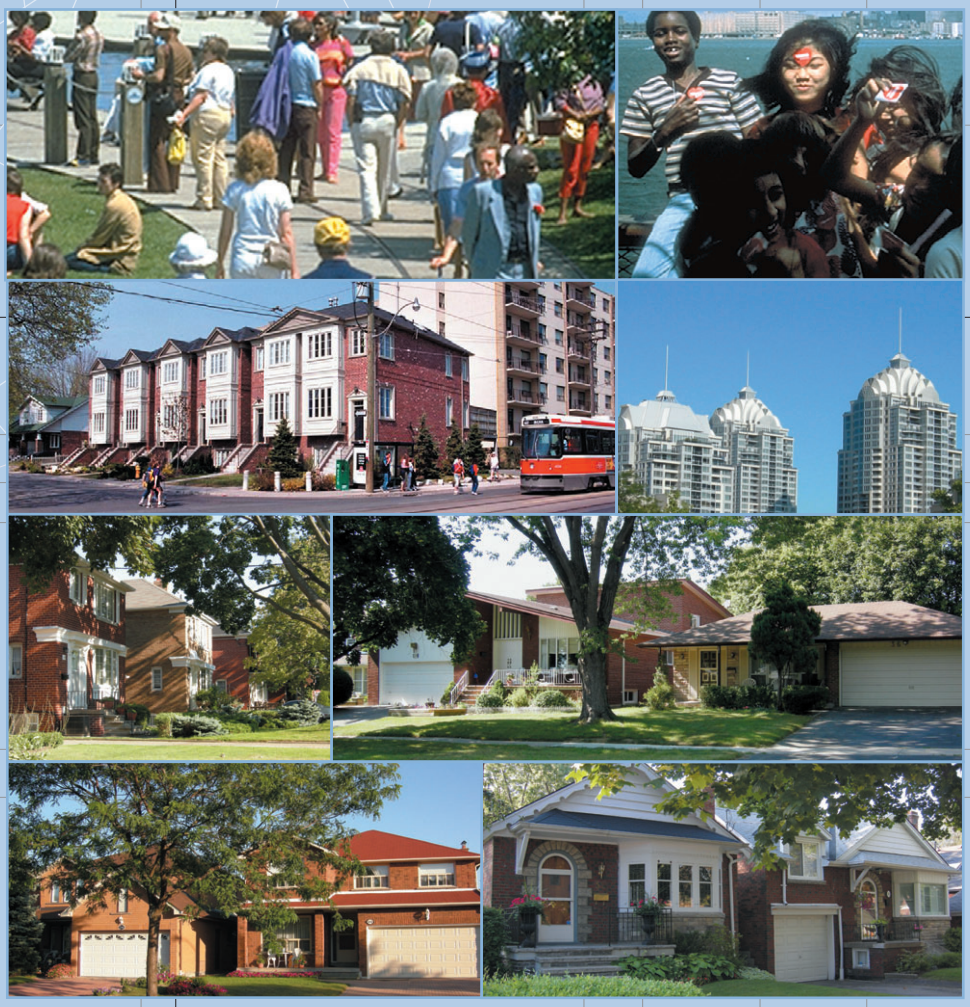
TORONTO

PLAN

FLASHFORWARD ADDENDUM:
PROJECTING HOUSING DEMAND BY TENURE TO 2031



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TORONTO City Planning

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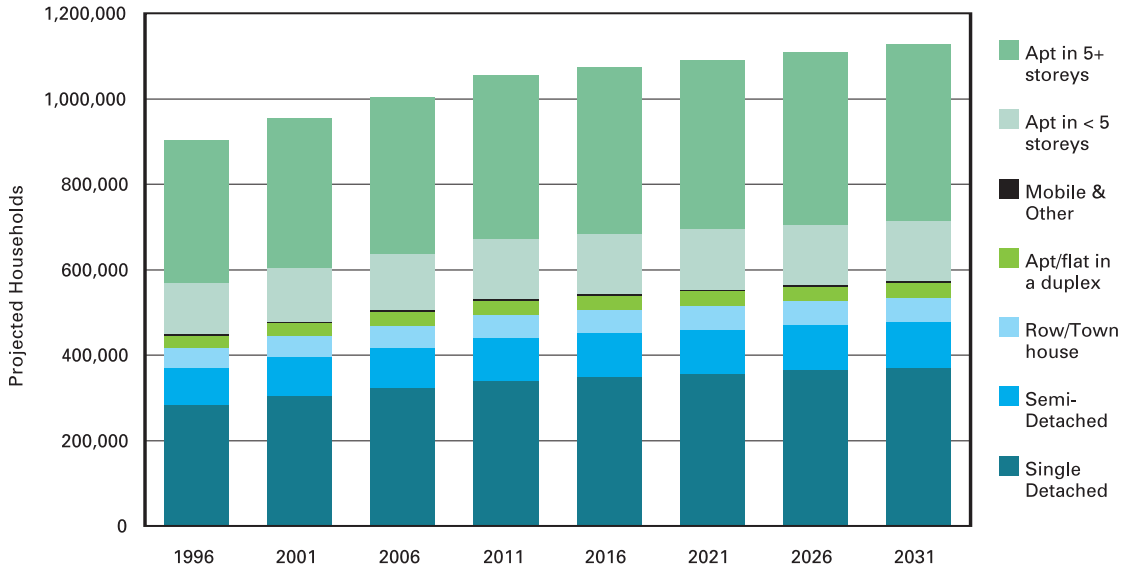
PROJECTING HOUSING DEMAND BY TENURE TO 2031

The City of Toronto is an attractive and dynamic urban community, forecasted to grow by over one-half million people between 1996 and 2031. This added population represents new families, new workers, more children and seniors, increased demand for public services: a vital economy and a vibrant city. The growing population indicates an increased demand for a diverse range of housing to accommodate it. As background research to the City's Official Plan, projections of the population and its households were developed to