

Demographic Analysis and Population and Housing Projection for Maple Ridge, 2001-2031

Prepared for:
District of Maple Ridge

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Prepared by:



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Executive Summary

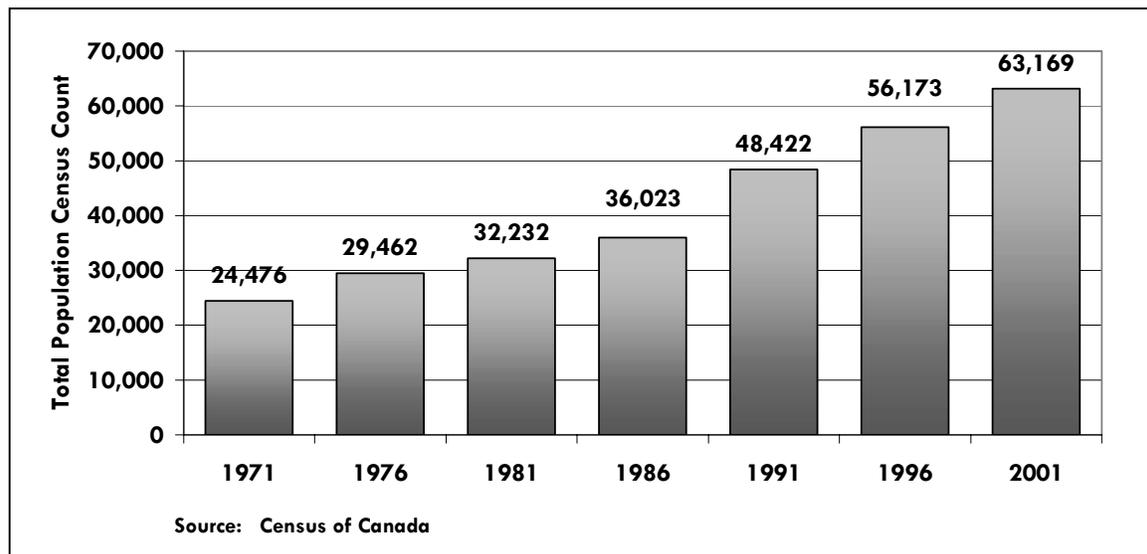
The District of Maple Ridge is in the initial stages of reviewing its Official Community Plan (OCP), last updated in 1996. A key component of the present review is to update the District's population and housing projections. This work will provide the District with important demographic and housing information that can be used to inform policy and decision making for land use planning, housing, transportation planning, and delivering municipal and other government services.

This report presents a profile of population, households, and housing in Maple Ridge, a population and housing projection to 2031, and a sensitivity analysis of the results of the projection.

Population Profile and Historical Growth

According to the population count from the Census of Canada, the population of Maple Ridge was 63,169 in 2001, up 30% from 48,422 in 1991 (Figure 1). Between 1971 and 2001, the compound annual population growth rate was 3.2%. In comparison, the GVRD had a compound annual population growth rate of 2.1% over the same period. Maple Ridge has outpaced the GVRD in population growth in each 5-year period from 1971 to 2001.

Figure 1: Total Census Population Count, Maple Ridge, 1971-2001



In 2001, the median age of the District of Maple Ridge was 36.7 years, slightly less than in the GVRD (37.3 years) and that of the Canadian median (37.6 years). The percentage of the population aged 65 years and older was 11% in Maple Ridge, which is slightly lower than in the GVRD (12%) and much lower than in BC (16%).

As with the GVRD and BC, there is a bulge in the population due to the Baby Boom generation, who were between 35 to 54 years of age in 2001. There is also a second smaller bulge corresponding to the Baby Boom Echo, which consists of the children of the Baby Boom generation, who were predominantly between 5 to 19 years of age in 2001. The District of Maple Ridge has a higher portion (30%) of its population 19 years of age and younger compared to the GVRD

(24%). This can be attributed to the general appeal of the District to families in their child-rearing years. The proportion of the population aged 20 to 34 years is significantly lower in Maple Ridge (18%) compared to the GVRD (22%). This may be explained by some people in this age group leaving the community due to a lack of post secondary educational opportunities in the vicinity as well as potentially fewer employment opportunities for young adults.

Maple Ridge has a much lower share of visible minorities (8%) than either the GVRD (37%) or BC (22%), reflecting the large share of people of European origin in the community.

Housing Profile

According to the census, there were 22,590 occupied private dwellings in Maple Ridge in 2001. Approximately 65% of these dwellings were single-detached homes, which is a much higher share than in the GVRD (43%) or in BC (55%), reflecting the family-oriented nature of Maple Ridge. However, there has been an increasing trend towards other housing options over the last 25 years, as the share of single-detached homes has decreased from 79% in 1976 to 65% in 2001.

Based on household maintainer rates from the census for 2001, single-detached housing is the preferred dwelling type for maintainers in all age groups. This remains true even though the propensity for people to live in apartments significantly increases for those maintainers over 55 years of age.

Maple Ridge is primarily a community of homeowners with 78% of household's owning their home, compared to 61% for the GVRD and 66% for BC in 2001.

Housing start activity was particularly high in the District between 1985 and 1994, when an average of approximately 790 units were added each year. Between 1995 and 2002, the number of housing starts has slowed to an average of close to 560 units per year.

Maple Ridge has a much higher share of one family households (at 75%), compared to the GVRD (64%) and BC (66%). This difference reflects the family-oriented nature of the municipality. The average household size in Maple Ridge has steadily declined from 3.3 in 1971 to 2.76 in 2001. This decline, which parallels trends in most other Canadian communities, is related to changing family structures, delayed marriages, and other socio-economic factors. As a result of declining household sizes, housing in the district has been growing at a faster rate than population over the last three decades.

Housing affordability is an issue for both renters and homeowners. In 2001, almost 24% of homeowners spent 30% or more of their gross income on housing. The housing affordability issue is even more pronounced for renters in Maple Ridge where 34% of this group spent 30% or more of their household income on housing in 2001. Homelessness is also an issue for some people in Maple Ridge. A one-night survey conducted by the GVRD in January 2002 counted 62 sheltered and street homeless people in the municipality, one of the highest rates among municipalities in the GVRD.

Population and Housing Drivers and Constraints

Different forces exist that can either “drive” or “constrain” the population and housing growth in Maple Ridge. Drivers that may positively influence population and housing growth over the next three decades include:

- natural increase of population in Maple Ridge;
- net migration to Maple Ridge;
- changing age composition of population in Maple Ridge;
- availability of amenities in Maple Ridge and differential housing prices;
- declining average household size;
- the GVRD population growth rate;
- transportation infrastructure investments, including the Fraser River Crossing;
- 2010 Vancouver-Whistler Winter Olympics; and,
- macroeconomic forces, such as low interest and mortgage rates.

Constraints that may limit or slow population and housing growth in Maple Ridge over the next three decades include:

- availability of residential land supply;
- transportation bottlenecks;
- higher energy prices;
- increased housing costs; and,
- macroeconomic forces.

Of these constraints, the municipality has a direct influence over housing capacities. Based on the land use designations in the current Official Community Plan, there is a total capacity of approximately 35,100 dwelling units in the district, excluding the capacity of the urban reserve and secondary suites. The remaining total capacity is approximately 12,400 units as of 2001. The capacity for single-detached homes is estimated to be about 20,400 units, which means that there is only capacity to develop an additional 5,800 units.

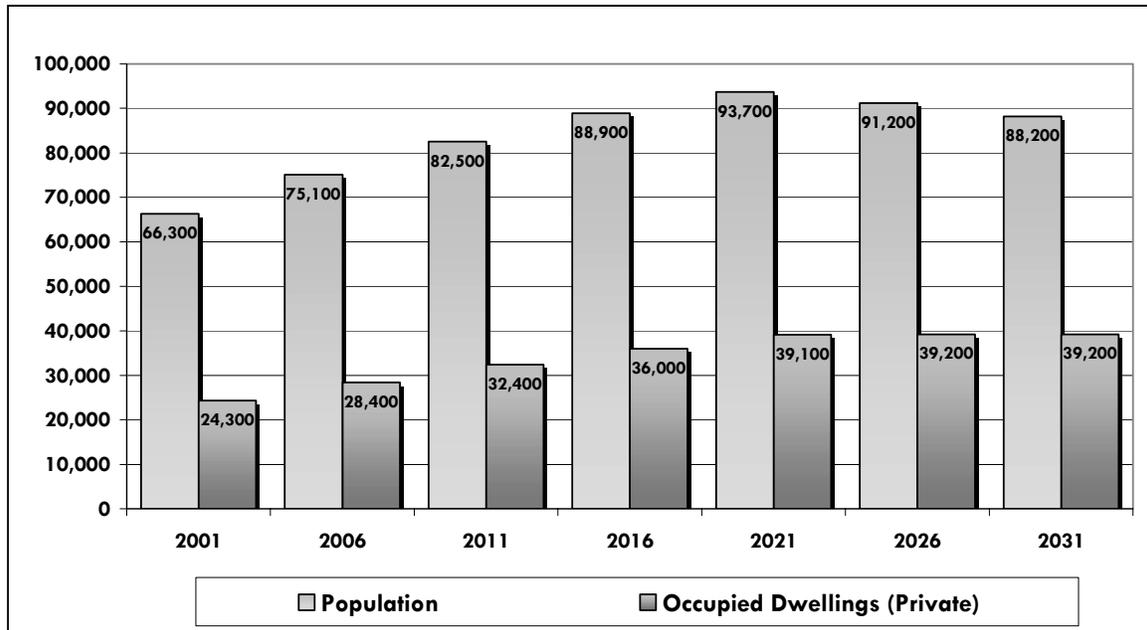
Population and Housing Projection

A base case population and housing projection was developed using conservative assumptions and the existing Official Community Plan land use designations. The projection is based on data from reputable sources, including Statistics Canada and BC Stats.

The base case population projection is derived from the BC Stats PEOPLE 28 projection for the Maple Ridge Local Health Area. The District of Maple Ridge was factored out from the rest of the local health area to obtain a base case population projection for Maple Ridge. Using this approach, the population for the District of Maple Ridge is projected to be 108,900 in 2031, representing a compound annual growth rate of 1.67% from 2001. However, the current housing capacity in Maple Ridge, including secondary suites, is insufficient to accommodate this projected population. Applying current capacity constraints results in the district’s housing capacity being reached just after 2021 and the capacity for single detached homes being reached between 2011 and 2016. Under these conditions, the population would reach 93,700 in 2021. If no new capacity is made available, the population will decline to an estimated 88,200 in 2031 (Figure 2) due to an anticipated decline in average household size. The average household size for

private households is projected to decline from 2.76 persons per household in 2001 to 2.23 in 2031. It is possible that the District would change its housing capacity to levels different than in the current OCP due to changes in policy. In light of this possibility, two scenarios with different housing capacities are explored in a sensitivity analysis.

Figure 2: Base Case Population Projection and Occupied Dwellings, Maple Ridge, 2001-2031



Under the base case conditions, the total number of private dwellings, including secondary suites, increases to a maximum of 39,200 units. Due to the declining average household size, the number of dwelling units will increase at a faster rate than the population. Under this projection, the annual compound growth rate between 2001 and 2021 will be 1.75% for the population and 2.5% for housing. Until capacity is reached, the population is projected to increase by an average of approximately 1,400 people per year, and the number of dwellings by an average of 740 private dwelling units per year.

In the base case projection, housing stock composition is expected to change towards higher density units. The following dwelling stock changes are projected between 2001 and 2031:

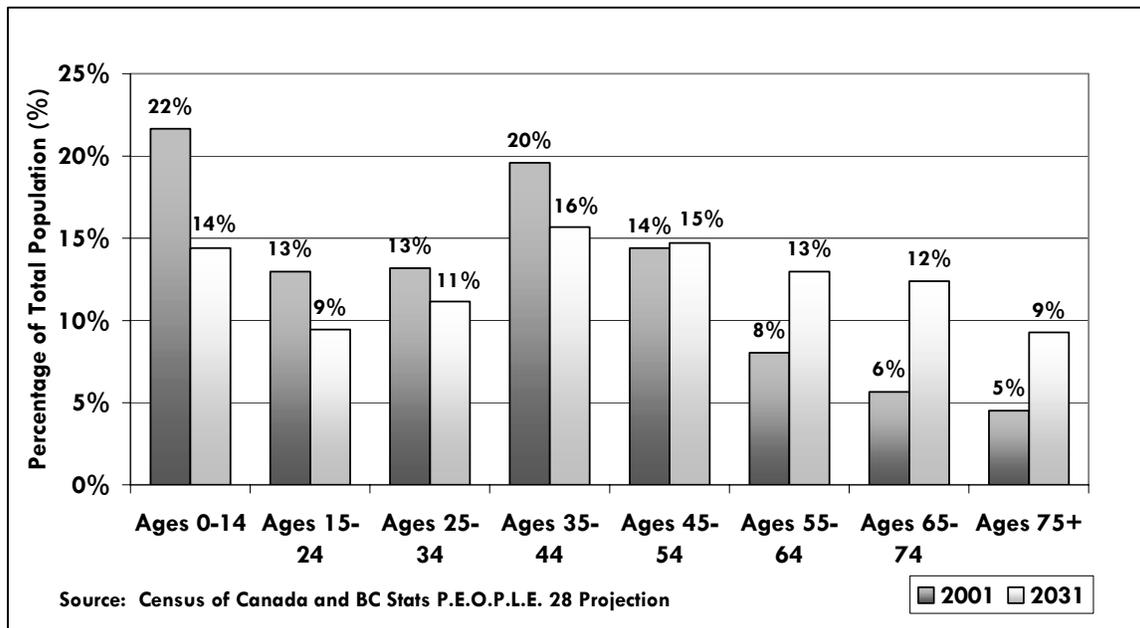
- single-detached units will decrease from 65% in 2001 to 52% of the dwelling stock by 2021;
- ground-oriented units, which include secondary suites, will increase from 19% in 2001 to 30% of the dwelling stock in 2031; and,
- apartments will increase from 16% in 2001 to 18% of the dwelling stock in 2031.

