

Residential Land Supply and Demand to 2031: 2012 Update



City of Ottawa
Planning and Growth Management
Research and Forecasting Unit
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Housing Supply and Demand to 2031: 2012 Update

The purpose of this report is to respond to the housing component of Section 2.2.1 Policy 7 of the City's Official Plan, which states in part:

“7. Council shall provide funding in 2012 to permit an examination of the supply of / demand for land for employment, housing and other purposes to meet the requirements of the Provincial Policy Statement with the results to be submitted to Council no later than June, 2014.”

Projections of housing demand and supply to 2031 were extensively researched and debated as part of the process leading up to the adoption of Official Plan Amendment 76 (OPA 76) in June 2009. Extensive evidence on the supply and demand for urban residential land was also presented during phase one of the urban boundary Ontario Municipal Board (OMB) hearings on OPA 76 in 2011.

Council has also established¹ that 2031 is to be the planning horizon for the 2013 Official Plan (OP) review. In addition, a report to the City's Planning Committee in April 2012² concluded that the population projections in the OP are tracking closely with Census results. On that basis there is no need to revise the current OP projections to 2031.

The outcome of the OMB hearings on the urban boundary which concluded in the summer of 2012 was to add 941 gross developable hectares (ha) of urban residential land to the land supply. Since 2009, urban land additions have also included 163 gross ha in the Fernbank area through OPA 77, bringing the total added to the urban area since the last OP review to 1,104 gross ha.

Given that much of the detailed work required to undertake an examination of residential land supply and demand has been established, the purpose of this report is four-fold:

- Part 1: To assess what has occurred in the Ottawa housing market since mid-2006 compared with what had been projected. Mid-2006 is used because it is the starting point of the projections developed for the 2009 Official Plan review and incorporated in the City's Official Plan;
- Part 2: To review recent trends in single-detached housing propensities based on available data from the 2011 Census in the context of data from previous censuses;
- Part 3: To update information on housing supply by unit type on vacant greenfield land as of 2012 including urban expansion lands added by the OMB, and;
- Part 4: Based on the results of the foregoing, update projected demand by housing type and conclude on the adequacy of the housing land supply to meet the requirements of the Provincial Policy Statement.

¹ Council meeting of 11 July 2012.

² See April 24, 2012 Planning Committee agenda, “2011 Census Results and Relation to Population Projections”.

Part 1. Housing Market Trends 2006-2012 versus Projected

More than six years has elapsed since the mid-2006 starting point of the projections prepared for the City's last Official Plan review³. The housing component of those projections was further refined and detailed by dwelling unit type in the Residential Land Strategy report⁴. The six years represents almost one quarter of the entire 2006-2031 projection period, and provides a reasonably long timeframe on which to base an assessment of how housing market performance since 2006 compares to what had been projected.

Two measures of comparison are reviewed; housing completions and housing starts. These are supplemented by new units from additions and conversions, detailed in the following section.

1.1 Additions and Conversions

In order to capture all new housing added since 2006 in addition to housing completions and starts, units created through additions and conversions are included based on building permit information, since they are not included in completions and starts⁵.

As an example, additions may add new units by adding an extra floor to an existing apartment building. Conversions may add units through changing a non-residential building to residential use. In Figure 1 the losses of single-detached units occurred primarily from the creation of accessory apartments. Based on the Census definition for structural type of dwelling unit, the addition of, for example, a basement apartment in an existing single-detached house converts it to a duplex (two apartments). Similarly, creation of an accessory apartment at the side or rear of a single-detached creates two semi-detached units. Unit gains and losses in Figure 1 reflect these changes in order to be consistent with census definitions.

Figure 1
Units Added from Additions and Conversions, mid-2006 to mid-2012

	Single	Semi	Row	Apt.	Total
2006*	-15	12	0	31	28
2007	-30	4	0	303	277
2008	-24	6	0	52	34
2009	-28	10	-1	116	97
2010	-21	3	0	184	166
2011	-46	10	4	138	106
2012**	-29	2	0	108	81
Total	-193	47	3	932	789

* last six months of 2006; ** first six months of 2012

Source: building permits

³ Growth Projections for Ottawa: Prospects for Population, Housing and Jobs 2006-2031 (November 2007).

⁴ Residential Land Strategy for Ottawa 2006-2031 (February 2009).

⁵ Canada Mortgage and Housing Corporation (CMHC) housing starts and completions data do not include units added through additions to existing buildings or conversions of buildings from non-residential to residential use. Additions and conversions were identified separately from Ottawa building permit issuances.

1.2 Housing Completions

Housing completions are shown in Figure 2. The six-year period from mid-2006 to mid-2012 is used for comparison to projected.