assess the potential impact of the Plan's growth management policies in terms of the demand for different types and tenures of housing and where those dwellings might be accommodated in the city. This report elaborates on the household projections by type of dwelling in regards to the tenures of occupancy.

HOW MANY HOUSEHOLDS WILL THERE BE?

The number of households in Toronto is projected to grow from 903,235 in 1996 to 1,127,844 by 2031 (see Figure 1). One-half of these households occupy ground-related dwellings and the other half live in apartments in multiple-unit buildings (see Table 1).

Figure 1: Projected Households by Structural Type of Dwelling



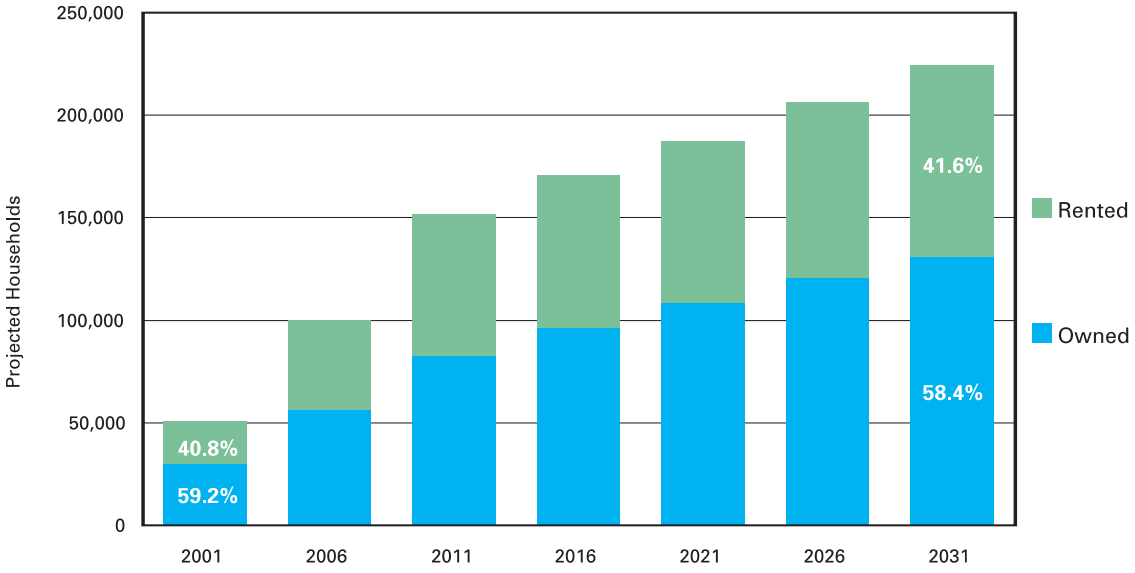
Note: Figures for 1996 are from the 1996 Census, Statistics Canada. All other figures are projected.
Source: Toronto City Planning Division, Policy and Research.