The base case projection indicates that the median age of the population will increase markedly, from 36.7 years in 2001 to 44.6 years in 2031. The BC Stats projection for the Maple Ridge Local Health Area indicates that the proportion of the population 65 years of age and older is expected to increase from about 11% in 2001 to 21% by 2031 (Figure 3). By 2031, all of the Baby Boomers will be 65 years of age and older. Including those 55 years of age and older, this proportion is expected to increase from 18% in 2001 to over 34% by 2031.

The majority of this older population will continue to live independently in private residences; however, there will be increased demand for greater housing choices overall including:

- home care services
- assisted living
- congregate residences
- care homes, and
- retirement residences.

Figure 3: Base Case Percentage of Population by Selected Age Groupings, Maple Ridge Local Health Area, 2001 and 2031



Sensitivity Analysis

A sensitivity analysis was conducted in conjunction with the base case population and housing projection to better understand how the results vary due to changes in key assumptions about the housing capacity, the population growth rate, the average household size, and the percentage of single-detached homes that have secondary suites.

The key variable that the District can control is the amount of residential land available for certain types and densities of housing. Three main policy options explored in the sensitivity analysis were 1) to keep housing capacities in line with current OCP designations, 2) to allow development in the Urban Reserve which would make available up to an additional 7,550 units of capacity, and 3) to encourage redevelopment in existing urban areas which could increase the capacity by approximately 6,100 units under assumptions made by the consultant team. In all cases, it was assumed that the Agricultural Land Reserve remains intact.

The results of the sensitivity analysis indicate that under the base case population growth rate of 1.67%, the population in 2031 will fall between 88,200 and 108,900 depending on the housing capacity assumptions (see Table 1). A higher growth rate of 2.5% will result in the population in 2031 falling between 88,200 and 109,500 depending on the capacity assumptions.

The housing capacity is reached or almost reached by 2031 in all of the variations examined in the sensitivity analysis. At a 2.5% population growth rate, housing capacity would be reached by 2021 or 2026. The housing capacity for single-detached homes is projected to be reached between 2011 and 2016 in the base case projection. A decision to make land available in the urban reserve would extend the supply of single detached houses beyond 2021. However, a declining average household size suggests that housing options other than single detached homes or at least smaller houses will be in demand particularly later in the projection period. A slower population growth rate would also extend the time single detached houses capacity is reached.

Table 1: Projected Population Based on Variations in Growth Rate & Housing Capacity Assumptions

Assumed Housing Capacity	Compound Annual Population Growth Rate	2021	2031	Period Single-detached Housing Capacity Reached	Period Total Housing Capacity Reached
Using capacities based on land use designations in current OCP	Base case (1.67%)	93,700	88,200	2011-2016	2021-2026
	2.5%	94,200	88,200	2011-2016	2016-2021
Including Urban Reserve capacities	Base case (1.67%)	93,700	108,900	2026-2031	After 2031
	2.5%	108,600	109,500	2021-2026	2021-2026
Including potential capacities from redevelopment of existing urban area	Base case (1.67%)	95,600	99,500	2006-2011	2026-2031
	2.5%	106,100	99,500	2006-2011	2016-2021

The time it takes to reach housing capacity is highly sensitive to assumptions regarding average household size as well as the share of single-detached houses that have secondary suites. With all other factors being equal, lower average household sizes would result in the housing capacity being reached sooner than in cases with higher household sizes. Similarly, a higher share of secondary suites would extend the length of time it takes for housing capacity to be reached.

Under the base case population growth rate, the share of single-detached houses declines from 65% in 2001 to a level between 42% for a redevelopment option and 58% for the Urban Reserve option in 2031.

Under all scenarios, there will be a significant increased demand in the coming decades for apartments and ground-oriented units such as row houses. Demand for apartment units will in fact exceed the available capacity based on the existing land use designations or if the Urban Reserve were made available. As the redevelopment option increases the supply of ground-oriented and apartment capacity, it may be more suitable than the other scenarios from the perspective of meeting future housing needs. The District will be conducting a Housing and Residential Lands Policy Review in 2004, which will explore these issues and policy options related to housing capacity in much greater detail.

Population and housing growth in Maple Ridge will ultimately be affected by internal decisions made by the municipality, particularly regarding the choices that the district makes about the availability of land for residential development for certain types of housing. Therefore, we recommend that a revised base case population and housing projection be prepared if a major change in policy regarding residential capacities is made as part of the OCP review process. This revised base case projection should be included in the District's updated OCP.

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1. Introduction

Background

The District of Maple Ridge is in the process of reviewing its Official Community Plan (OCP), which was last reviewed formally in 1996. This report, a component of the present review, is an update of the District's population and housing projections. This work will provide the District with important demographic and housing information that can be used for land use planning, transportation planning, housing planning, and delivering municipal and other government services. The population and housing projections will provide the planning context for the rest of the OCP review process.

A key reason to update the population and housing projections is that the data in the 1996 OCP are out-of-date. The historical population and housing data in the 1996 OCP are mainly based on the 1991 Census of Canada data, with some data also provided for interim years up to 1995. This data does not accurately reflect the significant growth and change witnessed in Maple Ridge since 1991.

Scope

The scope for this report is limited to district-wide demographic analyses and population and household projections. It does not address the spatial allocation of population and housing. The geographic scope of the project is the District of Maple Ridge. The District of Pitt Meadows and the local Indian reserves are outside the geographic scope of this analysis.

The population and housing projections are provided in 5-year increments from 2001 to 2031. The baseline year is 2001, which coincides with the last Census year when detailed population and housing data was obtained. The year 2031 is the end-year for the projection.

Regional Context

The District of Maple Ridge is situated within the Greater Vancouver Regional District (GVRD). Developments and policies affecting the whole region also affect Maple Ridge. The GVRD's regional growth strategy, called the Livable Region Strategic Plan, contains several policies which affect the type and rate of population and housing growth in Maple Ridge, namely:

- 1) Focusing growth in Regional Town Centres
- 2) Focusing growth within the Growth Concentration Area, and
- 3) Protecting the Green Zone.

First, the Livable Region Strategic Plan identifies Maple Ridge as being the location of one of eight designated Regional Town Centres in the region. The Regional Town Centres are intended to offer a mix of jobs, shops, services, and housing in close proximity and be well served by public transit. A regional town centre provides a growth stimulus to the municipality and can foster more intense residential development.

Second, the Livable Region Strategic Plan identifies the District of Maple Ridge as lying outside the designated "Growth Concentration Area", which comprises the Burrard Peninsula, the Northeast Sector communities, and North Surrey / North Delta. An objective of the regional growth strategy is to have 70% of the GVRD's population living within the Growth Concentration

Area by 2021 (compared to 65% in 1991). Areas inside the Growth Concentration Area are intended to have more rapid growth supported by infrastructure such as rapid transit. Population growth in Maple Ridge may be slower than would otherwise occur without the regional growth strategy in place, because the municipality is located outside the Growth Concentration Area.

Third, the Livable Region Strategic Plan has a policy initiative to protect the Green Zone. The Green Zone includes major parks, natural features, forest lands, and lands in the Agricultural Land Reserve. Maple Ridge has significant areas that are within the regional Green Zone. Lands designated as Green Zone determine, in part, the amount of land that is unavailable for residential development.

As part of developing a regional growth strategy, each participating municipality is required to include a Regional Context Statement in its OCP as required under the BC Local Government Act. The Regional Context Statement indicates how its OCP would become consistent over time with the regional growth strategy. The District of Maple Ridge has included a Regional Context Statement in its 1996 OCP that describes this regional context and linkages to the regional growth strategy.

Data Sources

The current and historical data used in this report are primarily based on data from Statistics Canada from the Census of Canada and is supplemented with housing data from the Canada Mortgage and Housing Corporation.

The population projections are primarily based on data from BC Stats, which conducts population projections for the province, regional districts, and local health areas in BC. Additional data from Statistics Canada, BC Stats, and the Greater Vancouver Regional District are used to develop the housing projections.

Housing capacity estimates, which are used in conducting the housing projections, are based on the District of Maple Ridge's OCP land use designations.

Process

This project was undertaken by The Sheltair Group in conjunction with Kelly & Associates between November 2003 and March 2004. The District of Maple Ridge provided data, resources, and input for the project, and reviewed and commented on the draft report.

A Housing Trends and Preferences Workshop was held on December 9, 2003 to obtain input from those knowledgeable about housing market trends and preferences in order to:

- better understand the specific short- and medium-term housing market trends in Maple Ridge as it pertains to housing demand;
- identify potential issues and concerns regarding future housing supply and demand in Maple Ridge; and,
- to obtain qualitative information to supplement or fill in gaps in data sources.

The agenda, list of participants, and discussion questions from the workshop are included in Appendix B.

Structure of the Report

The report is organized into three sections following this background section:

Section 2 provides a demographic, household, and housing profile of the District of Maple Ridge.

Section 3 identifies various forces that can speed or slow population and housing growth in Maple Ridge.

Section 4 documents the base case population and housing projection, describes the methodology used and limitations of the projection, and includes a sensitivity analysis of the results to changes in key assumptions.

The report concludes with suggestions for further research.

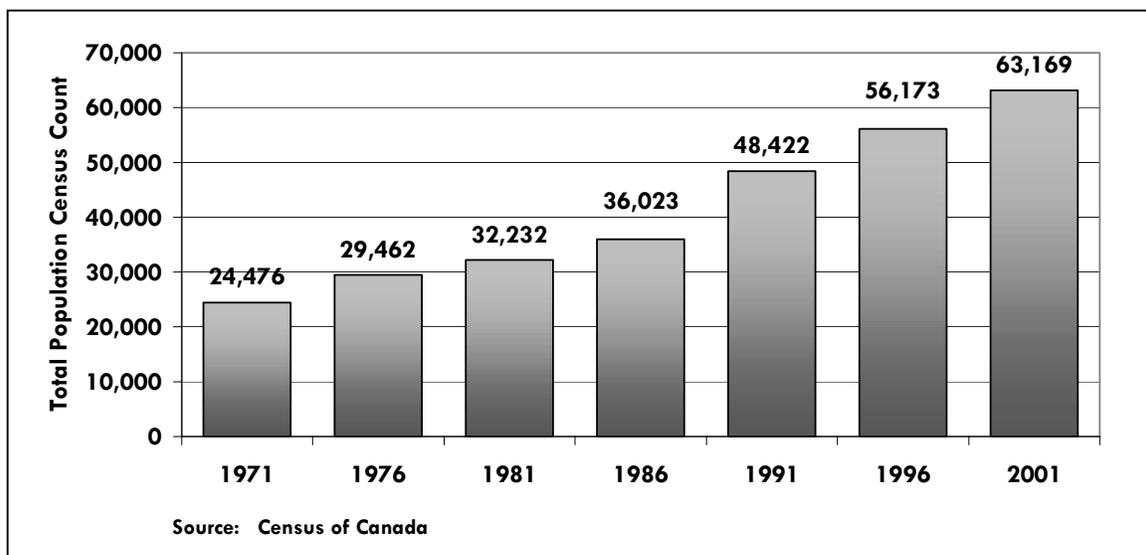
2. Population and Housing Profile and Trends

Population Profile

A Rapidly Growing Population

According to the census population count, 63,169 people were living in Maple Ridge in 2001, which represented a population increase of approximately 30% over the last decade¹. In comparison, the size of the population in the GVRD increased 24% over the same time period. The population in Maple Ridge has grown rapidly over the past three decades, with the population increasing more than 150% in the 30-year period from 1971 to 2001 (Figure 2-1).

Figure 2-1: Total Census Population Count, Maple Ridge, 1971-2001



From 1991 to 2001, Maple Ridge had the eighth fastest population growth rate in the GVRD (Figure 2-2). Of the 21 municipalities that comprise the GVRD, all of the municipalities with the fastest growth rates are located east of the Pitt River, south of the Fraser River, or in the Northeast Sector (i.e. Tri-Cities and Anmore and Belcarra).

