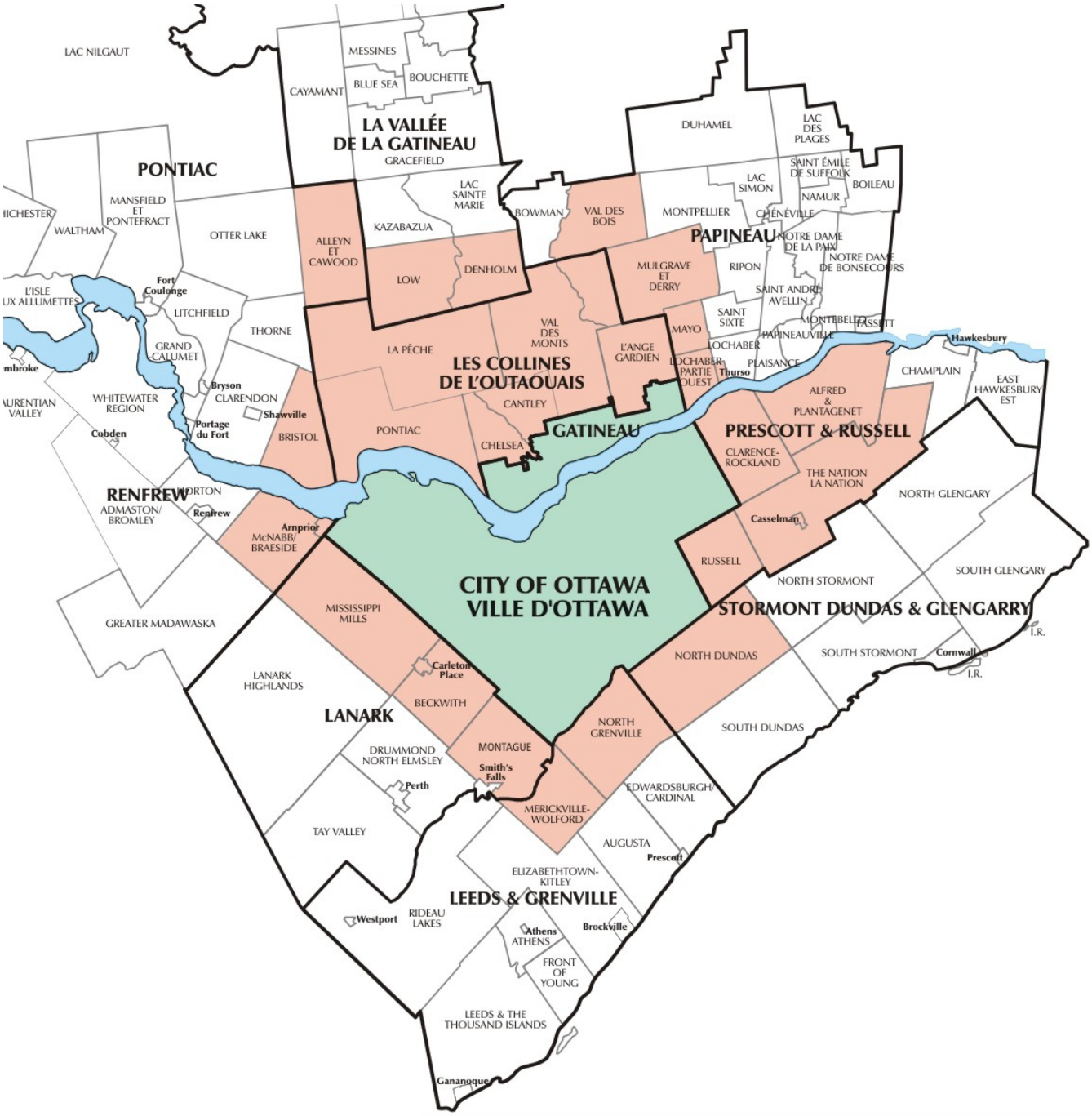
The two criteria in selecting municipalities were immediate adjacency to Ottawa or Gatineau and/or at least 25% of the employed labour force in the 2001 Census working in Ottawa or Gatineau.

Figure 1
GREATER OTTAWA-GATINEAU AREA

Municipality	Population, 2001 (Post-censal at July 1st)[1]	Population, 2006 (July 1st estimate)	% growth 2001-06	Employed labour force working in Ottawa-Gatineau (2001)	Employed labour force working in Ottawa-Gatineau (2001) (%)
City of Ottawa	**806,560**	**870,760**	**8.0**	**347,870**	**85%**
Ville de Gatineau	**231,344**	**249,374**	**7.8**	**103,360**	**86%**
ONTARIO MUNICIPALITIES ADJACENT TO OTTAWA (OMATO)					
City of Clarence-Rockland	19,612	22,325	13.8	6,170	58%
Township of Russell	12,412	14,458	16.5	4,050	59%
The Nation Municipality	10,599	11,578	9.2	2,155	37%
Village of Casselman	2,910	3,368	15.7	640	41%
Township of Alfred and Plantagenet	8,593	9,317	8.4	1,275	31%
Township of North Grenville	13,581	14,962	10.2	2,980	43%
Village of Merrickville-Wolford	2,630	2,999	6.6	265	19%
Township of North Dundas	11,014	11,757	6.7	1,820	31%
Township of Montague	3,671	4,081	11.2	325	20%
Township of Beckwith	6,046	6,759	11.8	1,645	49%
Town of Carleton Place	9,083	10,024	10.4	2,055	46%
Town of Mississippi Mills	11,647	12,732	9.3	2,480	41%
Town of Arnprior	7,192	8,010	11.4	855	26%
Township of McNab/Braeside	6,843	7,442	8.8	730	21%
QUÉBEC MUNICIPALITIES ADJACENT TO GATINEAU (QMAG)					
MRC Les-Collines-de-l'Outaouais	35,188	39,726	15.3	12,365	67%
Municipalité de Denholm	526	557	5.9	180	67%
Municipalité de Low	852	903	5.9	140	36%
Municipalité de Mayo	443	485	9.4	135	64%
Municipalité de Mulgrave-et-Derry	235	267	13.4	45	36%
Municipalité de Lochaber-Partie-Ouest	460	440	-4.3	80	41%
Ville de Thurso	2,436	2,614	7.3	340	39%
Municipalité de Val-des-Bois	732	807	10.2	80	36%
Municipalité de Bristol	993	1,197	20.5	125	28%
Municipalité de Alleyn-et-Cawood	179	170	-5.3	50	71%
TOTAL	**1,205,963**	**1,307,104**	**8.4**		
Ontario part	932,575	1,010,569	8.4		
Québec part	273,388	296,535	8.5		
	2001	*2006 est.*	*% chg.*	*% share of metro pop.*	
City of Ottawa	806,560	870,760	8.0	66.6%	
Ville de Gatineau	231,344	249,374	7.0	19.1%	
OMATO	126,015	139,809	10.9	10.7%	
QMAG	42,044	47,161	14.1	3.6%	

[1] Sources: Statistics Canada (Population and Labour Force Data; 2001 post-censal estimates for Ottawa and Gatineau; Census population for all other municipalities).
City of Ottawa (2006 population estimates for Ottawa based on building permits and for other Ontario municipalities based on housing starts and average number of persons per dwelling from the 2001 Census).
Institut de la Statistique du Québec (2006 Québec population estimates by municipality).

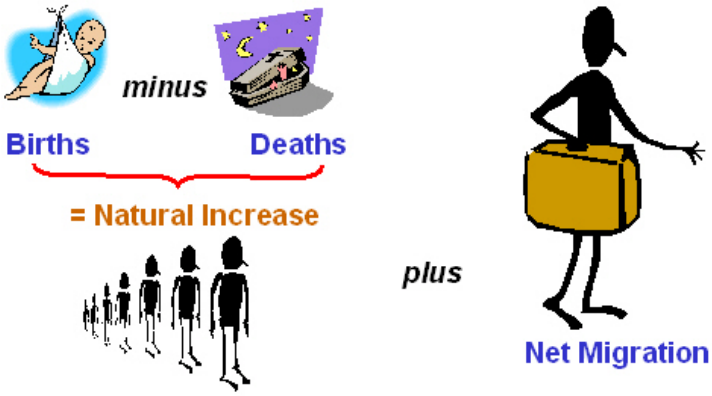
Figure 2
GREATER OTTAWA-GATINEAU AREA
(Shaded area)



1.2 Method and Model

This projection uses the cohort survival model, which has the best track record at successfully estimating future growth. The software program used to produce the projection is the Potential Housing Demand (PHD) Model developed by Canada Mortgage and Housing Corporation (CMHC). The PHD model forecasts aging, births, deaths and migration in the population for single years of age for each future year of projection. The model also incorporates headship rates, household formation by age, dwelling type propensities and tenure choice propensities to produce a projected number of dwellings by type and tenure.

The cohort survival method is an aggregate projection of natural population increase and net migration.



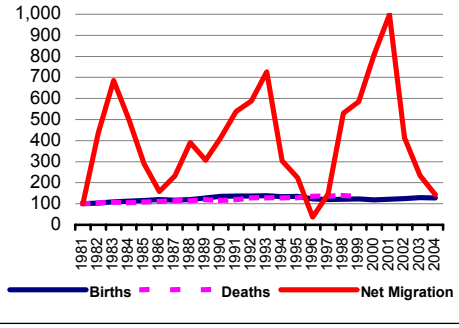
Natural increase, the excess of births over deaths, affects how the population changes, but is less significant and much less volatile than migration. Between 1996 and 2001, about 31% of Ottawa's population growth was due to natural increase.

Figure 3 shows the comparative importance of births, deaths and migration over a quarter-century, expressed as an index where the 1981 level for all three components is 100. As can be seen, births and deaths have risen gradually and steadily from the base year, while migration has much more volatile cycles and volumes that have reached ten times the base year at the highest peak.

One of the main findings of demographic analysis is that fertility and mortality rates change relatively slowly over time, however the contribution of natural increase to population growth will shrink as the population ages.

3 **Variation in Migration, Births and Deaths, City of Ottawa (1981=100)**

Statistics Canada



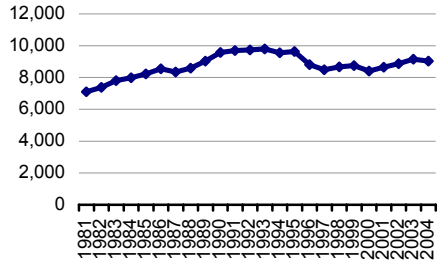
Fertility

Assumptions:

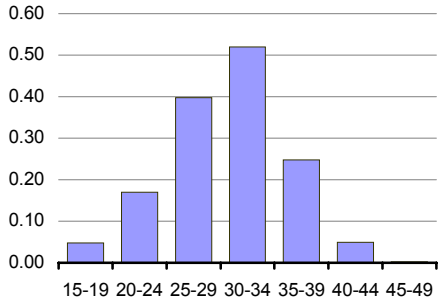
- **Total Fertility Rate (TFR) will remain unchanged at 1.43 births per woman** (the 2001 Ottawa average)

- *Ottawa's birth rate has been dropping, like Canada's*
- ***Ottawa's TFR is typically lower than the Ontario average***

4 **Number of Births, Ottawa**
Ontario Ministry of Health



5 **Total Fertility Rate by Age of Mother, Ottawa, 2001**
Ontario Ministry of Health and City of Ottawa



The number of births in Ottawa was on a steady ascending curve from the mid-1970s until the early 1990s. Births peaked in 1993, as the final wave of "baby-boom echo" babies was born. That year there were almost 10,000 births in Ottawa. Since then, births have receded to between 8,000 and 9,000 per year *(Fig. 4)*.

The best predictor of births is the Total Fertility Rate (TFR), the number of births per woman on average in her lifetime. Birth rates are not consistent across age groups. The effect of higher age-specific fertility rates in the 30-34 group is visible in Figure 5. The baby-boom generation has been conspicuous by the much larger number of women entering the work force and delaying childbirth until their thirties.

Ottawa's birth rate (TFR) has been dropping over the last two decades, but could be held steady by the large number of immigrants of childbearing age that settle in Ottawa.

All three projection scenarios assume a TFR of **1.43,** based on the 2001 Ottawa average, held constant over the period 2006 to 2031. This is lower than the 1999 Ontario average of 1.52, a pattern that is consistent with previous periods. For example, the last projection by the former Region used the Ottawa 1991 rate of 1.58, compared to the provincial average of 1.68, and kept it constant through the projection period. The 2001 projection used a TFR of about 1.4.

Mortality

Assumptions:

- **Use the 2003 Ontario survival rate with slight increases in life expectancies.**

- 2003 Life expectancy at birth:
  Male 77.8
  Female 82.4

- *The aging baby boom will mean a steady rise in the number of deaths during the 2006-2031 projection period*

There are two main schools of thought when it comes to mortality projections. One says that continued discoveries and improvements in the medical field will continue to prolong life expectancies. Another says that the increase in sedentary lifestyles and the rise in consumption of junk food will begin to stabilize and even reduce life expectancies.

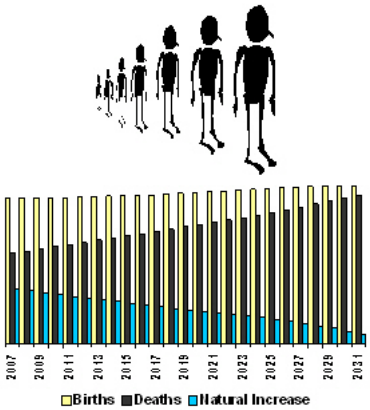
Our projection scenarios assume the 2003 Ontario survival rate. The life expectancy at birth for Ontario males in 2003 was 77.8 years and for females was 82.4 years. Ottawa survival rates have historically been higher than the provincial average but the practical effects of adjusting rates upwards have proven in the past to be very marginal compared to the potential variation in the size of older age groups due to migration.

For simplicity, the Ontario mortality rate is used in this exercise, with slight increases over the projection period to reflect our working assumption that medical advances will outweigh lifestyle-related drags on life expectancy.

The highlight of the mortality projection is that the aging of the baby boom will mean a steady rise in the number of deaths through the period.

Natural increase

Since the number of deaths is projected to increase at a faster rate than the number of births, natural increase (births minus deaths) will decline over the projection period. These calculations highlight the importance of migration as the key component of population growth in Ottawa.



Conclusions:

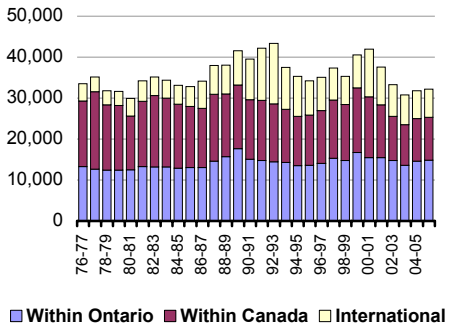
- **Natural increase will decline over the projection period of 2006-2031, due to deaths rising faster than births.**
- **Natural increase will remain positive but will constitute a much smaller component of population growth.**

Migration

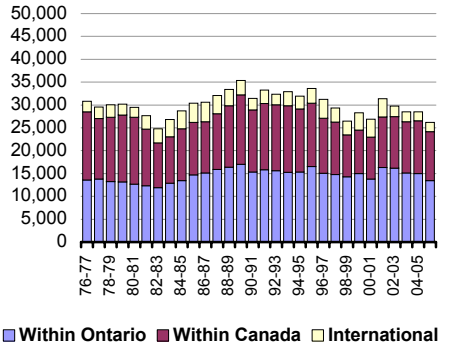
By far the most important question the projections need to answer is the volume of migration to and from the city and greater area. Net migration is the number of in-migrants minus the number of out-migrants.

Migration accounted for more than two-thirds of our population growth between 1996 and 2001, and the early part of this period in Ottawa's history coincided with a deep recession associated with severe federal employment cutbacks. Migration is also much more volatile than birth and death rates. For example, in 2000-01 there were about 69,000 moves to and from the city – 42,000 people moved in and 27,000 moved out (Charts 6 and 7). The total number of moves is about fifteen times the number of deaths and eight times the number of births.

6 **Ottawa In-migration: People moving in**
Statistics Canada



7 **Ottawa Out-migration: People moving out**
Statistics Canada



Assumptions:

- **Net migration will be, by far, the greatest contributor to population growth.**

People moving in
– People moving out
= Net Migration

International immigration to Ottawa has risen sharply since 1987. Charts 6 and 7 show the migration movements in and out of Ottawa since 1976. Migration from within Canada accounted for 71% of Ottawa's total net migration between 1976 and 1986. In the last decade the situation has reversed: international immigration has accounted for 72% of the city's net migration between 1996 and 2006.

Since 1987, the time when international immigration took its current prominent role in the city's growth, the average annual net migration to the city of Ottawa has been 6,039 persons. During this period there were two distinct cycles with peaks above 10,000 and troughs at or below 2,000. One observation to be drawn from the data is that peaks and troughs are getting higher.

Canadian in-migration

Migration flows react quickly to changes in economic conditions across the country. Migration patterns are notably reflecting the increasing concentration of economic activity in Canada's major metropolitan areas.

Generally speaking, in Ottawa there is always positive net migration from international sources, and positive net migration from within Ontario and from within the rest of Canada when the local economy is growing. When the economy is on the downward curve of a cycle, Ottawa tends to lose residents to other parts of Canada, but still gains from abroad.

However, because the metropolitan area is in two provinces, the data also conceals the redistribution of people within the larger commutershed. In fact, the greatest numbers of people who move out of Ottawa during slower economic times are people who are relocating to adjacent municipalities in Ontario and Quebec. Such moves also tend to pick up with price peaks in the Ottawa housing market.

Net migration to Gatineau illustrates this point *(Fig. 9)*. The migration patterns for Gatineau reveal rising levels of interprovincial migration at the same time as Ottawa begins to lose interprovincial migrants.

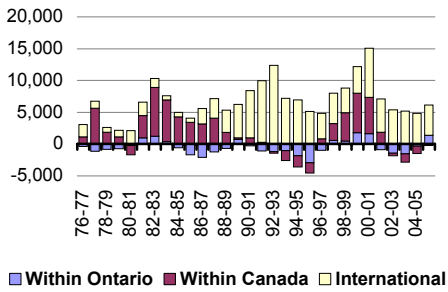
A more detailed analysis of migration flows confirms the existence of a larger commutershed and the role played by other major cities in supplying migrants to Ottawa or attracting them away.

Figure 10 shows that Ottawa attracted a significant number of residents from the Greater Montreal area in the years leading up to and encompassing the high-tech boom. The other top sources of migration from Canada were (in descending order) Atlantic Canada, Northern Ontario, the Prairie provinces of Manitoba and Saskatchewan, and Eastern Ontario. To a lesser degree, Ottawa is also a regular

8

Net migration by origin, City of Ottawa

Statistics Canada



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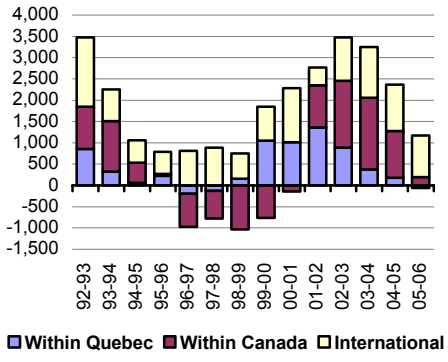
Net migration by origin, Gatineau CMA

Statistics Canada



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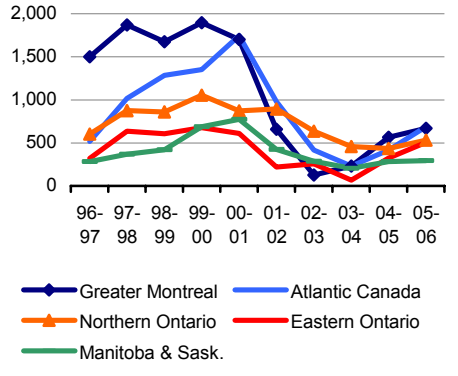
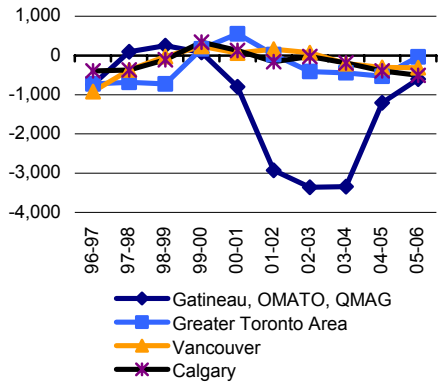
Net Migration In-Flows to Ottawa, top 5 origins

Statistics Canada



11 **Net Migration Out-Flows from Ottawa, top 5 destinations** *Statistics Canada*



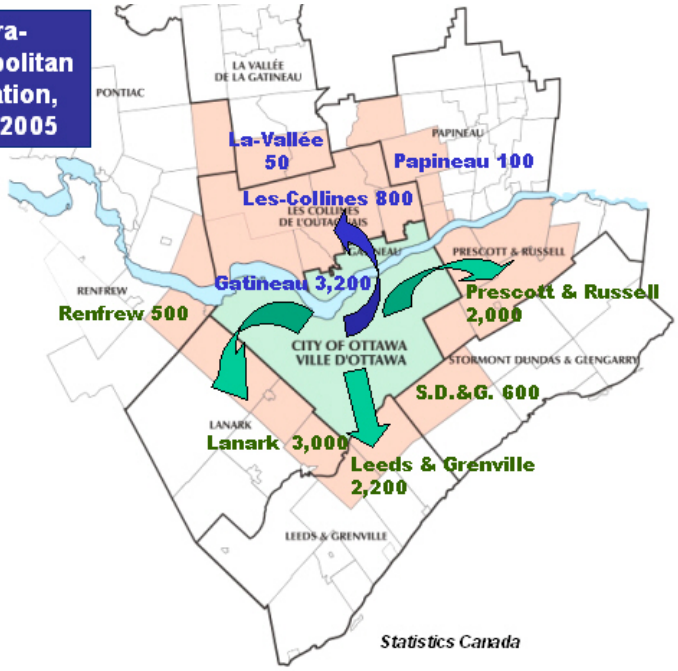
beneficiary of in-migration from the rest of Quebec, the rest of Ontario outside the GTA and Eastern Ontario, and the Canadian North (Nunavut in particular, given the economic ties between Ottawa and Iqaluit).

In all cases, when Ottawa's high-tech sector experienced its downturn starting in the latter part of 2001, in-migration from these areas also receded, but remained positive. The economy of those areas being traditionally weaker than Ottawa's, our city has been a recipient of their job-seeking migrants on an ongoing basis.

Figure 11 shows that the largest number of people leaving the city of Ottawa relocate within the metropolitan area, in Gatineau, Ontario Municipalities Adjacent to Ottawa (OMATO) or Quebec Municipalities Adjacent to Gatineau (QMAG). Since the metropolitan economy is relatively stable and becomes vigorous at times, the amount of out-migration to other parts of Canada is small.

Not coincidentally, the destinations to which Ottawa does lose residents are the three major cities with stronger economies, namely the Greater Toronto Area, Vancouver and Calgary. Most departures from Ottawa are Toronto-bound, with Vancouver and Calgary following in that order. The rest of British Columbia and the rest of Alberta are also regular net recipients of Ottawa residents.

Intra-metropolitan migration, 2000-2005



Net migration, 2000-2005:

- Ottawa has gained almost 30,000 people from other countries.
- Ottawa has gained 17,000 people from other parts of Canada.
- Ottawa has lost 15,500 people to other parts of Canada.
- Of those 15,500, *12,500 have actually resettled in adjacent municipalities in Ontario and Quebec.*

Interestingly, during the height of the high-tech boom (1999-2000), Ottawa was actually a net recipient of residents from each of those areas. This shows that at times of strong economic conditions in Ottawa, our city will gain residents from all parts of Canada, including the more prosperous cities that otherwise attract Ottawans with their job markets.

International immigration

Immigration from the rest of the world to Canada is accelerating. The country's largest cities receive the bulk of international immigrants. Toronto in particular, and also Vancouver and Montreal, receive a disproportionate amount of immigrants relative to their demographic weight, largely because their immigrant populations are larger and newcomers find it easier to adapt to a new country when they have access to more people from their own culture.

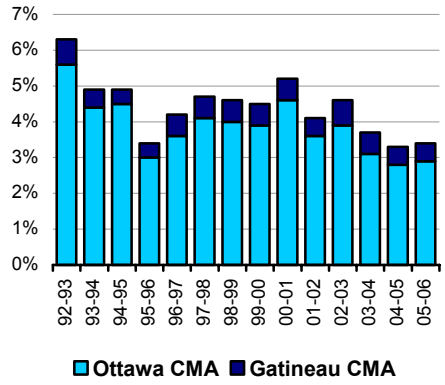
Ottawa and Calgary are the next two top destination cities for immigrants and rank fourth and fifth interchangeably depending on economic conditions.

Between 1992 and 2006, Ottawa-Gatineau captured on average 4.4% of all immigrants to Canada. Before 1986 the annual average was closer to 2-3%. As of 2006, Ottawa-Gatineau represented 3.5% of the total Canadian population, which means we are receiving only slightly more immigrants than our share of population. By contrast, in 2004 it was estimated that the Toronto CMA received over 40% of Canada's immigrants even though it represents only 17% of the country's population.