Between 1996 and 2031, the number of Toronto households is projected to increase by 224,609 or 24.9%. The demand for rental accommodation is projected to grow by 93,471 households or 19.7% by 2031, an added 15.4% after 2001. This represents 41.6% of the additional households (see Figure 2).

HOUSEHOLD PROJECTIONS BY STRUCTURAL TYPE OF DWELLING AND TENURE

These projections show the anticipated number of households and their dwellings based on the long-range GTA regional forecast released in 2000, the Census and 1996 occupancy rates of households by structural type of dwelling and tenure. These are long-term projections, intended to show the general pattern in the growth and structure of the population and its households. They take into account trends in births and deaths and in-migration and mobility. Variations in population characteristics due to the business cycle are considered to even out over the long term, consequently only 1996 occupancy rates are used.

Figure 2: Projected Change in Households by Tenure versus 1996



Source: Toronto City Planning Division, Policy and Research.

The share of rental tenure of all households is projected to decline from 52.5% in 1996 to 50.4% by 2031 while the demand for rental housing among net new households is projected to rise from 40.8% to 41.6%. This occurs due to the projected increase in the number of persons in those age groups with a comparatively higher demand for rental accommodation e.g. younger persons of working age who increase in number due to higher rates of in-migration, and those over 65 years of age due to the overall aging of the population.

Projections of dwelling unit demand by structural type of dwelling and tenure are inherent to the projections of population and households produced as background research to the Official Plan, as documented in *Flashforward: Projecting Population and Employment to 2031 in a Mature Urban Area*, published in 2002.

METHODOLOGY

In summary, the 1996 occupancy rates by age of the primary household maintainer, structural type of dwelling occupied and the tenure of the occupancy were applied to the projected population to calculate the number of households in that population and their demand for housing by structural type of dwelling and tenure. This generated a set of housing demands based on the projected populations in each time period. These are the expected households to be housed in each projection period.

A cohort-component model was developed to project the population of the City of Toronto by single years of age and sex from 1996 to 2031. This takes into account birth and death rates and trends in migration by single years of age. The initial model was calibrated against a trend projection for the City by Statistics Canada. The City's projection is based on the 1996 Census and earlier data. Comparison with 2001 Census results show that the projections are generally on track. International out-migration was estimated using the "residual migration" method. Given the fertility, survivorship and in-migration rates, out-migration in each time period was adjusted such that the sum of the population components – births, deaths, in- and out-migration – totalled to the regional forecast for Toronto in each time period. This accounts for national and international in-migration and out-migration to other parts of the GTA. The regional forecast was developed by the City of Toronto, the Regions of the GTA and the former Provincial Office of the GTA and presented to Greater Toronto Co-ordinating Committee in March 2000.

The projections do not include the Census undercount, the portion of the population missed by the Census or who do not participate in it. The undercoverage rate inherent in the regional forecast for Toronto is 3.27%. Based on the December 2005 post-censal estimate of the 2001 population by Statistics Canada, Toronto's undercoverage is now estimated to be 4.47%. *Consequently, by not including the population undercount, these projections are a conservative estimate of the projected households.*