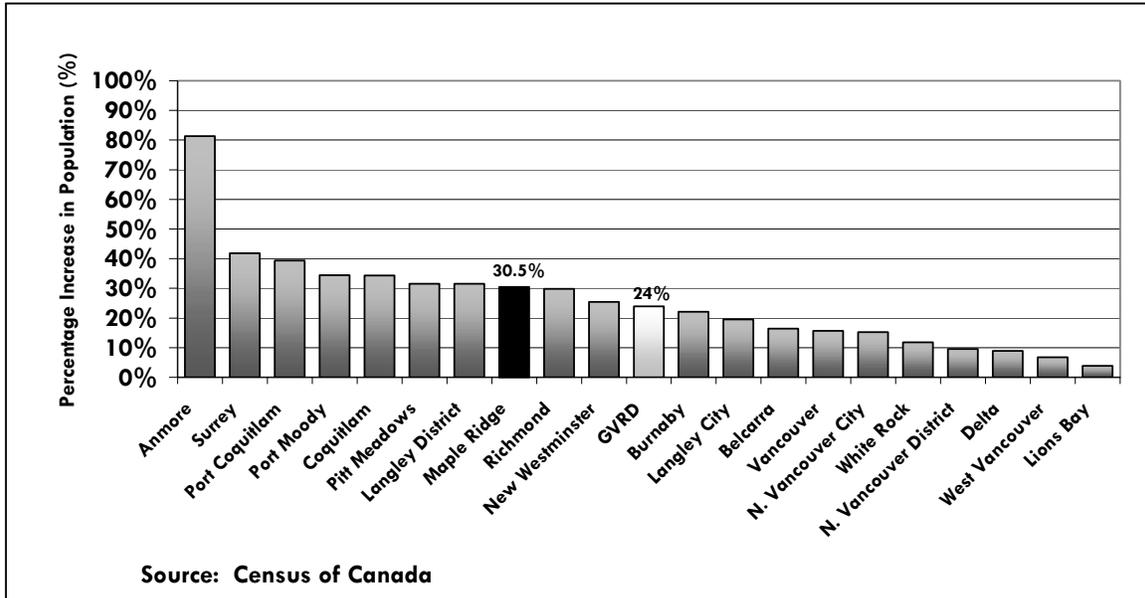
Between 1971 and 2001, Maple Ridge experienced a strong compound annual population growth rate of 3.2%. In comparison, the GVRD had a compound annual population growth rate of 2.1% over the same period. In each 5-year period from 1971 to 2001, Maple Ridge has had a faster population growth rate than the GVRD.

In 1971, Maple Ridge comprised 2.2% of the GVRD's total population. In 2001, this share had increased to 3.2%. Between 1991 and 2001, 3.8% of the GVRD's population growth occurred in

¹ BC Stats also prepares annual municipal population estimates. BC Stats estimated the population in Maple Ridge to be 66,269 in 2001. The difference is primarily due to the census undercount of population, which in 2001 was estimated at 4.0% in B.C. For the purpose of the population profile, this section of the report uses census data. For the population projection, the BC Stats baseline population for 2001 is used.

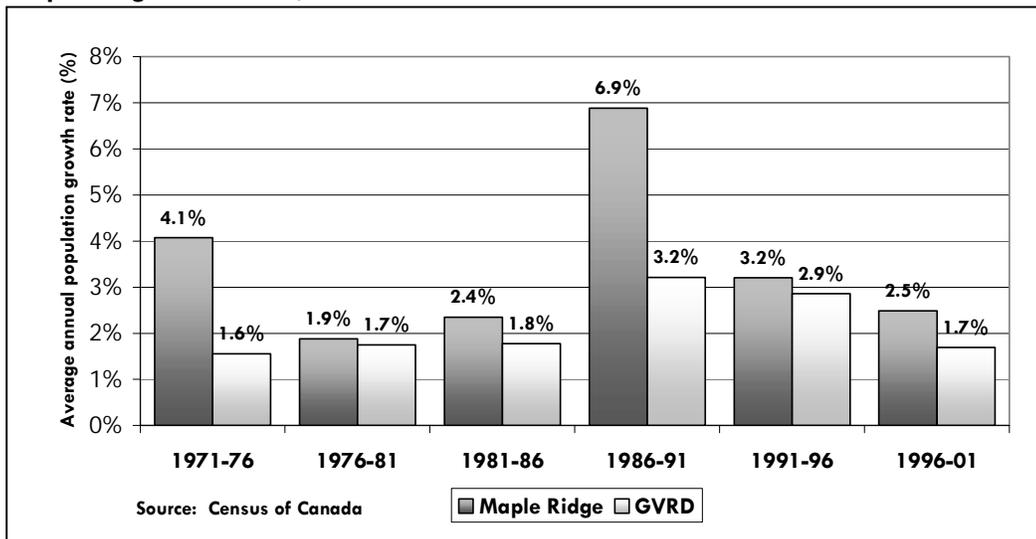
Maple Ridge. In comparison, a 4.1% share of the GVRD's population growth occurred in Maple Ridge between 1971 and 1981, and a 4.8% share occurred in Maple Ridge between 1981 and 1991.

Figure 2-2: Increase of Population of GVRD Municipalities, 1991-2001



Maple Ridge's population growth rate has varied considerably over the last three decades (Figure 2-3). Maple Ridge's fastest growth spurt occurred between 1986 and 1991 when it experienced an annual compound population growth rate of 6.1% - more than double the regional average. Maple Ridge's growth rate has declined to 3.0% between 1991 and 1996 and to 2.4% between 1996 and 2001. The decline in the population growth rate from 1996 to 2001 is reflective of the broader decline in population growth rates in BC and in the GVRD.

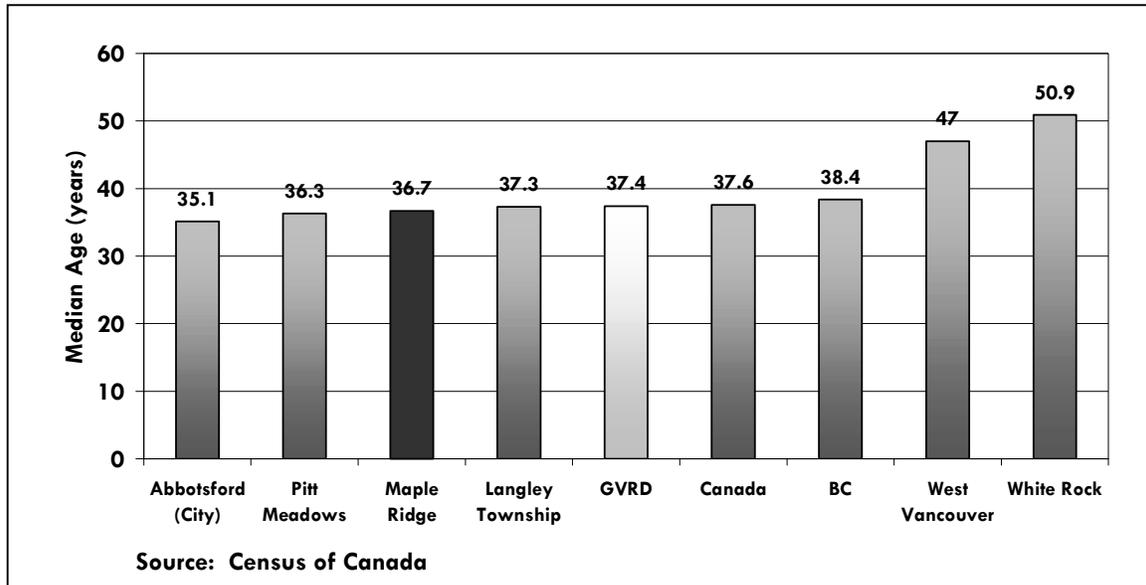
Figure 2-3: Average Annual Population Growth Rate Over 5-year Census Periods, Maple Ridge and GVRD, 1971-2001



An Aging Population

In 2001, the median age of the District of Maple Ridge was 36.7 years, meaning that half of the population was younger than this age and half was older. The median age of the population provides a useful indicator of how a population ages over time and for comparison with other jurisdictions. The median age of Maple Ridge is slightly less than that of the GVRD at 37.3 years of age, as well as the Canadian median of 37.6 years of age. The two municipalities in the GVRD with the oldest median age are White Rock at 50.9 years of age and West Vancouver at 47 years of age (Figure 2-4).

Figure 2-4: Median Age of Population, Maple Ridge and Selected Jurisdictions, 2001



The median age of the District of Maple Ridge has increased considerably over the last 25 years. In 1976, the median age of the District of Maple Ridge was 28.6, or over 8 years less than its level in 2001.

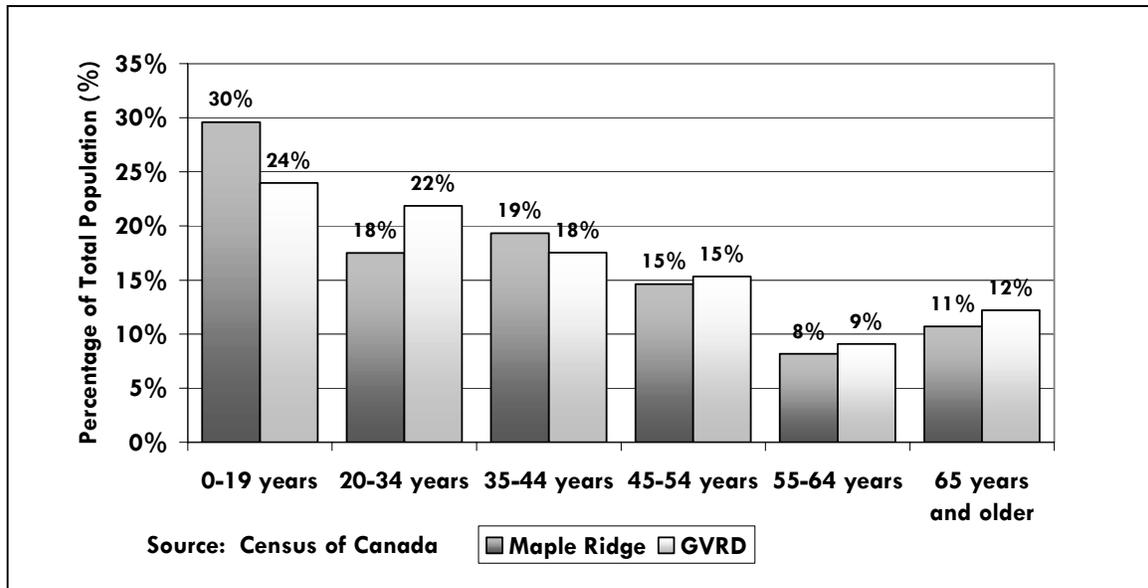
The breakdown of the population by age cohorts, or age groupings, is a useful way to understand the age structure distribution of the population. Figure 2-5 shows the percentage of the population by selected age cohorts for Maple Ridge and the GVRD. The District of Maple Ridge has a high portion of its population aged 0 to 19 years (30%) compared to the GVRD (24%). This difference is likely attributed to the general appeal of the District to families in their child-rearing years.

The proportion of the population aged 20 to 34 years is significantly lower in Maple Ridge (18%) compared to the GVRD (22%). This may be explained by the lack of post secondary educational opportunities in the District as well as potentially fewer employment opportunities for young adults. In addition, other locations with more urbanized amenities may be more desirable than Maple Ridge for people in this age category.

The proportion of the population aged 35 to 44 years is higher in Maple Ridge (19%) than in the GVRD (18%). The proportion of the population aged 45 to 64 years is similar between Maple Ridge (15%) and the GVRD (15%). Finally, the proportion aged 65 years and older was 11% in

Maple Ridge compared to 12% for the GVRD. Both these statistics are slightly lower than the overall proportion of the Canadian population that is 65 years of age and older (13%).