Compared to Canada's other major cities, Ottawa's immigrant population had the third highest growth rate

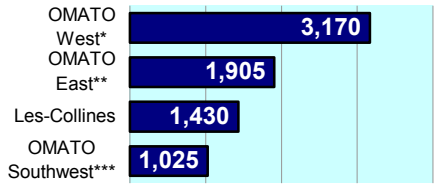
12 **Share of Immigration to Canada locating in Ottawa-Gatineau**

Statistics Canada



13 **Foreign-born population in municipalities adjacent to Ottawa and Gatineau**

Statistics Canada, 2001 Census



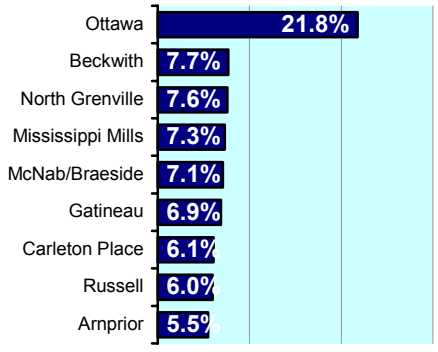
* **OMATO West:** Arnprior, McNab/Braeside, Mississippi Mills, Carleton Place, Beckwith, Smiths Falls (Montague data not available)
** **OMATO East:** Clarence-Rockland, Russell, The Nation (Casselman data not available)
*** **OMATO Southwest:** North Grenville (Merrickville-Wolford data not available)

Les Collines is Les Collines de l'Outaouais, shown in Figure 2
OMATO is **O**ntario **M**unicipalities **A**djacent **T**o **O**ttawa

Source: Statistics Canada

14 **Foreign-born population as % of total**

Statistics Canada, 2001 Census



(14.7%) between 1996 and 2001, tied with Toronto and trailing Vancouver (16.5%) and Calgary (15.5%).

Greater Metropolitan Area

Immigrants choosing to settle in the Greater Ottawa Area are generally drawn to the city of Ottawa, but interesting trends are appearing in neighbouring municipalities.

In terms of numbers, the greatest concentration outside Ottawa of foreign-born residents in the greater metropolitan area is found in the city of Gatineau. The next largest concentrations are in Les-Collines-de-l'Outaouais (the MRC north of Gatineau), North Grenville Township and the Town of Mississippi Mills, both of which are adjacent to Ottawa and neither is yet considered part of the Census Metropolitan Area (CMA) by Statistics Canada.

In terms of percentage, the city of Ottawa has the highest proportion of foreign-born residents (22%) of all metropolitan municipalities. Next are Beckwith and North Grenville Townships (8% each), Gatineau, Mississippi Mills and McNab/Braeside (7%), and Carleton Place, Russell Township and Arnprior (6% each) *(fig. 16)*.

The presence of notable foreign-born populations in adjacent municipalities, many of which are not part of the CMA and most of which are in the western part of the metropolitan area, would suggest that the employment opportunities in Kanata's high-tech sector have attracted an important number of well-educated immigrants who commute to work from locations outside Ottawa.

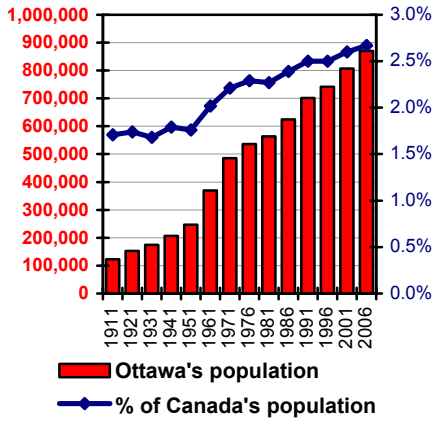
1.3 Migration scenarios

As previously discussed, migration has both cyclical and long-term trends. Over the past quarter-century, as Ottawa has grown larger, more diverse and cosmopolitan, it has become a more prominent destination for immigrants to Canada. This is illustrated by Ottawa's historically growing share of Canada's population *(fig. 15)*.

15

Ottawa's population and share of Canada's

Statistics Canada



Over the next quarter-century, the first fundamental question to answer is whether immigration to Canada will increase or decrease. There are, again, two schools of thought. One believes that, like many other mature societies such as Japan, Italy and Germany, population growth will stop and turn to population decrease over the course of the 21st century. On the other hand, another view is that the acceleration of global warming will make large areas of the Earth along the equator unliveably hot, and that a massive movement of migrants to better climates is to be expected. In such a context, Canada being a relatively under-populated land mass and a country with a stable and prosperous economy would stand to be one of the world's prime recipients of this influx of migrants.

Unlike countries like Germany, Italy and Japan, where population decreases are already observed or anticipated, the likelihood of such a scenario in Canada is remote because to a much larger extent we remain a country of immigration. Immigrants form 9% of Germany's population, 4% of Italy's, and about 1% of Japan's. On the other hand, as of the 2001 Census, immigrants accounted for 18.4% of Canada's population. In larger cities that proportion is higher (in 2001 it was 22% in Ottawa).

For the purposes of this exercise, we will not delve into the philosophical implications of such dramatic scenarios. Projections for Ottawa are reviewed every five years, which should allow us to closely monitor large-scale as well as more local trends on a regular basis and adjust the forecast accordingly.

For these projections we rely on Statistics Canada's mid-point projection presented in the report *"Population projections for Canada, Provinces and Territories"* (Cat. 91-520, December 2005). This projection assumes annual immigration to Canada of 240,000 from 2006 to 2010, and 280,000 from 2011 to 2031.

While it is not possible to attempt to predict the timing of cycles, it is reasonable to assume that the peaks and

troughs will continue to reach higher, if only because the city's population continues to increase and, therefore, employment opportunities continue to increase, as will immigrant populations seeking employment and family reunification, in addition to other factors driving in-migration.

Three migration scenarios are tested for the projections:

- The first scenario is based on Ottawa attracting a constant share of immigrants who settle in Canada.

- The other two are smoothed long-term average levels of net migration to which progressive increases are applied.

Scenario 1 – Constant share of immigration to Canada

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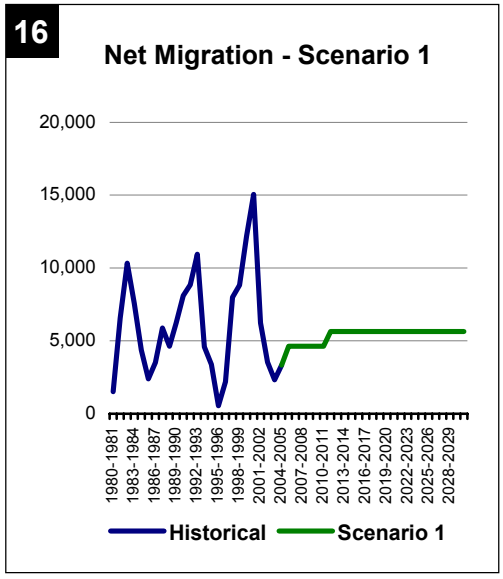


The first scenario bases Ottawa's population growth on a constant share of immigration to Canada, adjusted to be expressed as total net migration using the proportions outlined below.

As mentioned earlier, between 1992 and 2004 Ottawa-Gatineau captured 4.6% of all immigrants to Canada. Over that period, the city of Ottawa has captured 87.4% of the net international migration to the Census Metropolitan Area, equating to an Ottawa share of 4.02%.

This scenario proposes that the city of Ottawa's share of immigrants to Canada will remain stable at **4.02%** until 2031. Because Canadian immigration is forecast to rise, this results in approximately 9,600 immigrants settling in Ottawa between 2006 and 2011, and about 11,250 immigrants in 2012 and after.

This translates into net migration levels of 4,650 per year between 2006 and 2011, and 5,650 annually from 2012 to 2031. This latter average is about 7% below the average net migration recorded over the 25 years to 2005.

These levels are the result of calculations that blend national and international net migration, outlined below.

Annual international in-migration must be adjusted for out-migration to arrive at international net migration. Between 1987 and 2004, for every 100 international immigrants that arrived in Ottawa, 37.3 Ottawans left for other countries.

The rate of 37.3% was left constant for the duration of the projection period.

International in-migration represented, between 1987 and 2004, 23.9% of all in-migration to Ottawa. Intra-provincial in-migration accounted for 39.6% and inter-provincial in-migration made up 36.5%. These proportions were also kept constant.

International out-migration represented, between 1987 and 2004, 10.2% of all out-migration from Ottawa. Intra-provincial out-migration represented 49.8% of all departures, and inter-provincial out-migration accounted for 40.0%. These proportions were kept constant.

As a result, net intra-provincial migration represented -9.0% of Ottawa's total net migration, the only component of migration to be negative (mostly due to the movement of Ottawa residents to OMATO). Inter-provincial net migration had a share of 20.0% and international migration accounted for 89.0% of net migration to the city.

Scenarios 2 and 3 - Progressive increases in long-term averages

Average annual net migration to Ottawa was 6,039 for the 25-year period to 2004-05. This figure forms the basis for the second and third scenarios.

The difference between each intercensal cycle shows swings in the five-year annual average net migration, largely due to economic cycles.

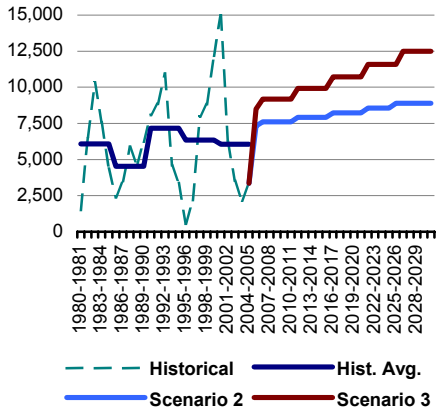
Two scenarios were developed from this starting point.

The lower scenario (Scenario 2) assumes that annual average net migration increases by four per cent at each intercensal period.

The high scenario (Scenario 3) assumes that annual average migration increases by eight per cent at each intercensal period.

Under Scenario 2, net migration would be 7,600 in the 2006-2011 period and would rise to 8,900 by the 2026-2031 period. Under this scenario, Ottawa's share of immigration to Canada would rise from 5.4% in 2006 to 6.0% in 2031.

17 **Net Migration - Scenarios 2 and 3**



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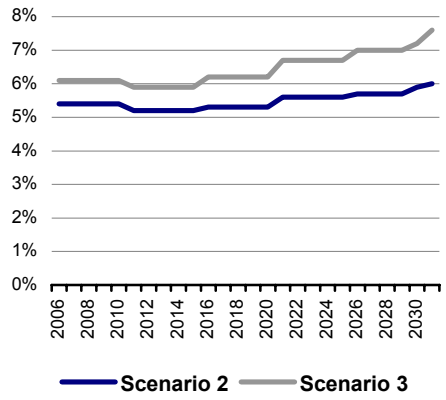
SCENARIOS 2 AND 3 - Ottawa's Share of International Immigration



Under Scenario 3, annual net migration would be 9,200 in the 2006-2011 period and would rise to 12,500 by 2026-2031. Under this scenario, Ottawa's share of immigration to Canada would rise from 6.1% in 2006 to 7.6% in 2031.

Projection Base Year and Population

The base year for the three scenarios is 2006. All projection data are mid-year. The age and sex distribution from the post-censal estimate for 2006 was applied proportionally to the City-estimated Ottawa population of **870,760** as of mid-year 2006. The 2006 Census population figure of 812,129 is not considered as reliable because of the magnitude of its undercount.[3] The city estimate of 870,760[4] is based on the dwelling occupancy method, which, in the City's opinion, provides a more accurate figure of the population residing here and for which it provides services.

[3] The 2006 Census undercount is attributable to two main reasons: the non-enumeration of several apartment buildings and rental communities, mostly inside the Greenbelt, and a change in the definition of residents eligible to be counted.

[4] Starting with Statistics Canada's 2001 post-censal estimate of the population of Ottawa (806,560), the population occupying new dwelling units based on building permit issuances is added. Population is assigned according to the average household size for each type of unit, based on 2001 Census data for persons per unit; permits are lagged to allow for construction and occupancy time. Demolished units are taken out. The total is then adjusted to reflect changes in the rental vacancy rate, as reported by CMHC, and ongoing small declines in average persons per unit in existing dwellings based on the rate of decline reported in the census between 1996 and 2001.

1.4 PROJECTION RESULTS

Because Scenario 3 is the most ambitious with regard to migration, it yields the highest population and the youngest age profile. Conversely, Scenario 1 produces the lowest population and the oldest age profile. Under Scenario 1, natural increase in 2031 is a year away from becoming negative; in Scenario 3 natural increase is down by a little over half its 2007 level. Scenario 2 produces results that are somewhere between those of Scenarios 1 and 3 in terms of population projection and age profile.

Figure 19
Projection results

	Scenario 1	Scenario 2	Scenario 3
2011	907,757	923,041	929,736
2016	948,697	976,747	994,432
2021	988,370	1,031,305	1,063,207
2026	1,025,523	1,085,279	1,134,810
2031	1,057,258	1,135,840	1,206,626

Charts 20 to 22 show the age profile for each of the three scenarios. In all three scenarios, the aging of the population is visible: the proportions of Ottawans aged 50-64 and 65 and over become larger as time advances.

Expressed as an index, with the base year 2006 having a value of 100, the population's main age groups are seen evolving differently in each of the scenarios *(fig. 23)*.

In the first scenario, which is premised on the most conservative migration estimates, the proportion of children and teenagers (under age 20) drops from its 2006 level until the later stages of the projection period, when it climbs back up to just under its 2006 level in 2031. The number of young adults (aged 20-34) increases modestly until 2021, then drops to a level that is just 2% more in 2031 than in 2006. The number of mature adults (aged 35-49) remains relatively stable until 2021, dropping a little at first, then recovering, until their numbers rises in 2031 to a level 9% above 2006. The 55-64 age group rises steadily and significantly in number until 2021, then drops slightly in the last decade. The 65+ age cohort increases its population continuously and most strongly, ending in 2031 at a level 115% above its 2006 level. As a whole, the city's population increases by 21% by 2031.

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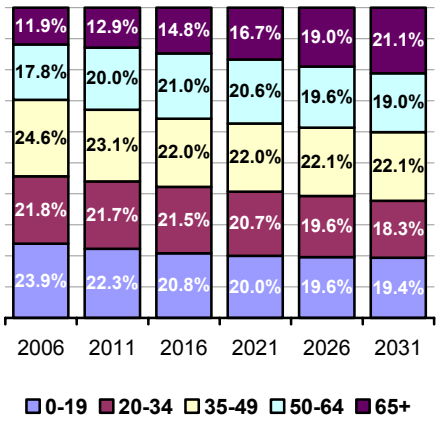

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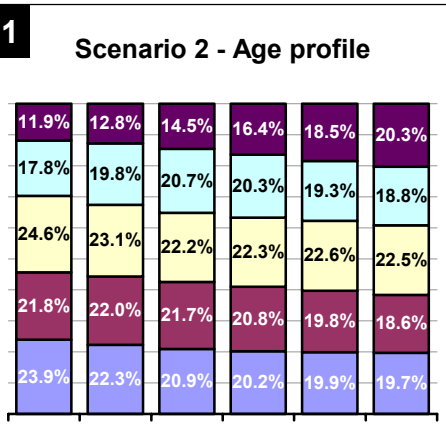

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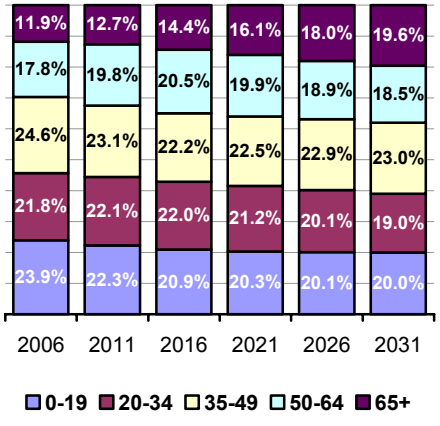


Figure 23
Index of population by age group, 3 scenarios (2006 = 100)

Age groups		2006	2011	2016	2021	2026	2031
Scenario 1	0-19	100	97	95	95	97	99
	20-34	100	104	107	108	106	102
	35-49	100	98	98	101	106	109
	50-64	100	117	128	131	129	129
	65+	100	112	135	159	188	215
	TOTAL	**100**	**104**	**109**	**114**	**118**	**121**
Scenario 2	0-19	100	99	98	100	104	108
	20-34	100	107	112	113	113	111
	35-49	100	100	101	107	114	120
	50-64	100	118	130	135	135	138
	65+	100	113	137	163	193	222
	TOTAL	**100**	**106**	**112**	**118**	**125**	**130**
Scenario 3	0-19	100	100	100	104	110	116
	20-34	100	109	115	119	120	121
	35-49	100	100	103	112	122	130
	50-64	100	118	131	137	138	144
	65+	100	114	138	164	196	227
	TOTAL	**100**	**107**	**114**	**122**	**130**	**139**

In Scenario 2, the under-20 age group remains relatively stable until 2021 then increases to a 2031 level that is 8% above its 2006 population. The 20-34 cohort rises steadily in population until 2021, then stabilizes and decreases slightly by 2031 to end at 11% above its 2006 amount. The 35-49 age group increases steadily throughout the projection period, ending in 2031 at 20% above its 2006 number. The 50-64 group also increases continuously and ends the projection period at a level 38% above its 2006 base. Seniors aged 65 and over also see their population increase to 122% above 2006 levels. Overall, the city's population increases by 30% by 2031.

In Scenario 3, the most aggressive with respect to migration, the population of children and teenagers remains stable until 2016 and increases thereafter to 16% above 2006 by 2031. All other age groups see a continuous increase in their population. In 2031, young adults (aged 20-34) number 21% more than in 2006; mature adults (35-49) 30% more; older adults (50-64) 44% more, and seniors (65+) 127% more. Under scenario 3 the city's population rises by 39% by 2031.

Figure 24 shows a comparison of historical and projected growth rates for the three scenarios. The projected growth rates are also shown in the table at Figure 25:

24 **Comparison of past and projected growth rates, 3 scenarios**
Statistics Canada and City of Ottawa

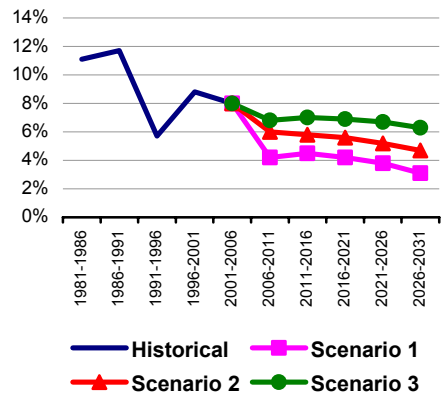


Figure 25
Projected five-year population growth rates, 3 scenarios (%)

	2006-2011	2011-2016	2016-2021	2021-2026	2026-2031
Scenario 1	4.2	4.5	4.2	3.8	3.1
Scenario 2	6.0	5.8	5.6	5.2	4.7
Scenario 3	6.8	7.0	6.9	6.7	6.3

In all three scenarios, the growth rate tapers off into the projection period. This is mainly a function of the aging of the population but also of its growth in size.

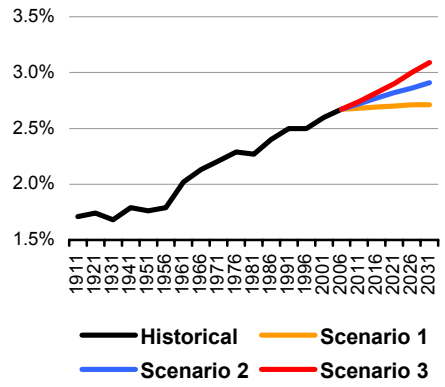
Selection of Reference Projection

Scenario 2 is the recommended Reference Projection. This scenario assumes a moderate progressive increase in net migration, consistent with the historical growth in net migration attracted to Ottawa mainly by its employment opportunities. This scenario appears neither too conservative nor overly aggressive in its expectations with regard to in-migration. It anticipates neither a marked slowdown nor an exceptional surge in the city's economy and its overall attractiveness.

The current population projection for 2021 in the Official Plan is 1,192,000. Although not in the OP, that projection also extended to 2031 and forecast a population for that year of 1,274,000, an increase of 403,000 from the 2006 estimate. The most recent Ontario government projection for Ottawa, published in 2005, calls for a growth of 266,000 in the 2006-2031 period, almost identical to the Reference Scenario. Another comparison is provided by the Centre for Spatial Economics' most recent Ontario regional forecast,[5] issued in 2007, which projects growth of 240,000 people for Ottawa during the 2006-2031 period, a slightly lower number than the Reference Projection and that of the Ontario government.

Another way of weighing the reasonableness of the draft Reference Projection is to view it in terms of the historical trend in the share of the Canadian population accounted for by the city of Ottawa. That share has increased at virtually every Census interval since 1951, the only decline being during the recessionary period of 1976-81. In 2006, Ottawa represented 2.67 per cent of the country; 25 years ago, in 1981, it had 2.27 per cent; 25 years hence, based on the Reference Projection, it would stand at 2.91 per cent. *(Fig. 26)* Hence Ottawa would continue to gain in national population share, but at a slower rate.

26 **Ottawa's Share of Canada's Population**
Statistics Canada and City of Ottawa



[5] CSE, the consultants who prepared the forecast in 2001 which is used in the current Official Plan

Using Scenario 2 as the Reference Projection is therefore the preferred scenario the basis for revisions to the City's OP through 2008.

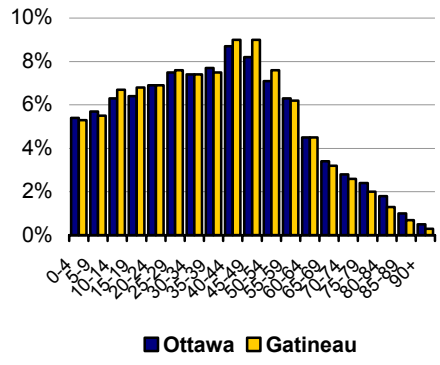
1.5 Projections for Gatineau

Population projections for municipalities in Québec are prepared by the *Institut de la Statistique du Québec* (ISQ). For Gatineau, the current ISQ projection anticipates a 2026 population of 274,020. The ISQ's scenario is based on the assumption that annual population growth in Gatineau will slow from 0.72% in 2007 to 0.3% in 2026. Extrapolating the ISQ scenario to 2031, Gatineau would have a population of **277,324** in 2031. The ISQ's projection is used here as Scenario 1. The City of Gatineau considers this to be a low-growth scenario.

Detailed consultations were undertaken with Gatineau to examine that city's specific demographic profile and migration patterns and to develop growth assumptions and scenarios that better reflect the metropolitan reality of interprovincial moves and the amount of international immigration settling there.

27 **Comparison of Ottawa's and Gatineau's Age Structure, 2006**

Statistics Canada Census and City of Ottawa



One of the significant demographic differences between Ottawa and Gatineau *(fig. 27)* is that Gatineau's population is younger. There are slightly fewer children and slightly more teenagers, significantly more middle-aged adults, and significantly fewer older seniors, as a proportion of the total population, in Gatineau than in Ottawa. A possible reason for this is that Gatineau attracts a significant number of working-aged people who settle there for the duration of their federal government careers and then retire to their home region elsewhere in Quebec. Federal employment turnover replenishes Gatineau's population with younger generations and the city ends up with a smaller percentage of seniors.

Migration to and from Gatineau also has its own characteristics. Taking the average of the last 15 years' data, international immigration is Gatineau's largest growth migration component, as is the case for Ottawa. International net migration to Gatineau is always positive.

The second largest component is intra-provincial migration. While Ottawa historically loses population to other parts of Ontario (mostly to adjacent municipalities), Gatineau traditionally gains population from elsewhere in Quebec, typically people who are attracted to federal jobs. This

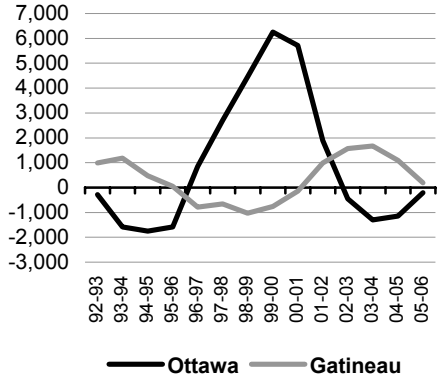
component has an added dimension, as is the case for Ottawa, which is the migration of people from Gatineau to adjacent Quebec municipalities. The latest data (2005-06) actually shows Gatineau losing population to other parts of Quebec, mostly to Les-Collines-de-l'Outaouais. Gatineau otherwise gains population from Montreal, Quebec City, northwestern Quebec and the Saguenay.

The third migration component for Gatineau is the inter-provincial component. Gatineau's specific circumstance compared with other cities in Quebec is its close interrelationship with Ottawa. Movements of people between Ottawa and Gatineau are cyclical and follow larger scale trends in the economy (the foremost being housing prices) and politics. There are also other factors such as variations in provincial policies regarding personal income taxes and family support services (such as daycare) among others that periodically act to sway movements across the Ottawa River. Aside from the fact that interprovincial net migration to Ottawa is generally of a larger magnitude, there is a clear inverse relationship between both sides of the river showing that Ottawa and Gatineau gain population from each other in cycles *(fig. 28)*.

28

Interprovincial Net Migration, Ottawa and Gatineau, 1992-2006

Statistics Canada



Gatineau – Scenario 1

The ISQ's projection (designated here as Gatineau's Scenario 1) anticipates that Gatineau's annual net migration will be at about half (about 800 persons) the average of the past 15 years (about 1,600 persons), and Gatineau staff consider this approach to be conservative. The ISQ also uses a Total Fertility Rate (TFR) of 1.38, while Gatineau's actual TFR in 2001 was 1.58 and is traditionally higher than the provincial average.

Gatineau – Scenarios 2 and 3

Two other scenarios for Gatineau have been tested. The first one (Scenario 2) keeps the TFR at 1.38 and maintains the level of annual net migration constant at 1,500 persons throughout the projection period, slightly below the 15-year historical average. This projection yields a 2031 population of **309,696** for Gatineau in 2031.