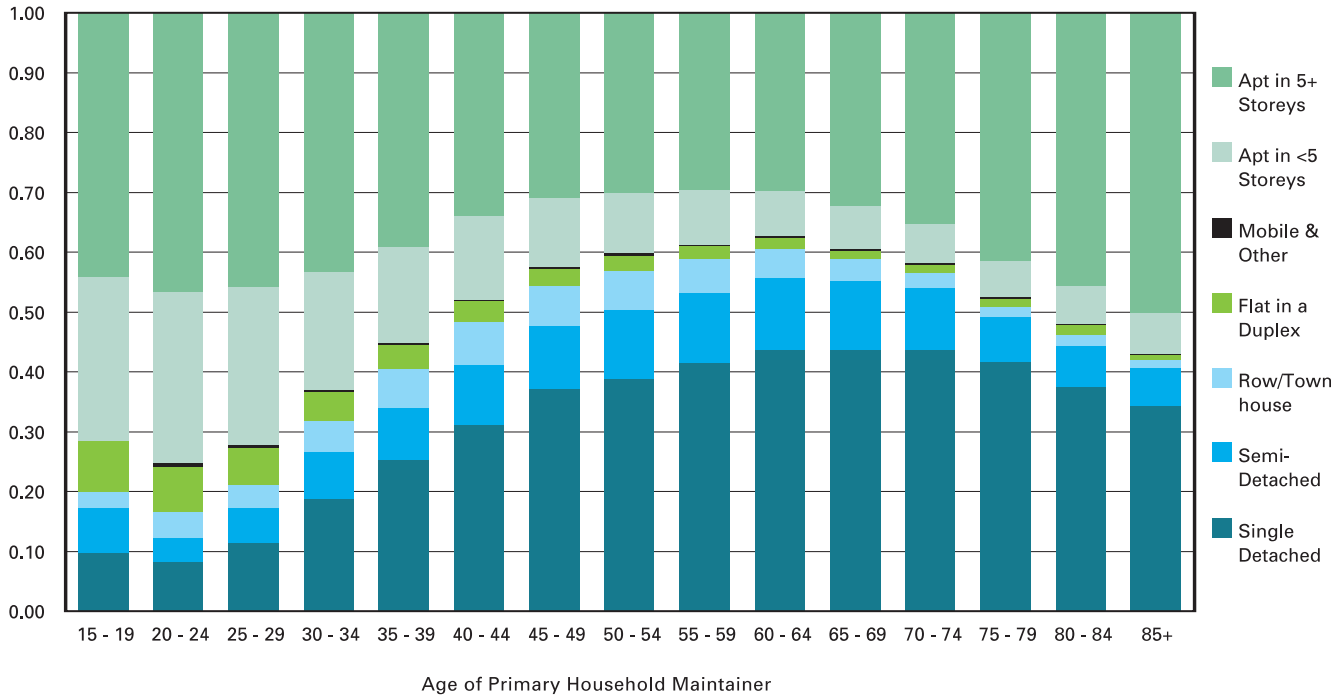
The next step is to convert the projected population into households. This is essential in order to determine the impacts of population growth and change on the demand for owned and rented housing and for different structural types of dwellings within the City. It also serves to gauge the growth that Toronto can and must absorb so as to contribute to the management of growth pressures and infrastructure demands elsewhere in the Greater Golden Horseshoe.

The Census reports the characteristics of people who share a household. In Census terms, each household is considered to have one or more household maintainers, those persons in the household who pay the rent or mortgage or taxes or utilities or other such expenses. The first such person recorded on the Census form for a household is regarded as the primary household maintainer. The numbers of primary household maintainers by age, family type, structural type of dwelling, tenure and Census Subdivision in 1996 are known, as are the numbers of persons who share the household with them. Thus, for a given age cohort, the proportion of households led by persons of a given age can be calculated. By applying these proportions to the age distribution of the projected population, the number of households can be projected as well.

OCCUPANCY, MIGRATION AND MOBILITY

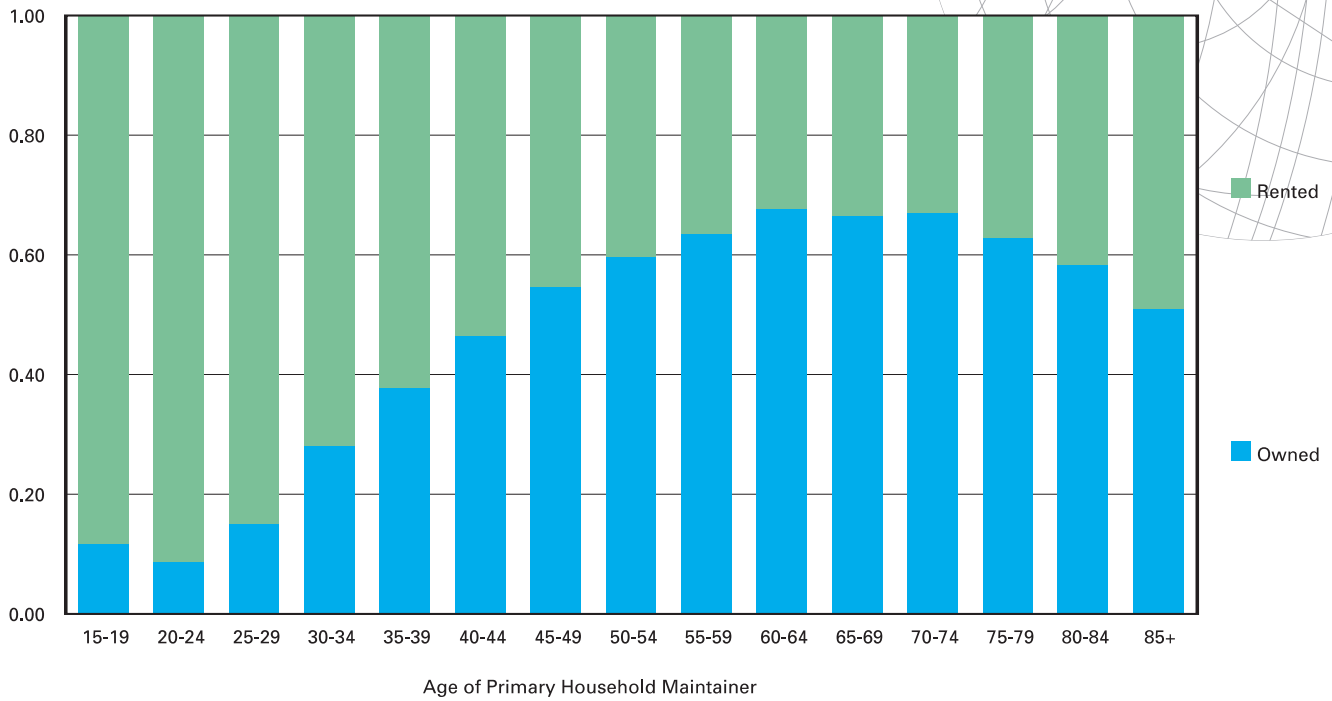
Occupancy rates represent the distribution of people making housing decisions, and those who live with them, by the type of dwelling they occupy, their type of household and their tenure. The underlying assertion is that these occupancy rates reflect decisions about the choice of dwelling by people at a particular stage in their lives, as reflected by their age. These rates are used to represent the likelihood that a person of a given age decides where their household will reside and, given a range of choices, will choose to occupy a particular dwelling type. These rates are shown in Figures 3 and 4.