Figure 2-5: Percentage of Population by Selected Age Groupings, Maple Ridge and GVRD, 2001



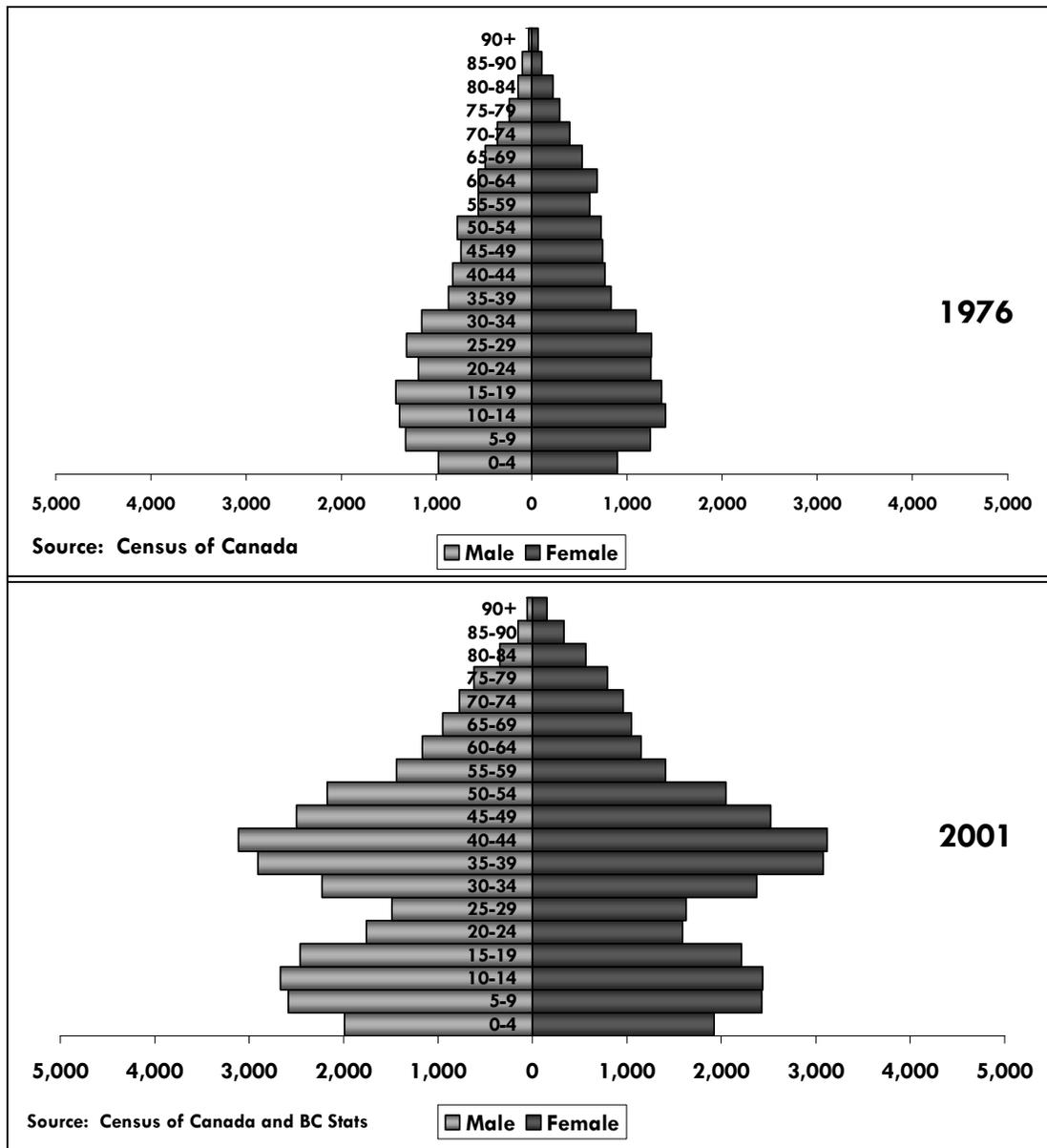
Another way to show the changing size, age, and sex distribution of the population is through population pyramids. Figure 2-6 includes two population pyramids that show how the population in Maple Ridge has changed over the last 25-year period. The increased area of the pyramid indicates how the total population has grown over time from 1976 to 2001. For each 5-year age cohort, the size of the cohort is larger in 2001 than it was in 1976.

The bulge at the bottom of the population pyramid for 1976 represents the Baby Boom generation, which was 10 to 29 years of age at that time. The population pyramid for 2001 shows how this generation has aged. In 2001, the Baby Boom generation was 35 to 54 years of age. The second smaller bulge below the Baby Boom represents the Baby Boom echo, consisting of the children of the Baby Boom generation. In 2001, the Baby Boom echo were predominantly between the ages of 5 and 19.

As with most population distributions in Canada, the majority of people over the age of 65 are females because of their higher life expectancy compared to males.

Between 1976 and 2001, the proportion of the population aged 65 years or older has remained relatively constant (between 10% and 11%). However, this is anticipated to increase significantly in the coming decades as the Baby Boom generation ages into the 65 and older age category.

Figure 2-6: Population Pyramids for Maple Ridge, 1976 and 2001



Population Predominantly of European Origin but Becoming More Diverse

The population of Maple Ridge predominantly consists of people of European origin complemented with people of a diversity of other ethnic origins. Approximately 83% of the population was Canadian-born compared to 73% for the GVRD. Of the foreign-born residents, about three-quarters had immigrated before 1991.

The top eight ethnic origins in 2001, in descending order according to size were:

- English
- Canadian

- Scottish
- Irish
- German
- French
- Dutch, and
- Ukrainian.

Figure 2-7 compares and contrasts the proportion of the population according to various ethnic origin groups in Maple Ridge with those in the GVRD. The graph shows that the top eight ethnic origins listed above are much more prevalent in Maple Ridge than in the GVRD. It also shows that the proportion of the population that are Chinese, East Indian and Filipino is much lower in Maple Ridge than in the GVRD. For example, 17.7% of the GVRD's population is of Chinese origin, while only 2.2% of Maple Ridge's population is Chinese. Similarly, 7.2% of the GVRD's population is East Indian whereas only 1.9% of Maple Ridge's population is East Indian.

Figure 2-7: Percentage of Population by Ethnic Origin (multiple responses), 2001

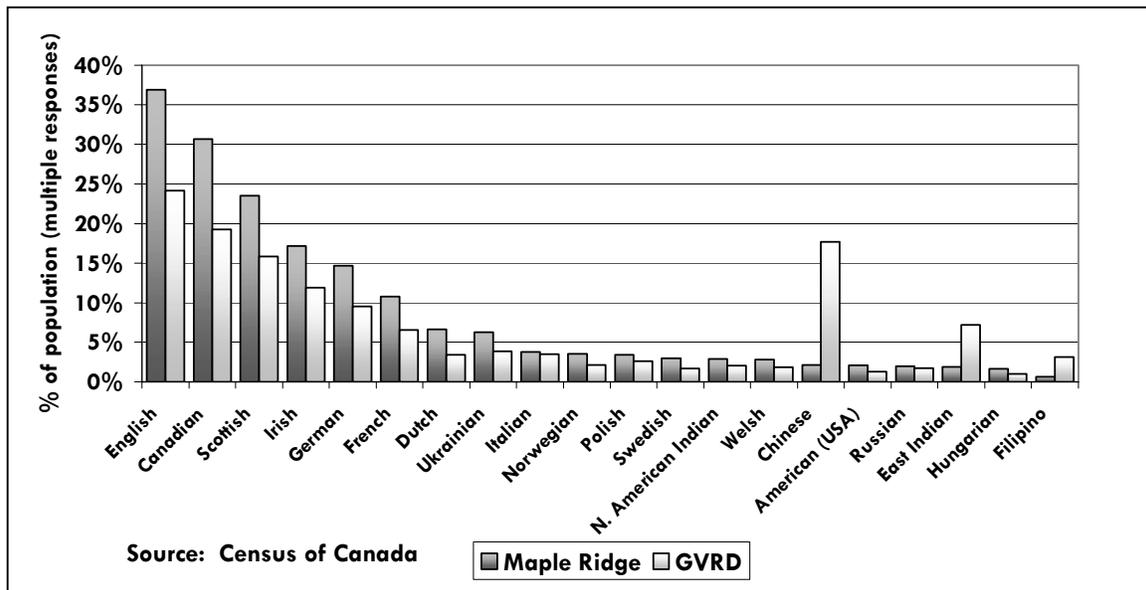
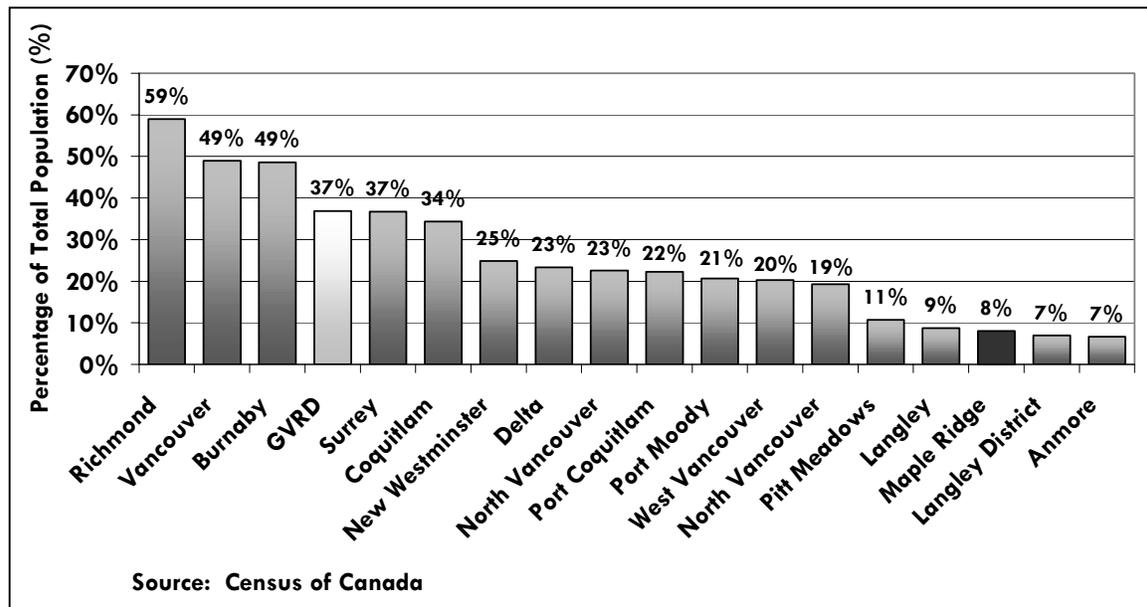


Figure 2-8 shows the proportion of visible minorities in the District of Maple Ridge in relation to the GVRD and other municipalities in the region. In the GVRD, approximately 37% of the population was a visible minority in 2001. In comparison, only 8.1% of the population was a visible minority in the District of Maple Ridge - the third lowest amongst the municipalities in the GVRD. This low proportion reflects the high portion of people of European origin living in the District, which are primarily Caucasian. Aboriginals comprise 2.5% of the population in Maple Ridge (excluding the population from the Katzie Indian Reserve).

Figure 2-8: Total Visible Minorities by Selected GVRD Municipality, 2001

Recent Migrants Originate Primarily from Elsewhere in BC

Between 1996 and 2001, approximately 47% of the population of Maple Ridge moved. These moves may be motivated by changing housing needs, such as the desire to move to a larger or smaller home, to change housing tenure, to meet changing needs at different life stages, and to respond to changing economic and employment situations. Of the population that moved, just under half moved to a different residence within Maple Ridge. Of the people who moved to Maple Ridge from outside the municipality, just over 80% came from elsewhere in B.C., 10% came from another province or territory, and just under 10% came from outside Canada. In contrast, the source of new migrants to the GVRD between 1996 and 2001 was 50% from elsewhere in BC, 15% from elsewhere in Canada, and 37% from international places of origin.

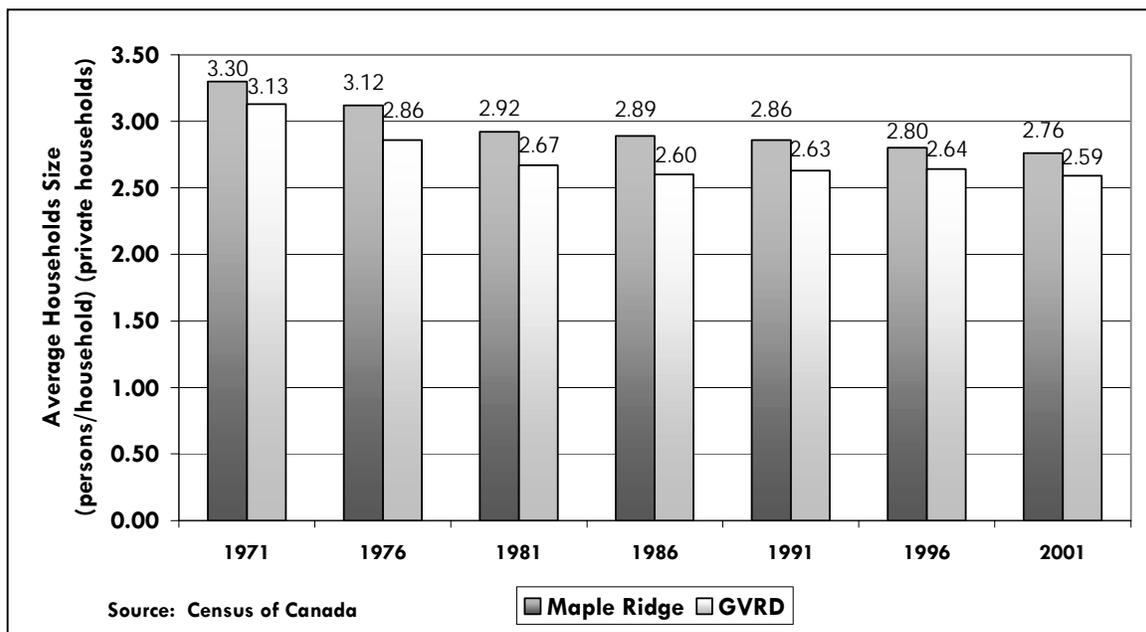
The proportion of recent immigrants currently residing in Maple Ridge is lower than in the GVRD, but does show a trend toward increasing ethnic diversity. Just under 1,100 recent immigrants located to Maple Ridge between 1996 and 2001, representing less than 2% of the population in 2001. In contrast, the GVRD attracted a much higher share of recent immigrants moving to Canada between 1996 and 2001 at about 9% of the total population. The top five countries of birth of immigrants between 1996 and 2001 that moved to Maple Ridge were from South Korea, Taiwan, South Africa, the United Kingdom and Iran. This trend represents a move away from the large presence of people in Maple Ridge originating from European origin. During the same time period, the top five countries of birth of recent immigrants to Greater Vancouver were China, Taiwan, India, Hong Kong Special Administrative Region, and the Philippines.

Household Profile

Average Household Size Continues to Decline

The average household size of private dwellings in the District of Maple Ridge has steadily declined from 3.3 persons per household in 1971 to 2.76 in 2001 (Figure 2-9). This trend parallels the declining average household sizes experienced in the GVRD, BC, and Canada over the last three decades. The declining average household size reflects changing family structures, delayed marriages, declining birth rate and other socio-economic factors.