Scenario 3 is slightly more ambitious in terms of the fertility rate and assumes Ottawa's TFR of 1.43. The assumptions for net migration are more ambitious, like the ISQ scenario, involve a gradual reduction throughout the projection

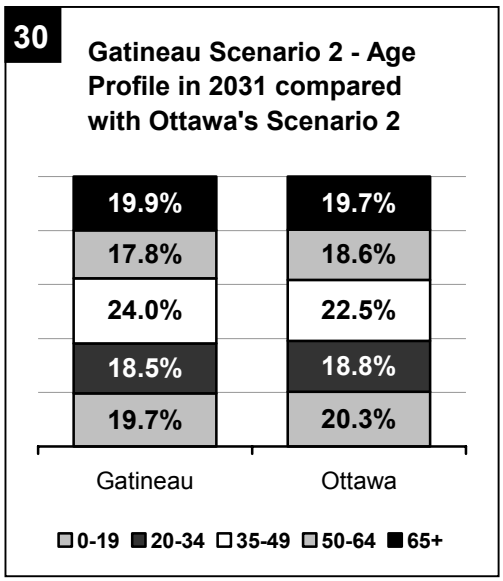
period. In scenario 3, annual net migration decreases from 2,500 persons in 2007 to 1,300 by 2031. With this scenario, Gatineau would have a population of **324,198** in 2031.

For both scenarios 2 and 3, the migrant age distribution takes into account Gatineau's specificity in that there is a higher number of retirees who leave the city to return to their home regions, and a higher number of migrants in younger age groups due to lower housing costs.

The three projection scenarios for Gatineau are shown in Figure 29 below:

Figure 29
Projection results, Gatineau

	Scenario 1	Scenario 2	Scenario 3
2011	256,031	262,367	267,452
2016	263,256	275,348	284,640
2021	269,311	288,023	300,421
2026	274,020	299,816	313,998
2031	277,324	309,696	324,198



In consultation with Gatineau, Scenario 2 will be used in the metropolitan projection as it appears to be the projection that best represents the probable growth prospects for that city, based on the analysis of demographic and migration characteristics. Gatineau staff indicated that this projection may undergo slight modifications but that the ultimate 2031 population projection will not be fundamentally different than the one presented here as Scenario 2.

Under Scenario 2, the age profile of Gatineau's population will feature a slightly higher percentage of seniors and a slightly lower percentage of children than Ottawa. It will, however, have a greater proportion of middle-aged adults (35-49) and a lower proportion of pre-seniors (50-64) than Ottawa *(fig. 30)*.

1.6 Projections for OMATO

The projections contained in the current Official Plans (OPs) of OMATO upper-tier or lower-tier municipalities produce a forecast similar to Scenario 2 presented here. Taking the existing projections and applying the same forecast growth rates forward to 2031 produces an overall OMATO total of **220,014**. Our Scenario 2 projects 219,619 OMATO residents in 2031.

According to the most aggressive of the three scenarios, that population level would be reached in 2028. The most aggressive scenario calls for an OMATO population of 233,778 in 2031 and the most conservative projection would see OMATO grow to 204,619 people in that time frame.

Figure 31 - Current population projections in OMATO Official Plans, Extrapolated to 2031

Upper Tier (OMATO municipalities only)	2006	2011	2016	2021	2026	2031	% chg 06-31
Prescott and Russell	60,477	64,743	68,761	72,863	76,790	80,717	33.5%
Lanark	35,058	39,664	44,271	48,877	53,483	58,089	65.7%
Leeds and Grenville	23,710	27,926	32,142	36,358	40,573	44,789	88.9%
Renfrew	15,477	17,079	18,522	19,957	21,392	22,827	47.5%
Stormont-Dundas-Glengarry	11,393	11,772	12,151	12,530	13,212	13,591	19.3%
OMATO Total	**146,115**	**161,184**	**175,846**	**190,585**	**205,451**	**220,014**	**50.6%**

It should be noted that most of the existing Official Plans in OMATO do not project past 2021; some are now of some vintage and have an even shorter projection horizon. In some cases, where there is no upper-tier OP, individual municipalities do not have population projections in their OPs (in those cases the growth rate was calculated using the average for the last ten years).

There is a possibility that some of the OMATO projections may be conservative. If one were to use traditional assumptions about population growth at the periphery of major cities, the underlying thinking would be that the lower cost of land, development and housing, and the expanding road network, would prove to be the dominant forces leading to rapid population growth.

However, there are other factors that may keep OMATO's population growth to levels within the projections in the local OPs and in these scenarios.

The underlying assumptions in the scenarios are that rising gasoline prices, aging of the population, the trend to smaller households and the rising popularity of the urban lifestyle will be the dominant forces that will limit the amount of growth in outlying communities that originates from the Ottawa employment market.

In addition, population growth in OMATO depends to some degree on the availability of capacity in municipal water and wastewater infrastructure in serviced areas, and on the ability of the rural countryside to absorb population growth based on private services. All OMATO municipalities are facing their own infrastructure-related challenges.

Upon closer examination, the projections vary significantly in the scope of the growth they forecast. OMATO municipalities in Leeds and Grenville have the most aggressive projection, no doubt related to Highway 416.

Lanark County municipalities have the next highest anticipated rate of growth, likely linked also to a major road twinning, Highway 7.

Projections for OMATO municipalities in Renfrew are third, but officials there are the most sceptical about their forecast, believing them to be too low.

1.7 Projections for QMAG

The ISQ projection for the Outaouais area shows that, between 2006 and 2026, Gatineau is forecast to grow at a slower rate (10.7%) than La-Vallée-de-la-Gatineau (18.1%), Les-Collines-de-l'Outaouais (15.1%) and Papineau (14.2%).

Assuming that the bulk of the population growth in the MRCs[6] adjacent to Gatineau is linked to job growth in Gatineau and Ottawa, the ISQ scenario lends credence to the assumption that Gatineau's commutershed is expanding into the adjacent municipalities and, as a result, QMAG's share of the metropolitan population will increase at a similar rate to the forecast.

The table at Figure 32 outlines the ISQ's projection for Gatineau and each of the adjacent MRCs. It should be noted that, except for Les-Collines, the municipalities included in QMAG are only a few of the municipalities comprised in the MRCs for which the forecast below is provided. In looking at these projections, we are mostly interested in the trend assumed by the ISQ for the MRCs adjacent to Gatineau.

Figure 32
ISQ Projections for QMAG Upper-Tier Municipalities, to 2026

Upper Tier	2006	2016	2026	% chg. 2006-26
Gatineau	249,374	263,256	274,020	9.9%
Les-Collines	40,335	44,098	46,427	15.1%
La-Vallée	20,447	22,497	24,141	18.1%
Papineau	21,985	23,672	25,112	14.2%
Pontiac	15,075	15,436	15,876	5.3%

Only the Pontiac MRC is not seen as achieving any significant growth. The other adjacent MRCs are forecast to outpace Gatineau's growth rate.

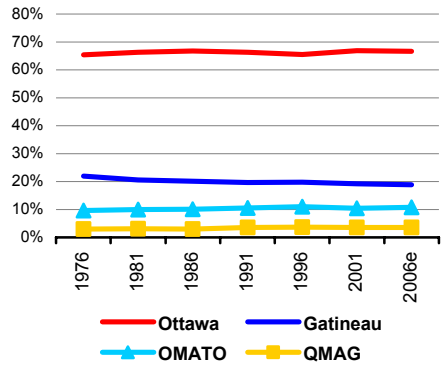
[6] MRC = *Municipalité régionale de comté*, Quebec's municipal equivalent to Ontario's county or regional (upper-tier) municipalities.

1.8 Projections for Greater Ottawa-Gatineau

33

Share (%) of metro population, 1976-2006

Statistics Canada (1976-2001); City of Ottawa (2006e)



For the period 1992-2006, net migration to the Ottawa-Gatineau CMA totalled 116,700 persons. Of this total, 79% settled on the Ontario side of the CMA and 21% on the Québec side. Most of the net migration to the Ontario side of the CMA settled in the city of Ottawa.

The projection assumes the following distribution of net migration:

City of Ottawa	73%	***Ontario***	***79%***
Ville de Gatineau	19%	*(Ottawa 73% + OMATO 6%)*	
OMATO	6%	***Québec***	***21%***
QMAG	2%	*(Gatineau 19% + QMAG 2%)*	

This projected distribution retains a 79%-21% ratio between Ontario and Quebec. On the Ontario side, since we include more municipalities than Statistics Canada in the Greater Area, the assumption is that 92% of migrants who settle on the Ontario side will settle in the city of Ottawa and 8% in OMATO. For the Quebec side the forecast is that 90% of migrants will settle in Gatineau and 10% in QMAG.

Historically, the distribution of overall population among the component areas of the Greater Metropolitan Area has been relatively stable. Since 1976, Ottawa has maintained its share to a remarkable extent, and currently comprises a larger proportion of the whole than in 1976. Gatineau has lost almost a three percentage-point share of the overall population, and OMATO and QMAG have made small gains. The pattern since 1976 up to latest population estimates (2006) show the following distribution:

Figure 34
Distribution of population (historical)

	1976	1981	1986	1991	1996	2001	2006(e)
Ottawa	65.4%	66.3%	66.8%	66.3%	65.5%	66.9%	66.6%
Gatineau	21.9%	20.6%	20.1%	19.7%	19.8%	19.2%	19.1%
OMATO	9.6%	10.0%	10.1%	10.5%	11.0%	10.4%	10.7%
QMAG	3.0%	3.1%	3.0%	3.5%	3.7%	3.5%	3.6%

1976-2001: Census data; 2006: City of Ottawa estimate

The reference projection assumes the following long-term distribution of population:

Figure 35
Projected distribution of population

	2006-2011	2012-2016	2017-2021	2022-2026	2027-2031
Ottawa	66.6%	66.3%	66.0%	65.8%	65.5%
Gatineau	18.9%	18.7%	18.4%	18.2%	17.9%
OMATO	10.8%	11.3%	11.7%	12.2%	12.7%
QMAG	3.6%	3.7%	3.8%	3.9%	4.0%

The projected distribution assumes that OMATO and QMAG achieve a modest increase in the share of metropolitan population, largely fuelled by improved road access, upgrades to municipal services, and cheaper housing.

The city of Ottawa, however, is expected to maintain a high share of metropolitan population since it is expected to continue attracting the great majority of international migrants.

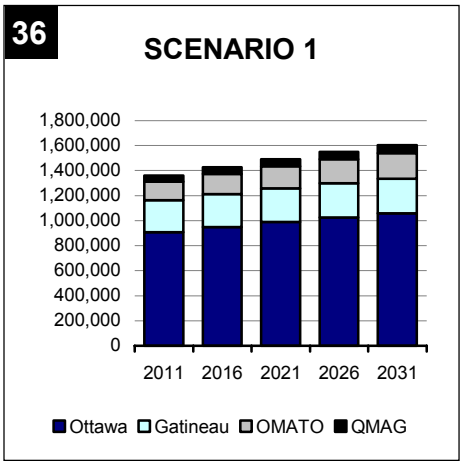
Gatineau's share of the metro population continues its gradual decrease, but less significantly in our Scenario 2 than under the official projection prepared by the Institut de la Statistique du Québec (ISQ).

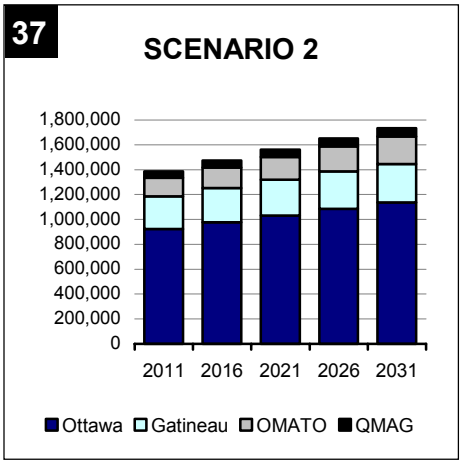
Under these assumptions, the population of the Greater Ottawa-Gatineau Area would grow from 1.36 million in 2006 to an estimated 1.6 million under the lowest scenario, 1.73 million under the middle scenario, and to approximately 1.84 million under the highest scenario.

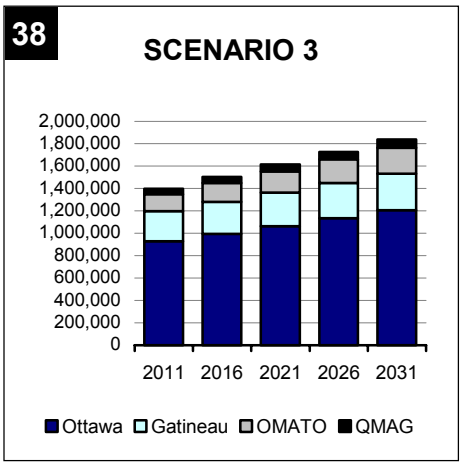
The three scenarios for the Greater Area are summarized in Figure 39.

Figure 39
Greater Ottawa-Gatineau Area - Projection Scenarios

	Scenario 1	Scenario 2	Scenario 3
2006			
Ottawa	870,760	870,760	870,760
Gatineau	249,374	249,374	249,374
OMATO	139,809	139,809	139,809
QMAG	47,161	47,161	47,161
TOTAL	**1,307,104**	**1,307,104**	**1,307,104**
2011			
Ottawa	907,757	923,014	929,736
Gatineau	256,031	262,367	267,452
OMATO	147,204	149,682	150,768
QMAG	49,068	49,894	50,256
TOTAL	**1,360,060**	**1,384,984**	**1,398,212**







	Scenario 1	Scenario 2	Scenario 3
2016			
Ottawa	948,697	976,747	994,432
Gatineau	263,256	275,348	284,640
OMATO	161,207	165,974	168,979
QMAG	52,785	54,345	55,329
TOTAL	**1,425,945**	**1,472,414**	**1,503,380**
2021			
Ottawa	988,370	1,031,305	1,063,207
Gatineau	269,311	288,023	300,421
OMATO	175,644	183,274	188,943
QMAG	56,563	59,020	60,846
TOTAL	**1,489,888**	**1,561,623**	**1,613,418**
2026			
Ottawa	1,025,523	1,085,279	1,134,810
Gatineau	274,020	299,816	313,998
OMATO	190,255	201,341	210,530
QMAG	60,325	63,840	66,754
TOTAL	**1,550,123**	**1,650,276**	**1,726,092**
2031			
Ottawa	1,057,258	1,135,840	1,206,626
Gatineau	277,324	309,696	324,198
OMATO	204,425	219,619	233,305
QMAG	63,883	68,631	72,908
TOTAL	**1,602,889**	**1,733,785**	**1,837,037**

2.0 Household and Housing Projections

Having carried forward the Reference population projection presented as Scenario 2, households and housing projections for the city of Ottawa are derived based on a 2031 population of **1,135,840.**

To calculate the number of projected households, a headship rate is applied to the projected age groups for the Reference scenario. In this case, the headship rate is taken from the 2001 Census for Ottawa.

Although households increase in all age groups, the first conclusion to be drawn from this step is that household growth is concentrated in households headed by people aged 60 and over. As shown in Figure 40, the number of households in all age groups over 60 is projected to double or more by 2031.

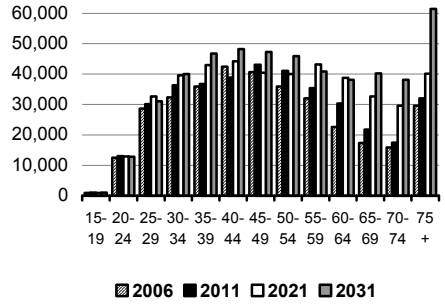
The number of households headed by people aged 30-49 will also increase, but at a much more modest rate. The number of households headed by people aged 20-29 and 50-59 will increase until 2021 but decrease over the following decade.

The number of persons per household is also projected to continue declining. From a 2001 average of 2.53, the average household size is forecast to drop to **2.31** by 2031 *(fig. 41)*.

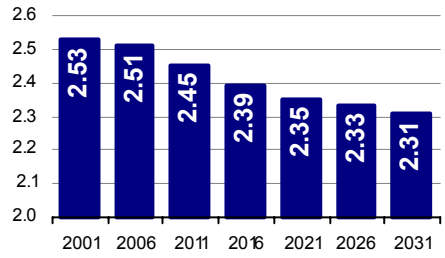
With the projected number of households, dwelling type propensities are applied to calculate the number of each type of housing unit projected to be needed to accommodate the population growth.

The term “dwelling type propensity” refers to the type of house people choose based on their age and family status.

40 **Projected Households by Age Group, Reference Projection, 2006-2031**



41 **Projected Average Household Size (persons per household)**



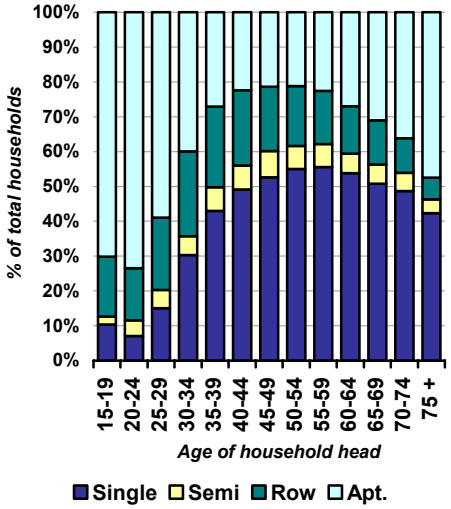
2.1 Basic Methodology

The most basic methodology for projecting housing demand by dwelling type consists of applying the dwelling type propensities reported in the most recent Census to the projection period. Under this methodology, we would then take 2001 Census propensities and apply them unchanged to 2031.

42

Dwelling type propensities, Ottawa, 2001

Statistics Canada (Census)



As of 2001, propensities in Ottawa were as shown in Figure 42. This chart shows, for example, that as of the 2001 Census, 43% of households headed by a person aged 35-39 lived in a single-detached home and 27.1% of households in the same age group lived in an apartment.

The chart also shows that households tend to live in apartments in their younger years. Townhouses represent a significant housing choice for many households headed by young adults. The propensity for single-detached homes is highest in later adulthood (in the 50's age group) and gradually decreases into the pre-retirement and retirement age groups, with apartments again taking greater prominence. Semi-detached homes constitute a very small portion of Ottawa's dwelling mix and the greatest propensity for this type of dwelling is in the late 40's age group.

By applying these propensities to the projected population by age group, and accounting for vacancies[7] and demolition replacements, the projected housing demand would be as follows:

Figure 43
Projected Housing Requirements using 2001 Propensities

Year	Single	Semi	Row	Apt	Total
2006	154,522	21,345	62,305	117,042	**355,214**
2011	168,988	23,081	66,774	127,554	**386,396**
2021	197,945	26,477	75,488	148,282	**448,192**
2031	223,998	29,380	82,106	167,320	**502,804**

Includes allowance for vacancies and replacement of demolitions.

[7] Vacancy allowances are applied to the housing stock as follows: we assume that 0.5% of all single- and semi-detached homes are vacant (to account for vacant rented or recently-sold homes of this type and newly constructed but yet unoccupied houses). We assume that 85% of townhouses are owned and apply a 0.5% vacancy rate to that stock, we assume that 15% of townhouses are rented and apply a 3% vacancy rate to that stock. We apply a 3% vacancy rate to rented apartments and a 0.5% vacancy rate to owned apartments. We estimate rental apartments to represent 75% of the existing stock and, between now and 2021, 25% of the projected new stock. After 2021 we project that 40% of new apartment stock will be rental, to account for rising retirement home construction. For owned apartments we apply a 0.5% vacancy rate.

Using this calculation, the annualized rate of new housing construction would be as follows:

Figure 44
Annualized Rate of New Housing Construction, using 2001 Propensities

Period	Single	Semi	Row	Apt	Total
2006-11	2,893 *46%*	47 *6%*	894 *14%*	2,102 *34%*	**6,236**
2011-21	2,896 *47%*	340 *6%*	871 *14%*	2,073 *34%*	**6,180**
2021-31	2,605 *48%*	290 *5%*	662 *12%*	1,904 *35%*	**5,462**

These housing projections anticipate a very different housing mix than what has been observed over the past five years, since the 2001 Census data was recorded. Notably, the proportion of townhouses projected appears too low and the proportion of single homes too high.

For the period 2001-2006, the share of dwellings built by type is different than the share that would have otherwise occurred using 2001 propensities and different also from what the market actually produced.

Figure 45
Ottawa Housing Starts, by 2001 Propensities and Actual, 2001-2006

Share of total housing starts, 2001-2006	Singles	Multiples*	Apts.
What would have been built under 2001 propensities	*46%*	*22%*	*32%*
What the market actually produced	46%	38%	16%

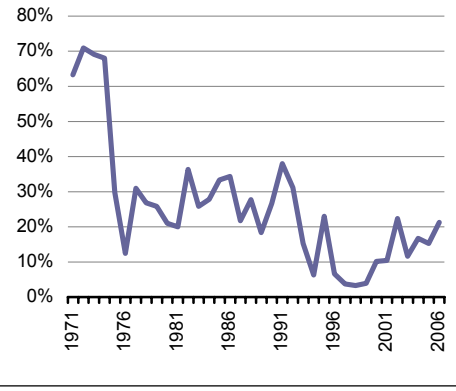
* Multiples include semi-detached and townhouse units.

Historical data on dwelling type propensities encompasses the city's entire housing stock, hence the high percentage of apartments that appears in the 2001 Census data. Historical data, however, fails to account for changing market preferences and cyclical fluctuations, notably variations made in response to affordability.

For example, the proportion of townhouses built between mid-2001 and mid-2006 was higher than during the five previous years, since this is a more affordable type of housing and the time period in question corresponds with cyclically high housing prices in Ottawa. In this context, demand increased for the more affordable types of housing.

46 **Apartments' share of housing starts, City of Ottawa**

CMHC



On a broader level, the prominence of higher-density forms of housing has been increasing as the city grows and as the composition of its households evolves.

One illustration of this is the pattern of apartment construction *(fig. 46)*. During the early 1970s, an unprecedented number of apartment dwellings were built, almost all of which were destined to the rental market to accommodate the first wave of baby-boomers entering the housing market.

Between 1971 and 1975, apartments represented about two-thirds of Ottawa's housing starts. Through the 1980s and early 1990s, as government programs fuelled the development of rent-geared-to-income units, apartment construction steadily represented between 25% and 30% of the city's housing starts. During the second half of the 1990s, as senior government housing subsidies were eliminated, apartment construction tumbled to represent only 5% of the total housing production. However, with the rise of the condominium market at the turn of the century, apartments have climbed back to a 15% share of new construction, largely on the strength of ownership units.

This highlights another flaw with the use of historical propensities data applied to forecasting. The public can only "choose" what is available on the market. During the late 1990s, with very few new apartments available to choose from, dwelling choices were necessarily redirected toward other housing types. In this case, the supply of apartments was curtailed by the elimination of government programs that had been the cornerstone of their development for the previous quarter-century.

Market demand, however, eventually corrected this imbalance. The rising importance of the apartment condominium market over the last six years is a manifestation of demographic and lifestyle preferences which reflect, among other things, the increasing prevalence of smaller households and the aging of the population.

Therefore, historical information does not necessarily predict future dwelling type propensities. This is why it is appropriate to explore potential variations in dwelling type propensities.

2.2 Detailed Methodology

A more detailed approach is found in the publication *Projection Methodology Guideline*[8], a Provincial publication intended to serve as a "best practices" reference manual for municipalities for the preparation of population and housing forecasts.[9] The text that follows in quotation marks is a direct quote from the document.

(Pages 14-17) "Here is a summary of the steps involved in the housing need projection process:

- **Population Projection:** A population projection by age group for the housing market area forms the starting point. […]

- **Housing Need Projection:** Through the use of headship rates and propensities to occupy particular dwelling types (single-detached, high-rise apartments, etc.), the population projection is converted into a projection of households by type of dwelling for the housing market area.

  The number of households in the base year is subtracted, yielding projected household growth.

  This may then need to be adjusted for:

  - the units added since the base year,
  - the replacement of units that will be lost through demolitions or other factors,
  - changes in the level of vacancies, and
  - possibly a "market contingency factor" (for shorter time periods).

  The end result is the projection of total housing need by dwelling type.

- **Allocation of Housing Needs:** The projected housing need for the housing market area is then allocated among the component municipalities. Where upper-tier planning exists, the regional or county government should, in consultation with the local municipalities,

[8] Ontario Ministry of Municipal Affairs; Projection Methodology Guideline: A Guide to Projecting Population, Housing Need, Employment and Related Land Requirements; Queen's Printer for Ontario, 1995

[9] The **Projection Methodology Guideline** was issued as a complement to the 1995 *Comprehensive Set of Policy Statements*, which accompanied the changes to the *Planning Act* made under Bill 163. The *Comprehensive Set of Policy Statements* has since been replaced by several generations of *Provincial Policy Statements*. The Projection Methodology Guideline has no legal standing and only serves as a reference document which municipalities are not required to use or have regard to under any current legislation.

make the allocation among the municipalities based on such factors as past market shares, planned urban structure and potential for intensification.

- **Affordability Analysis:** Prices of projected housing types are analyzed by local municipalities to ensure that the projection will meet the minimum affordability targets of the Housing Policies. If necessary, the projected mix of dwelling types is adjusted so that it will meet the affordability targets.

- **Need for Additional Residential Land:** The number of draft-approved and registered units, the estimated volume of residential intensification activity in built-up areas and the number of units that will be created outside the urban boundary are deducted from projected housing need.

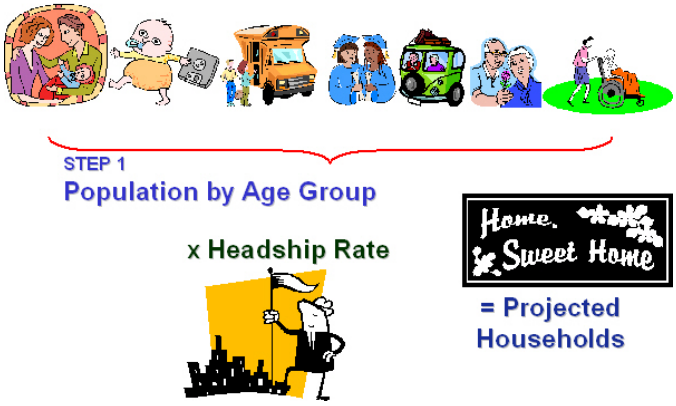
  Separate densities are estimated for the different housing categories, and projected needs are divided by the densities. The amount of land currently designated for residential development but not yet draft-approved is subtracted. The end result is the amount of additional land (if any) to be designated for new residential development through extension of the settlement area(s)."