Figure 3: Household Occupancy Rates by Structural Type of Dwelling



Source: Statistics Canada, 1996 Census, Custom Tabulation.

Figure 4: Household Occupancy Rates by Tenure



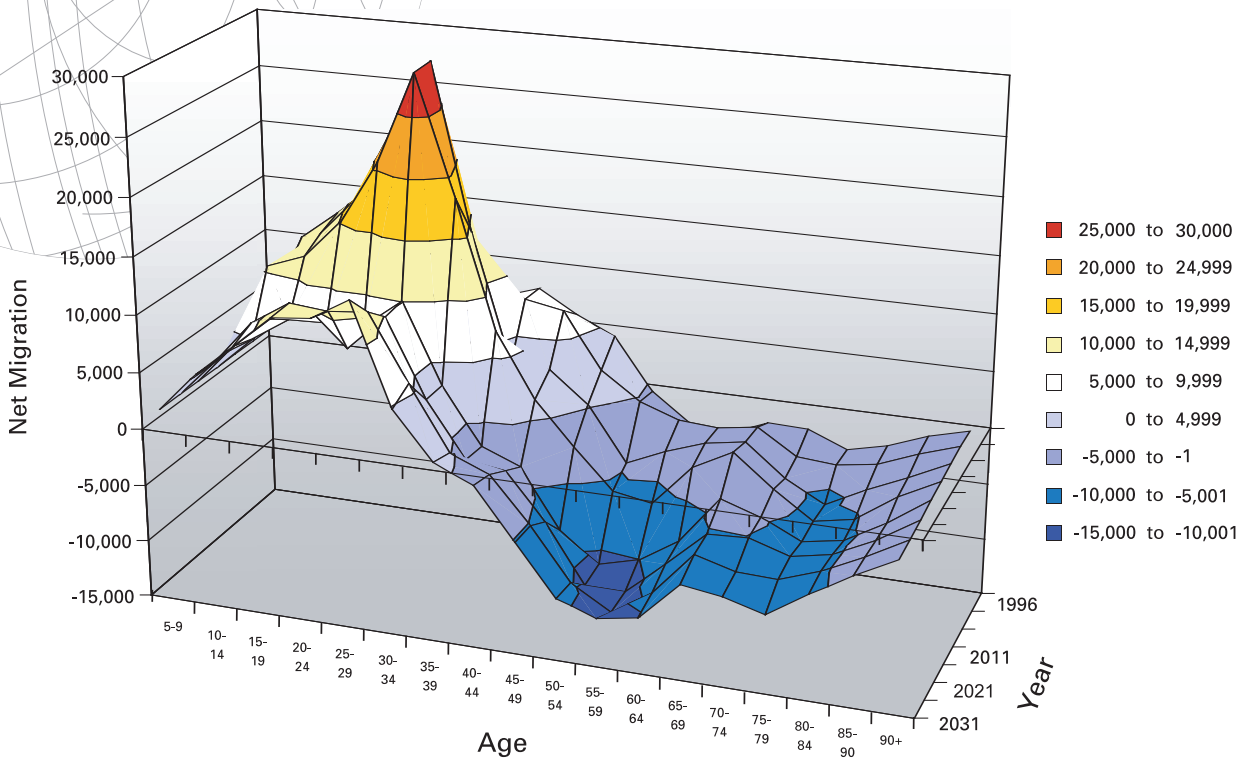
Source: Statistics Canada, 1996 Census, Custom Tabulation.