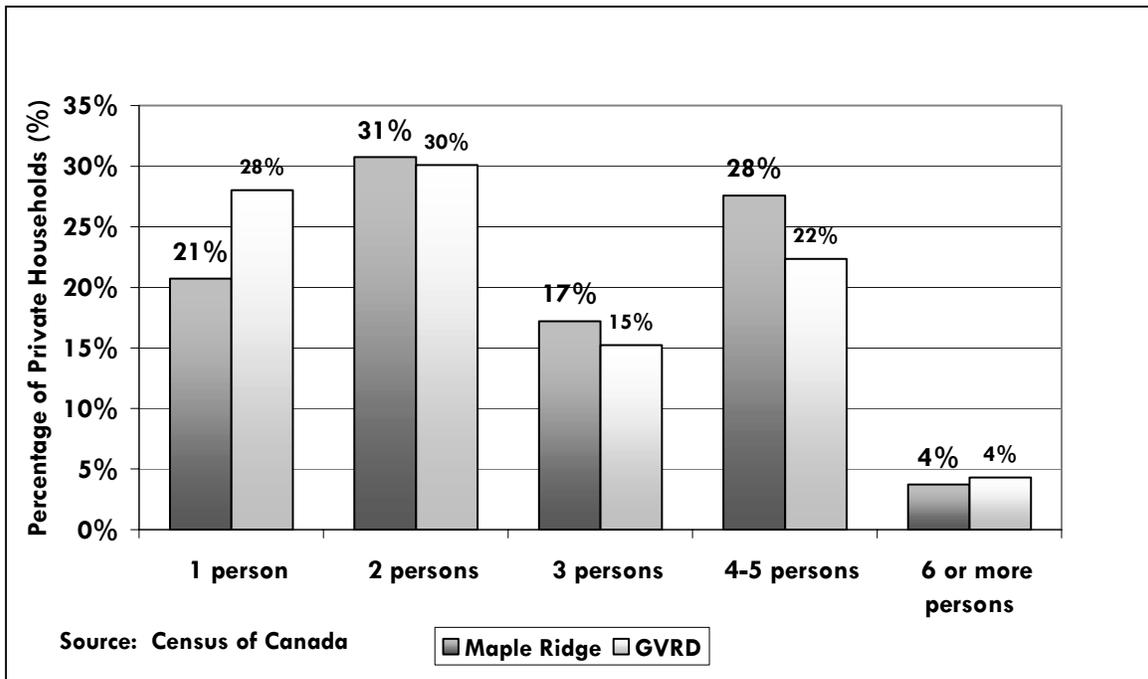
Figure 2-9: Average Household Size, Maple Ridge and GVRD, 1971-2001



Maple Ridge has a much higher average household size than the GVRD at 2.76 compared to 2.59 for the GVRD. This reflects the fact that Maple Ridge is a family-oriented community with larger family sizes and a higher portion of single detached homes compared to the GVRD. Single detached homes have the highest average number of persons per household and the proportion of single detached homes relative to other dwelling types can affect the average household size number.

Maple Ridge has a much lower share of single person households compared to the GVRD. In 2001, approximately 21% of households in Maple Ridge had only one member compared to 28% in the GVRD (Figure 2-10). Maple Ridge and the GVRD had a similar share of two-person households in 2001 (31% and 30%, respectively). Approximately 49% of households in Maple Ridge had three or more members compared to 42% for the GVRD. Again, the higher proportion of households having three or more members in Maple Ridge is consistent with the family and children-oriented nature of the community.

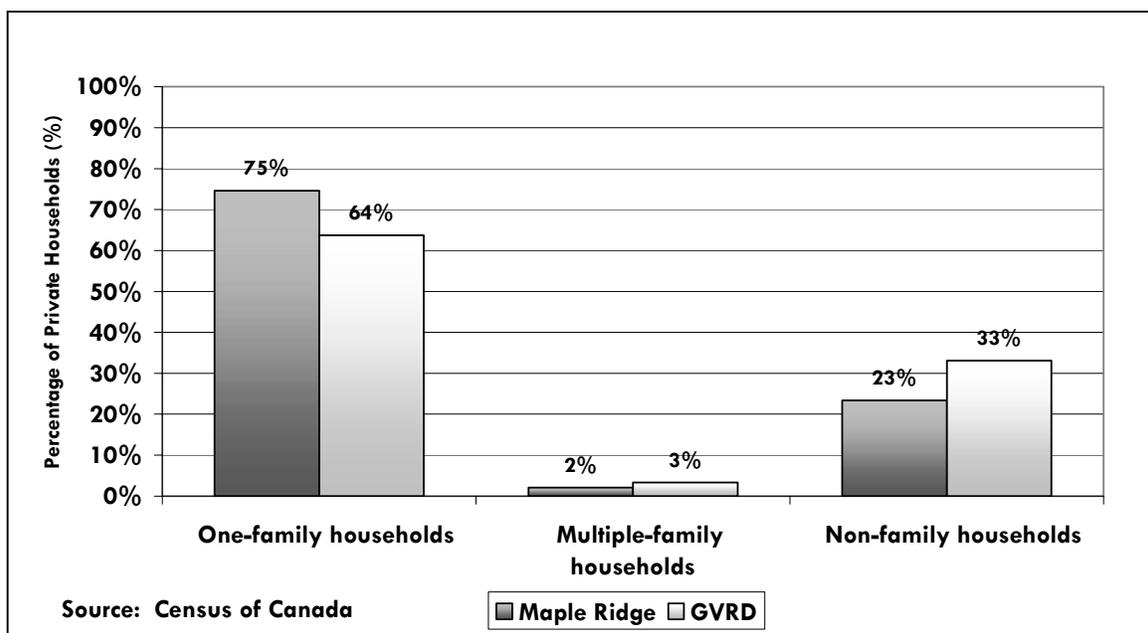
Figure 2-10: Household Size Distribution, Maple Ridge and GVRD, 2001



Maple Ridge is a Community with a High Portion of Family Households

Maple Ridge has a much higher proportion of one-family households compared to the GVRD. In 2001, 75% of households in Maple Ridge were one-family households compared to 64% in the GVRD (Figure 2-11).

Figure 2-11: Family and Non-Family Households by Type, Maple Ridge and GVRD, 2001



Just over 2% of households in Maple Ridge were multi-family households compared to slightly over 3% in the GVRD. Approximately 23% of households in Maple Ridge were non-family households compared to 33% in the GVRD. A non-family household refers either to one person living alone in a private dwelling or to a group of two or more people who share a private dwelling, but do not comprise a census family.

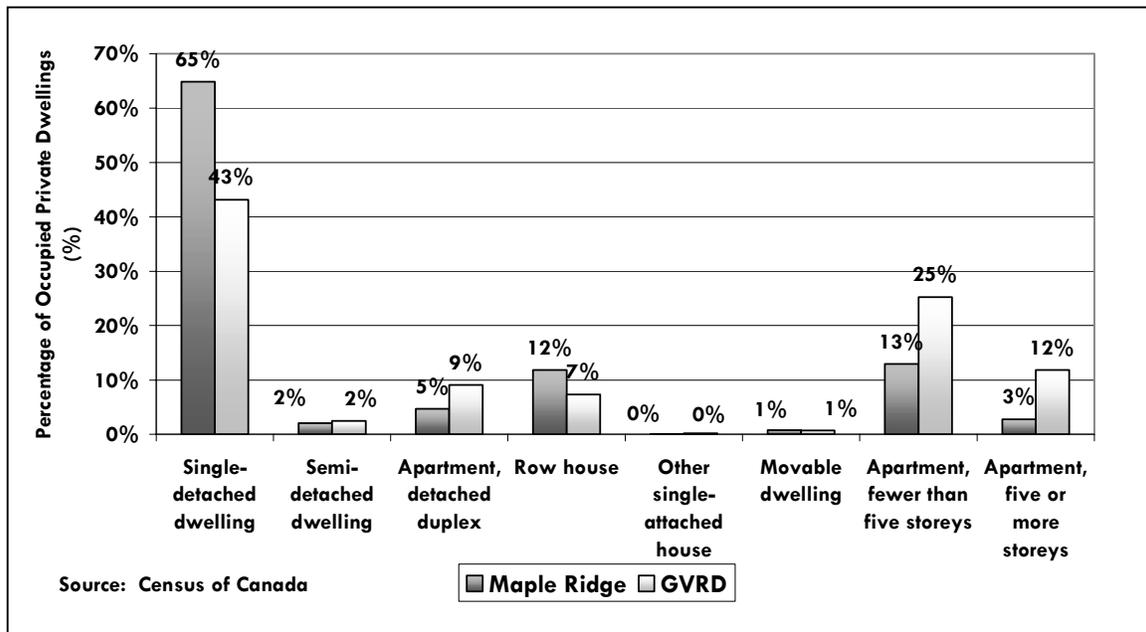
Maple Ridge has a similar share of couple families and lone-parent families as in the GVRD. Approximately 85% of families in Maple Ridge were couple families compared to 84% for the GVRD. In 2001, 16% of families in Maple Ridge were lone parent families compared to 15% in the GVRD.

Housing Profile

A Stock of Predominantly Single-Detached Homes But with Increasing Housing Diversity

The dwelling stock of Maple Ridge is predominantly comprised of single-detached dwellings. In 2001, approximately 65% of dwellings in the district were single-detached homes compared to 43% in the GVRD (Figure 2-12). This is likely due to the relative affordability of land prices in Maple Ridge and the availability of land designated for single-detached homes.

Figure 2-12: Dwellings by Structural Type, Maple Ridge and GVRD, 2001



Rowhouses² comprised 12% of the district's dwelling stock compared to 7% in the GVRD. Low-rise apartments made up 13% of the stock in Maple Ridge compared to 25% in the GVRD. Less than 3% of the dwelling units in Maple Ridge were high-rise apartment compared to 12% in the GVRD. Less than 8% of the district's dwelling stock were semi-detached dwellings, apartments in a detached duplex, other single-attached houses or movable dwellings.

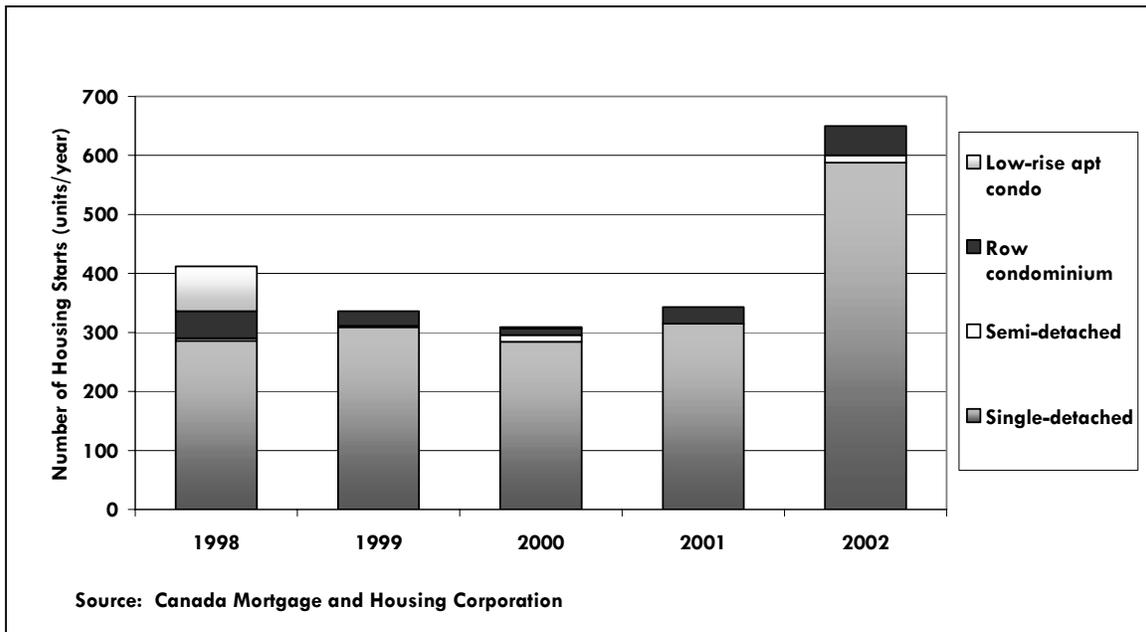
In 1976, 79% of the housing stock in Maple Ridge were single-detached homes. Over the past 25-year period, the district has seen a trend towards other housing choices, particularly low-rise apartments and row houses. This trend is consistent with other areas in the region where there has been a shift towards a broader mix of dwelling types. The result has been an increased share of other ground-oriented and apartment units. Another trend experienced in the region has been the increasing proportion of families living in housing forms other than single detached houses.

² See the glossary in Appendix A for a definition of each of the structural types of housing.