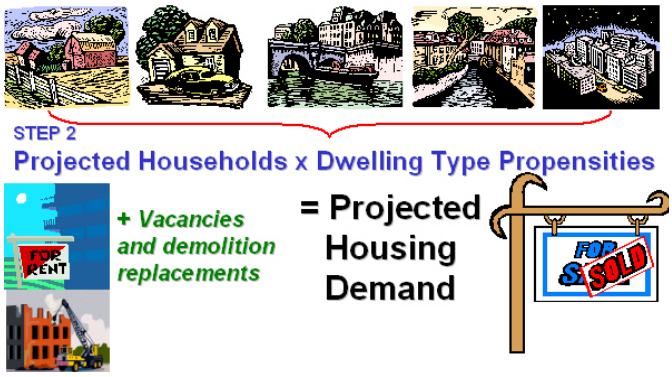
  (Pages 6-7) "Whatever projection approach is utilized, the underlying assumptions should always be clearly stated and should be reasonable and justifiable in light of both general trends in the province and specific conditions in the municipality. […] Assumptions should not simply reflect the status quo. Municipalities should try to take into account future economic, social and policy directions where these are known. For instance, the planned housing mix should include not only the dwelling types that have traditionally been produced in the municipality, but newer types possible through more compact urban form, alternative development standards and higher densities of development."

  (Page 8) "Assumed densities should not be based solely on the historic pattern and density in the municipality. Rather, they should take into account the urban structure and built form expected for the future. In accordance with the Comprehensive Set of Policy Statements, they should facilitate compact urban form, mixed uses and the efficient use of infrastructure and public services."

Based on this methodology, and if the Greater Ottawa-Gatineau Area is considered to be the regional market area for housing, required new dwellings by type would be apportioned to each of the regions of the greater metro area. This distribution would take into account historic shares, planned urban structure and potential for intensification.

- **Population projection by age group**
  - City and metro area
  - PPS refers to "Regional Market Area"
- **Apply headship rate**
- **Housing propensity analysis**
- **Assumptions**
- **Affordability analysis**
- **Allocation within Regional Market Area**





A projection that uses this detailed methodology will therefore attempt to reflect what might reasonably be anticipated in the context of a gradual evolution of market demand, based on recent demographic and housing market trends and starting from the 2001 Census propensity data.[10]

There was a time… *The post-war days of a suburban single-detached home for every family depict more of a folkloric perception than today's reality. Ottawa's housing stock is more diverse and urban than many may believe.*

[10] Propensity data from the 2006 Census will not be available until 2008.

The market demands it… *therefore it gets built. Smaller households, an aging population, and the increasing appeal of the urban lifestyle support expectations of higher levels of apartment construction.*

***Higher densities** don't necessarily always mean apartment buildings. There are many ways to build denser neighbourhoods with ground-oriented housing, including detached homes and townhouses, as these two pictures (above) from Cornell (Markham) illustrate.*

2.3 Recent Trends

Between 2001 and 2006, dwelling type propensities as measured by housing construction have illustrated slightly lower propensities for single and semi-detached dwellings and apartments, and higher propensities for townhouses, than the data reported in the 2001 Census.

The slight downward variation in the propensity for singles reflects, in part, rising prices for this type of dwelling over the period since the 2001 Census and, on the other hand, coupled with an increased variety of housing types on the market. Singles accounted for 46% of housing starts between 2001 and 2006. The 25-year average was 48.1%.

Because single-detached dwellings represented, in 2001, 43% of the city's total housing stock, the volume of single-detached construction since 2001 has resulted in an increase in their share of the total housing stock.

The increase in the propensity for townhouses is estimated to have occurred among younger households. A possible interpretation of the evolution of these propensities is that the rapid rise in housing prices, especially in single-detached homes, between 2001 and 2006, caused more adults to delay purchasing a single-detached home until later in life and opt for another type of dwelling in the meantime.

Because townhouses represented, in 2001, 18% of the city's housing, the fact that this type of dwelling represented 33% of housing starts between 2001 and 2006 means that townhouses have increased their share of the total housing stock by the largest margin.

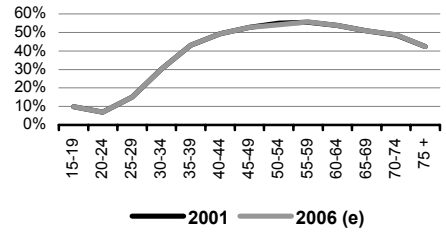
Generally, the propensity for apartments did not change much between 2001 and 2006, with a slight downward variation estimated to have occurred among middle-aged households. Given the fact that historical propensity data reflects the city's entire housing stock, such stability in the propensity for apartments is actually indicative of market interest in this type of dwelling. If the market had been disinterested in apartments, and construction had continued at a pace comparable to that of the 1990s, propensity data would show a decrease in preference for apartments.

Apartments represented 33% of the city's housing stock in 2001 but accounted only for 16% of housing starts between 2001 and 2006. Therefore, apartments have lost share of the total housing stock. However, this loss would have been

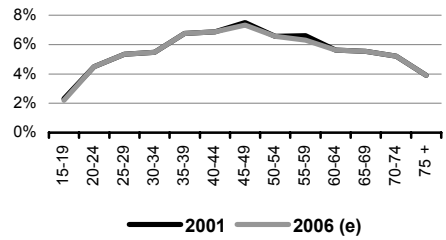
even more significant if construction had continued at a similar pace as observed over the 1990's.

In summary, the trend over the 2001-06 period shows increases in demand for townhouses in particular and also apartments, and stable demand for single-detached dwellings.

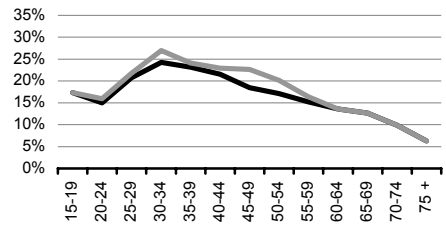
47
Propensity for single-detached homes



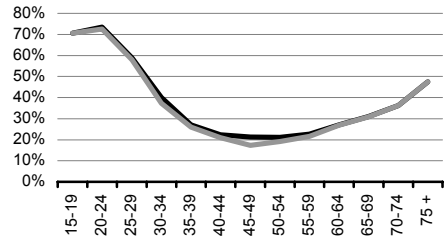
48
Propensity for semi-detached dwellings



49
Propensity for row houses



50
Propensity for apartments



2.4 Propensity projections for the City of Ottawa

A number of factors must be analyzed to prepare a projection of dwelling type propensities. While an imperfect exercise, a projection of what could reasonably be expected in terms of future housing choices rests on the interplay of a variety of demographic realities as well as a reasonable extrapolation of historic trends.

Aging of the population

The most significant demographic change that we know will occur in Ottawa (as in the rest of Canada) is the aging of the population. In this respect there are several recent studies that have analyzed the issue of seniors' housing choices. One in particular[11] has used extensive data from the longitudinal Survey of Labour and Income Dynamics (SLID) to track the characteristics of senior movers. From this data, the study was able to observe that:

- Seniors move less than younger people.
- Widowed seniors are likelier to move than their married counterparts.
- Two out of five seniors move to a residence with the same number bedrooms.
- Two out of five seniors move to a residence with fewer bedrooms.
- One out of five moves to a residence with more bedrooms.
- A large proportion of seniors leave homeownership to rent.
- Most pre-seniors (aged 55-64) remain owners when they move and 45% of them move into a home with fewer bedrooms.

Anecdotal and surveyed market information in Ottawa suggests that condominium apartments appear to have found a receptive market with pre-seniors and seniors who wish to remain owners but who may no longer wish to maintain larger homes and larger parcels of land. The security of apartment buildings is also a sought-after amenity for many senior buyers.

Increase in Disabilities

With an older population will come an increase in the number of people with disabilities, notably mobility-related

[11] Lin, Jane; "The Housing Transitions of Seniors" in Canadian Social Trends, Statistics Canada, Catalogue No. 11-008, Winter 2005

disabilities. A post-censal survey[12] was done by Statistics Canada based on the 2001 Census' questions on disabilities. The results were released only for Canada and the provinces but not for metropolitan areas. The study found that mobility problems affect 31.5% of the Canadian population over the age of 65. This rate increases with age: 39.5% of those aged 75-84, and 57.7% of those aged over 85, have mobility problems. The prevalence of mobility disabilities is also higher among women.

If the same rate applies to Ottawa, the reference projection suggests that by 2031 there could be almost 73,000 seniors with mobility problems in our city.

Declining household size

As of the 2006 Census the average household size in Ottawa is 2.48 persons, compared with 2.52 in 2001. The number of persons living alone rose to 27.4% in 2006, from 26.3% in 2001. As of the 2006 Census, seniors (aged 65+) are likelier to live alone or in residences without their relatives (29%). Five per cent of seniors live with relatives. The number of one- and two-person households accounted for 60.1% of the total in 2006, versus 58.8% in 2001. Clearly, there is a progression in the number of small households. The aging of the population will accelerate this trend.

The housing choices of immigrants

Since a large proportion of Ottawa's population growth will be through international immigration, it is relevant to examine the housing choices of people arriving from other parts of the world. Data from the 2001 Census was analyzed to determine what type of dwelling is occupied by immigrants by household type and by length of time since arriving in Canada.

As other nation-wide studies have found, the longer an immigrant household lives in Ottawa, the likelier it is that their dwelling choice will mirror that of the overall population. As of 2001, 43% of Ottawa's population and 42% of its overall immigrant population lived in single-detached homes, and 21% of the overall population lived in apartment buildings of five and more storeys, as did 21% of the city's overall immigrant population.

[12] Cossette, Lucie; A Profile of Disability in Canada, 2001, Statistics Canada, Catalogue No. 89-577-XIE, December 2002

Recent immigrants to Ottawa, most often than not, need apartments to integrate themselves into their new hometown. In Ottawa, 39% of immigrant households with children who arrived in the last five years were living in apartment buildings as of the 2001 Census.

However, most recent immigrants tend to live in apartment buildings. The 2001 Census shows that, of all immigrant households who arrived here between 1996 and 2001:

- Overall, 43% were living in apartment buildings of five and more storeys, and 19% in detached homes;
- 69% of single-person immigrant households lived in apartment buildings of five and more storeys, and 3% in detached homes;
- 58% of couple family households with no children lived in apartment buildings of five and more storeys, and 14% in detached homes;
- 45% of lone-parent family households lived in apartment buildings of five and more storeys, and 10% in detached homes;
- 39% of all households with children lived in apartment buildings of five and more storeys, and 21% in detached homes.

After five years in Ottawa, immigrant households are more evenly distributed between tall apartment buildings and detached dwellings, although the percentage living in apartments remains higher than the overall city average. The 2001 Census shows that, of all immigrant households who arrived in Ottawa between 1991 and 1995:

- Overall, 25% were living in apartment buildings of five and more storeys, and 26% in detached homes;
- 69% of single-person immigrant households still lived in apartment buildings of five and more storeys, and 4% in detached homes;
- 37% of couple family households with no children lived in apartment buildings of five and more storeys, and 25% in detached homes;
- 27% of lone-parent family households lived in apartment buildings of five and more storeys, and 14% in detached homes;
- 17% of all households with children lived in apartment buildings of five and more storeys, and 30% in detached homes.

Apartment dwellings are important for new immigrants from both an affordability standpoint and, when they are located close to places of employment or rapid transit, also from a cost of living standpoint, as many immigrant households may not be able to afford an automobile before they are well established economically. To ensure that Ottawa remains an attractive destination for immigrants it is therefore important to take into account the role of apartment dwellings as an essential component of their

integration into the community in the early years after their arrival.

Downtown living appeals to an increasing number of people, especially young adults. Many apartment condos in recent years have successfully targeted this demographic.

The appeal of the urban lifestyle

Across Canada and indeed North America, which have had the world's highest rates of private vehicle ownership since the end of World War II, there is a noticeable resurgence of interest in urban lifestyles, characterized by residential locations that allow people to function on foot to access most of their functional and recreational needs. The denser city cores are in the best position to provide this lifestyle option since they already possess the amenities sought by people seeking an urban lifestyle.

In Ottawa, downtown is a residential location of choice for a large number of young adults. According to the 2006 Census, 43.4% of the population of the greater downtown core[13] is aged between 20 and 39. Overall, that age group accounts for 28% of the city's population. Seniors are also slightly over-represented in the greater downtown core, accounting for 12.9% of its population against 12.4% of the city's overall population.

Neighbourhoods that offer an urban lifestyle of a more tranquil variety than the downtown core appear to draw special interest from pre-seniors. For example, the 2006 Census shows that the 50-64 age group accounts for 19.6% of the population of the West Wellington-Westboro area, while its proportion of the city's total population is 18.4%.

A question that is frequently asked is whether the people of Ottawa, and especially seniors, will want to move to condominium apartments, and in what proportion. A number of sources were consulted to attempt to find elements of response to this question.

A report prepared for the Conference Board of Canada by Genworth Financial Canada has analyzed in depth the Canadian condo apartment market and specifically the condo market in the eight largest cities.[14] According to this study, "An aging population — particularly the increasing population share of those 55 and over in all major urban areas — provides a solid demographic underpinning that is

[13] The Greater Downtown Core includes the traditional financial core and the surrounding neighbourhoods including Centretown, Lowertown, Sandy Hill, Chinatown, the Glebe and Little Italy.

[14] Genworth Financial Canada; Metropolitan Condo Outlook: Insights Into the Condominium Market in Canada's Eight Largest Census Metropolitan Areas, prepared for the Conference Board of Canada, Summer 2007

critical to the condo market's long term health […]". In terms of its Ottawa analysis, the report states: "[…] an aging population and deteriorating affordability of competing single-detached homes underpin favourable long-term prospects."

Another source of market analysis, Canada Mortgage and Housing Corporations' Housing Market Outlook for Ottawa,[15] says: "[…] a significant share of the new residential projects will be condominiums, a housing type that meets the needs of an aging population seeking to live close to services and urban amenities."

An IPSOS-Reid survey published in June 2006[16] found that over one-third of a sample of Ottawa residents would consider purchasing a condominium apartment as their primary residence, and just over one-fifth would consider raising a family in a condominium apartment.

Polled respondents indicated that they found condominium apartments suitable for families with children because of building security (91%), closeness to public transportation (87%), pools and recreation facilities for children (83%), closeness to work (81%) and the nearby presence of schools (81%).

While the findings are based on a sample and there is not a long time series of poll results dealing with this specific question, it remains interesting and relevant that the question has now been posed to the home-buying public and the responses reflect an openness to consider raising children in apartments, as is commonplace in many other parts of the world.

A special report by TD Economics[17] highlighted the results of a survey by TD Bank Financial group of potential condo buyers. Their findings reveal a variety of reasons underpinning the future of the condo apartment market: "39% of those surveyed [aged 18 and over] said they were likely to consider buying a condominium as a principal residence […]. The top two reasons for preferring condos were lower maintenance costs and greater affordability, but there was more to the decision as well. The top three amenities were building security, attractive design and

[15] CMHC; Housing Market Outlook: Ottawa, Spring 2007

[16] Ipsos-Reid; Many (35%) in Canada's Top Cities are Likely to Consider Purchasing a Condominium for their Primary Residence; Survey and Report conducted on behalf of TD Bank Financial Group, June 19, 2006

[17] TD Economics; Special Report: Condos to Remain an Attractive Option for Many Home Buyers, TD Bank Financial Group, May 17, 2007.

environmentally friendly/energy efficiency. The last item is of particular interest, since the outcome could be interpreted in two different ways. It might reflect increased environmental awareness, which is consistent with the fact that concerns about the environment are ranking at the top of many public opinion polls. Alternatively, it could reflect a desire to keep monthly expenses on utilities as low as possible. Proximity to public transit, retail outlets and entertainment were also deemed to be attractive to potential buyers."

There appears to be general agreement among industry literature to draw a link between an aging population and a market appetite for condominium apartments. There also is a link between rising costs of single-detached dwellings and rising sales of condo apartments. These studies suggest that the City is not fundamentally erring by anticipating a rising demand for apartment dwellings as part of its projections.

How much longer can we realistically expect the city to keep growing along a car-dependent model? Fuel costs are one of many factors that are likely to have an impact on the choice of housing types and locations in the years ahead.

Increasing cost of, and challenges to finance, municipal infrastructure construction and maintenance

As infrastructure reaches the end of its economic life and new development demands construction of new infrastructure, the importance of optimizing these costs and distributing them among the greatest number of ratepayers becomes increasingly essential. With its limited financial toolbox, the municipality must require a more efficient use of the land it services.

Increasing costs of fuel

With gasoline retail prices reaching and surpassing $1 per litre, longer commutes by car become more expensive. This may prompt more people to opt for public transit and, more fundamentally, may lead more people over time to choose residential locations that require shorter and fewer trips by private vehicle. Typically, such residential locations would involve a trade-off between living space and land area, and proximity to jobs, services and other amenities.

Propensity projections

All of the above factors may affect dwelling type propensities as well as development densities, which will be addressed when urban land requirements are analyzed at later stages of the Official Plan review.

For the purposes of projecting dwelling units by type, the following propensity forecasts are proposed:

The propensity for single-detached dwellings will still peak at the 55-59 age group but by 2031 will be the choice of 52.8% of households headed by someone in that cohort, compared with 55.7% estimated in 2006. The bulk of the reduction in propensities for single-detached dwellings will be redirected, in younger age groups, to row dwellings and, in older age groups, to apartments. This modest shift in the propensity for single-detached homes takes into account the fact that a large proportion of seniors will want to age in place or, more fundamentally, avoid any change in their lifestyle associated with a smaller dwelling. It also takes into account the fact that more people in their 20's stay at their parents' homes longer, thus delaying any downsizing the parents may aspire to. There is reason to anticipate, however, that the trend toward downsizing coupled with the desire to remain homeowners will fuel the demand for condominium apartments throughout the projection period.

The propensity for row dwellings will rise most significantly for household cohorts up to age 49 but remain closer to current levels in cohorts older than 50. The propensity for row dwellings will also peak at a slightly older age group, reflecting the increasing acceptability of townhouses as permanent family residences for first-time buyers as well as for move-up buyers. The townhouse will remain a dwelling type of choice for young families wishing to raise children in a ground-oriented home. Smaller townhouses will also find favour with younger childless households for whom stairs pose no physical challenge. Housing types like bungalow townhouses will also appeal to older buyers who prefer ground-oriented homes.

The propensity for apartments is already high among younger and older household cohorts. It is projected to rise modestly in the younger age cohorts and very slightly in the older age groups. Since the older age groups will make up a larger share of the population, the number of apartments required is projected to increase, especially in the later stages of the projection period.

The projection is for a very modest rise in the propensity for apartments in the younger age groups because it is already high; in fact the condominium apartment market already caters to a growing share of first-time buyers who do not have children.

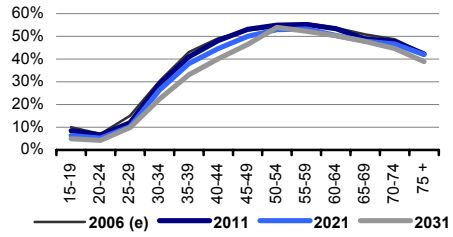
In the case of seniors, as noted above, the propensity for apartments is also already high so the increase will be negligible. It will largely be due to the condominium apartment segment, which will cater to seniors wishing to live in a low-maintenance dwelling with security features and at locations that will allow them to access services on foot near their home.

Apartment buildings will also take the form of retirement homes, to cater to the growing seniors' population that will require health and other support services. It will make more economic sense, as we see already with the growing number of private retirement homes, to achieve economies of scale to offer those services, and also to be able to respond quickly to any medical emergency when needed. These factors will support the construction of apartment retirement homes over lower-density retirement communities whose spread-out character would reduce the cost-efficiency of service delivery and reduce emergency response times.

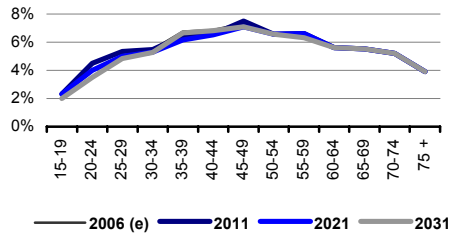
For semi-detached dwellings, the propensity is projected to slightly decrease, although this is a rather academic point since the share of semi-detached dwellings in the Ottawa housing market is very small. The projection calls for a small decrease, mostly among younger households, because the rising price of land will sooner favour the construction of townhouses over semi-detached homes as a non-detached form of ground-oriented dwelling. If this assumption proves wrong and the construction of semi-detached dwellings were to increase, it is likely they would take market share away from single-detached homes as they would be positioned as a more affordable low-density alternative to a single-detached home. It is also likely that there will be a higher share of bungalow semis to cater to senior buyers, but again in Ottawa this form of housing is not projected to see a significant increase in overall share.

In all cases the forecast assumes a gradual amount of change over the course of the next two decades.

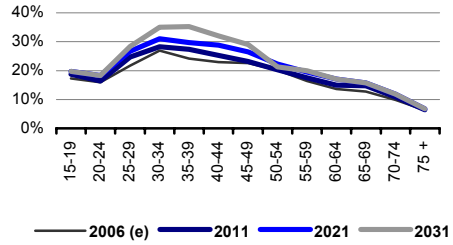
51 **Projected propensity for single-detached dwellings**



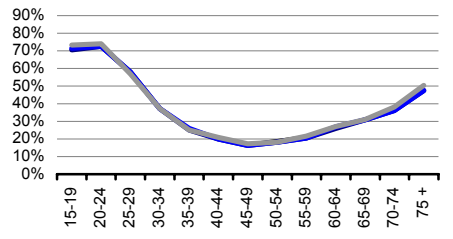
52 **Projected propensity for semi-detached dwellings**



53 **Projected propensity for row dwellings**



54 **Projected propensity for apartments**



2.5 Housing Demand Using Detailed Methodology

Housing demand is calculated by multiplying the projected number of households for each age group by the dwelling type propensities. Using the assumptions presented in section 2.4, and accounting for vacancies[18] and demolition replacements, housing demand to 2031 would be as follows:

Figure 55
Projected Housing Requirements by Type, 2011-2031
Using Propensity Projections

	Singles	Semis	Towns	Apts.	TOTAL
2006	154,206	21,175	67,749	112,044	**355,174**
2011	165,920	22,885	78,146	120,051	**387,002**
2021	185,397	25,774	97,522	141,582	**450,275**
2031	200,064	28,781	113,089	163,629	**505,565**

When allowances for demolitions and vacancies are factored in, the totals in Figure 55 translate into the following volume of housing construction:

Figure 56
Projected Annual Housing Production and Share by Type

	Single	Semi	Row	Apt.	Total
2006 Overall share	43.6%	6.0%	19.0%	31.4%	100%
2006-2011	12,430	1,788	9,927	5,895	30,039
Annual average	2,486	358	1,985	1,179	6,008
Annual share	41%	6%	33%	20%	100%
Overall share at end of period	43.1%	6.0%	20.2%	30.7%	100%
2012-2021	19,476	2,889	19,463	22,051	63,879
Annual average	1,948	289	1,946	2,205	6,388
Annual share	30%	5%	30%	35%	100%
Overall share at end of period	41.3%	5.8%	21.7%	31.2%	100%
2022-2031	14,667	3,008	15,594	22,129	55,398
Annual average	1,467	301	1,559	2,213	5,540
Annual share	26%	5%	28%	40%	100%
Overall share at end of period	39.6%	5.7%	22.5%	32.2%	100%

[18] Vacancy allowances are applied to the housing stock as follows: we assume that 0.5% of all single- and semi-detached homes are vacant (to account for vacant rented homes of this type and newly constructed but yet unoccupied houses). We assume that 85% of townhouses are owned and apply a 0.5% vacancy rate to that stock, we assume that 15% of townhouses are rented and apply a 3% vacancy rate to that stock. We apply a 3% vacancy rate to rented apartments and a 0.5% vacancy rate to owned apartments. We estimate rental apartments to represent 75% of the existing stock and, between now and 2021, 25% of the projected new stock. After 2021 we project that 40% of new apartment stock will be rental, to account for rising retirement home construction. For owned apartments we apply a 0.5% vacancy rate.

While the amount of new apartments may appear high by today's standards, it should be noted that by the end of the projection period about 26% of the population of Ottawa will be over the age of 60.

The production of new apartments is expected to include a combination of new construction, conversions of existing non-residential buildings and additions of apartment units to existing residential buildings, especially in older single-detached houses. It will also include retirement homes.

This projection suggests a very gradual change in housing preferences. Between 2006 and 2031, the overall share of the total housing stock made up of single-detached homes will decrease from 43.6% to 39.6%. The overall share of apartments will rise from 31.4% to 32.2%. The share of townhouses will increase most, from 19% to 22.4%.

2.6 Comparison between methodologies

Using the basic methodology, Ottawa would require 2,760 fewer dwellings by 2031 overall. Apartment construction would be much higher in the earlier stages of the projection and townhouse construction would be at about one-third the amount observed over the last five years. The share of single detached homes would be 10% higher than the share observed over the past five years (2002-2006) and about 11% higher than their current overall share. Figure 57 below summarizes the difference between using the basic and detailed methodologies:

Figure 57
Housing Requirements - Difference between methodologies

WITH UNCHANGED 2001 PROPENSITIES					
Year	**Single**	**Semi**	**Row**	**Apt.**	**TOTAL**
2006	154,522	21,345	62,305	117,042	**355,214**
2011	168,988	23,081	66,774	127,554	**386,396**
2016	183,466	24,779	71,131	137,918	**417,294**
2021	197,945	26,477	75,488	148,282	**448,192**
2026	210,972	27,928	78,794	157,801	**475,495**
2031	223,998	29,380	82,106	167,320	**502,804**
WITH PROJECTED PROPENSITIES					
2006	154,206	21,175	67,749	112,044	**355,174**
2011	165,920	22,885	78,146	120,051	**387,002**
2016	175,659	24,330	87,834	130,817	**418,639**
2021	185,397	25,774	97,522	141,582	**450,275**
2026	192,730	27,278	105,292	152,606	**477,906**
2031	200,064	28,781	113,089	163,629	**505,565**
DIFFERENCE					
2006	316	170	-5,443	4,998	**40**
2011	3,067	196	-11,371	7,503	**-606**
2016	7,807	449	-16,703	7,101	**-1,344**
2021	12,548	703	-22,034	6,700	**-2,083**
2026	18,241	651	-26,498	5,195	**-2,411**
2031	23,934	599	-30,983	3,691	**-2,760**

NOTE: *Totals for 2006 differ slightly because the propensities are applied to 2001 totals.*

Using the basic methodology (unchanged 2001 propensities), by 2031 there would be 23,934 more single-detached dwellings than if the propensity projections are used. There will also be 3,691 more apartments and 599 more semi-detached homes, but 30,983 fewer townhouses.