Figure 2
Housing Completions, City of Ottawa, mid-2006 to mid-2012

	Single	Semi	Row	Apt.	Total
2006*	1,280	246	924	477	2,927
2007	2,269	297	1,610	1,260	5,436
2008	2,685	240	2,002	1,208	6,135
2009	2,484	229	1,740	1,167	5,620
2010	2,490	370	2,016	1,544	6,420
2011	1,906	349	1,964	1,410	5,629
2012**	795	154	701	918	2,568
Total	13,909	1,885	10,957	7,984	34,735

* last six months of 2006; ** first six months of 2012
 Source: CMHC

Total actual new units compared to projected units for 2006-2012 (Figure 3) show actuals have been close to projected for all unit types except single-detached. The number of single-detached completed was 2,600 units less than projected, or only 84% of projected. All other units types were within 3% or less of the projected number. The difference in total units, almost 3,000 less than projected, is mostly attributable to the lower number of single-detached units built.

Figure 3
New Units (completions, additions & conversions) versus Projected, mid-2006 to mid-2012

	Single	Semi	Row	Apt.	Total
Actual	13,716	1,932	10,960	8,916	35,524
Projected	16,316	1,917	11,096	9,161	38,490
Difference	-2,600	15	-136	-245	-2,966
% of projected	84.1%	100.8%	98.8%	97.3%	92.3%

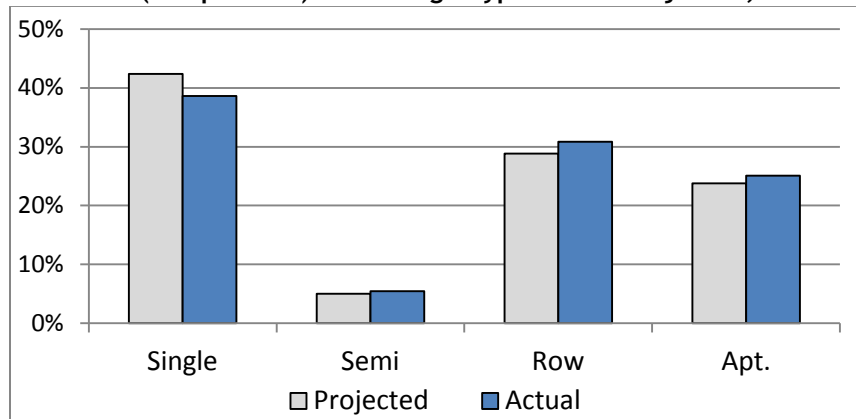
Comparing the percentage distribution of actual versus projected units by dwelling type (Figure 4 and associated graph), the differences are more marked. While it was projected that 42.4% of new units would be single-detached over the 2006-12 period, only 38.6% of actual units were single-detached. Semi-detached units were close to projected, and there were more row units - almost 31% of the total compared to 28.8% projected. Apartments were projected to have a 23.8% share but accounted for slightly over 25% of new units.

Figure 4
New Units (completions*) Percentage Type versus Projected, mid-2006 to mid-2012

	Single	Semi	Row	Apt.	Total
Actual %	38.6%	5.4%	30.9%	25.1%	100.0%
Projected %	42.4%	5.0%	28.8%	23.8%	100.0%

* including additions and conversions

New Units (completions) Percentage Type versus Projected, mid-2006-2012



1.3 Housing Starts

Housing starts are another measure to compare recent housing activity to the projections. Because starts represent future units that have only begun construction⁶ they provide a slightly more future-oriented picture of housing market activity than do completions.

To allow time for construction and occupancy of started units, projections of ground-oriented housing (single, semi and row units) were lagged four months and projected apartments were lagged 18 months. Thus, ground-oriented starts for mid-2006 to mid-2012 were compared to projected units from the end of October 2006 to the end of October 2012. Apartment starts for mid-years 2006-2012 were compared to projected from the end of 2008 to the end of 2014.

Housing starts for the 2006-2012 period are shown in Figure 5. Units added through additions and conversions are as shown in Figure 1.

**Figure 5
Housing Starts, City of Ottawa, mid-2006 to mid-2012**

	Single	Semi	Row	Apt.	Total
2006*	1,460	201	887	939	3,487
2007	2,722	292	1,954	1,250	6,218
2008	2,715	203	2,136	1,625	6,679
2009	2,228	280	1,887	1,127	5,522
2010	2,035	346	1,881	1,784	6,046
2011	1,957	343	1,810	1,411	5,521
2012**	706	104	707	2181	3698
Total	13,823	1,769	11,262	10,317	37,171

* last six months of 2006; ** first six months of 2012

Source: CMHC

⁶ CMHC defines a housing start as the beginning of construction work on a building, usually when the concrete has been poured for the whole of the footing around the structure.