The assumption is that these occupancy rates actually are propensities i.e. "intense natural inclinations or preferences" for different types of housing. In a market with low vacancy rates, these occupancy rates are closely related to the available stock in the base year. Occupancy decisions are affected by the strength of the local economy, which also affects income, migration and household formation. If economic times are tough and choices are limited, the occupancy rates will tend to reflect the existing stock rather than the preferences of the occupants. A further assumption is that these revealed preferences are stable over time. If the mix of near-term dwelling unit completions or their geographic distribution are significantly different from the mix of stock in the base year, then the "propensities" will not reflect the choices that primary household maintainers are likely to make in subsequent time periods.

Consequently, this is a "demand-side" projection, representing a long-term estimate of the quantity of housing to be demanded, by type and tenure, in each projection period based on 1996 occupancy rates. This is different than a "supply-side" projection, based on what housing is likely to be constructed. To the extent that the City is part of a larger regional housing market, the two views of the future are brought into balance by migration, particularly of international migrants into the city and of young families with children out to other parts of the GTA in search of ground-related housing, as well as the structure mix of the housing supply. This balance was achieved in the projections for *Flashforward*, which examined both demand and supply. The net migration rates are shown in Figures 5 and 6.

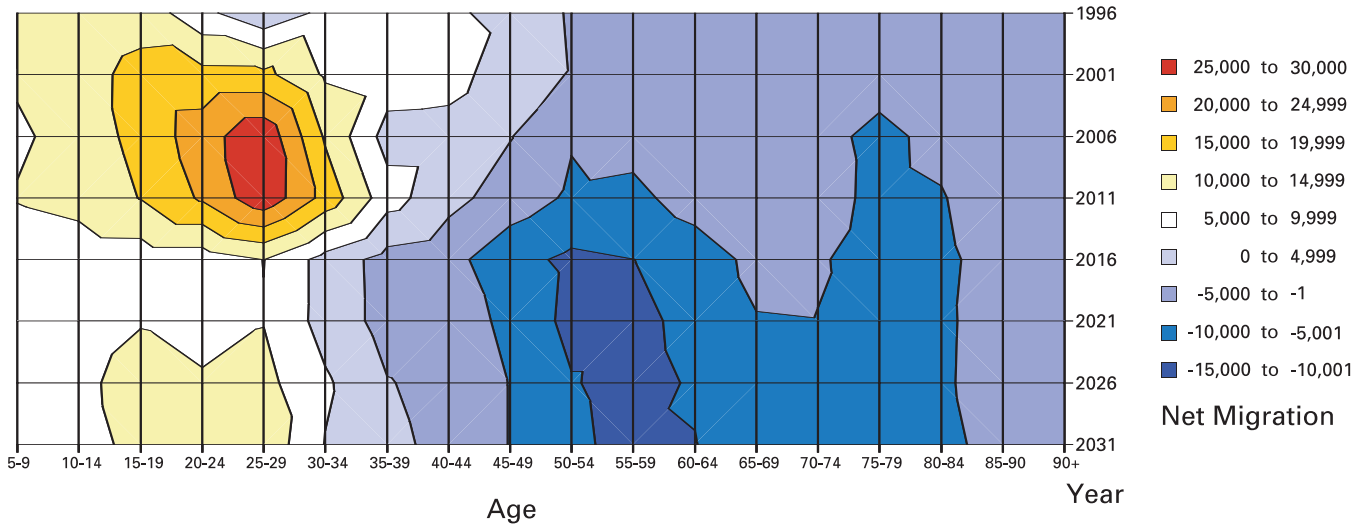
The pattern of net migration reflects the stages of the lifecycle of people and households. Strong economic growth early in the regional forecast involves more jobs and the need for workers. The comparatively high levels of net migration amongst those between 20 and 34 years of age