The implications of opting for one or the other methodology will become apparent when urban land requirement scenarios are developed in early 2008, notwithstanding the density assumptions that may be applied to land requirement projections. For the purposes of this report, the propensity projections will be carried forward.

2.7 Historic Housing Shares in the Greater Metro Area

The latest Census data on housing is from 2001 and it shows that Ottawa accounted for 66% of the total number of dwellings in the greater metro area. Gatineau accounts for a further 21%, OMATO for 10% and QMAG for 4%.

Census data shows that Ottawa, over time, has lost a small percentage of its overall share, Gatineau has gained, and the more rapidly suburbanizing regions (Prescott-Russell, Les-Collines, Lanark and Leeds-Grenville) have gained as well *(fig. 58)*.

Estimates for 2006 show that Ottawa has retained its share since 2001 and Gatineau has lost two-tenths of a percentage point.

A breakdown by upper-tier for the regions outside Ottawa and Gatineau shows that Prescott & Russell, Les-Collines-de-l'Outaouais and Lanark have the largest shares.

Figure 58
Share of Total Metropolitan Housing Units, 1981-2006(e)

City, County or MRC*	1981	1986	1991	1996	2001	2006e
Ottawa	69.0%	68.7%	67.5%	66.2%	66.0%	66.0%
Gatineau	19.2%	19.4%	19.6%	20.1%	20.6%	20.4%
Prescott-Russell	3.3%	3.6%	3.9%	4.2%	4.1%	4.2%
Les-Collines-de-l'Outaouais	2.0%	2.1%	2.6%	2.8%	2.8%	3.1%
Lanark	2.2%	2.2%	2.3%	2.4%	2.4%	2.4%
Leeds & Grenville	1.1%	1.1%	1.2%	1.3%	1.3%	1.3%
Renfrew	1.3%	1.3%	1.2%	1.3%	1.2%	1.2%
Stormont, Dundas & Glengarry	1.0%	1.0%	1.0%	0.9%	0.9%	0.8%
Papineau	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%
Pontiac	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
La-Vallée-de-la-Gatineau	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
OMATO Combined	9.0%	9.2%	9.6%	10.1%	9.9%	9.9%
QMAG Combined	2.8%	2.8%	3.3%	3.5%	3.5%	3.7%

* OMATO and QMAG: Member municipalities only
Source: 1981-2001 from Census; 2006 from Building Permits

There is a difference between the share of total population and the share of total dwellings among the municipalities of the metro area. The city of Ottawa has a higher share of metro dwellings than population, reflecting the smaller average household size found in the central city. Similarly, as a central city, the amalgamated city of Gatineau has a higher share of dwellings than population.

The municipalities with a more suburban profile have a higher share of population than dwellings. This is the case with all OMATO municipalities except Arnprior, which as an older town has a higher percentage of apartments. The pattern is also visible in QMAG, again with the exception of municipalities with older town cores where there is a higher share of apartments (e.g. Thurso and La Pêche).

2.8 Urban structure outside Ottawa

The composition of the housing stock differs from one municipality to the next and helps determine the urban structure by highlighting the locations of more intensive urban development. The more urban municipalities have a smaller proportion of single-detached dwellings and a higher proportion of multiple dwellings, especially apartments.

Gatineau has the highest proportion of apartments, and Ottawa and Gatineau have the lowest (and identical) proportion of single-detached homes. In some of the more rural municipalities, up to 100% of the housing stock is made up of single-detached homes.

Within many of the municipalities in the regions outside Ottawa and Gatineau, there are urban cores with concentrations of multiple dwellings, which present opportunities for intensification.

Figure 59 highlights the municipalities with the highest concentrations of apartments:

Figure 59
Share of Apartments as % of Total Dwellings, 2001

Municipality	Share of apartments as % of total dwellings
Gatineau	38%
Ottawa	33%
Thurso	30%
Arnprior	29%
Casselman	22%
Carleton Place	17%
North Dundas	13%
Mississippi Mills	10%
Clarence-Rockland	10%
Alfred and Plantagenet	10%
Merrickville-Wolford	10%
Russell	8%

Source: Statistics Canada, Census

In some of the listed municipalities, which were created as a result of amalgamations, the concentrations of apartments are found in historic village cores such as Chesterville, Almonte, Alfred, Plantagenet and Merrickville.

Figure 60 highlights the municipalities with the highest concentrations of townhouses:

Figure 60
Share of Townhouses as % of Total Dwellings, 2001

Municipality	Share of townhouses as % of total dwellings
Ottawa	18%
Carleton Place	11%
Gatineau	6%
Arnprior	6%
Casselman	5%
North Grenville	4%

Source: Statistics Canada, Census

Figure 61 highlights the municipalities with the highest shares of single-detached dwellings. Only those with shares higher than 85% are included, and it is notable to observe that many of the municipalities usually regarded as rural have in fact a more diverse housing stock than might be expected. In some cases, this is due to the presence of historic villages or towns that functioned as regional hubs and where denser forms of housing were usually available. This would be the case in Thurso, Alfred and Plantagenet, Mississippi Mills and North Dundas.

In other cases the diversification of the housing stock is also, or exclusively, due to more recent development linked to the Ottawa commutershed. This is the case in Carleton Place, Casselman, Clarence-Rockland, Mississippi Mills and Arnprior.

Figure 61
Share of Single-Detached as % of Total Dwellings, 2001

Municipality	Share of singles as % of total dwellings
Alleyn-et-Cawood	100%
Mulgrave-et-Derry	100%
Beckwith	99%
Bristol	98%
Mayo	97%
Denholm	95%
Low	95%
McNab/Braeside	95%
Les-Collines-de-l'Outaouais	94%
Montague	94%
Lochaber-Ouest	94%
Val-des-Bois	92%
The Nation	89%
Russell	88%
North Grenville	88%
Merrickville-Wolford	88%

Source: Statistics Canada, Census

Figure 62 below summarizes the share of the metro total held by each city and county by type of dwelling.

Figure 62
Share of Total Metro Dwellings by Type, 2001

City, County or MRC*	Single	Semi	Row	Apt.	TOTAL
Greater Metro Area	**100%**	**100%**	**100%**	**100%**	**100%**
Ottawa	59%	55%	89%	71%	66.4%
Gatineau	18%	39%	9%	25%	20.2%
Prescott & Russell	7%	2%	1%	1%	4.1%
Lanark	4%	2%	1%	1%	2.4%
Renfrew	2%	1%	>1%	1%	1.2%
Leeds-Grenville	2%	>1%	>1%	>1%	1.3%
S.D.&G.	1%	>1%	>1%	>1%	0.9%
Les-Collines	5%	>1%	>1%	>1%	2.9%
Papineau	1%	>1%	0%	>1%	0.4%
La-Vallée	>1%	0%	0%	>1%	0.1%
Pontiac	>1%	0%	0%	0%	0.1%

*OMATO and QMAG member municipalities only
Source: 2001 Census

2.9 Allocation outside Ottawa

In Section 1 (Population), the projected greater metro population in 2031 for the reference scenario is **1,715,770**.

In Figure 58, it can be seen that Ottawa's share of total metro dwellings has gradually shrunk from 69.0% in 1981 to 66.0% according to the 2006 estimate. Gatineau's share has progressed from 19.2% (1981) to 20.6% (2001) and is estimated at 20.4% in 2006. OMATO has seen its share rise from 9.0% (1981) to 9.9% (2006e). And QMAG has also seen its share rise from 2.8% (1981) to 3.7% (2006 estimate).

To project the future share of dwellings among the component regions of the metro area, assumptions must first be made about average household sizes.

In the first section of this report, the average household size for Ottawa is projected to decrease from 2.48 (estimated in 2006) to 2.28 in 2031. Since households in Ottawa will continue shrinking, this will translate into a higher number of dwellings per capita.

Gatineau already has a smaller average number of persons per dwelling (2.41 estimated in 2006, down from 2.47 in 2001) than Ottawa. This is because, despite the extent of its suburban fabric, which is largely home to traditional families with children, Gatineau has a higher average of single-person and non-family households than Ottawa. This can be due to the fact that many newcomers to Gatineau arrive alone for career opportunities, or also that the older cores of Hull, Gatineau and Buckingham contain higher percentages of seniors whose households are smaller.

As its population continues to age, the average household size in Gatineau is projected to continue decreasing. However, net migration to Gatineau is expected to continue being comprised mainly of international migrants whose age profile is typically younger, and of intra- and inter-provincial migrants drawn to Gatineau by job prospects or lower housing costs, and whose age profile will also be younger. This will contribute to slow the shrinking of household sizes in Gatineau.

QMAG's average household size will decrease slightly but will remain, by 2031, well above the average in both central cities. Its share of total dwellings will rise. OMATO regions will be the only ones to experience an increase in average household size, given that their increasingly suburban role will translate into a population with a higher percentage of

families with children. OMATO's share of total dwellings will also increase.

The tables below outline projected household sizes across the metro area for the projection period:

Figure 63
Projected Household Size, Greater Area

City or Region	2006 (e)	2011	2016	2021	2026	2031
Ottawa	2.48	2.42	2.37	2.32	2.30	2.28
Gatineau	2.41	2.39	2.37	2.35	2.33	2.31
OMATO	2.73	2.70	2.72	2.74	2.76	2.80
QMAG	2.62	2.60	2.58	2.56	2.53	2.49
TOTAL	**2.49**	**2.45**	**2.41**	**2.38**	**2.36**	**2.35**

From these projections and using the population projections developed earlier in the report, a projected number of households can be obtained:

Figure 64
Projected Number of Households, Greater Area

City or Region	2006 (e)	2011	2016	2021	2026	2031
Ottawa	351,212	381,752	412,973	443,592	471,729	497,440
Gatineau	103,475	109,777	116,181	122,563	128,676	134,068
OMATO	52,056	55,515	61,040	66,990	72,851	78,330
QMAG	18,220	19,190	21,064	23,055	25,233	27,563
TOTAL	**524,962**	**566,234**	**611,258**	**656,200**	**698,490**	**737,400**

Projected growth in total households is shown in Figure 65:

Figure 65
Projected Household Growth, Greater Area

City or Region	2006-2011	2011-2016	2016-2021	2021-2026	2026-2031
Ottawa	30,540	31,221	30,619	28,137	25,711
Gatineau	6,302	6,404	6,382	6,113	5,391
OMATO	3,459	5,526	5,950	5,861	5,479
QMAG	970	1,874	1,991	2,178	2,329
TOTAL	**41,272**	**45,024**	**44,942**	**42,290**	**38,910**

The projected growth at an annualized rate produces the following figures:

Figure 66
Annualized Projected Household Growth, Greater Area

City or Region	2006-2011	2011-2016	2016-2021	2021-2026	2026-2031
Ottawa	6,108	6,244	6,124	5,627	5,142
Gatineau	1,260	1,281	1,276	1,223	1,078
OMATO	692	1,105	1,190	1,172	1,096
QMAG	194	375	398	436	466
TOTAL	**8,254**	**9,005**	**8,988**	**8,458**	**7,782**

In these projections it can be seen that OMATO surpasses Gatineau in household growth by 2031. Household growth in Ottawa and Gatineau peaks in the 2011-16 period. In OMATO the peak takes place between 2016-21. In QMAG the peak occurs after 2026.

In projecting the number of annual housing starts for Ottawa, provision was made to account for demolition replacements and vacancies in the housing stock. This provision amounts to a factor of 1.63% that is added to annual household formation to arrive at a projected amount of actual housing starts.

Because Ottawa has a larger rental stock than the other municipalities, a lower factor of 1.5% is applied to account for demolition replacements and vacancies in the rest of the metro area. Once these factors are applied, the projected annualized housing starts for the entire metro area over the projection period appears in Figure 67:

Figure 67
Annualized Projected Growth in Dwellings, Greater Area

City or Region	2006-2011	2011-2016	2016-2021	2021-2026	2026-2031
Ottawa	6,366	6,327	6,327	5,526	5,532
Gatineau	1,279	1,300	1,296	1,241	1,094
OMATO	702	1,122	1,208	1,190	1,112
QMAG	197	380	404	442	473
TOTAL	**8,544**	**9,129**	**9,235**	**8,399**	**8,211**

From these projections, the total number of dwellings in the metro area would reach the following thresholds:

Figure 68
Projected Dwellings, Greater Area

City or Region	2011	2016	2021	2026	2031
Ottawa	387,002	418,639	450,275	477,906	505,565
Gatineau	110,509	117,009	123,487	129,692	135,164
OMATO	55,567	61,175	67,214	73,163	78,724
QMAG	19,205	21,107	23,127	25,338	27,703
TOTAL	**572,283**	**619,930**	**664,104**	**706,100**	**747,156**

Resulting from these calculations, the projected distribution of total metro dwellings would be as follows:

Figure 69
Projected Distribution of Dwellings (%), Greater Area

City or Region	2011	2016	2021	2026	2031
Ottawa	67.62	67.75	67.80	67.68	67.67
Gatineau	19.31	18.94	18.59	18.37	18.09
OMATO	9.71	9.90	10.12	10.36	10.54
QMAG	3.36	3.42	3.48	3.59	3.71
TOTAL	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

The annual share of housing starts would be projected as follows:

Figure 70
Projected Share of Housing Starts (%), Greater Area

City or Region	2011	2016	2021	2026	2031
Ottawa	74.50	69.31	68.52	65.79	67.37
Gatineau	14.97	14.24	14.03	14.78	13.33
OMATO	8.22	12.29	13.08	14.17	13.54
QMAG	2.31	4.17	4.38	5.26	5.76
TOTAL	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

2.10 Dwellings by Type

Figure 56 presented the projected share of new dwellings by type for the city of Ottawa. This projection was based on the assumptions listed in Section 2.4.

Similar assumptions must be developed for the remainder of the metro area to arrive at a projection for dwelling types.

The city of Gatineau has a more urban profile than OMATO and QMAG, but has a larger share of single-detached dwellings than Ottawa. Interestingly it also has a larger share of semi-detached and apartment dwellings than Ottawa. It lags Ottawa in townhouses. The assumption for Gatineau, as a central city, is that it will experience a maturing of its housing market that will translate into an incremental shift toward denser forms of housing, mostly apartments but also an increasing share of townhouses.

OMATO has a larger share of single-detached homes than Ottawa and Gatineau, and a larger share of townhouses than Gatineau. It also has a small share of apartments. The higher-density dwelling types in OMATO (townhouses and apartments) are found mainly in historic town cores (in the case of apartments) and in growing and suburbanizing communities (in the case of townhouses). The assumption for OMATO is that it will retain a largely rural and suburban dwelling type profile, however the more rapidly suburbanizing communities will introduce a greater variety of dwelling types, especially townhouses. The share of apartments will increase marginally to accommodate the aging population.

QMAG's dwelling stock has the highest share of single-detached homes. Aside from a very small number of town cores that have a higher share of apartments, the profile of QMAG's housing stock is largely rural and suburban. Over the projection period this is not expected to undergo much change. A limited amount of townhouse development and a small number of new apartment units can be expected, but by and large the stock will continue to be predominantly made up of single-detached homes.

These assumptions are applied at the upper-tier level of the nine OMATO and QMAG regions. Municipalities will exhibit variations at the local level. Given the urban structure discussed in section 2.7, the municipalities that are experiencing the greatest rates of suburban-type growth are the ones that will likely exhibit the greatest variations in dwelling types. Historic town cores present the most

significant opportunities for intensification and higher-density development, and those will also receive the greatest variety of dwelling type construction.

The following table outlines the projected share of dwelling types for new construction across the metro area:

Figure 71
Share of New Dwellings by Type

		Single	Semi	Town	Apt.
Ottawa	2006-2011	37%	5%	33%	25%
	2011-2016	31%	5%	31%	34%
	2016-2021	31%	5%	31%	34%
	2021-2026	27%	5%	28%	40%
	2026-2031	27%	5%	28%	40%
Gatineau	2006-2011	56%	13%	3%	28%
	2011-2016	54%	12%	5%	29%
	2016-2021	52%	11%	7%	30%
	2021-2026	50%	10%	8%	32%
	2026-2031	46%	10%	10%	34%
OMATO	2006-2011	88%	4%	6%	2%
	2011-2016	87%	4%	7%	2%
	2016-2021	86%	4%	8%	2%
	2021-2026	85%	3%	9%	3%
	2026-2031	84%	3%	9%	4%
QMAG	2006-2011	99%	1%	0%	0%
	2011-2016	99%	1%	0%	0%
	2016-2021	97%	1%	1%	1%
	2021-2026	95%	1%	2%	2%
	2026-2031	94%	1%	3%	2%

Based on the projected share of housing starts *(fig. 70)*, the projected annualized total of new housing units by dwelling type would be as follows:

Figure 72
Projected Housing Starts (annualized)

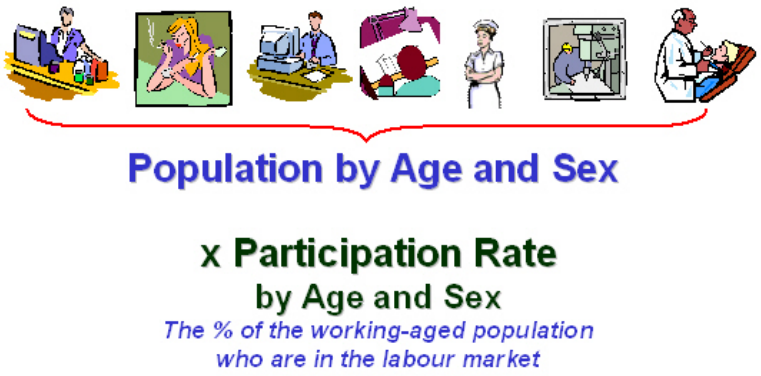
		Single	Semi	Town	Apt.	TOTAL
Ottawa	2006-2011	2,343	342	2,079	1,601	**6,365**
	2011-2016	1,948	289	1,938	2,153	**6,328**
	2016-2021	1,948	289	1,938	2,153	**6,328**
	2021-2026	1,467	301	1,554	2,205	**5,527**
	2026-2031	1,467	301	1,559	2,205	**5,532**
Gatineau	2006-2011	711	170	38	360	**1,279**
	2011-2016	702	156	65	377	**1,300**
	2016-2021	674	143	91	389	**1,296**
	2021-2026	621	124	99	397	**1,241**
	2026-2031	503	109	109	372	**1,094**
OMATO	2006-2011	618	28	42	14	**702**
	2011-2016	976	45	79	22	**1,122**
	2016-2021	1,039	48	97	24	**1,208**
	2021-2026	1,011	36	107	36	**1,190**
	2026-2031	934	33	100	44	**1,112**
QMAG	2006-2011	195	2	0	0	**197**
	2011-2016	377	4	0	0	**380**
	2016-2021	392	4	4	4	**404**
	2021-2026	420	4	9	9	**442**
	2026-2031	444	5	14	9	**473**
TOTAL Greater Area	2006-2011	3,867	542	2,159	1,975	**8,544**
	2011-2016	4,002	494	2,082	2,552	**9,130**
	2016-2021	4,052	484	2,129	2,570	**9,236**
	2021-2026	3,519	465	1,769	2,647	**8,400**
	2026-2031	3,349	449	1,783	2,631	**8,211**

2.11 Affordability

Housing affordability is an important issue in Ottawa as in all major cities in Canada. The reader is asked to refer to the City Housing Strategy, which addresses this topic comprehensively.

3.0 Employment Projections

Projections of employment are based on the population projection. Labour force participation rates by age and sex are applied to the age-sex structure of the projected population to produce an estimate of the resident labour force. This is then adjusted by an assumed unemployment rate to produce the number for employed residents. To that will be added an allowance for the number of net in-commuters from adjacent municipalities to jobs located in Ottawa. These projections will be done only for the city of Ottawa.



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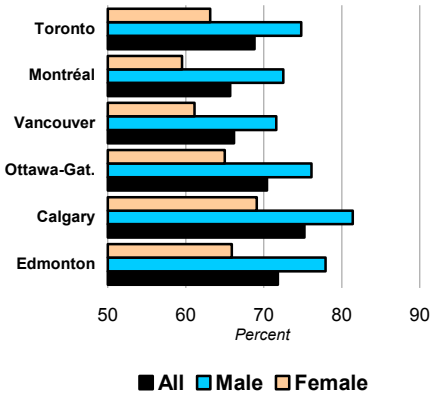
Labour Force Participation rates, Big 6 Cities

Statistics Canada, 2001 Census



3.1 Participation Rates

Ottawa-Gatineau has the third-highest labour force participation rate among large Canadian cities *(fig. 73)*. The city of Ottawa has a slightly lower rate than the Census Metropolitan Area. This is consistent with the fact that our economy is stable and generally prosperous. Higher labour force participation rates are found in the two Alberta cities, whose economic prosperity currently lead all Canadian centres. Participation rates in both the city of Ottawa and the Ottawa-Gatineau CMA are above the national average.

Interestingly, Ottawa-Gatineau has the second-highest participation rates for the core working age groups of 25-49, after Calgary. It has the third highest participation rate in the 50-54 age group, after Calgary and Edmonton. However, we also have the second-lowest participation rates in the older age groups of 55 and over, after Montreal. In other words, our population is intensely engaged in the work force during their prime working years and has greater opportunities to retire later in life.

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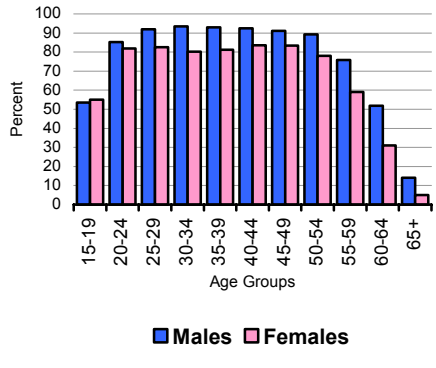
Labour Force Participation rates, Ottawa CMA

Statistics Canada, 2001 Census



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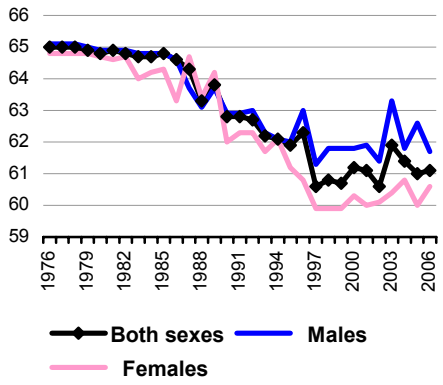
Median Retirement Age, Canada

Statistics Canada



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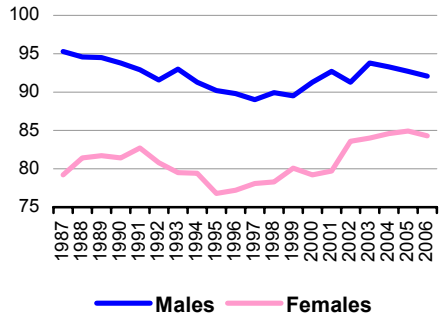
Participation Rates, Ottawa, Ages 25-54

Statistics Canada, Labour Force Survey



The female participation rate is also third highest in Ottawa among large Canadian cities, with Calgary and Edmonton ahead. Nationally, the female participation rate has plateaued after rising rapidly between the 1960s and 1990s.

The three main questions to ponder to produce assumptions for future labour force participation are:

- ***Will seniors' participation rates increase as the baby boom generation ages?*** This question is asked at a national level in the context of suggestions that the mandatory retirement age be raised to 67 or eliminated altogether. With the aging of the baby boom, a larger share of the population will soon begin drawing retirement pensions and will presumably require more health care and other services that will have to be funded from contributions from the working population. Hence, the national debate around the mandatory retirement age. A recent study by Statistics Canada shows that the median retirement age at the national level has been trending up since the late 1990s *(fig.75)*.

- ***Will female participation rates increase further, or stay at their current levels?*** If more seniors of both sexes prolong their careers past current retirement ages and since people aged 55 and over will make up a larger share of the population in the decades ahead, we can assume that there will be a rise in female participation rates. In Ottawa, female participation rates for the core working ages of 25-54 have started trending up since the mid-1990s after having seemingly peaked earlier that decade *(fig. 76)*.

- ***Will participation rates increase, decrease or stay the same?*** In general, the answer to this question will depend on a number of other factors including the two above. Generally speaking, and confirmed by a special study[19] by Statistics Canada, the overall labour force participation rate will inevitably decline as a result of low birth rates and the aging of the population, even if participation rates increase for each of the major age groups taken separately. In its findings, the StatCan study finds that even a rise in the birth rate or in immigration will only have a marginal impact on the evolution of the overall participation rate in the short and medium term. A continued increase in the participation rate of older workers can potentially delay the trend by a few years, and this would provide a

[19] Canadian Economic Observer; Labour Force Projections for Canada, 2006-2031, Statistics Canada, June 2007, Catalogue No. 11-010

cushion for employers to prepare for the drop in labour force participation, but the trend is inexorable.

Assumptions

For this projection the following assumptions are applied to participation rates:

- Youth participation rates (the 15-24 age group) will increase moderately, mostly in the 20-24 age segment as rising tuition fees for higher education will prompt more young people to work alongside their studies. The demographic weight of this age group, however, will diminish over time and therefore their net impact on the labour force will not affect the overall trend.