Housing Starts Continue to Favour Single-Detached Homes

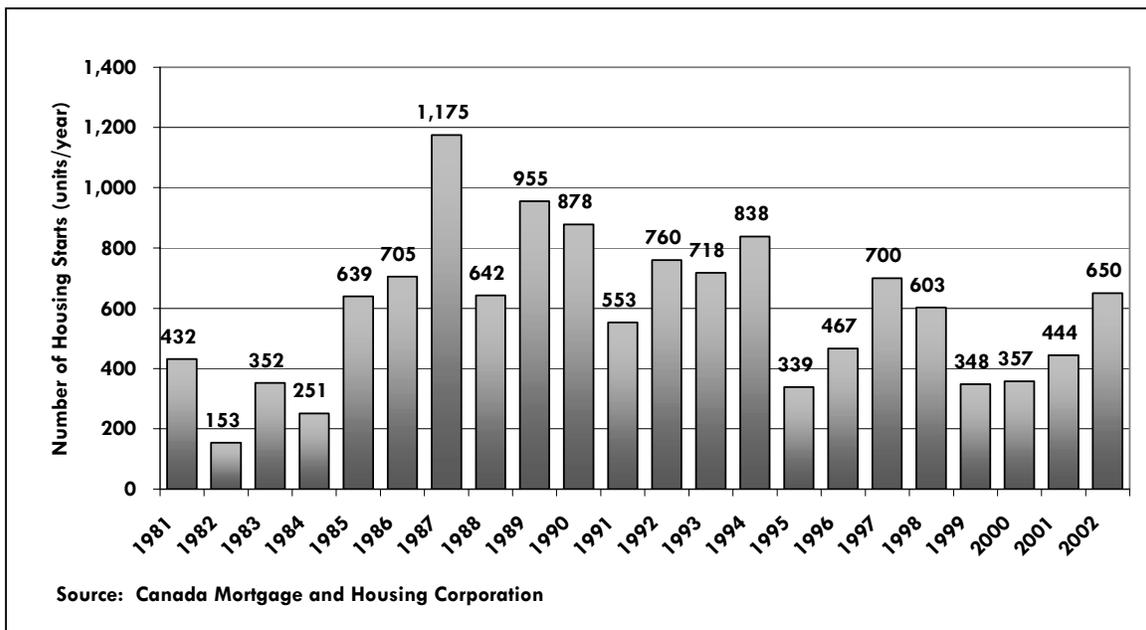
Between 1999 and 2002, over 90% of the new housing starts in the District were single-detached homes, dwarfing housing starts for all other structural types (Figure 2-13).

Figure 2-13: Housing Starts by Type, Maple Ridge, 1998 to 2002



Housing start activity was particularly high between 1985 and 1994, during which time an average of 790 units were added annually (Figure 2-14). Housing starts peaked in 1987 at 1,175. Between 1995 and 2002, the average number of housing starts slowed to 560 units per year. Most recently, housing starts climbed to 650 units in 2002.

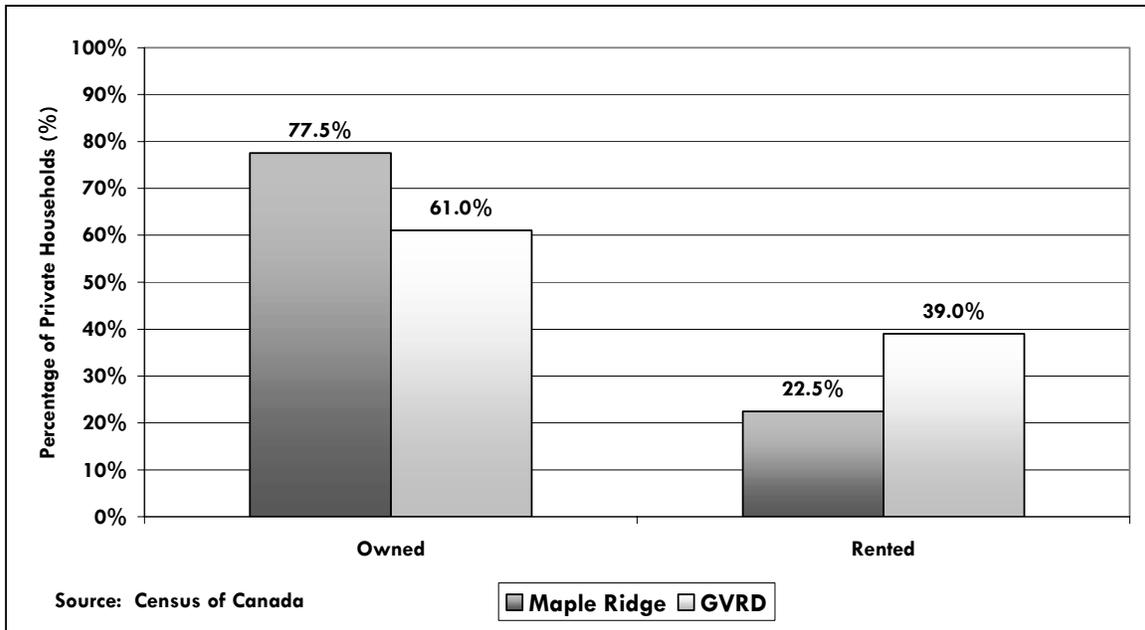
Figure 2-14: Housing Starts, Maple Ridge, 1981-2002



Maple Ridge is Primarily a Community of Home-owners

In 2001, homeowners resided in 77.5% of the occupied private dwelling units in the District of Maple Ridge (Figure 2-15). The rate has remained relatively stable over the last ten years.

Figure 2-15: Percentage of Households by Tenure, Maple Ridge and GVRD, 2001

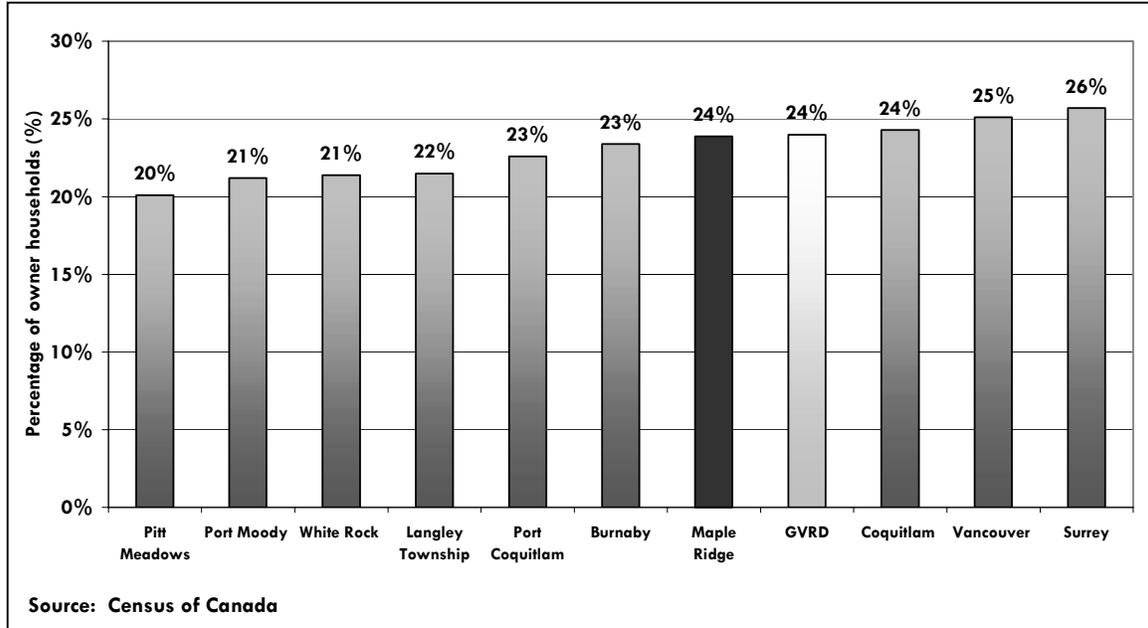


In comparison, homeowners inhabited 61% of the occupied private dwelling units in the GVRD. The higher share of owner-occupied dwellings in Maple Ridge may be partially attributed to the large proportion of single-detached homes in the District and the relative affordability of land prices. These dwellings are more likely to be inhabited by homeowners than other dwellings.

Housing Affordability an Issue for Many Renters and Homeowners

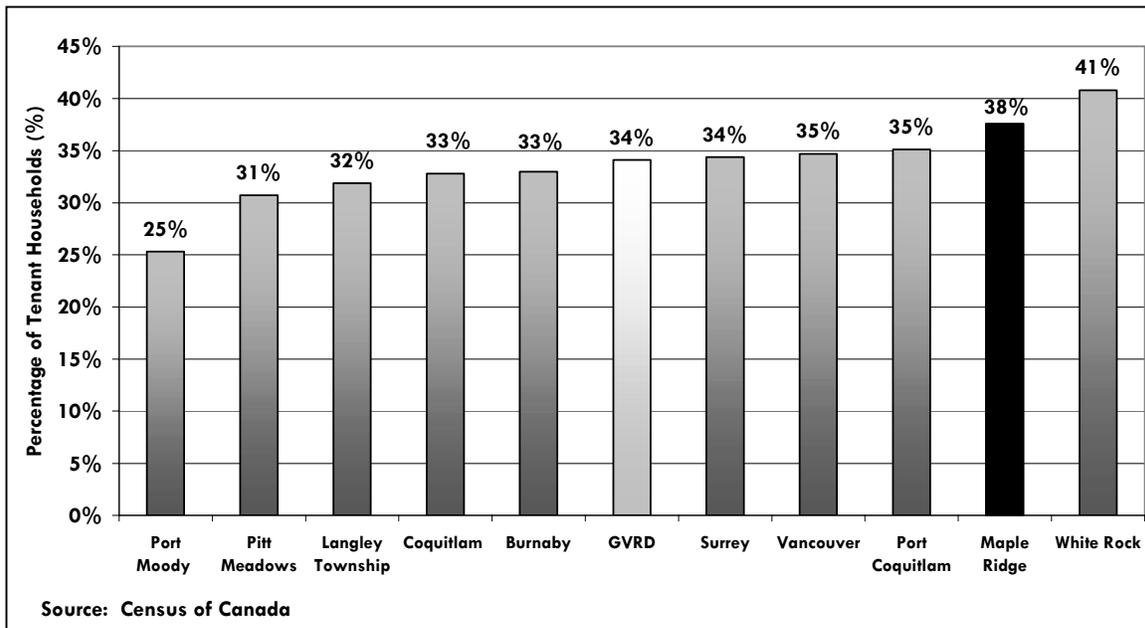
Housing prices in Greater Vancouver are consistently among the highest in Canada. Housing affordability is an issue for both homeowners and renters in the region as a whole, including Maple Ridge. In 2001, almost 24% of homeowners spent 30% or more of their gross income on housing (Figure 2-16). This was about the same level as in the GVRD. This portion of income spent on housing is a useful proxy of housing affordability. It is related to the definition of core housing need developed by the Canada Mortgage and Housing Corporation. A household is in core housing need if it cannot find somewhere to live that is in reasonably good condition and is big enough for their household without spending more than 30% of their income. Households who choose to spend 30% or more of their income on housing would not be considered in core housing need. When a household that is in core housing need spends 30% or more of their income on housing, this leaves less disposable income for other expenses such as food, clothing, and transportation.

Figure 2-16: Percentage of Owner Households Spending 30% or more of Gross Income on Housing, Maple Ridge and Selected Jurisdictions, 2001



Almost 38% of tenant households in Maple Ridge spent 30% or more of their gross income on housing (Figure 2-17). This was much higher than in the GVRD, where 34% of renters spent 30% or more of their gross income on housing. Affordability continues to be an issue despite the fact that housing is more affordable in Maple Ridge relative to many other municipalities in the GVRD.

Figure 2-17: Percentage of Tenant Households Spending 30% or More of their Gross Income on Housing, Selected Jurisdictions, 2001



Homelessness a Reality for Some

Homelessness in the GVRD is not only an issue for metropolitan areas such as Downtown Vancouver or the inner city. It also affects outlying areas such as Maple Ridge. Typically, homeless people do not get counted in the census, making it difficult to accurately quantify the magnitude and trends in size of this population. The existence of a homeless population in the community reflects the fact that housing affordability is a significant issue for lower income groups.

In January 2002, the GVRD conducted a one-night count of the homeless across the Lower Mainland. Based on the responses, there were 62 homeless people living in Maple Ridge. While not all the homeless were counted, it does provide a useful proxy. Of these, 25 were 'sheltered homeless' and 37 were 'street homeless'. According to the survey, the 'sheltered homeless' are those people without a home who spent the night in emergency shelters. The 'street homeless' are those who did not stay in shelters, either staying with friends or sleeping outside.

Many of homeless people in Maple Ridge have temporary accommodation. In 2001, the Ministry of Human Resources sponsored 6 emergency shelter beds (cold, wet weather conditions) with the ability to increase this capacity to 10 beds if needed. These beds are provided through the Salvation Army's Mountain View Community Church. A Homelessness Coalition is also doing work in the community with homeless people.

Shortage of Certain Types of Rental Accommodation

According to the Canada Mortgage and Housing Corporation's rental market report, the Maple Ridge and Pitt Meadows area has very few bachelor suites and very few apartments with three or more bedrooms. Similarly, there are few two-bedroom townhouse units in the District. The lack of these affordable types of rental housing may contribute to the issue of housing affordability. This may also help explain why the District has a much lower proportion of its population aged 20 to 34 years. People in this age range tend to have a high propensity to rent and to reside in smaller sized dwellings.