Figure 5: Net Migration by Age (3D)



Source: Toronto City Planning Division, Policy and Research

Figure 6: Net Migration by Age (2D)



Source: Toronto City Planning Division, Policy and Research

reflects the forecasted growth of the economy and the scenario in which Toronto competes successfully against North American and other world centres for employment. After 2011, this growth is forecasted to level off and the level of job-related in-migration declines somewhat. Meanwhile, the rates of out-migration are unaffected. When population growth slows, out-migration becomes more prominent. Households in search of ground-related housing move elsewhere. As the population ages, those moving out of the city to retire become more numerous. The large majority of older households that remain causes rising demand for rental accommodation.

Nevertheless, the City remains a major immigrant reception area. Toronto received 29.1% of Canada's international in-migrants between 1996 and 2001 and two-thirds of all immigrants to the Greater Toronto Area, continuing past trends. International migration is a major component of Toronto's population change. It is driven by the relative economic prosperity of the destination versus the origin, job opportunities, and desire for family reunification. National immigration policy plays a major role in this through the national immigration target which is adjusted from time to time. In 2005, the target was 255,000, and 260,000 people became new permanent residents that year. Consequently, the City can expect to continue to receive a large number of new permanent residents into the future, which will drive its continued growth.

Toronto is projected to grow by one-fifth between 1996 and 2031. Some of this growth has already materialized. Toronto grew strongly between 1996 and 2001, by 96,073 people and 39,765 households or 4.4%. According to CMHC, housing starts have averaged 13,900 per annum since 2001 versus 9,700 in the preceding five years, well above the 1984 – 2001 average of 7,850. Similarly, housing completions have averaged 13,100 per year between 2002 and 2005, far above the 7,000 average of 1984 – 2001. While economic cycles rise and fall, this pace of construction confirms substantial growth of population and households in Toronto in the near term, between 2001 and 2011.

CONCLUSION

The demand for rental accommodation is projected to remain strong and to grow by over 15% in the thirty years after 2001. This growth is the consequence of continual changes in population and household composition over time, and the choices people make about where to live and where to work. This leads to short- and long-term variations in the occupancy rates of different types of dwellings and the tenures of those occupancies, in the context of prevailing economic conditions and the operation of the regional housing market. These demographic changes necessitate the regular review of household occupancy rates and the determination as to whether these rates actually reflect housing propensities. This is necessary so as to anticipate the future needs of our City's residents for housing choice, location, amenities and services.

Toronto's population and economy are dynamic. The challenges for Toronto are to retain its young and growing households, to make the City more attractive to families with children, to maintain the range of affordable housing choices, to enhance its employment prospects and to provide supportive services that match the needs of the community as they evolve. In short, our challenge is to encourage Toronto's current and future residents to consider the diverse range of housing choices the City can provide by enhancing the quality of urban life and the opportunities in our neighbourhoods.

Table 1: Projecting Housing Demand by Structural Type of Dwelling and Tenure

Projected Households	Single Detached		Semi-Detached		Row House		Apt in a det. duplex		Apt in < 5 storeys		Apt in 5+ storeys		Other		Total		
	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Households
1996*	257,060	28,300	69,000	15,565	24,685	21,720	10,020	19,360	14,410	108,065	52,535	279,335	1,110	2,070	428,820	474,415	903,235
2001	275,505	29,608	73,643	16,119	26,452	22,991	10,698	19,815	15,346	111,699	55,831	292,630	1,199	2,129	458,674	494,992	953,666
2006	291,723	30,938	77,823	16,830	27,974	24,104	11,260	20,656	16,227	116,667	58,819	306,631	1,276	2,230	485,102	518,056	1,003,157
2011	307,701	32,346	82,121	17,634	29,479	25,173	11,802	21,670	17,098	122,333	61,857	321,961	1,361	2,347	511,418	543,464	1,054,883
2016	316,467	32,454	84,296	17,703	30,015	25,308	12,002	21,667	17,448	123,011	63,490	326,568	1,402	2,359	525,121	549,070	1,074,191
2021	324,352	32,427	86,042	17,699	30,349	25,276	12,152	21,589	17,702	123,345	65,163	330,569	1,435	2,361	537,196	553,266	1,090,461
2026	332,304	32,561	87,683	17,763	30,679	25,356	12,350	21,635	17,967	124,218	67,079	336,335	1,467	2,371	549,530	560,239	1,109,768
2031	338,985	32,737	89,006	17,853	30,938	25,475	12,536	21,740	18,227	125,288	68,779	342,401	1,487	2,391	559,958	567,886	1,127,844
Tenure %																	
1996	90.1%	9.9%	81.6%	18.4%	53.2%	46.8%	34.1%	65.9%	11.8%	88.2%	15.8%	84.2%	34.9%	65.1%	**47.5%**	**52.5%**	100.0%
2031	91.2%	8.8%	83.3%	16.7%	54.8%	45.2%	36.6%	63.4%	12.7%	87.3%	16.7%	83.3%	38.3%	61.7%	**49.6%**	**50.4%**	100.0%