- Female participation rates in the age groups 25-54 will increase moderately. Male participation rates in the age groups 25-54 will increase negligibly. They are already very high.

- Participation rates for persons aged 55-64 will increase significantly for males and females.

- Participation rates for persons aged 65-74 will increase moderately for both males and females.

Because the demographic weight of the 55+ age groups will increase significantly over the projection period, even though the participation rate increases for each age group individually, the overall participation rate will decrease.

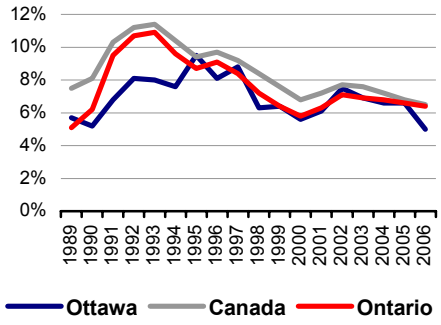
Our forecast participation rates for the 65-74 age group are somewhat conservative. If there were to be a revision to this projection it would be upward. Another recent Statistics Canada study[20] suggests that seniors' labour force participation is trending up and may involve working fewer hours and feature a much greater proportion of self-employment. Since Ottawa's workforce is heavily knowledge-based, this assumption may be all the more relevant.

[20] Marshall, Katherine and Ferrao, Vincent; "Participation of Older Workers" in Perspectives, August 2007, Statistics Canada, Ottawa, Catalogue No 75-001-XIE

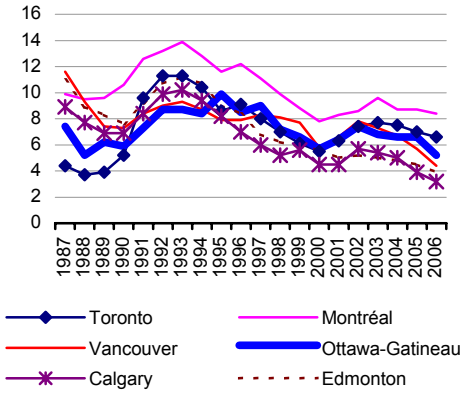
Figure 77
Projected participation rates, City of Ottawa

		2006	2011	2016	2021	2026	2031
Overall	**15+**	**69.5**	**69.2**	**68.3**	**67.4**	**66.3**	**65.4**
	15-24	67.3	67.8	68.3	68.8	69.2	69.7
	25-54	88.4	88.8	89.1	89.4	89.7	90.1
	55-64	59.1	61.1	63.0	65.1	67.1	69.1
	65-74	14.4	14.8	15.2	15.6	16.0	16.5
Male	**15+**	**74.7**	**74.1**	**73.1**	**72.1**	**70.9**	**69.7**
	15-24	65.8	66.3	66.7	67.2	67.6	68.1
	25-54	92.6	92.8	92.9	93.1	93.2	93.4
	55-64	67.0	68.5	70.0	71.5	73.0	74.5
	65-74	19.8	20.3	20.8	21.3	21.8	22.3
Female	**15+**	**64.7**	**64.6**	**63.7**	**62.9**	**91.9**	**61.2**
	15-24	68.9	69.4	69.9	70.3	70.8	71.3
	25-54	84.3	84.8	85.3	85.7	86.2	86.7
	55-64	51.7	54.1	56.5	58.9	61.3	63.7
	65-74	9.7	10.0	10.3	10.6	10.9	11.2

78 **Unemployment Rate, Canada, Ontario and Ottawa**
Statistics Canada, Labour Force Survey



79 **Unemployment rate, Big 6 Cities**
Statistics Canada, Labour Force Survey



3.2 Unemployment Rates

Ottawa-Gatineau traditionally has one of the lowest unemployment rates in Canada among major cities. Ottawa's rate is usually lower than the provincial and national averages *(fig. 78)*, and Gatineau's is usually below Quebec's and the national average. In recent years only Calgary and Edmonton have had lower unemployment rates.

Compared with the other large cities, Ottawa-Gatineau has the most stable unemployment rate, meaning that the swings or variations attributable to economic cycles are flatter here *(fig. 79)*. The peaks are not as high and the troughs not as low as in cities like Toronto, Vancouver or Calgary. This contributes to Ottawa's attractiveness as a destination for migrants and also allows for assumptions that call for stable unemployment rates.

Unemployment rates are highest in the younger age groups and lowest in the age groups older than 35. Female unemployment is lower than male unemployment for the age groups 45-64, presumably as more mothers return to the workforce when their children are in school, and in the younger age groups under 24. In all other age groups, male unemployment is lower.

To arrive at a forecast unemployment rate by age and sex, an average of the last 20 years' worth of data (1987-2006) was analyzed.

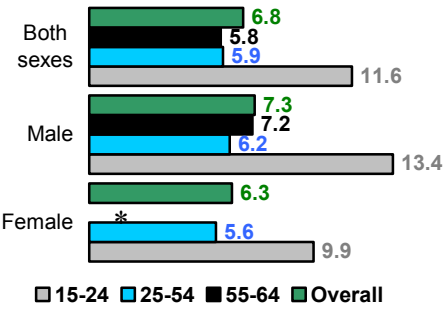
The 20-year overall average unemployment rate for Ottawa is 6.8%. It is highest in the younger age groups and lowest in the older age groups *(fig. 80)*.

The decline in participation rates will put pressure on the supply of labour, and therefore it can be anticipated that the unemployment rate will be low in the future. From an overall average of 6.5% between 2002 and 2006, it is therefore assumed that Ottawa's unemployment rate will decrease to 5.5% between 2006 and 2011, and to 5.0% between 2012 and the end of the projection period *(fig. 81)*.

80

Unemployment Rate by Age and Sex, 20-year average, Ottawa

Statistics Canada, Labour Force Survey



* Female unemployment rate for the age group 55-64 was suppressed by Statistics Canada, due to small sample numbers

81

Historical and projected unemployment rate, Ottawa

Statistics Canada and City of Ottawa

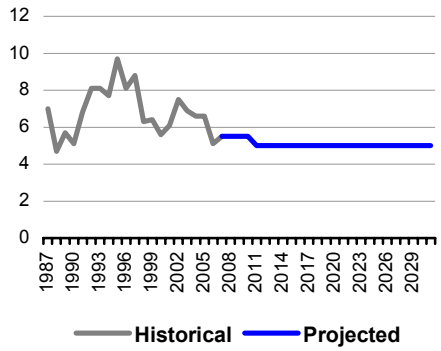


Figure 82
Projected Labour Force, Ottawa

		2006	2011	2016	2021	2026	2031
Overall	**15+**	**499,322**	**537,187**	**565,710**	**590,785**	**612,234**	**633,574**
	15-24	77,924	82,017	82,192	79,613	79,574	82,659
	25-54	358,408	376,923	390,651	404,156	421,082	436,598
	55-64	55,248	68,770	80,112	91,191	93,117	93,308
	65-74	7,743	9,476	12,755	15,825	18,460	21,008
Male	**15+**	**258,286**	**280,845**	**295,936**	**309,274**	**320,507**	**331,262**
	15-24	38,502	40,772	40,397	39,095	39,435	41,142
	25-54	184,416	196,707	204,354	211,078	219,282	226,529
	55-64	30,447	37,279	42,991	48,953	49,945	50,012
	65-74	4,922	6,087	8,193	10,147	11,846	13,579
Female	**15+**	**241,037**	**256,342**	**269,774**	**281,511**	**291,726**	**302,312**
	15-24	39,422	41,245	41,795	40,517	40,139	41,517
	25-54	173,992	180,216	186,297	193,078	201,800	210,070
	55-64	24,801	31,491	37,121	42,238	43,172	43,296
	65-74	2,821	3,390	4,562	5,678	6,615	7,429

Population by Age and Sex

x Participation Rate
by Age and Sex

x Employment Rate
by Age and Sex

= Base number of jobs

Figure 83
Projected Employed Labour Force, Ottawa (after unemployment rate is factored in)

2011	2016	2021	2026	2031
507,641	537,424	561,246	581,622	601,895

3.3 Net Commuting

As of the 2001 Census there were about 85,000 residents of surrounding municipalities working in Ottawa and almost 20,000 Ottawa residents working in surrounding municipalities. Most of the outside commuters working in Ottawa reside in Gatineau, and most Ottawa residents commuting outward work in Gatineau. However, Prescott-Russell and Lanark are becoming more prominent as places of residence for commuters working in Ottawa *(fig. 84)*.

Figure 84
Commuting Labour Force by Place of Residence, 2001 (Census)

Working in Ottawa, living in	*No.*	*%*	*Living in Ottawa, working in*	*No.*	*%*
Gatineau	45,685	*53.8*	Gatineau	16,145	*82.1*
Prescott-Russell	14,005	*16.5*	Lanark	895	*4.6*
Lanark	8,135	*9.6*	Prescott-Russell	850	*4.3*
Les-Collines	6,215	*7.3*	Leeds-Grenville	725	*3.7*
Leeds-Grenville	4,170	*4.9*	Renfrew	670	*3.4*
S.D.&G.	3,795	*4.5*	S.D.&G.	310	*1.6*
Renfrew	2,340	*2.8*	Les-Collines	50	*0.3*
Rest of QMAG	530	*0.6*	Rest of QMAG	25	*0.1*
TOTAL	**84,875**	*100*	**TOTAL**	**19,670**	*100*

Figure 1 (page 4 of this report) shows the percentage of the employed labour force that lives in outlying municipalities and works in Ottawa-Gatineau. In the case of OMATO residents, even if they work in Gatineau they must travel through Ottawa to access bridges to Quebec. In the case of QMAG residents, far fewer of them work in Ottawa than in Gatineau.

To assess how many commuters there might be in the future from outlying areas, assumptions must be made regarding the percentage of growth anticipated in those communities that is directly tied to the Ottawa-Gatineau labour market.

At this time it is unknown if transit, whether existing bus lines or a future regional commuter rail system, will have a measurable impact on commuter place of residence. For the purposes of this projection, the commuting assumptions include transit ridership.

Keeping the average number of jobs per household constant at the 2001 Census average, the following assumptions are applied to the distribution of future job growth in OMATO and QMAG:

Figure 85
Projected location of new employment of OMATO and QMAG residents

Job location	OMATO		QMAG	
Local	0.435	30.0%	0.482	36%
Ottawa	0.979	67.5%	0.415	31%
Gatineau	0.036	2.5%	0.442	33%
Total jobs/hhld	**1.45**	100%	**1.34**	100%

This distribution assumes that, throughout the projection period, 67.5% of the future employed labour force residing in OMATO will work in Ottawa, 2.5% in Gatineau and 30% locally. For QMAG the assumption is that 31% of the future employed labour force will work in Ottawa, 33% in Gatineau and 36% locally.

Figure 86
Projected employment, OMATO and QMAG, by job location

OMATO	2006	2011	2016	2021	2026	2031
Local	42,535	44,040	46,445	49,034	51,584	53,968
Ottawa	29,814	33,201	38,613	44,440	50,179	55,545
Gatineau	1,307	1,432	1,631	1,845	2,056	2,253
TOTAL	**73,656**	**78,673**	**86,688**	**95,318**	**103,819**	**111,767**
Local	57.7%	56.0%	53.6%	51.4%	49.7%	48.3%
Ottawa	40.5%	42.2%	44.5%	46.6%	48.3%	49.7%
Gatineau	1.8%	1.8%	1.9%	1.9%	2.0%	2.0%

QMAG	2006	2011	2016	2021	2026	2031
Local	8,878	9,344	10,246	11,203	12,251	13,371
Ottawa	7,692	8,094	8,870	9,694	10,596	11,560
Gatineau	8,162	8,590	9,416	10,294	11,255	12,282
TOTAL	**24,732**	**26,028**	**28,531**	**31,191**	**34,101**	**37,213**
Local	35.9%	35.9%	35.9%	35.9%	35.9%	35.9%
Ottawa	31.1%	31.1%	31.1%	31.1%	31.1%	31.1%
Gatineau	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%

Assumptions are also made regarding cross-commutes between the two central cities, Ottawa and Gatineau. The assumptions presented in Figure 87 foresee a slight increase in the percentage of Ottawa's employed labour force working in Gatineau, and a slight decrease in the percentage of Gatineau's employed labour force working in Ottawa. This assumption is based on the expectation that Gatineau's labour market will continue to mature and attract workers from Ottawa, and that the federal government will continue to move toward a stricter adherence to the principle of a 75%-25% distribution of their public service between Ottawa and Gatineau.

Figure 87
Projected cross-commutes between Ottawa and Gatineau

% of Employed Labour Force	2011	2016	2021	2026	2031
Ottawa to Gatineau	4.6%	4.7%	4.8%	4.9%	5.0%
Gatineau to Ottawa	37.9%	37.6%	37.3%	37.0%	36.5%

The projected employed labour force for Ottawa *(fig. 83)* was derived from the methodology described earlier in this section. For Gatineau, OMATO and QMAG, forecasts of employed labour force were produced by keeping constant the 2001 Census average number of jobs per household.

Figures 88 and 89 show the projected number of jobs in Ottawa and Gatineau, once net in-commuting has been calculated.

Figure 88
Projected number of jobs in Ottawa

	2006e	2011	2016	2021	2026	2031
1. Employed Labour Force	461,606	507,641	537,424	561,246	581,622	601,895
2. Out-commutes to Gatineau	20,772	23,351	25,259	26,940	28,499	30,095
3. In-commutes from Gatineau	51,428	54,561	57,286	59,951	62,435	64,172
4. In-commutes from OMATO	29,814	33,201	38,613	44,440	50,179	55,545
5. In-commutes from QMAG	7,692	8,094	8,870	9,694	10,596	11,560
Total number of jobs in Ottawa (1-2)+3+4+5	**529,768**	**580,145**	**616,934**	**648,390**	**676,333**	**703,078**

NOTE: This calculation estimates that there are 530,000 jobs in Ottawa as of 2006. The City's 2006 Employment Survey has a lower total closer to 522,000. Generally, Employment Surveys have tended to report a slightly lower number than the estimated actual number of jobs because some jobs are not captured (some farmers, some home-based workers with no business telephone, etc.)

Figure 89
Projected number of jobs in Gatineau

	2006e	2011	2016	2021	2026	2031
1. Employed Labour Force	136,373	143,959	152,357	160,726	168,743	175,814
2. Out-commutes to Ottawa	51,428	54,561	57,286	59,951	62,435	64,172
3. In-commutes from Ottawa	20,772	23,351	25,259	26,940	28,499	30,095
4. In-commutes from QMAG	8,162	8,590	9,416	10,294	11,255	12,282
5. In-commutes from OMATO	1,307	1,432	1,631	1,845	2,056	2,253
Total number of jobs in Gatineau (1-2)+3+4+5	**114,508**	**122,771**	**131,377**	**139,854**	**148,118**	**156,272**

Calculations for out-commutes from Ottawa to OMATO and QMAG, and from Gatineau to QMAG and OMATO, are not provided because of their very low numbers. For instance, 2001 Census data shows that 0.76% of Ottawa's employed labour force worked in OMATO and 0.02% in QMAG. From Gatineau, 0.96% of the 2001 employed labour force worked in QMAG and 0.08% in OMATO.

Figure 90 summarizes the projected total number of jobs by location once all major commuting movements have been calculated.

Figure 90
Projected total number of jobs, Greater Ottawa-Gatineau Area

	2006	2011	2016	2021	2026	2031
Ottawa	529,768	580,145	616,934	648,390	676,333	703,078
Gatineau	114,508	122,771	131,377	139,854	148,118	156,272
OMATO	73,656	78,673	86,688	95,318	103,819	111,767
QMAG	24,732	26,028	28,531	31,191	34,101	37,213
TOTAL	**742,664**	**807,617**	**863,530**	**914,753**	**962,371**	**1,008,329**

These numbers suggest that employment will not grow as quickly in the later years of the projection period, which is consistent with the larger demographic scenario that anticipates that one in every five Ottawans will be aged 65 or over by 2031. They also show that in OMATO and QMAG, a stronger rate of job growth is expected as a result of population growth reaching levels that will sustain more locally oriented service jobs, even though the bulk of the employed labour force will still be commuting to the city. In Gatineau's case, it is anticipated that employment growth will be attributable to a maturing local economy and a continuation of federal job relocation. Figure 91 summarizes the rates of job growth for each component of the Greater Area.

Figure 91
Projected rates of job growth (five-year % growth)

	2006-2011	2011-2016	2016-2021	2021-2026	2026-2031
Ottawa	9.5%	6.3%	5.1%	4.3%	4.0%
Gatineau	7.2%	7.0%	6.5%	5.9%	5.5%
OMATO	6.8%	10.2%	10.0%	8.9%	7.7%
QMAG	5.2%	9.6%	9.3%	9.3%	9.1%
Total	**8.7%**	**6.9%**	**5.9%**	**5.2%**	**4.8%**

By and large, however, Ottawa will remain the focus of employment for the entire Greater Area. Its share of total metropolitan employment, as is shown in Figure 92, will not vary significantly and remain dominant.

Figure 92
Projected share of metropolitan jobs

Year	2006	2011	2016	2021	2026	2031
Ottawa	72%	72%	71%	71%	70%	70%
Gatineau	15%	15%	15%	15%	15%	15%
OMATO	10%	10%	10%	11%	11%	11%
QMAG	3%	3%	3%	3%	4%	4%

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APPENDICES

Appendix 1 - Scenario Summaries

SCENARIO 1

City of Ottawa	2006	2011	2016	2021	2026	2031	*Change 2006-2031*
Population (mid-year)	870,757	907,757	948,697	988,370	1,025,523	1,057,258	186,501
Average annual increase		7,400	8,188	7,935	7,431	6,347	7,460
Average annual percentage change		0.8%	0.9%	0.8%	0.7%	0.6%	0.8%
Population by Age Group							
0-4	47,299	46,164	48,103	49,701	50,553	50,164	2,865
5-9	49,770	47,524	46,704	48,644	50,246	51,102	1,332
10-14	55,013	50,492	48,507	47,690	49,632	51,234	-3,779
15-19	55,776	58,071	53,824	51,844	51,034	52,976	-2,800
20-24	59,952	61,136	63,954	59,725	57,754	56,948	-3,004
25-34	129,553	135,874	139,651	144,540	143,171	137,020	7,467
35-44	142,451	134,735	140,910	148,648	152,477	157,392	14,941
45-54	133,547	145,239	141,910	135,115	141,402	149,158	15,611
55-64	93,414	111,616	125,111	136,936	134,001	127,821	34,407
65+	103,982	116,906	140,023	165,527	195,253	223,443	119,461
0-19	23.9%	22.3%	20.8%	20.0%	19.6%	19.4%	-1.3%
20-34	21.8%	21.7%	21.5%	20.7%	19.6%	18.3%	2.4%
35-54	31.7%	30.8%	29.8%	28.7%	28.7%	29.0%	16.4%
55-64	10.7%	12.3%	13.2%	13.9%	13.1%	12.1%	18.4%
65+	11.9%	12.9%	14.8%	16.7%	19.0%	21.1%	64.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Households (total)	351,212	375,738	401,778	426,377	447,540	465,236	114,024
Households by Age Group of Head							
<25 years	13,496	13,783	14,297	13,379	12,954	12,819	-676
25-34 years	61,578	64,756	66,540	68,837	68,450	65,440	3,862
35-44 years	79,602	75,212	78,591	82,958	85,092	87,826	8,224
45-54 years	77,691	84,534	82,682	78,668	82,285	86,834	9,143
55-64 years	55,439	66,204	74,215	81,211	79,434	75,794	20,355
65+ years	63,406	71,249	85,454	101,323	119,326	136,523	73,117
Average persons per household	2.48	2.42	2.36	2.32	2.29	2.27	----
Dwellings (total)	355,200	381,300	406,900	433,000	453,000	473,100	117,900
Average annual new housing units		5,200	5,200	5,200	4,000	4,000	4,716
Single detached	154,200	164,000	171,200	178,700	183,200	187,800	33,600
Semi-detached	21,200	22,500	23,600	24,800	25,800	26,800	5,600
Townhouse	67,800	76,800	85,000	93,200	99,000	104,700	36,900
Apartment	112,000	118,000	127,100	136,300	145,000	153,800	41,800
Labour Force & Employment							
Population 15+	718,675	763,577	805,383	842,335	875,092	904,758	186,083
Participation Rate	69.6%	69.3%	68.3%	67.3%	66.3%	65.5%	----
Labour Force	499,300	523,600	542,900	557,500	567,400	575,700	76,400
Unemployment Rate	3.3%	5.5%	5.0%	5.0%	5.0%	5.0%	----
Employment	483,900	494,800	515,800	529,600	539,000	546,900	63,000
5-Year Absolute Change		10,900	21,000	13,800	9,400	7,900	----
Unemployed persons	16,400	28,800	27,100	27,900	28,400	28,800	----
Total employed by place of work	529,800	565,500	591,800	612,100	625,900	638,000	108,200

Greater Ottawa-Gatineau Area							
Population	1,307,100	1,360,000	1,426,000	1,489,900	1,550,100	1,602,900	295,800
Households	525,000	556,300	592,600	627,300	657,800	683,900	158,900
Employment (by place of residence)	742,700	788,300	829,500	866,100	892,300	917,400	174,700

SCENARIO 2 - *REFERENCE PROJECTION*

City of Ottawa	2006	2011	2016	2021	2026	2031	*Change 2006-2031*
Population (mid-year)	870,757	923,041	976,747	1,031,305	1,085,279	1,135,840	265,083
Average annual increase		10,457	10,741	10,912	10,795	10,112	10,603
Average annual percentage change		1.2%	1.1%	1.1%	1.0%	0.9%	1.1%
Population by Age Group							
0-4	47,299	47,131	50,233	52,652	54,196	54,594	7,295
5-9	49,770	48,499	48,433	51,627	54,140	55,784	6,014
10-14	55,013	51,269	50,080	50,102	53,374	55,967	954
15-19	55,776	58,649	55,005	53,897	54,013	57,374	1,598
20-24	59,952	62,333	65,369	61,900	60,966	61,269	1,317
25-34	129,553	140,621	146,701	152,942	153,378	149,890	20,337
35-44	142,451	137,353	146,941	158,711	165,568	172,584	30,133
45-54	133,547	146,655	144,787	140,308	150,287	162,357	28,810
55-64	93,414	112,631	127,116	140,177	138,845	135,099	41,685
65+	103,982	117,900	142,082	168,989	200,512	230,922	126,940
0-19	23.9%	22.3%	20.9%	20.2%	19.9%	19.7%	6.0%
20-34	21.8%	22.0%	21.7%	20.8%	19.8%	18.6%	8.2%
35-54	31.7%	30.8%	29.9%	29.0%	29.1%	29.5%	22.2%
55-64	10.7%	12.2%	13.0%	13.6%	12.8%	11.9%	15.7%
65+	11.9%	12.8%	14.5%	16.4%	18.5%	20.3%	47.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Households (total)	351,212	381,752	412,973	443,592	471,729	497,440	146,228
Households by Age Group of Head							
<25 years	13,496	14,043	14,613	13,870	13,677	13,799	303
25-34 years	61,578	67,020	69,942	72,895	73,356	71,613	10,035
35-44 years	79,602	76,666	81,942	88,563	92,397	96,306	16,704
45-54 years	77,691	85,358	84,355	81,686	87,446	94,510	16,818
55-64 years	55,439	66,806	75,404	83,134	82,308	80,113	24,674
65+ years	63,406	71,859	86,718	103,445	122,545	141,100	77,694
Average persons per household	2.48	2.42	2.37	2.32	2.30	2.28	----
Dwellings (total)	355,200	387,000	418,600	450,300	477,900	505,600	150,400
Average annual new housing units		6,400	6,300	6,300	5,500	5,500	6,016
Single detached	154,200	165,900	175,700	185,400	192,700	200,100	45,900
Semi-detached	21,200	22,900	24,300	25,800	27,300	28,800	7,600
Townhouse	67,800	78,100	87,800	97,500	105,300	113,100	45,300
Apartment	112,000	120,100	130,800	141,600	152,600	163,600	51,600
Labour Force & Employment							
Population 15+	718,675	776,142	828,001	876,924	923,569	969,495	250,820
Participation Rate	69.6%	69.3%	68.3%	67.3%	66.3%	65.5%	----
Labour Force	499,300	537,200	565,700	590,800	612,200	633,600	134,300
Unemployment Rate	3.3%	5.5%	5.0%	5.0%	5.0%	5.0%	----
Employment	483,900	507,600	537,400	561,300	581,600	601,900	118,000
5-Year Absolute Change		23,700	29,800	23,900	20,300	20,300	----
Unemployed persons	16,400	29,600	28,300	29,500	30,600	31,700	----
Total employed by place of work	529,800	580,200	617,000	648,400	676,300	703,100	173,300

Greater Ottawa-Gatineau Area

Population	1,307,100	1,385,000	1,472,400	1,561,600	1,650,300	1,733,800	426,700
Households	525,000	566,200	611,300	656,200	698,500	737,400	212,400
Employment (by place of residence)	742,700	807,600	863,500	914,800	962,400	1,008,300	265,600