New units from starts, additions and conversions show there were 2,622 fewer single-detached than projected (84% of projected), very similar to the shortfall for completions. However, there was also a large difference in apartments, with 1,625 more apartments built than had been projected for the last six years, 17% higher than the projection (Figure 6).

Figure 6
New Units (starts, additions and conversions), mid-2006 to mid-2012 versus Projected*

	Single	Semi	Row	Apt.	Total
Actual	13,631	1,816	11,265	11,248	37,960
Projected	16,253	1,912	11,017	9,624	38,805
Difference	-2,622	-96	248	1,625	-845
% of projected	83.9%	95.0%	102.3%	116.9%	97.8%

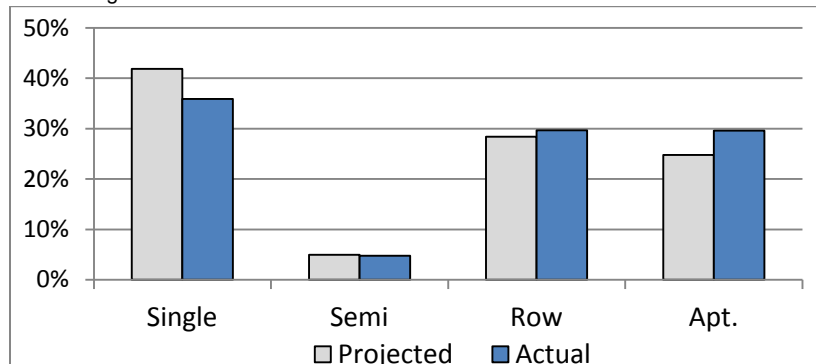
* lagged as described in text above

The percentage distribution of actual versus projected units shows marked differences for single-detached and apartments (Figure 7 and associated graph). While it was projected that almost 42% of new units would be single-detached, less than 36% of actual units have been singles. Semi-detached units were similar to projected, and row housing was 1.3% higher. Apartments were projected to have slightly under a 25% share of new housing but achieved almost a 30% share.

Figure 7
New Units (starts*) Percentage by Type, mid-2006 to mid-2012 Versus Projected

	Single	Semi	Row	Apt.	Total
Actual %	35.9%	4.8%	29.7%	29.6%	100.0%
Projected %	41.9%	4.9%	28.4%	24.8%	100.0%

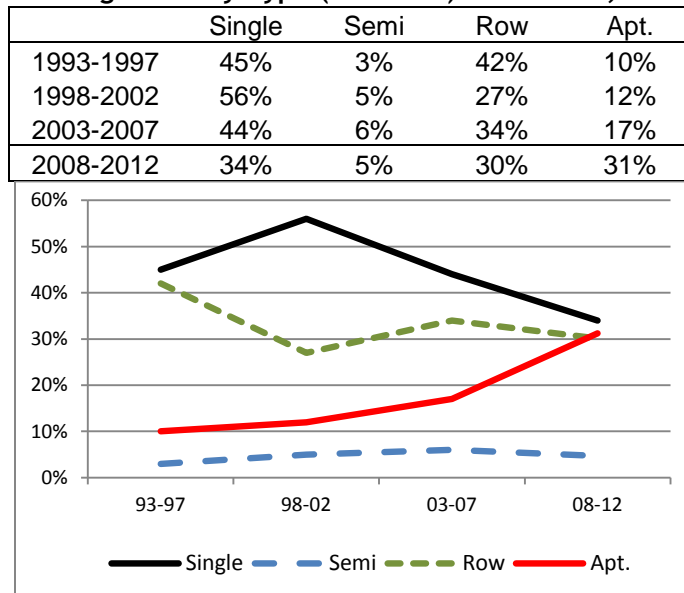
* including additions and conversions



The significant differences between projected units and actual construction indicate that the shift from lower density housing forms to higher density units that was anticipated to occur over the 2006 to 2031 time period is occurring more rapidly than had been projected in the 2009 Residential Land Strategy report. Of particular importance to land supply and demand, since singles are the largest consumer of housing land, construction of single-detached units is approximately 16% lower than was projected for the past six years.

The Residential Land Strategy (RLS) had in 2009 noted a trend to fewer single-detached. Figure 8 and the associated graph show the trend noted in the RLS (from Fig. 5, p. 13 of the RLS) up to the five-year period from 2003 to 2007. The line below compares this with starts, including additions and conversions, starting in 2008. The drop-off in singles' share is clear, as is the dramatic increase in apartments.