Change vs. 1996	Single Detached		Semi-Detached		Row House		Apt in a det. duplex		Apt in < 5 storeys		Apt in 5+ storeys		Other		Total		
	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Change
2001	18,445	1,308	4,643	554	1,767	1,271	678	455	936	3,634	3,296	13,295	89	59	29,854	20,577	50,431
2006	34,663	2,638	8,823	1,265	3,289	2,384	1,240	1,296	1,817	8,602	6,284	27,296	166	160	56,282	43,641	99,922
2011	50,641	4,046	13,121	2,069	4,794	3,453	1,782	2,310	2,688	14,268	9,322	42,626	251	277	82,598	69,049	151,648
2016	59,407	4,154	15,296	2,138	5,330	3,588	1,982	2,307	3,038	14,946	10,955	47,233	292	289	96,301	74,655	170,956
2021	67,292	4,127	17,042	2,134	5,664	3,556	2,132	2,229	3,292	15,280	12,628	51,234	325	291	108,376	78,851	187,226
2026	75,244	4,261	18,683	2,198	5,994	3,636	2,330	2,275	3,557	16,153	14,544	57,000	357	301	120,710	85,824	206,533
2031	81,925	4,437	20,006	2,288	6,253	3,755	2,516	2,380	3,817	17,223	16,244	63,066	377	321	**131,138**	**93,471**	**224,609**
Tenure %																	
1996	93.4%	6.6%	89.3%	10.7%	58.2%	41.8%	59.8%	40.2%	20.5%	79.5%	19.9%	80.1%	60.0%	40.0%	**59.2%**	**40.8%**	100.0%
2031	94.9%	5.1%	89.7%	10.3%	62.5%	37.5%	51.4%	48.6%	18.1%	81.9%	20.5%	79.5%	54.0%	46.0%	**58.4%**	**41.6%**	100.0%

% Change vs. 1996	Single Detached		Semi-Detached		Row House		Apt in a det. duplex		Apt in < 5 storeys		Apt in 5+ storeys		Other		Total		
	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	% Change
2001	7.2%	4.6%	6.7%	3.6%	7.2%	5.9%	6.8%	2.4%	6.5%	3.4%	6.3%	4.8%	8.0%	2.9%	7.0%	4.3%	5.6%
2006	13.5%	9.3%	12.8%	8.1%	13.3%	11.0%	12.4%	6.7%	12.6%	8.0%	12.0%	9.8%	14.9%	7.7%	13.1%	9.2%	11.1%
2011	19.7%	14.3%	19.0%	13.3%	19.4%	15.9%	17.8%	11.9%	18.7%	13.2%	17.7%	15.3%	22.6%	13.4%	19.3%	14.6%	16.8%
2016	23.1%	14.7%	22.2%	13.7%	21.6%	16.5%	19.8%	11.9%	21.1%	13.8%	20.9%	16.9%	26.3%	13.9%	22.5%	15.7%	18.9%
2021	26.2%	14.6%	24.7%	13.7%	22.9%	16.4%	21.3%	11.5%	22.8%	14.1%	24.0%	18.3%	29.3%	14.1%	25.3%	16.6%	20.7%
2026	29.3%	15.1%	27.1%	14.1%	24.3%	16.7%	23.3%	11.7%	24.7%	14.9%	27.7%	20.4%	32.2%	14.6%	28.1%	18.1%	22.9%
2031	31.9%	15.7%	29.0%	14.7%	25.3%	17.3%	25.1%	12.3%	26.5%	15.9%	30.9%	22.6%	34.0%	15.5%	**30.6%**	**19.7%**	**24.9%**

Note: Figures for 1996 are from the 1996 Census, Statistics Canada. All other figures are projected.
Source: Toronto City Planning, Policy and Research.