Appendix 1 - Scenario Summaries

SCENARIO 3

City of Ottawa	2006	2011	2016	2021	2026	2031	*Change 2006-2031*
Population (mid-year)	870,757	929,736	994,432	1,063,207	1,134,810	1,206,626	335,869
Average annual increase		11,796	12,939	13,755	14,321	14,363	13,435
Average annual percentage change		1.3%	1.3%	1.3%	1.3%	1.2%	1.3%
Population by Age Group							
0-4	47,299	47,508	51,555	55,054	57,680	59,225	11,926
5-9	49,770	48,875	49,383	53,667	57,406	60,303	10,533
10-14	55,013	51,582	50,945	51,662	56,156	60,114	5,101
15-19	55,776	59,011	55,851	55,429	56,370	61,113	5,337
20-24	59,952	63,044	66,762	64,032	64,053	65,475	5,523
25-34	129,553	142,840	151,993	161,019	164,189	163,837	34,284
35-44	142,451	138,472	150,478	165,927	176,952	187,997	45,546
45-54	133,547	147,161	146,306	143,536	156,374	172,613	39,066
55-64	93,414	112,970	128,029	141,913	141,829	140,035	46,621
65+	103,982	118,273	143,130	170,968	203,801	235,914	131,932
0-19	23.9%	22.3%	20.9%	20.3%	20.1%	20.0%	9.8%
20-34	21.8%	22.1%	22.0%	21.2%	20.1%	19.0%	11.9%
35-54	31.7%	30.7%	29.8%	29.1%	29.4%	29.9%	25.2%
55-64	10.7%	12.2%	12.9%	13.3%	12.5%	11.6%	13.9%
65+	11.9%	12.7%	14.4%	16.1%	18.0%	19.6%	39.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Households (total)	351,212	384,306	419,844	456,076	491,269	525,614	174,402
Households by Age Group of Head							
<25 years	13,496	14,198	14,919	14,342	14,362	14,742	1,247
25-34 years	61,578	68,072	72,474	76,775	78,549	78,306	16,728
35-44 years	79,602	77,288	83,906	92,576	98,739	104,900	25,298
45-54 years	77,691	85,652	85,237	83,561	90,981	100,468	22,777
55-64 years	55,439	67,007	75,946	84,164	84,079	83,042	27,603
65+ years	63,406	72,089	87,362	104,659	124,559	144,155	80,749
Average persons per household	2.48	2.42	2.37	2.33	2.31	2.30	----
Dwellings (total)	355,200	389,500	426,300	462,800	498,400	533,900	178,700
Average annual new housing units		6,900	7,300	7,300	7,100	7,100	7,148
Single detached	154,200	166,800	178,400	189,900	200,100	210,200	56,000
Semi-detached	21,200	23,000	24,800	26,500	28,500	30,500	9,300
Townhouse	67,800	78,700	89,700	100,700	110,700	120,800	53,000
Apartment	112,000	121,000	133,400	145,700	159,100	172,400	60,400
Labour Force & Employment							
Population 15+	718,675	781,771	842,549	902,824	963,568	1,026,984	308,309
Participation Rate	69.6%	69.3%	68.3%	67.3%	66.3%	65.5%	----
Labour Force	499,300	537,700	571,700	604,200	635,500	669,200	169,900
Unemployment Rate	3.3%	5.5%	5.0%	5.0%	5.0%	5.0%	----
Employment	483,900	508,100	543,100	574,000	603,700	635,800	151,900
5-Year Absolute Change		24,200	35,000	30,900	29,700	32,100	----
Unemployed persons	16,400	29,600	28,600	30,200	31,800	33,400	----
Total employed by place of work	529,800	582,100	625,500	665,400	704,000	743,700	213,900

Greater Ottawa-Gatineau Area							
Population	1,307,100	1,398,200	1,503,400	1,613,400	1,726,100	1,837,000	529,900
Households	525,000	571,500	623,500	676,700	728,600	778,500	253,500
Employment (by place of residence)	742,700	812,200	877,900	941,100	1,003,100	1,066,200	323,500

APPENDIX 2
GREATER OTTAWA-GATINEAU METROPOLITAN AREA

HISTORIC EVOLUTION OF POPULATION SHARE

Region	1976	1981	1986	1991	1996	2001	2006e
Ottawa	520,553	546,849	606,639	678,147	721,136	806,560	870,760
Gatineau	174,560	170,174	182,654	201,536	217,591	231,344	249,374
OMATO	76,256	82,163	92,106	107,393	120,931	126,015	139,809
QMAG	24,174	25,436	27,067	35,681	40,588	42,044	47,161
	795,543	**824,622**	**908,466**	**1,022,757**	**1,100,246**	**1,205,963**	**1,307,104**

Upper-Tier Municipality	1976	1981	1986	1991	1996	2001	2006e
Ottawa	520,553	546,849	606,639	678,147	721,136	806,560	870,760
Gatineau	174,560	170,174	182,654	201,536	217,591	231,344	249,374
Prescott & Russell	29,669	32,575	37,583	45,950	52,180	54,126	61,045
Leeds & Grenville	8,737	9,708	10,854	12,624	15,278	16,393	17,960
S.D. & G.	8,760	9,239	9,851	10,661	11,064	11,014	11,757
Lanark	18,428	19,958	22,448	25,453	28,816	30,447	33,595
Renfrew	10,662	10,683	11,370	12,705	13,593	14,035	15,452
MRC Les-Collines-de-l'Outaoua	17,459	18,841	20,355	28,894	33,680	35,188	39,724
MRC Papineau	4,410	4,199	4,189	4,175	4,294	4,306	4,611
MRC La-Vallée-de-la-Gatineau	1,071	1,161	1,261	1,301	1,300	1,378	1,460
MRC Pontiac	1,234	1,235	1,262	1,311	1,314	1,172	1,366
TOTAL	**795,543**	**824,622**	**908,466**	**1,022,757**	**1,100,246**	**1,205,963**	**1,307,104**

Region	1976	1981	1986	1991	1996	2001	2006e
Ottawa	65.4%	66.3%	66.8%	66.3%	65.5%	66.9%	66.6%
Gatineau	21.9%	20.6%	20.1%	19.7%	19.8%	19.2%	19.1%
OMATO	9.6%	10.0%	10.1%	10.5%	11.0%	10.4%	10.7%
QMAG	3.0%	3.1%	3.0%	3.5%	3.7%	3.5%	3.6%
	100%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Upper-Tier Municipality	1976	1981	1986	1991	1996	2001	2006e
Ottawa	65.4%	66.3%	66.8%	66.3%	65.5%	66.9%	66.6%
Gatineau	21.9%	20.6%	20.1%	19.7%	19.8%	19.2%	19.1%
Prescott & Russell	3.7%	4.0%	4.1%	4.5%	4.7%	4.5%	4.7%
Leeds & Grenville	1.1%	1.2%	1.2%	1.2%	1.4%	1.4%	1.4%
S.D. & G.	1.1%	1.1%	1.1%	1.0%	1.0%	0.9%	0.9%
Lanark	2.3%	2.4%	2.5%	2.5%	2.6%	2.5%	2.6%
Renfrew	1.3%	1.3%	1.3%	1.2%	1.2%	1.2%	1.2%
MRC Les-Collines-de-l'Outaoua	2.2%	2.3%	2.2%	2.8%	3.1%	2.9%	3.0%
MRC Papineau	0.6%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%
MRC La-Vallée-de-la-Gatineau	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
MRC Pontiac	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Statistics Canada (1976-2001); City estimates (2006)

APPENDIX 3
NET MIGRATION, 1992-2006, OTTAWA AND GATINEAU

OTTAWA	INTRA-PROVINCIAL	INTER-PROVINCIAL	INTERNATIONAL	TOTAL
1992-1993	-1,169	-280	12,390	10,941
1993-1994	-1,022	-1,589	7,198	4,587
1994-1995	-1,831	-1,749	6,954	3,374
1995-1996	-2,966	-1,585	5,103	552
1996-1997	-985	845	2,333	2,193
1997-1998	551	2,702	4,736	7,989
1998-1999	487	4,450	3,886	8,823
1999-2000	1,774	6,251	4,168	12,193
2000-2001	1,632	5,708	7,716	15,056
2001-2002	-870	1,885	5,218	6,233
2002-2003 (R)	-1,412	-450	5,394	3,532
2003-2004 (R)	-1,526	-1,305	5,169	2,338
2004-2005 (R)	-352	-1,150	4,844	3,342
2005-2006 (P)	1,390	-211	4,768	5,947
GATINEAU				
1992-1993	857	993	1,626	3,476
1993-1994	325	1,184	742	2,251
1994-1995	57	475	529	1,061
1995-1996	223	45	522	790
1996-1997	-194	-783	808	-169
1997-1998	-128	-652	885	105
1998-1999	162	-1,032	589	-281
1999-2000	1,050	-761	796	1,085
2000-2001	1,012	-141	1,268	2,139
2001-2002	1,357	994	417	2,768
2002-2003 (R)	889	1,566	1,023	3,478
2003-2004 (R)	377	1,677	1,198	3,252
2004-2005 (R)	184	1,095	1,086	2,365
2005-2006 (P)	-59	196	976	1,113

NET MIGRATION, CITY OF OTTAWA, 1996-2006			
IN-FLOWS*		OUT-FLOWS*	
Greater Montréal	10,908	Gatineau	-1,106
Atlantic provinces	8,698	Alberta	-2,596
Northern Ontario	7,251	Greater Toronto Area	-2,814
Eastern Ontario	4,102	British Columbia	-3,243
Manitoba & Saskatchewan	4,035	OMATO & QMAG	-12,458
Rest of Ontario***	3,385		
Rest of Québec**	2,615		
Canadian North	556		
TOTAL IN-FLOWS	**41,550**	**TOTAL OUT-FLOWS**	**-22,217**

Source: Statistics Canada, Migration Estimates for Census Division 3506

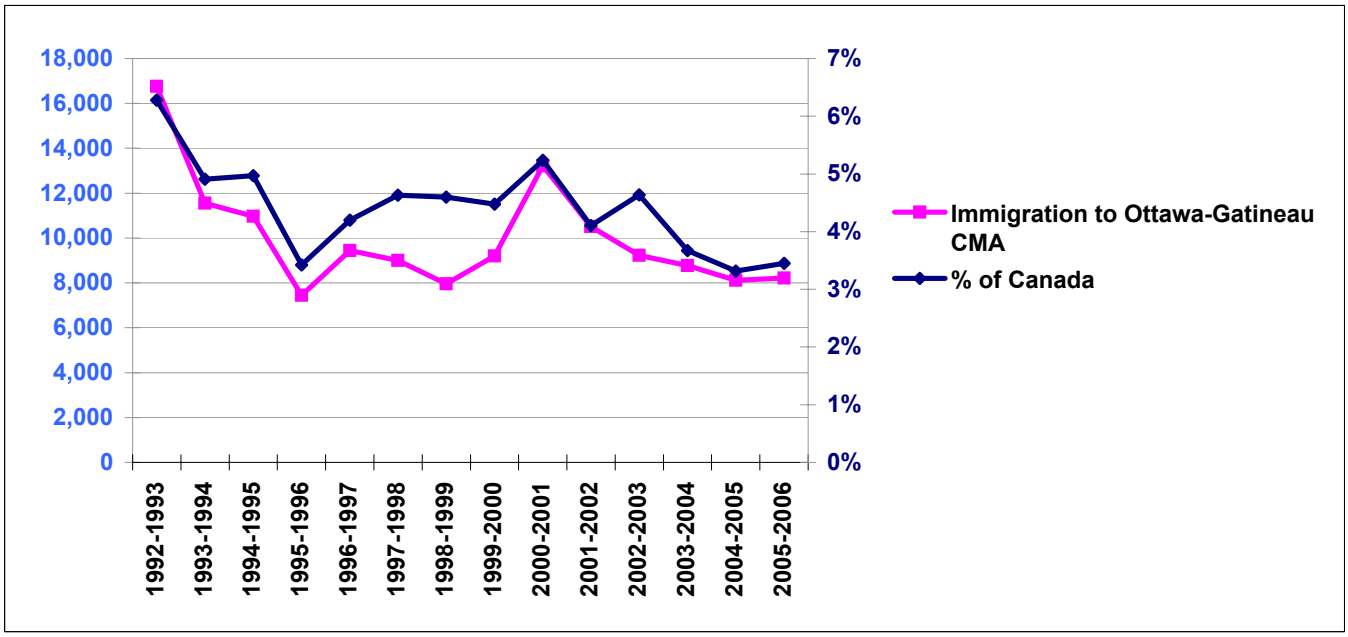
* Most significant destinations in order of magnitude

** Rest of Québec = All of Québec outside Gatineau, Suburban Gatineau and Greater Montréal

*** Rest of Ontario = All of Ontario outside OMATO, Eastern Ontario, Northern Ontario and the Greater Toronto Area

APPENDIX 4
IMMIGRATION TO CANADA AND OTTAWA-GATINEAU

	Immigration to Canada	Immigration to City of Ottawa		Immigration to Ottawa CMA		Immigration to Gatineau CMA		Immigration to Ottawa-Gatineau CMA	
		#	% of Canada	#	% of Canada	#	% of Canada	#	% of Canada
1992-1993	266,890	14,727	5.5%	14,840	5.6%	1,922	0.7%	16,762	6.3%
1993-1994	235,360	10,301	4.4%	10,359	4.4%	1,198	0.5%	11,557	4.9%
1994-1995	220,738	9,939	4.5%	9,986	4.5%	984	0.4%	10,970	5.0%
1995-1996	217,478	8,376	3.9%	6,524	3.0%	924	0.4%	7,448	3.4%
1996-1997	224,857	8,172	3.6%	8,204	3.6%	1,243	0.6%	9,447	4.2%
1997-1998	194,459	7,845	4.0%	7,881	4.1%	1,122	0.6%	9,003	4.6%
1998-1999	173,194	6,868	4.0%	6,910	4.0%	1,053	0.6%	7,963	4.6%
1999-2000	205,710	8,006	3.9%	8,028	3.9%	1,175	0.6%	9,203	4.5%
2000-2001	252,533	11,618	4.6%	11,659	4.6%	1,557	0.6%	13,216	5.2%
2001-2002	256,334	9,207	3.6%	9,234	3.6%	1,284	0.5%	10,518	4.1%
2002-2003	199,212	7,735	3.9%	7,835	3.9%	1,398	0.7%	9,233	4.6%
2003-2004	239,116	7,296	3.1%	7,336	3.1%	1,440	0.6%	8,776	3.7%
2004-2005	244,579	6,827	2.8%	6,867	2.8%	1,245	0.5%	8,112	3.3%
2005-2006	238,100	5,947	2.5%	7,101	3.0%	1,113	0.5%	8,214	3.4%
							Avg. 1992-2006		**4.4%**



Source: Statistics Canada

APPENDIX 5

IMMIGRANT STATUS BY PERIOD OF IMMIGRATION, GREATER OTTAWA-GATINEAU AREA
2001 Census

	Type	Total population	Canadian-born population	Foreign-born population	Immigrated before 1991	Immigrated between 1991-2001
Canada		*29,639,030*	*23,991,905*	*5,448,480*	*3,617,800*	*1,830,680*
Ottawa-Gatineau CMA	CMA	1,050,755	857,095	185,005	114,495	70,515
Greater Ottawa Area*		**1,128,428**	**920,940**	**189,355**	**118,175**	**71,175**
Ottawa	C	763,790	589,010	**166,750**	103,045	63,705
Gatineau	V	224,755	208,615	**15,530**	9,215	6,315
Clarence-Rockland	C	19,195	18,545	**645**	500	145
Russell	TP	12,265	11,525	**730**	630	100
The Nation	TP	10,415	9,865	**530**	360	170
Casselman	VL	2,910				
North Grenville	TP	13,415	12,360	**1,025**	900	125
Merrickville-Wolford	VL	2,812				
Montague	TP	3,671				
Beckwith	TP	6,045	5,575	**465**	415	50
Carleton Place	T	8,885	8,335	**545**	470	75
Mississippi Mills	T	11,365	10,520	**830**	720	115
McNab/Braeside	TP	6,825	6,345	**485**	390	90
Arnprior	T	7,040	6,655	**390**	355	35
Les-Collines-de-l'Outaouais	MRC	35,040	33,590	**1,430**	1,175	250
Canada		*100.0%*	*80.9%*	*18.4%*	*12.2%*	*6.2%*
Ottawa-Gatineau CMA	CMA	100.0%	81.6%	17.6%	10.9%	6.7%
Greater Ottawa Area		**100.0%**	**81.6%**	**16.8%**	**10.5%**	**6.3%**
Ottawa	C	100.0%	77.1%	**21.8%**	13.5%	8.3%
Beckwith	TP	100.0%	92.2%	7.7%	6.9%	0.8%
North Grenville	TP	100.0%	92.1%	7.6%	6.7%	0.9%
Mississippi Mills	T	100.0%	92.6%	7.3%	6.3%	1.0%
McNab/Braeside	TP	100.0%	93.0%	7.1%	5.7%	1.3%
Carleton Place	T	100.0%	93.8%	6.1%	5.3%	0.8%
Gatineau	V	100.0%	92.8%	6.9%	4.1%	2.8%
Russell	TP	100.0%	94.0%	6.0%	5.1%	0.8%
Arnprior	T	100.0%	94.5%	5.5%	5.0%	0.5%
The Nation	TP	100.0%	94.7%	5.1%	3.5%	1.6%
Les-Collines-de-l'Outaouais	MRC	100.0%	95.9%	4.1%	3.4%	0.7%
Clarence-Rockland	C	100.0%	96.6%	3.4%	2.6%	0.8%

* Only includes municipalities with populations higher than 5,000 for which immigration data exists.

APPENDIX 6

MIGRATION BETWEEN THE UPPER-TIER REGIONS OF THE GREATER OTTAWA-GATINEAU AREA

SGC of Dest.	Place Name of SGC of Destination	Total 2001-2006 TO	FROM	NET
3506	**CITY OF OTTAWA**			
2480	Papineau	89	181	-92
2481	Ville de Gatineau	10,566	14,438	-3,872
2482	Les Collines-de-l'Outaouais	1,392	2,328	-936
2483	La Vallée-de-la-Gatineau	220	277	-57
2484	Pontiac	316	369	-53
3501	Stormont, Dundas and Glengarry United Counties	4,680	4,905	-225
3502	Prescott and Russell United Counties	8,293	10,165	-1,872
3507	Leeds and Grenville United Counties	3,918	5,922	-2,004
3509	Lanark County	4,609	7,382	-2,773
3547	Renfrew County	4,893	5,463	-570
		38,976	**51,430**	**-12,454**
2481	**VILLE DE GATINEAU**			
2480	Papineau	2,574	2,738	-164
2482	Les Collines-de-l'Outaouais	9,453	11,902	-2,449
2483	La Vallée-de-la-Gatineau	1,796	1,895	-99
2484	Pontiac	726	673	53
3501	Stormont, Dundas and Glengarry United Counties	292	269	23
3502	Prescott and Russell United Counties	978	1,114	-136
3506	City of Ottawa	14,438	10,566	3,872
3507	Leeds and Grenville United Counties	91	156	-65
3509	Lanark County	108	192	-84
3547	Renfrew County	224	220	4
		30,680	**29,725**	**955**
2482	**MRC LES COLLINES-DE-L'OUTAOUAIS**			
2480	Papineau	382	660	-278
2481	Ville de Gatineau	11,902	9,453	2,449
2483	La Vallée-de-la-Gatineau	299	441	-142
2484	Pontiac	192	435	-243
3501	Stormont, Dundas and Glengarry United Counties	28	47	-19
3502	Prescott and Russell United Counties	139	84	55
3506	City of Ottawa	2,328	1,392	936
3507	Leeds and Grenville United Counties	35	36	-1
3509	Lanark County	26	48	-22
3547	Renfrew County	46	57	-11
		15,377	**12,653**	**2,724**
3502	**PRESCOTT AND RUSSELL UNITED COUNTIES**			
2480	Papineau	105	127	-22
2481	Ville de Gatineau	1,114	978	136
2482	Les Collines-de-l'Outaouais	84	139	-55
2483	La Vallée-de-la-Gatineau	27	44	-17
2484	Pontiac	25	36	-11
3501	Stormont, Dundas and Glengarry United Counties	1,745	1,687	58
3506	City of Ottawa	10,165	8,293	1,872
3507	Leeds and Grenville United Counties	133	265	-132
3509	Lanark County	150	178	-28
3547	Renfrew County	190	191	-1
		13,738	**11,938**	**1,800**

HOW TO READ THIS TABLE: Numbers under the column "TO" denote migrants to municipality in **bold**; "From" denotes migrants from municipality in bold.

APPENDIX 6

MIGRATION BETWEEN THE UPPER-TIER REGIONS OF THE GREATER OTTAWA-GATINEAU AREA

SGC of Dest.	Place Name of SGC of Destination	Total 2001-2006 TO	FROM	NET
(CONTINUED)				
3507	**LEEDS AND GRENVILLE UNITED COUNTIES**			
2480	Papineau	4	2	2
2481	Ville de Gatineau	156	91	65
2482	Les Collines-de-l'Outaouais	36	35	1
2483	La Vallée-de-la-Gatineau	11	14	-3
2484	Pontiac	7	19	-12
3501	Stormont, Dundas and Glengarry United Counties	1,687	1,584	103
3502	Prescott and Russell United Counties	265	133	132
3506	City of Ottawa	5,922	3,918	2,004
3509	Lanark County	2,261	2,057	204
3547	Renfrew County	362	284	78
		10,711	**8,137**	**2,574**
3501	**STORMONT DUNDAS AND GLENGARRY UNITED COUNTIES**			
2480	Papineau	12	10	2
2481	Ville de Gatineau	269	292	-23
2482	Les Collines-de-l'Outaouais	47	28	19
2483	La Vallée-de-la-Gatineau	6	12	-6
2484	Pontiac	15	4	11
3502	Prescott and Russell United Counties	1,687	1,745	-58
3506	City of Ottawa	4,905	4,680	225
3507	Leeds and Grenville United Counties	1,584	1,687	-103
3509	Lanark County	209	238	-29
3547	Renfrew County	242	278	-36
		8,976	**8,974**	**2**
3509	**LANARK COUNTY**			
2480	Papineau	1	2	-1
2481	Ville de Gatineau	192	108	84
2482	Les Collines-de-l'Outaouais	48	26	22
2483	La Vallée-de-la-Gatineau	1	1	0
2484	Pontiac	21	22	-1
3501	Stormont, Dundas and Glengarry United Counties	238	209	29
3502	Prescott and Russell United Counties	178	150	28
3506	City of Ottawa	7,382	4,609	2,773
3507	Leeds and Grenville United Counties	2,057	2,261	-204
3547	Renfrew County	785	811	-26
		10,903	**8,199**	**2,704**
3547	**RENFREW COUNTY**			
2480	Papineau	5	5	0
2481	Ville de Gatineau	220	224	-4
2482	Les Collines-de-l'Outaouais	57	46	11
2483	La Vallée-de-la-Gatineau	16	8	8
2484	Pontiac	595	509	86
3501	Stormont, Dundas and Glengarry United Counties	278	242	36
3502	Prescott and Russell United Counties	191	190	1
3506	City of Ottawa	5,463	4,893	570
3507	Leeds and Grenville United Counties	284	362	-78
3509	Lanark County	811	785	26
		7,920	**7,264**	**656**

APPENDIX 6

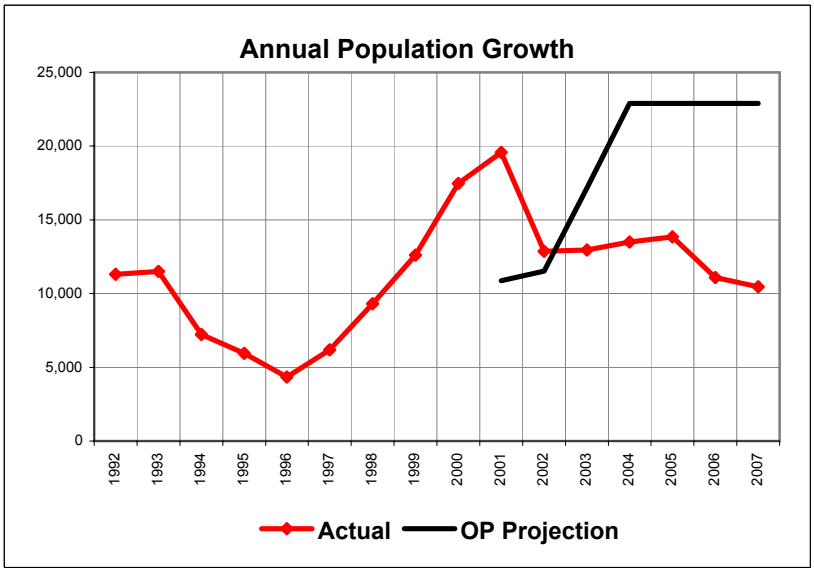
MIGRATION BETWEEN THE UPPER-TIER REGIONS OF THE GREATER OTTAWA-GATINEAU AREA

SGC of Dest.	Place Name of SGC of Destination	Total 2001-2006 TO	FROM	NET
(CONTINUED)				
2483	**MRC LA VALLÉE-DE-LA-GATINEAU**			
2480	Papineau	86	81	5
2481	Ville de Gatineau	1,895	1,796	99
2482	Les Collines-de-l'Outaouais	441	299	142
2484	Pontiac	76	61	15
3501	Stormont, Dundas and Glengarry United Counties	12	6	6
3502	Prescott and Russell United Counties	44	27	17
3506	City of Ottawa	277	220	57
3507	Leeds and Grenville United Counties	14	11	3
3509	Lanark County	1	1	0
3547	Renfrew County	8	16	-8
		2,854	**2,518**	**336**
2480	**MRC PAPINEAU**			
2481	Ville de Gatineau	2,738	2,574	164
2482	Les Collines-de-l'Outaouais	660	382	278
2483	La Vallée-de-la-Gatineau	81	86	-5
2484	Pontiac	15	48	-33
3501	Stormont, Dundas and Glengarry United Counties	10	12	-2
3502	Prescott and Russell United Counties	127	105	22
3506	City of Ottawa	181	89	92
3507	Leeds and Grenville United Counties	2	4	-2
3509	Lanark County	2	1	1
3547	Renfrew County	5	5	0
		3,821	**3,306**	**515**

APPENDIX 7
COMPARISON OF OBSERVED ANNUAL GROWTH TO PROJECTION B, CITY OF OTTAWA

Annual Population Growth

	Actual	OP Projection
1992	11,298	
1993	11,491	
1994	7,217	
1995	5,951	
1996	4,332	
1997	6,182	
1998	9,307	
1999	12,604	
2000	17,464	
2001	19,585	10,863
2002	12,860	11,525
2003	12,949	17,168
2004	13,494	22,891
2005	13,840	22,891
2006	11,100	22,891
2007	10,470	22,891

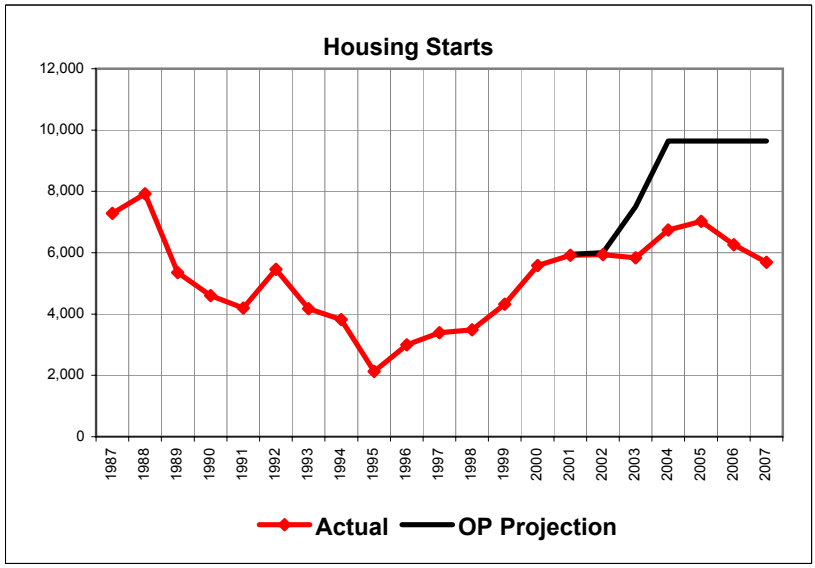


Note: All figures are mid-year.