Figure 8
Housing Starts by Type (from RLS) 1993-2007; and Update 2008-2012



Comparing actual starts for the past six years to projected (Figure 9 and associated graph) shows the following:

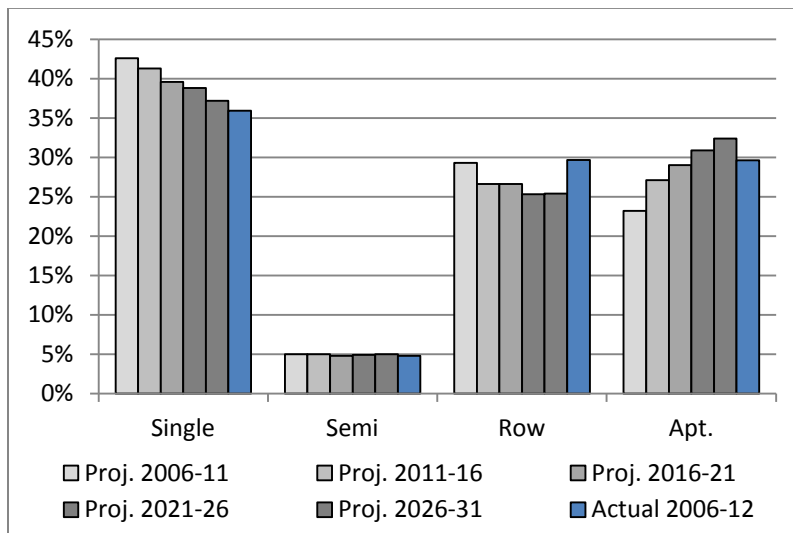
- Single-detached units have dropped much more quickly than projected, specifically:
 - Singles were projected to have a 42.6% share of new units during 2006-11, but their actual share since 2006 was below 36%;
 - Singles were projected to decline steadily to 2031 to reach a projected share of 37.2% by 2026-31, but their actual share since 2006 has been even lower than that, at 35.9%.
- Semi-detached units are close to but below their projected share for 2006-11.
- Row units are slightly above the share projected for 2006-11.
- Apartments have increased much more quickly than was projected, specifically:
 - Apartments were projected to account for 23% of units during 2006-11, but actually had almost a 30% share of new units since 2006;
 - Apartments' 29.6% share since 2006 is at the level projected between 2016-21 and 2021-26.

Because housing starts data provide the best insight into the direction of change in the housing market, they are preferred for use in updating projected demand to 2031 in Part 4 of the report.

Figure 9
Share of New Housing Units by Type, Projected for 2006-2031 versus Actual 2006-2012

Projected in RLS, 2006-2031*					
	Single	Semi	Row	Apt.	Total
2006-11	42.6%	5.0%	29.3%	23.2%	100.0%
2011-16	41.3%	5.0%	26.6%	27.1%	100.0%
2016-21	39.6%	4.8%	26.6%	29.0%	100.0%
2021-26	38.8%	4.9%	25.3%	30.9%	100.0%
2026-31	37.2%	5.0%	25.4%	32.4%	100.0%
Actual (starts, additions, conversions)					
2006-12	35.9%	4.8%	29.7%	29.6%	100.0%

* Residential Land Strategy, Feb. 2009, Appendix 2, Scenario 3, p. A2-13



Key Points:

- The housing market is changing to higher density housing forms much more quickly than had been projected.
- The single-detached market is shrinking. Comparing actual building since 2006 to projected shows:
 - Single-detached were projected at 43% of new units, but were actually 36%;
 - Singles were projected to be at 37% in 2031, but their current share is even lower.
- Apartments are increasing more quickly than projected. Since 2006:
 - Apartments were projected at 23% of units for 2006-11, but had a 30% share;
 - Apartment market is 15 years ahead of projected.
- Given that housing starts data provide the best insight into the direction of change in the housing market, they are preferred for use in updating projected demand to 2031.

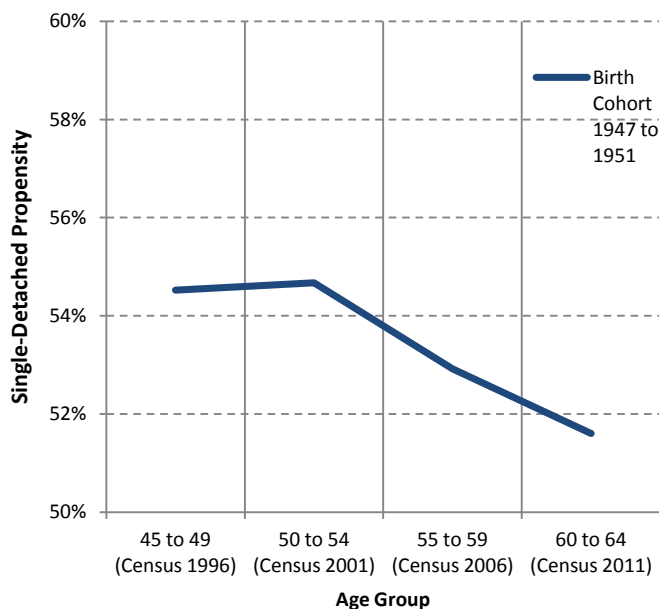
Part 2. Housing Propensity Trends, 1991 to 2011

Further insights into changes in the housing market can be obtained by examining new 2011 Census data on housing choices by age group (termed “housing propensities”) in the context of historical trends. Propensities assist in understanding past changes and in developing projections of the amount of housing by type required in the future.