Secondary Suites Fill an Affordable Housing Market Niche

Another important source of rental accommodation is secondary suites and temporary residential units for blood relatives. Secondary suites increase the affordability of single-detached homes for homeowners and provide affordable accommodation for renters. As of November 2003, the District had 28 registered secondary suites and 87 suites with pending applications. In 1999, Maple Ridge began to allow secondary suites in certain single-family zones, with the requirement that the homeowner resides in the building.

Based on discussions at the housing trends and preferences workshop held in December 2003 (Appendix B), the estimate of the actual number of secondary suites was much higher with there being at least 1,000 to 1,500 secondary suites. In a GVRD municipal inventory of secondary suites conducted in November 2000, they estimated that there were between 760 and 3,410 secondary suites in Maple Ridge based on data available for neighbouring municipalities.

Seniors Housing Increasing in Maple Ridge and Greater Vancouver

The Canada Mortgage and Housing Corporation estimated that in 2002 the Maple Ridge and Pitt Meadows area had 170 units in congregate residences, 416 units in care homes and 439 units in retirement residences. Congregate care residences are independent living units with housekeeping, laundry and common meal services. Between 1998 and 2002, the number of congregate residences tripled in Greater Vancouver. Housing for seniors also includes options such as home care, independent living and assisted living.

The demand for seniors housing is anticipated to increase as the population in Maple Ridge and Greater Vancouver ages over the coming decades, as described in subsequent sections of this report.

New Housing Preferences and Seniors Housing Preferences

The following section describes housing preferences for two segments of the housing market in Maple Ridge. The first subsection presents the results of a survey of prospective new home buyers. The second subsection, describes the housing choices and preferences of seniors in greater detail.

CMHC Consumer Intent to Buy A Home Survey Results for 2001 and 2002

The Canada Mortgage and Housing Corporation (CMHC) Consumer Intent to Buy a Home Survey is used to explore housing preferences and attitudes for Maple Ridge. The purpose of the section is to help better understand who is considering buying in Maple Ridge and what type of home are they considering purchasing. Last completed in 2002, this is a survey of approximately 4,000 households in the Vancouver Metropolitan Area of which approximately 10% had the intent to buy a home over the next 6 to 12 month period. Custom data was obtained for those respondents considering to buy a home in Maple Ridge or Pitt Meadows. The results given in this report were based on an aggregate of 2001 (18 respondents) and 2002 data (12 respondents). Due to the small sample size, the data should be interpreted only as a rough proxy for actual housing intentions.

Key findings from the CMHC survey include:

- Over 80% of the respondents who had the intent of buying a home were seeking to purchase a single detached home
- Approximately 63% were looking to buy a pre-owned home
- Over 63% were looking for a home in the \$200,000 to \$350,000 price range
- 60% were thinking of buying a home that was larger than their current residence while 20% were seeking a smaller home, and the remainder were looking for a similar sized home
- 50% were looking for a home between 1,600 and 2,500 ft² in size
- Almost 25% were looking for a home greater than 2,500 ft² in size
- 29% indicated that the most important reason why they were thinking of purchasing a home in the next year was to change from renting or want to build equity or are looking for a home as an investment
- 23% indicated that the need for a larger or better home or upgrade was the most important reason why they were thinking of purchasing a home
- 19% indicated that they no longer require a large home as the main reason for purchasing a home
- 6% indicated that the most important reason for purchasing a home was because they wanted acreage
- 87% of respondents were between 25 to 54 years of age; 40% were between 35 and 44 years of age
- 67% were married or common-law
- 35% had two people currently in their household and 58% had 3 or more persons currently in their household, and
- 53% were owners and 47% were currently renters.

The survey results reinforce the perspective that Maple Ridge is attracting family-oriented households seeking affordable housing. The survey results also reflect the fact that lifestyle is an important reason for people to move to Maple Ridge. This is indicated by the large proportion of survey respondents looking for more expensive housing or homes with a large floor area. Detailed results from the CMHC survey are included in Appendix C.

Seniors Housing Preferences

Due to the increasing portion of seniors that are anticipated to comprise the 2031 population in Maple Ridge, some additional information is included for seniors.

Maintainer rate data indicate that the majority of people that are 55 years of age and over still prefer to live in single-detached homes. However, the propensity to choose to live in apartments increases significantly and reaches a peak for those that are 75 years of age and older.

The majority of seniors live in private dwellings. In a report prepared by the Urban Futures Institute entitled *Housing British Columbia's Seniors in the Next 30 Years*, over 98% of the population aged 55 to 74 live in private dwellings in 1996. At 75 years of age and older, this falls to 89% of this age group living in private dwellings.

The proportion of the population that do not live in private dwellings live in what the census terms a 'collective dwelling'. 'Collective dwellings' include institutional, service collective, and communal dwellings that are shared as result of need or imposition in the case of a correctional facility. Of the seniors that live in collective dwellings, 92% lived in institutional collective dwellings which include hospitals and care facilities in 1996. As the seniors age into the 65 and the 75 and over categories, the propensity to live in collective dwelling increases from about 1% to 11%. The Urban Futures Institute indicates that the most significant growth in seniors collective dwelling accommodation demand will be for living in care facilities and seniors residences.

Canada Mortgage and Housing Corporation have identified that the average age of senior's living in apartments is 72.7 years of age. The average age for congregate care is 83.5 years of age. The average age for personal care, intermediate care, extended care and multi-level care is all between 82.8 years of age and 84.6 years of age.³

The top "push" reasons identified by CMHC for seniors moving include:

- Change in health or physical strength (28.5%)
- Difficulty in looking after residence (20%)
- Desire to be with others of the same age (21%)

The top "pull" reasons why seniors move as identified in a CMHC survey include:

- Quality of the unit (40%)
- Attractiveness of the project (39%)
- Proximity to facilities and services (36%)
- Services available for premises (36%)
- Recreational facilities and services (31%)

³ Cited in Canada Mortgage and Housing Corporations *Senior Housing Market Survey - Metro Vancouver 2001*.

- Friends or relatives live nearby (27%)
- Children or relatives live nearby (27%)

The key “pull” factors over which the district has significant influence over is the proximity to facilities and services and the availability of community recreational facilities and services. The development of more complete communities can make daily living much easier and convenient for seniors.

A detailed analysis of housing demand for this segment of the market would need to take these findings and trends into consideration.

Summary and Conclusions

Maple Ridge has experienced rapid growth over the last 30 years, more than doubling in population to over 63,000 people. This population increase is associated with a transition to a more urban centered community, although Maple Ridge still retains its agricultural roots.

According to the District of Maple Ridge 2003 Community Survey, people currently living in Maple Ridge enjoy the smaller community size, rural character, access to the outdoors, community spirit, and appreciate the recreational and other amenities offered in the community. These attractive features, combined with relatively lower housing prices, are a strong draw especially for younger families.

Maple Ridge has a much higher proportion of young families and children than Greater Vancouver. In addition, Maple Ridge's ethnic profile is dissimilar from the rest of Greater Vancouver with a much smaller proportion of visible minorities.

Maple Ridge is not just a bedroom community for other municipalities in Greater Vancouver. Approximately 37% of the labour force both lives and works in Maple Ridge, which is very high for outlying communities.

Although single-detached houses are the dominant housing style, its share of the total housing stock has been declining over the last 25 years in favour of higher density development. This change has largely been precipitated by smaller household sizes, higher land costs, and affordability issues. The mix in new housing has created a more diverse community in terms of residential homes.

There is a housing affordability issue in Maple Ridge, particularly with rental accommodation, that is similar to other municipalities in Greater Vancouver. Maple Ridge also has a number of homeless people, reflecting the issue of affordability in the region.

There has been a trend towards increased specialized housing for segments of the senior's market in Maple Ridge and the GVRD, including the development of congregate residences, care homes, and retirement residences. For example, there has been a tripling of congregate care residences in the GVRD between 1998 and 2002.

3. Forces Shaping Maple Ridge's Population and Housing Growth

Different forces exist that can either promote or limit the population and housing growth in Maple Ridge. **Drivers** are forces that have a positive influence on population and housing growth. **Constraints** are forces that have a negative or limiting influence on population and housing growth.

Drivers

The following key drivers will have a significant influence on the population and housing growth in Maple Ridge over the next three decades.

Population Growth

There are two components of population change in an area:

- *Natural Increase* - the difference between the number of births and the number of deaths, which is in part a function of the age structure of the existing population
- *Net Migration* - the amount by which the inflow of migrants exceeds the outflow of migrants, which is strongly influenced by many factors such as employment opportunities, cost of living and lifestyle choices in the receiving area and at the original location of migrants and at the provincial, national, and international scales

The future population of an area is calculated using the following formula:

$$\text{Future Population} = \text{Current Population Estimate} + \text{Natural Increase} + \text{Net Migration}$$

Natural Increase

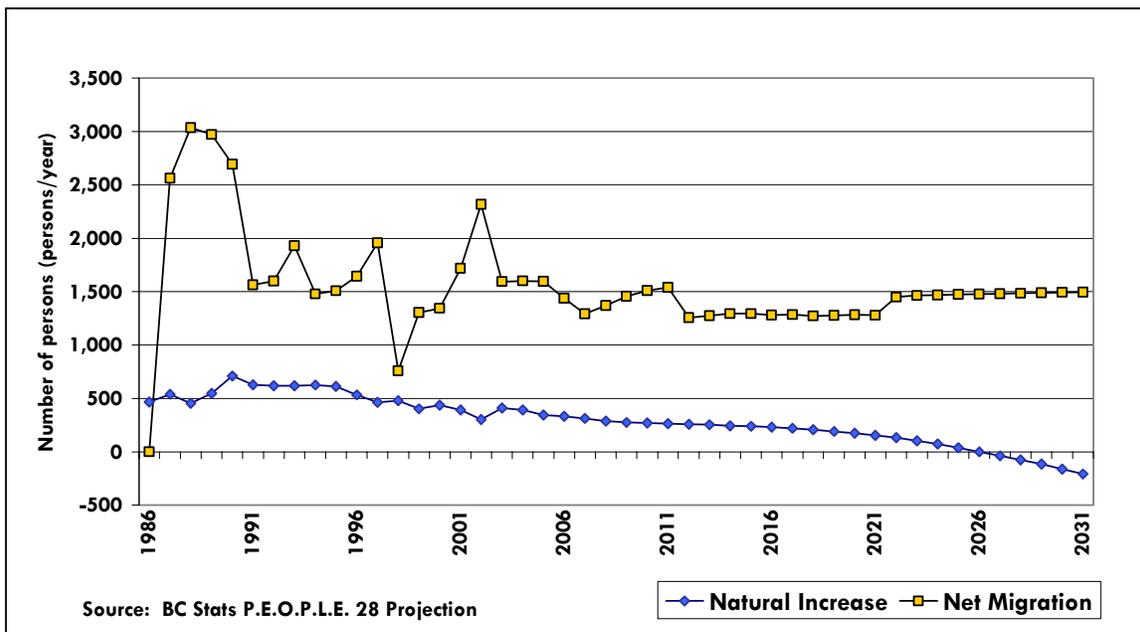
According to the latest BC Stats Population projection (PEOPLE 28) for the Maple Ridge Local Health Area, natural increase will be positive (excess of births over deaths) until the year 2026 (Figure 3-1). In contrast, the GVRD is expected to have a negative natural increase by between 2011 and 2016. The District of Maple Ridge has a higher fertility rate and higher proportion of children compared to the province as a whole.

Net Migration

As with the GVRD, net migration is expected to be the driving force of population change in Maple Ridge. It is anticipated that there will be a positive net migration to the District over the next three decades. There is much more uncertainty about net migration than net natural increase. The net migration to the region also affects the net migration to the District.

Net migration, particularly from international sources, can not only change the size of the population, but its age and ethnic mix in the community.

Figure 3-1: Projected Natural Increase and Net Migration Rates, Maple Ridge Local Health Area, 1986-2031

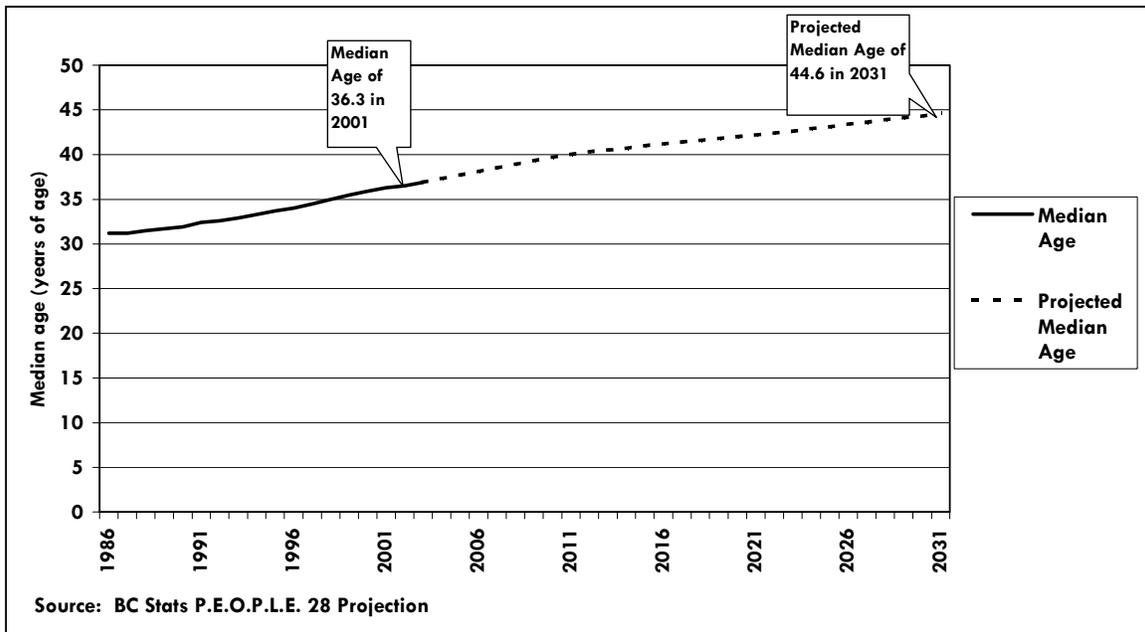


Changing Age Composition of Population

The population's changing age composition is an important driver of future housing demand in Maple Ridge. The median age in the District was 28.6 years in 1976. By 2001, the District's median age had increased over 8 years, to 36.7 years. According to the BC Stats population projection for the Maple Ridge Local Health Area, the median age for the local health area is anticipated to increase to 44.6 years by 2031, reflecting an aging population in the area (Figure 3-2). The District of Maple Ridge's median age is expected to closely reflect that of the Local Health Area. In 2031, Maple Ridge will still have a younger population than that which exists today in West Vancouver and White Rock (median ages of 47 and 50.9 in 2001, respectively).