Source: 1992 to 2001 from Statistics Canada's post-censal population estimates for the City of Ottawa.
2002 to 2007 are City staff estimates based on building permit issuances.

Housing Starts

	Actual	OP Projection
1987	7,285	
1988	7,925	
1989	5,348	
1990	4,602	
1991	4,196	
1992	5,454	
1993	4,179	
1994	3,819	
1995	2,128	
1996	2,993	
1997	3,392	
1998	3,481	
1999	4,325	
2000	5,581	
2001	5,916	5,949
2002	5,938	6,000
2003	5,831	7,500
2004	6,743	9,637
2005	7,019	9,637
2006	6,266	9,637
2007	5,690	9,637



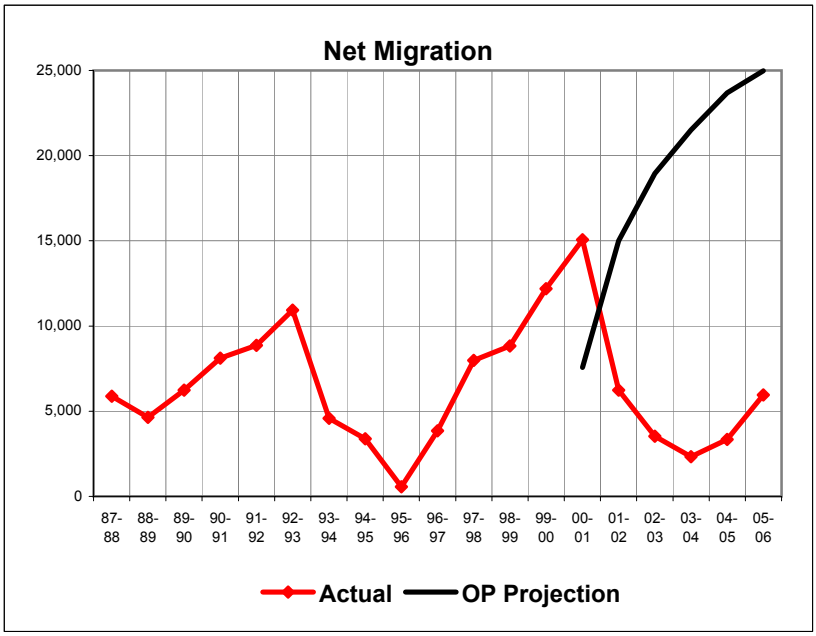
Source: CMHC and City of Ottawa

APPENDIX 7

COMPARISON OF OBSERVED ANNUAL GROWTH TO PROJECTION B, CITY OF OTTAWA

Net Migration

	Actual	OP Projection
87-88	5,887	
88-89	4,632	
89-90	6,236	
90-91	8,109	
91-92	8,863	
92-93	10,941	
93-94	4,587	
94-95	3,374	
95-96	571	
96-97	3,850	
97-98	7,989	
98-99	8,823	
99-00	12,193	
00-01	15,056	7,571
01-02	6,233	15,006
02-03	3,532	18,944
03-04	2,338	21,509
04-05	3,342	23,678
05-06	5,947	24,989



Note: figures for 2003-04 onward are preliminary

Source: Statistics Canada and City of Ottawa

Research & Forecasting Section, CPD, Planning Branch

Dept. of Planning, Transit and the Environment, City of Ottawa

APPENDIX 8
OTTAWA POPULATION PROJECTION
SCENARIO 1 - COMPONENTS OF GROWTH

Year	Start	Births	Deaths	Nat.Incr	In-Migr	Out-Migr	Net-Migr	End
2007	870,757	9,158	6,305	2,853	32,644	28,000	4,644	878,254
2008	878,254	9,220	6,403	2,817	32,644	28,000	4,644	885,715
2009	885,715	9,270	6,513	2,757	32,644	28,000	4,644	893,116
2010	893,116	9,331	6,631	2,700	32,644	28,000	4,644	900,460
2011	**900,460**	**9,405**	**6,752**	**2,653**	**32,644**	**28,000**	**4,644**	**907,757**
2012	907,757	9,481	6,877	2,604	33,652	28,000	5,652	916,013
2013	916,013	9,570	6,993	2,577	33,652	28,000	5,652	924,242
2014	924,242	9,644	7,104	2,540	33,652	28,000	5,652	932,434
2015	932,434	9,716	7,216	2,500	33,652	28,000	5,652	940,586
2016	**940,586**	**9,777**	**7,318**	**2,459**	**33,652**	**28,000**	**5,652**	**948,697**
2017	948,697	9,846	7,440	2,406	33,652	28,000	5,652	956,755
2018	956,755	9,905	7,548	2,357	33,652	28,000	5,652	964,764
2019	964,764	9,962	7,662	2,300	33,652	28,000	5,652	972,716
2020	972,716	10,008	7,789	2,219	33,652	28,000	5,652	980,587
2021	**980,587**	**10,045**	**7,914**	**2,131**	**33,652**	**28,000**	**5,652**	**988,370**
2022	988,370	10,075	8,050	2,025	33,652	28,000	5,652	996,047
2023	996,047	10,101	8,188	1,913	33,652	28,000	5,652	1,003,612
2024	1,003,612	10,134	8,339	1,795	33,652	28,000	5,652	1,011,059
2025	1,011,059	10,146	8,484	1,662	33,652	28,000	5,652	1,018,373
2026	**1,018,373**	**10,141**	**8,643**	**1,498**	**33,652**	**28,000**	**5,652**	**1,025,523**
2027	1,025,523	10,112	8,820	1,292	33,652	28,000	5,652	1,032,467
2028	1,032,467	10,072	9,074	998	33,652	28,000	5,652	1,039,117
2029	1,039,117	10,040	9,338	702	33,652	28,000	5,652	1,045,471
2030	1,045,471	10,009	9,603	406	33,652	28,000	5,652	1,051,529
2031	**1,051,529**	**9,959**	**9,882**	**77**	**33,652**	**28,000**	**5,652**	**1,057,258**

NOTE: All data are mid-year to mid-year.

APPENDIX 9
OTTAWA POPULATION PROJECTION
SCENARIO 2 - COMPONENTS OF GROWTH

Year	Start	Births	Deaths	Nat.Incr	In-Migr	Out-Migr	Net-Migr	End
2007	870,757	9,158	6,305	2,853	32,609	25,000	7,609	881,219
2008	881,219	9,278	6,419	2,859	32,609	25,000	7,609	891,687
2009	891,687	9,386	6,539	2,847	32,609	25,000	7,609	902,143
2010	902,143	9,504	6,660	2,844	32,609	25,000	7,609	912,596
2011	**912,596**	**9,636**	**6,800**	**2,836**	**32,609**	**25,000**	**7,609**	**923,041**
2012	923,041	9,769	6,927	2,842	32,913	25,000	7,913	933,796
2013	933,796	9,901	7,055	2,846	32,913	25,000	7,913	944,555
2014	944,555	10,012	7,171	2,841	32,913	25,000	7,913	955,309
2015	955,309	10,116	7,299	2,817	32,913	25,000	7,913	966,039
2016	**966,039**	**10,213**	**7,418**	**2,795**	**32,913**	**25,000**	**7,913**	**976,747**
2017	976,747	10,310	7,534	2,776	33,230	25,000	8,230	987,753
2018	987,753	10,399	7,655	2,744	33,230	25,000	8,230	998,727
2019	998,727	10,488	7,786	2,702	33,230	25,000	8,230	1,009,659
2020	1,009,659	10,560	7,926	2,634	33,230	25,000	8,230	1,020,523
2021	**1,020,523**	**10,621**	**8,069**	**2,552**	**33,230**	**25,000**	**8,230**	**1,031,305**
2022	1,031,305	10,673	8,210	2,463	33,559	25,000	8,559	1,042,327
2023	1,042,327	10,728	8,377	2,351	33,559	25,000	8,559	1,053,237
2024	1,053,237	10,788	8,529	2,259	33,559	25,000	8,559	1,064,055
2025	1,064,055	10,827	8,696	2,131	33,559	25,000	8,559	1,074,745
2026	**1,074,745**	**10,848**	**8,873**	**1,975**	**33,559**	**25,000**	**8,559**	**1,085,279**
2027	1,085,279	10,846	9,061	1,785	33,901	25,000	8,901	1,095,965
2028	1,095,965	10,839	9,338	1,501	33,901	25,000	8,901	1,106,367
2029	1,106,367	10,844	9,624	1,220	33,901	25,000	8,901	1,116,488
2030	1,116,488	10,848	9,917	931	33,901	25,000	8,901	1,126,320
2031	**1,126,320**	**10,835**	**10,216**	**619**	**33,901**	**25,000**	**8,901**	**1,135,840**

NOTE: All data are mid-year to mid-year.

APPENDIX 10
OTTAWA POPULATION PROJECTION
SCENARIO 3 - COMPONENTS OF GROWTH

Year	Start	Births	Deaths	Nat.Incr	In-Migr	Out-Migr	Net-Migr	End
2007	870,757	9,158	6,305	2,853	32,800	25,000	7,800	881,410
2008	881,410	9,282	6,419	2,863	34,189	25,000	9,189	893,462
2009	893,462	9,421	6,546	2,875	34,189	25,000	9,189	905,526
2010	905,526	9,573	6,669	2,904	34,189	25,000	9,189	917,619
2011	**917,619**	**9,738**	**6,810**	**2,928**	**34,189**	**25,000**	**9,189**	**929,736**
2012	929,736	9,905	6,946	2,959	34,924	25,000	9,924	942,619
2013	942,619	10,078	7,082	2,996	34,924	25,000	9,924	955,539
2014	955,539	10,233	7,208	3,025	34,924	25,000	9,924	968,488
2015	968,488	10,380	7,335	3,045	34,924	25,000	9,924	981,457
2016	**981,457**	**10,514**	**7,463**	**3,051**	**34,924**	**25,000**	**9,924**	**994,432**
2017	994,432	10,648	7,588	3,060	35,718	25,000	10,718	1,008,210
2018	1,008,210	10,786	7,718	3,068	35,718	25,000	10,718	1,021,996
2019	1,021,996	10,915	7,862	3,053	35,718	25,000	10,718	1,035,767
2020	1,035,767	11,031	8,004	3,027	35,718	25,000	10,718	1,049,512
2021	**1,049,512**	**11,129**	**8,152**	**2,977**	**35,718**	**25,000**	**10,718**	**1,063,207**
2022	1,063,207	11,219	8,318	2,901	36,576	25,000	11,576	1,077,684
2023	1,077,684	11,318	8,480	2,838	36,576	25,000	11,576	1,092,098
2024	1,092,098	11,421	8,651	2,770	36,576	25,000	11,576	1,106,444
2025	1,106,444	11,501	8,831	2,670	36,576	25,000	11,576	1,120,690
2026	**1,120,690**	**11,564**	**9,020**	**2,544**	**36,576**	**25,000**	**11,576**	**1,134,810**
2027	1,134,810	11,599	9,220	2,379	37,502	25,000	12,502	1,149,691
2028	1,149,691	11,640	9,514	2,126	37,502	25,000	12,502	1,164,319
2029	1,164,319	11,692	9,819	1,873	37,502	25,000	12,502	1,178,694
2030	1,178,694	11,742	10,138	1,604	37,502	25,000	12,502	1,192,800
2031	**1,192,800**	**11,773**	**10,449**	**1,324**	**37,502**	**25,000**	**12,502**	**1,206,626**

NOTE: All data are mid-year to mid-year.

APPENDIX 11

PROJECTIONS FOR GATINEAU AND ADJACENT MRC's *(MUNICIPALITÉS RÉGIONALES DE COMTÉ)* AS PROVIDED BY THE *INSTITUT DE LA STATISTIQUE DU QUÉBEC* (ISQ)

All ISQ Projections are based on Scenario A

	Gatineau		Les-Collines-de-l'Outaouais		Papineau		La-Vallée-de-la-Gatineau		Pontiac	
Year	Pop.	%chg.	Pop.	%chg.	Pop.	%chg.	Pop.	%chg.	Pop.	%chg.
2006	247,624		40,335		21,985		20,447		15,075	
2007	249,410	0.72	40,799	1.15	22,146	0.73	20,657	1.03	15,104	0.19
2008	251,143	0.69	41,237	1.07	22,308	0.73	20,865	1.01	15,132	0.19
2009	252,821	0.67	41,651	1.00	22,472	0.74	21,072	0.99	15,161	0.19
2010	254,449	0.64	42,044	0.94	22,638	0.74	21,277	0.97	15,192	0.20
2011	256,031	0.62	42,420	0.89	22,807	0.75	21,483	0.97	15,225	0.22
2012	257,564	0.60	42,778	0.84	22,977	0.75	21,687	0.95	15,261	0.24
2013	259,053	0.58	43,123	0.81	23,150	0.75	21,891	0.94	15,301	0.26
2014	260,501	0.56	43,459	0.78	23,325	0.76	22,094	0.93	15,343	0.27
2015	261,903	0.54	43,785	0.75	23,499	0.75	22,297	0.92	15,388	0.29
2016	263,256	0.52	44,098	0.71	23,672	0.74	22,497	0.90	15,436	0.31
2017	264,561	0.50	44,401	0.69	23,845	0.73	22,694	0.88	15,485	0.32
2018	265,819	0.48	44,691	0.65	24,015	0.71	22,885	0.84	15,536	0.33
2019	267,029	0.46	44,968	0.62	24,181	0.69	23,072	0.82	15,587	0.33
2020	268,194	0.44	45,232	0.59	24,340	0.66	23,252	0.78	15,637	0.32
2021	269,311	0.42	45,479	0.55	24,492	0.62	23,424	0.74	15,684	0.30
2022	270,378	0.40	45,710	0.51	24,635	0.58	23,587	0.70	15,730	0.29
2023	271,388	0.37	45,920	0.46	24,769	0.54	23,740	0.65	15,771	0.26
2024	272,335	0.35	46,110	0.41	24,894	0.50	23,884	0.61	15,810	0.25
2025	273,212	0.32	46,279	0.37	25,008	0.46	24,017	0.56	15,845	0.22
2026	274,020	0.30	46,427	0.32	25,112	0.42	24,141	0.52	15,876	0.20
2027	**274,787**	**0.28**	**46,554**	**0.27**	**25,210**	**0.39**	**24,257**	**0.48**	**15,905**	**0.18**
2028	**275,502**	**0.26**	**46,659**	**0.23**	**25,301**	**0.36**	**24,364**	**0.44**	**15,930**	**0.16**
2029	**276,163**	**0.24**	**46,742**	**0.18**	**25,384**	**0.33**	**24,461**	**0.40**	**15,952**	**0.14**
2030	**276,770**	**0.22**	**46,804**	**0.13**	**25,460**	**0.30**	**25,342**	**0.36**	**15,971**	**0.12**
2031	**277,324**	**0.20**	**46,844**	**0.08**	**25,529**	**0.27**	**25,423**	**0.32**	**15,987**	**0.10**
% chg.										
2006-26	***10.7***		***15.1***		***14.2***		***18.1***		***5.3***	
2006-31	***12.0***		***16.1***		***16.1***		***24.3***		***6.1***	

NOTE: Projections for 2027-2031 are extrapolated from the published 2006-2026 assumptions for each MRC.

Source: Institut de la Statistique du Québec.

APPENDIX 12

GATINEAU - POPULATION PROJECTION, SCENARIO 2
COMPONENTS OF GROWTH

Year	Start	Births	Deaths	Nat.Incr	In-Migr	Out-Migr	Net-Migr	End
2007	249,374	2,561	1,475	1,086	11,500	10,000	1,500	251,960
2008	251,960	2,616	1,513	1,103	11,500	10,000	1,500	254,563
2009	254,563	2,657	1,559	1,098	11,500	10,000	1,500	257,161
2010	257,161	2,700	1,595	1,105	11,500	10,000	1,500	259,766
2011	**259,766**	**2,742**	**1,641**	**1,101**	**11,500**	**10,000**	**1,500**	**262,367**
2012	262,367	2,788	1,684	1,104	11,500	10,000	1,500	264,971
2013	264,971	2,833	1,725	1,108	11,500	10,000	1,500	267,579
2014	267,579	2,873	1,774	1,099	11,500	10,000	1,500	270,178
2015	270,178	2,908	1,816	1,092	11,500	10,000	1,500	272,770
2016	**272,770**	**2,937**	**1,859**	**1,078**	**11,500**	**10,000**	**1,500**	**275,348**
2017	275,348	2,973	1,899	1,074	11,500	10,000	1,500	277,922
2018	277,922	3,000	1,942	1,058	11,500	10,000	1,500	280,480
2019	280,480	3,027	1,987	1,040	11,500	10,000	1,500	283,020
2020	283,020	3,053	2,033	1,020	11,500	10,000	1,500	285,540
2021	**285,540**	**3,064**	**2,081**	**983**	**11,500**	**10,000**	**1,500**	**288,023**
2022	288,023	3,075	2,131	944	11,500	10,000	1,500	290,467
2023	290,467	3,082	2,176	906	11,500	10,000	1,500	292,873
2024	292,873	3,087	2,220	867	11,500	10,000	1,500	295,240
2025	295,240	3,088	2,268	820	11,500	10,000	1,500	297,560
2026	**297,560**	**3,075**	**2,319**	**756**	**11,500**	**10,000**	**1,500**	**299,816**
2027	299,816	3,053	2,379	674	11,500	10,000	1,500	301,990
2028	301,990	3,023	2,449	574	11,500	10,000	1,500	304,064
2029	304,064	3,002	2,525	477	11,500	10,000	1,500	306,041
2030	306,041	2,978	2,598	380	11,500	10,000	1,500	307,921
2031	**307,921**	**2,955**	**2,680**	**275**	**11,500**	**10,000**	**1,500**	**309,696**

APPENDIX 13

GATINEAU - POPULATION PROJECTION, SCENARIO 3
COMPONENTS OF GROWTH

Year	Start	Births	Deaths	Nat.Incr	In-Migr	Out-Migr	Net-Migr	End
2007	249,374	2,642	1,475	1,167	12,500	10,000	2,500	253,041
2008	253,041	2,718	1,517	1,201	12,450	10,000	2,450	256,692
2009	256,692	2,782	1,566	1,216	12,400	10,000	2,400	260,308
2010	260,308	2,847	1,604	1,243	12,350	10,000	2,350	263,901
2011	**263,901**	**2,906**	**1,655**	**1,251**	**12,300**	**10,000**	**2,300**	**267,452**
2012	267,452	2,972	1,701	1,271	12,250	10,000	2,250	270,973
2013	270,973	3,035	1,750	1,285	12,200	10,000	2,200	274,458
2014	274,458	3,088	1,793	1,295	12,150	10,000	2,150	277,903
2015	277,903	3,137	1,841	1,296	12,100	10,000	2,100	281,299
2016	**281,299**	**3,177**	**1,886**	**1,291**	**12,050**	**10,000**	**2,050**	**284,640**
2017	284,640	3,221	1,927	1,294	12,000	10,000	2,000	287,934
2018	287,934	3,258	1,977	1,281	11,950	10,000	1,950	291,165
2019	291,165	3,284	2,021	1,263	11,900	10,000	1,900	294,328
2020	294,328	3,312	2,071	1,241	11,850	10,000	1,850	297,419
2021	**297,419**	**3,325**	**2,123**	**1,202**	**11,800**	**10,000**	**1,800**	**300,421**
2022	300,421	3,333	2,161	1,172	11,750	10,000	1,750	303,343
2023	303,343	3,337	2,212	1,125	11,700	10,000	1,700	306,168
2024	306,168	3,336	2,266	1,070	11,650	10,000	1,650	308,888
2025	308,888	3,331	2,319	1,012	11,600	10,000	1,600	311,500
2026	**311,500**	**3,312**	**2,364**	**948**	**11,550**	**10,000**	**1,550**	**313,998**
2027	313,998	3,283	2,421	862	11,500	10,000	1,500	316,360
2028	316,360	3,243	2,491	752	11,450	10,000	1,450	318,562
2029	318,562	3,214	2,574	640	11,400	10,000	1,400	320,602
2030	320,602	3,185	2,654	531	11,350	10,000	1,350	322,483
2031	**322,483**	**3,152**	**2,737**	**415**	**11,300**	**10,000**	**1,300**	**324,198**

APPENDIX 14
OFFICIAL PLAN PROJECTIONS FOR OMATO MUNICIPALITIES

County/Municipality	2001*	2006	2011	2016	2021	2026	2031	% growth 2006-2031
	*Census							
Renfrew County								
Arnprior, Town	7,192	7,977	9,104	10,072	11,032	*11,992*	*12,952*	62.4
McNab/Braeside, Twp.	6,843	7,500	7,975	8,450	8,925	9,400	*9,875*	31.7
	14,035	**15,477**	**17,079**	**18,522**	**19,957**	***21,392***	***22,827***	**47.5**
Lanark County								
Mississippi Mills, Town	11,647	13,020	14,390	15,760	17,130	18,500	*19,870*	52.6
Carleton Place, Town	9,083	11,000	*12,915*	*14,830*	*16,745*	*18,660*	*20,575*	87.0
Beckwith, Twp.	6,046	6,887	*7,728*	*8,570*	*9,411*	*10,252*	*11,093*	61.1
Montague, Twp.	3,671	4,151	*4,631*	*5,111*	*5,591*	*6,071*	*6,551*	57.8
	30,447	**35,058**	**39,664**	**44,271**	**48,877**	***53,483***	***58,089***	**65.7**
Leeds & Grenville United Counties								
Merrickville-Wolford, Vlg.	2,630	2,872	2,993	3,115	3,236	*3,357*	*3,479*	21.1
North Grenville	13,581	20,838	24,933	29,027	33,122	*37,216*	*41,311*	98.2
	16,211	**23,710**	**27,926**	**32,142**	**36,358**	***40,573***	***44,789***	**88.9**
Stormont, Dundas & Glengarry United Counties								
North Dundas, Twp.	11,014	11,393	11,772	12,151	12,530	*13,212*	*13,591*	19.3
Prescott and Russell United Counties								
Russell, Twp.	12,412	13,967	15,026	16,021	17,036	18,004	*18,972*	35.8
Casselman, Village	2,910	3,177	3,344	3,502	3,666	3,824	*3,982*	25.3
The Nation Municipality	10,599	11,578	12,186	12,766	13,363	13,944	*14,525*	25.5
Alfred & Plantagenet, Twp.	8,593	9,569	10,219	10,832	11,458	12,059	*12,660*	32.3
Clarence-Rockland, City	19,612	22,186	23,968	25,640	27,340	28,959	*30,578*	37.8
	54,126	**60,477**	**64,743**	**68,761**	**72,863**	**76,790**	***80,717***	33.5
OMATO TOTAL	**125,833**	**146,115**	**161,184**	**175,846**	**190,585**	***205,451***	***220,014***	**50.6**

SUMMARY								
Renfrew County	14,035	15,477	17,079	18,522	19,957	21,392	22,827	47.5
Lanark County	30,447	35,058	39,664	44,271	48,877	53,483	58,089	65.7
Leeds & Grenville United Counties	16,211	23,710	27,926	32,142	36,358	40,573	44,789	88.9
Stormont, Dundas & Glengarry United (	11,014	11,393	11,772	12,151	12,530	13,212	13,591	19.3
Prescott and Russell United Counties	54,126	60,477	64,743	68,761	72,863	76,790	80,717	33.5
	125,833	**146,115**	**161,184**	**175,846**	**190,585**	**205,451**	**220,014**	**50.6**

SHARE							
Renfrew County	11.2%	10.6%	10.6%	10.5%	10.5%	10.4%	10.4%
Lanark County	24.2%	24.0%	24.6%	25.2%	25.6%	26.0%	26.4%
Leeds & Grenville United Counties	12.9%	16.2%	17.3%	18.3%	19.1%	19.7%	20.4%
Stormont, Dundas & Glengarry United (	8.8%	7.8%	7.3%	6.9%	6.6%	6.4%	6.2%
Prescott and Russell United Counties	43.0%	41.4%	40.2%	39.1%	38.2%	37.4%	36.7%

2006 population data for Beckwith and Montague are estimates by the City of Ottawa, as reported in the Annual Development Report, based on residential housing start information

Italicized numbers represent extrapolated projection beyond the horizon provided by corresponding municipal documents, by extending forward the same asasumptions to 2031.