Census information on age of household head (Person 1) were grouped into five-year age segment (e.g. 40 to 44 years of age) and housing types were classified as in Part 1; singles, semis, row and apartments. Figures 10 and 11 show propensities for single-detached housing by five-year age group by year of birth (termed “birth cohorts”). The charts allow us to follow a birth cohort (e.g. people born between 1947 to 1951) as the group ages five years at a time through each census. The information provides a perspective on each birth cohort’s past housing behaviour and possible future choices.

As an example, Figure 10 follows the single-detached propensity of the 1947-1951 birth cohort as it ages 15 years from the 1996 Census to the 2011 Census. When this group was 45 to 49 years of age in 1996 it had a single-detached propensity of 54.5%, meaning that 54.5% of household heads aged 45-49 lived in a single. Five years later in 2001 this group was aged 50 to 54 and had a slight increase in single-detached propensity. Five years later (2006 Census) this group was aged 55 to 59 and showed a marked decrease in single-detached propensity to 53%. In 2011, our cohort now aged 60 to 64 reported a continued decline in single-detached propensity, dipping to 51.6%.

Figure 10
Cohort born 1947 to 1951 Aging from the 1996 to 2011 Census



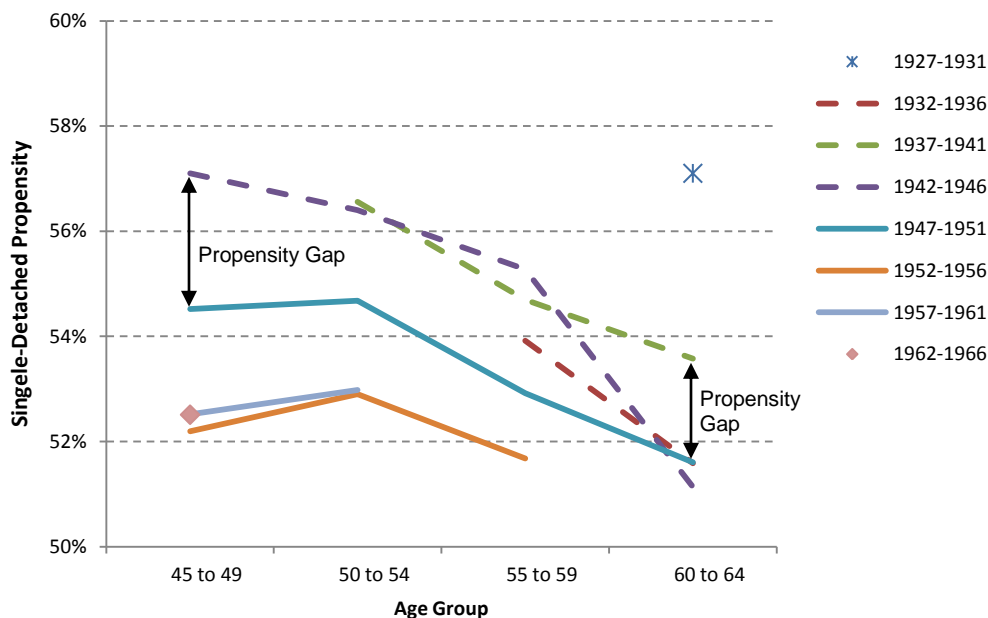
The baby-boom generation was born post-World War II between 1947 and 1966, a period with the highest birth rates in the past 80 years. In the 2011 Census the baby-boom was aged 45 to 64, and represented close to 30% of Ottawa’s population. Their significance in the housing market is even more pronounced, as they headed 42% of all households and 50% of all households living in a single-detached house. They have been and continue to be a key driver of the Ottawa housing market.

Figure 11 shows propensities for single-detached housing for the birth cohorts of the baby-boom compared to older groups. The baby-boom spans four birth cohorts, the oldest of which were born between 1947 and 1951. In Figure 11 the baby-boom cohorts are shown as solid lines, and the groups born before them (pre-boomer birth cohorts) are shown as dashed lines.

There is a propensity gap over the last 20 years where each of the four baby-boom cohorts (1947-1966) have a tendency for lower single-detached propensities than the older groups born 1927 to 1946. For example, when each group was aged 45 to 49, the group born just before the baby-boom (between 1942 and 1946, shown as the dashed purple line on the chart) had a 57% propensity for single-detached houses. In comparison, the first baby-boom group, born 1947-51, had a singles’ propensity of only 54.5%. The younger baby-boom groups, born 1952-56, 1957-61 and 1962-66, all had singles’ propensities between 52.2% and 52.5%, almost five per cent below the older pre-boomer group.

The gap between the baby-boom and pre-boomer cohorts continues as they age into their 50’s and 60’s. For example, when those born during 1927-31 were aged 60 to 64 their single-detached propensity was 57.1%. In comparison, when the first baby-boom cohort (born 1947-51) reached the 60-64 age group in 2011 they had a significantly lower propensity of 51.6%.

Figure 11
Baby-Boomer & Pre-Boomer Single-Detached Propensities, Census 1991-2011



As baby-boomers continue to age it is anticipated their single-detached propensities will continue to decrease and they will continue to display lower propensities than older generations showed when they were the same age.

There are several factors supporting a continuation of this trend, including:

- Aging of the population; propensity for single-detached houses peaks at ages 55 to 59. As the baby-boom ages they are likely to increasingly occupy townhouses and apartments.
- Housing choices of a population with an increasing incidence of disability, which increases with age, will make single-floor accommodation in apartments more popular.
- Older households are smaller, typically one or two people, and do not require large homes. Some will downsize to smaller units such as townhouses and apartments. This will be facilitated by an increasing range of choices.
- Housing in newer suburban areas is not as suitable for people to “age in place” as older more centrally-located housing that is closer to needed services. As a result some households in single-detached units are expected to move to more suitable housing with lower maintenance needs as they grow older.
- Immigration is projected to become the major source of Ottawa’s population growth and immigrants choose to live in higher density housing at a much higher rate than the Canadian-born population.
- The growing appeal of the urban lifestyle will make new apartment and other forms of intensification downtown and on mainstreets more attractive.
- The increasing cost of energy, in particular gasoline and electricity, will encourage the choice of energy-efficient housing forms and more central locations with excellent transit and options for walking and cycling.
- Increasing awareness of environmental issues such as climate change will encourage people to choose more centrally-located and higher-density housing to reduce their environmental footprint.

Key Points:

- The baby-boom age groups (aged 45 to 64 in the 2011 Census) are showing a declining preference for single-detached housing.
- The baby-boom has a lower take-up of single-detached housing than the older age groups that came before them.
- Several factors, including energy costs, lifestyle preference, aging population, and wider housing choices, indicate this trend will continue in the future.

Part 3. Updated Housing Supply on Greenfield Land

The supply of vacant residential greenfield land is comprised of two components:

1. Residential land in the urban centres outside the Greenbelt that was vacant in 2006, the start of the projection period. This has been updated to 2012 to show either what has been built since 2006, or if still vacant what the land is planned for based on current information from the development review process. Land added in the Fernbank area by OPA 77 is included in this supply.
2. Additions to the supply of residential land resulting from OMB decisions on OPA 76.

The updated unit supply by area and unit type is shown in Figure 12. This represents land parcels that were vacant at the end of 2006 with their development potential updated to 2012.

Figure 12
Housing Supply on Vacant Urban Land Outside the Greenbelt

Area	Single	Semi	Row	Apt.	Total
Kanata-Stittsville	7,165	673	8,682	3,579	20,099
Fernbank CDP	5,000	830	3,300	1,320	10,450
South Nepean	6,206	712	8,163	11,806	26,886
Riverside South	7,037	142	6,185	3,317	16,681
Leitrim	1,801	671	1,787	703	4,962
Orleans	5,916	595	6,253	3,984	16,748
Total on vacant land	33,125	3,623	34,370	24,709	95,826

As a result of the OMB decisions on the urban boundary, a total of 941 gross hectares (ha) of developable⁷ urban residential land was added to the Urban Area in 2012. OPA 77 added an additional 163 developable ha of land in the Fernbank CDP area in 2010. In total, 1,104 gross ha of developable residential land have been added since the land analysis published in the Residential Land Strategy (RLS) and Council's adoption of OPA 76 in June 2009.

The 941 gross hectares of urban expansion land are estimated to yield 517.6 net ha⁸ of residential land. At an average density of 34 units per net ha, the urban additions have an estimated potential for 17,598 dwelling units.

Based on the urban expansion unit mix in the RLS⁹ adjusted to meet Official Plan policies for unit mix and a minimum density of 34 units/ha in urban expansion areas (in S. 3.11 and 3.12 of the OP), Figure 13 shows the unit type composition and associated density of the additional 17,598 units on expansion lands.

⁷ Gross developable land excludes the following constraints: natural heritage system lands (woodlands, ravines, etc), Hydro corridors, floodplains, required setbacks from wetlands and landfills, and other constraints.

⁸ Based on a 55% gross-to-net ratio.

⁹ RLS Appendix 7, p. A7-2 calculations related to net land requirements.

Figure 13
Dwelling Unit Mix and Density on Urban Expansion Lands

Single	Semi	Row	Apt	Total
8,430	2,129	4,576	2,464	17,598
47.9%	12.1%	26.0%	14.0%	100.0%
Density (units/net ha)				
25.0	34.0	45.0	150.0	34.0

Combining the information from Figures 12 and 13, total unit supply by housing type and area are shown in Figure 14. Additional units in the supply results from the completion of units that were under construction in the urban centres at the end of 2006; those are shown in the third-last line of Figure 14.

Figure 14
Total Housing Supply on Vacant Greenfield Land including Urban Additions

Area	Single	Semi	Row	Apt.	Total
Kanata-Stittsville	15,333	2,303	13,702	5,825	37,163
South Nepean	7,122	943	8,660	12,074	28,799
Riverside South	7,037	142	6,185	3,317	16,681
Leitrim	2,581	868	2,210	931	6,591
Orleans	9,481	1,495	8,188	5,026	24,190
Total on vacant land	41,554	5,752	38,945	27,173	113,425
Under construction end 2006*	929	110	826	326	2,191
Total unit supply	42,483	5,862	39,771	27,499	115,616
% split	36.7%	5.1%	34.4%	23.8%	100.0%

* Under Construction and Completed And Not Absorbed (CMHC)

Key Points:

- Housing supply is approximately 96,000 dwelling units on vacant urban greenfield land designated in the OP.
- OMB decisions on the urban boundary increased the supply by an estimated 17,600 units through urban expansions.
- Total supply is estimated at 115,600 dwelling units¹⁰, comprised of 37% singles, 5% semis, 34% row units, and 24% apartments.
- The 115,600 unit **supply** will be compared to projected **demand** in the final section of the report.

¹⁰ Including the almost 2,200 units under construction at the end of 2006 which constitute supply post-2006.

Part 4. Update to Projected Housing Demand and Conclusion

The final steps in the analysis are to update the demand for housing by type to 2031 and compare that result to the land supply identified in Part 3.

4.1 Update to Housing Projection for 2006-2031

The OP projection is for an additional 143,000 occupied dwelling units¹¹ (households) in the city of Ottawa between 2006 and 2031. That figure does not require revision. However, the detailed projection of dwelling units by type from the 2009 Residential Land Strategy (RLS) does warrant updating due to the significant shifts that have occurred in the housing market since 2006. As noted at the conclusion of Part 1, the change from lower density housing forms to higher density housing has been much more rapid than was foreseen in the RLS.

The RLS presented three scenarios for projected housing by unit type for 2006-2031. Scenario 1 was based on a marked shift, with singles accounting for only 30.5% of all new units to 2031. Scenario 2 had a singles share of 43%. Scenario 3 was based on a 40% share of singles, with a gradual decline in singles' share over the projection period and a gradual rise in the share of apartments. For the analysis of housing land in the RLS, Scenario 3 was adopted.

Figure 15 presents the percentage split of projected units in Scenarios 1 and 3, followed by the average of the two. The last line shows the actual unit split during 2006-2012.

Figure 15
Scenarios 1 and 3 Projected Units 2006-2031 from the RLS Compared to Actual 2006-2012

	Single	Semi	Row	Apt	Total
Scenario 1	30.5%	5.1%	30.3%	34.1%	100.0%
Scenario 3	40.1%	4.9%	26.7%	28.3%	100.0%
Average	35.3%	5.0%	28.5%	31.2%	100.0%
Actual *					
2006-2012	35.9%	4.8%	29.7%	29.6%	100.0%

* Starts, additions and conversions

The average of the two scenarios produces a result quite similar to what has been observed since 2006. The “average” scenario has a slightly lower share of singles (-0.6%) and row units (-1.2%) and a 1.6% higher share of apartments. Given recent trends in the housing market an updated projection could defensibly be based on the Scenario 1 unit proportions. For this update, however, the average of the two scenarios is used, recognizing that over the remaining 19 years of the projection to 2031 the housing market will continue to change.

The number and percentage split of dwelling units that result from applying the average of the two scenarios are shown in Figure 16.

¹¹ Total dwelling unit requirements of 147,532 over the 2006 to 2031 period are higher than household growth due to the requirement to provide a vacancy rate in the housing stock and to replace units that are demolished.

Figure 16
Updated Unit Requirements for 2006-2031 from applying “Average” Scenario

Single	Semi	Row	Apt	Total
52,057	7,357	42,078	46,041	147,532
35.3%	5.0%	28.5%	31.2%	100.0%

4.2 Comparing Supply and Demand

The last step in the update is to combine total projected units by type (**housing demand**) from Figure 16 with **greenfield housing supply** from Figure 14. To complete the analysis, OP policies for rural development share (9% of city-wide units) and intensification (40% of new urban units) are first subtracted from total demand. The result, demand on greenfield land, is compared to greenfield supply. These steps are presented in Figure 17, which updates similar tables in the RLS and in evidence presented at the OMB.

The following points summarize each numbered step in Figure 17:

1. Total dwelling unit requirements by unit type over the 2006-2031 period are shown in Step 1. (Total units have been adjusted to remove demand for the last half of 2006 since the land supply is reported for year-end. Note also that because in some plans single and semi-detached units are not identified separately, Figure 17 sums them together in the third column of numbers.)
2. Rural Dwellings (Step 2): The rural area was assigned a 9% share of future housing units, consistent with OP policy. Unit split is the same applied in the RLS.
3. Urban dwellings (Step 3) are total units (from Step 1) minus rural units (from Step 2).
4. Intensification (Step 4): the OP target of 40% of future urban units is applied, with the same unit split as used in the RLS.
5. **Demand on greenfield land (Step 5):** This step subtracts intensification units (Step 4) from total urban demand (Step 3) to produce demand on greenfield land.
6. **Supply on greenfield land (Step 6)** is the unit supply from Figure 14.
7. **Supply minus Demand (Step 7)** subtracts demand on greenfield land (Step 5) from supply on greenfield land (Step 6). Positive numbers indicate a surplus of supply over demand.

Figure 17
Urban Land Requirements Analysis: 2012 Update

Step #		Single	Semi	Single+Semi	Row	Apt.	Total
1	New dwellings required, 2006-2031*	50,772	7,189	57,961	41,075	45,266	144,302
	% split by unit type	35.2%	5.0%	40.2%	28.5%	31.4%	100.0%
2	Rural dwellings (9% of total units)	12,208	130	12,338	519	130	12,987
3	Urban dwellings projected	38,564	7,059	45,623	40,556	45,136	131,315
4	Intensification (40% of urban units)	3,151	2,101	5,252	9,980	37,294	52,526
5	Greenfield housing demand	35,413	4,958	40,371	30,576	7,842	78,789
6	Supply on greenfield land	42,483	5,862	48,345	39,771	27,499	115,615
7	Supply minus Demand on greenfield land	7,070	904	7,974	9,195	19,657	36,826

* from end of 2006 to mid-2031

Figure 17 concludes that supply exceeds demand for all unit types. These results are shown graphically in Figure 18.

Figure 18
Housing Supply compared to Demand by Unit Type to 2031

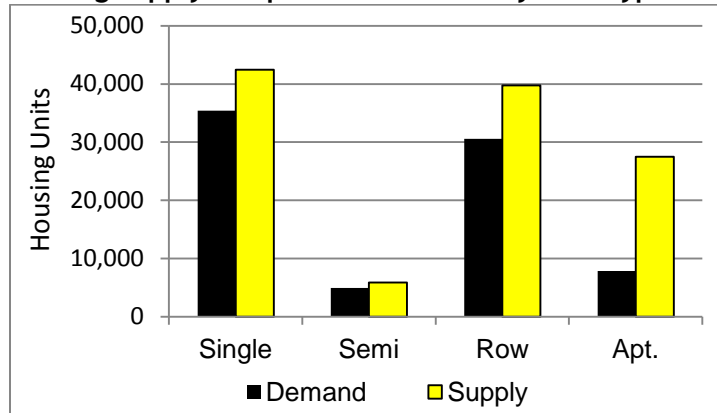


Figure 19 provides an estimate of the housing supply by unit type after 2031. Although there is no official projection for the years after 2031, the estimate is based on an extrapolation of projected demand to 2031-36 from the rate of change in the preceding decade.

Figure 19
Estimated Land Supply Post-2031

	Single	Semi	Row	Apt.	Total
Annual unit requirement 2031-36	1,416	243	1,225	1,690	4,574
Demand-years post-2031	5.0	3.7	7.5	11.6	8.1

Figure 19 shows that even for semi-detached units, the housing form in shortest relative supply, there is close to a four year supply after mid-2031.

4.3 Conclusion

In conclusion, the supply of land for housing of all types is sufficient for at least the next 20 years, and meets the requirements of the Provincial Policy Statement, specifically:

- S. 1.1.2, “Sufficient land will be made available through intensification and redevelopment and, if necessary, designated growth areas, to accommodate an appropriate range and mix of employment opportunities, housing and other land uses to meet projected needs for a time horizon of up to 20 years.”
- S. 1.4.1a, “Maintain at all times the ability to accommodate residential growth for a minimum of 10 years through residential intensification and redevelopment and, if necessary, lands which are designated and available for residential development.”

Given that there is at least a 20-year supply of housing land for all dwelling types, there is no need for Council to consider any change to the urban boundary for residential purposes as part of the 2013 Official Plan review.