The BC Stats population projection for the Maple Ridge Local Health Area indicates that the proportion of the population 65 years of age and older is expected to increase from about 11% in 2001 to 21% by 2031. Including those 55 years of age and older, the proportion is expected to increase from 18% in 2001 to over 34% by 2031. The proportion of the population under the age of 25 is expected to decrease from 35% in 2001 to 23% by 2031. Finally, the proportion of the population in the 25-44 age range is expected to decline from 2001 levels, but this change is not anticipated to be as pronounced as the other age categories.

Figure 3-2: Historical and Projected Median Age, Maple Ridge Local Health Area, 1986-2031



Declining Average Household Size

The average household size has declined from 3.3 in 1971 to 2.76 in 2001, reflecting trends in family composition and a decline in the birth rate. The average household size in Maple Ridge is projected to continue to decline, primarily as a result of changing family composition. The declining trend means that households will be growing at a faster rate than the population over the next three decades. This means that the demand for new housing would increase even if the population did not grow. In addition, the decline in average household size suggests a shift towards an increased share of smaller homes and other ground-oriented units and apartments to better match the declining average household size.

New Fraser River Crossing and Other Transportation Infrastructure Investments

The New Fraser River Crossing and the proposed Abernethy Connector, which are anticipated to receive certification by March 2004, will likely have a positive impact on population and housing growth in Maple Ridge. Expected to open in 2007 at a cost of approximately \$600 million, the New Fraser River Crossing will improve north-south traffic flow, thus reducing travel times across the river by 20 to 30 minutes or more. The Abernethy Connector would provide an alternate east/west route through Maple Ridge to the crossing.

A study prepared by Hudema Consulting and TyPlan Consulting⁴ has reviewed the impacts of bridges on population growth in various jurisdictions across North America and the Lower Mainland. This review indicates that population growth is generally accelerated as a result of bridge construction. A similar impact is anticipated to occur in Maple Ridge with the construction of the New Fraser River Crossing.

⁴ New Fraser River Crossing Project Socio-Community and Socio-Economic Comparative Assessment, Hudema Consulting and TyPlan Consulting Ltd, 2003

Transportation constraints have had a negative effect on population growth in Maple Ridge. The current constraints are with north-south movement across the Fraser River and with east-west movement across the Pitt River. The addition of the New Fraser River Crossing will remove to some extent the constraint regarding north-south movement. The Hudema and TyPlan study indicated that the bridge is expected to significantly impact accessibility, visibility, availability and demand for land. This in turn will create induced population growth and development. According to this study, of all adjacent municipalities, Maple Ridge is anticipated to experience the largest impact on population growth. In fact, out of the four most affected municipalities, Maple Ridge is estimated to receive almost 50% of the additional 20,000 to 25,000 people attributed to the bridge construction.

The Greater Vancouver Transportation Authority anticipates that the bridge will be tolled to recover some of the costs of the \$600 million investment. This toll is not accounted for in the Hudema and TyPlan study. Due to its dampening effect, this toll will likely be more restrictive to population and housing growth than the study indicates. While the bridge will be a boon to those already living in Maple Ridge, the toll on the bridge could well be a factor in the decision of others to move to Maple Ridge as it is an additional expense of living in the district.

Other future transportation improvements, such as additional lanes across the Pitt River or the potential twinning of the Port Mann Bridge, may also have a positive impact on population growth by promoting east-west movement into and out of the District.

Olympics

In 2010, Vancouver and Whistler will be hosting the Winter Olympic Games. A study on the Winter Olympic Games⁵ and the Vancouver Convention and Exhibition Centre expansion estimated an economic impact of 126,000 to 228,000 person years of employment and \$6.1 to \$10.7 billion dollars in economic activity. These figures include direct, indirect and induced incremental economic impacts. While the main impact will be in the Whistler-Vancouver corridor, there will be some smaller spillover effects to other parts of the Greater Vancouver, including Maple Ridge. In particular, the Olympics are expected to significantly stimulate the construction industry.

The Olympics and Vancouver Convention and Exhibition Centre expansion will support employment growth and provides an extra boost to provide underlying strength to both population growth and housing demand in Greater Vancouver. It is anticipated that the impact on Maple Ridge would be much less than the areas where Olympic venues and being built or upgraded or the communities in between Vancouver and Whistler.

Regional Economy and Livability

The attractiveness of Greater Vancouver as a place to live and do business impacts population and housing growth throughout the region. In a 2003 quality of life survey by Mercer Human Resource Consulting⁶, Greater Vancouver was ranked second overall amongst world cities after Zurich, Switzerland. The image of Greater Vancouver as a place with high livability and quality of life is likely to impact population growth over the coming decades. The attractiveness of Greater Vancouver makes it a desirable place for companies to locate, and for migrants from

⁵ "Economic Impact of the Winter Olympic and Paralympic Games: An Update" final report prepared by InterVistas Consulting for the Minister of State for Community Charter and Olympic Bid, November 2002

⁶ Overall Rankings - Quality of Life Survey 2003 by Mercer Human Resource Consulting.

elsewhere in Canada and internationally to live. These positive growth impacts spill over to outlying municipalities, such as Maple Ridge.

The metropolitan economy has a significant influence on employment in the region, which affects all municipalities. The resiliency and success of the economy in Greater Vancouver and BC, relative to Alberta and eastern Canada, plays a large role in attracting migrants from within and outside Canada.

Amenities and Differential Housing Prices

Maple Ridge has an image of a livable community in the Lower Mainland. In particular, the District has many amenities that make it a desirable place to live, including high quality recreational facilities. In the District of Maple Ridge Strategic Plan Community Survey (March 2003), residents attributed several factors for why they enjoyed living in Maple, including:

- Small town feel of the community
- Rural character
- Access to the outdoors and recreational facilities, and
- Affordability of housing.

Another driver is the differential housing prices between Maple Ridge and other municipalities in Greater Vancouver and the Fraser Valley Regional District. Currently, housing prices are much more affordable in Maple Ridge relative to most other municipalities in the GVRD. The magnitude of this differential can spur growth in Maple Ridge.

Macroeconomic Forces

There are many other forces that affect housing demand, including low interest rates and mortgage rates. As Maple Ridge is primarily a community of homeowners, interest rates and mortgage rates will have an impact on demand for new housing. These are influenced in turn by macroeconomic forces such as the state of the Canadian, U.S., and world economies. Macroeconomic forces can also affect immigration rates and patterns.

Constraints

The following key constraints are likely to limit or slow population and housing growth in Maple Ridge over the next three decades.

Availability of Residential Land Supply

A key factor that the District of Maple Ridge can influence is the amount of land available for residential development. According to the current OCP designations, the total housing capacity for the District is approximately 35,100 dwelling units. The current capacity is lower than that from the 1996 OCP levels of 41,700 based on revised estimates by the District. Capacity from certain areas, such as Silver Valley, were estimated to be lower than identified in the 1996 OCP.

Currently, there are approximately 22,580 occupied private dwelling units in Maple Ridge. At current OCP designations, the remaining available capacity in the District is for 12,560 units. However, these capacity figures do not include the urban reserve. If this land area were included, the capacity would increase by approximately 7,750 dwelling units, to a total capacity of 42,750 units. The majority of the District's housing capacity is located within the designated urban areas. These housing capacity figures do not include secondary suites.

Table 3-1: Estimated Housing Capacity by Geographic Area

	Estimated Capacity based on OCP land use designations (total units)	Existing Units, 2001 (total units)	Remaining Capacity (total units)
Urban Areas	31,130	18,770	12,360
Rural Areas	4,010	3,610	400
Subtotal	35,140	22,380	12,760
Urban Reserve	7,750	200	7,550
TOTAL	42,890	22,580	20,310

The key capacity constraint for the District is its availability of land for single-detached houses and other ground-oriented units. There is capacity for a total of 20,400 single detached houses and 7,600 other ground-oriented units. The District is fast approaching its capacity for both these housing types. In fact, there is remaining capacity for less than an additional 6,000 single detached houses and for just over an additional 3,000 other ground-oriented units.

Table 3-2: Estimated Total and Remaining Housing Capacity by Structural Type based on Current OCP land use designations (excluding Urban Reserve)

	Estimated Capacity based on OCP land use designations (total units)	Existing Units, 2001 (total units)	Remaining Capacity (total units)
Single detached houses	20,380	14,650	5,730
Other ground oriented units	7,630	4,380	3,250
Apartment units	7,140	3,560	3,580
TOTAL	35,140	22,580	12,560

The large number of streams and floodplains in the District also acts as a constraint on the housing capacity in Maple Ridge. Policies to protect these areas limit the housing capacity for the District. Ironically, policies to protect streams and other natural habitat also act as a population driver since the high environmental quality is a major attraction for people who live or want to move to Maple Ridge.

Availability of residential land supply acts as a constraint not only at the municipal level, but also at a regional one. The availability of land, particularly for single-detached homes, in Greater Vancouver can influence the influx of people to Maple Ridge.

The GVRD's Livable Region Strategic Plan (LRSP) designates Maple Ridge as a regional town centre. In addition, it designates Maple Ridge as being entirely outside the growth concentration area. Overall, growth may be less than expected in the absence of the growth concentration area designation. Even so, there will likely be growth in Maple Ridge regardless of this policy constraint because of limited land availability for development in the GVRD.

Transportation Bottlenecks

Another constraint that is likely limiting the population growth in Maple Ridge is transportation bottlenecks, particularly associated with the Pitt River Bridge. While the new Fraser River Crossing will significantly improve north-south transportation, east-west moving traffic may still be a constraint. This could influence people's choices of where to live, particularly if they need to commute to employment locations west of the Pitt River.

Energy Prices

An external constraint on growth in the District is the potential increase in energy prices. It is anticipated that over the next three decades natural gas and gasoline prices will rise significantly in North America. These higher energy prices will affect the costs for space and hot water heating, which will likely increase the relative cost to maintain a home, particularly for residents of single-detached homes. Higher gasoline and transportation fuel prices may also affect the attractiveness of Maple Ridge for people who commute long distances. In essence, rising energy prices raises the total living costs associated with outlying areas such as Maple Ridge, thus constraining the demand for housing.

Increased Housing Costs

Rising housing costs have resulted in recent years because of higher insurance costs, a shortage of skilled labour in various trades such as construction, and increasing prices of building materials. All of these factors affect the affordability of the housing market and can therefore constrain housing demand.

4. Base Case Population and Housing Projection, 2001-2031

Review of Existing Population Projections

This section reviews three existing population projections for Maple Ridge, each of which reflects different assumptions about the growth of the municipality (Table 4-1). These projections range from 95,700 to 108,000 for the year 2021.⁷

Table 4-1: Comparison of Existing Population Projections for District of Maple Ridge

	Baseline Year for Projection	Compound Average Growth Rate	Population (2021)	Population (2031)
Growth over last 30 years	1971	3.21% (1971 to 2001)	N/A	N/A
1996 OCP Projection	1991	3.00% (1996 to 2021)	122,900	N/A
GVRD Growth Management Scenario Projection (version 4.0)	1996	2.05% (1996 to 2021)	97,200	N/A
Hudema Consulting and TyPlan Consulting Projection (with expected impact from Fraser River Crossing)	1996 and 2001	2.47% (2001 to 2021)	108,000	N/A
BC Stats PEOPLE 28 Projection for Maple Ridge*	2002	1.86% (2001 to 2021) 1.67% (2001 to 2031)	95,700	108,900

* The BC Stats PEOPLE 28 projection was for the Maple Ridge Local Health Area and factored to the District of Maple Ridge by The Sheltair Group.

The **BC Stats PEOPLE 28** population projection was prepared in 2003 and is the only one that extends to 2031. This projection was for the Maple Ridge Local Health Area, which includes

⁷ By comparison, the population projection contained in the 1996 Official Community Plan was 122,900 for the year 2021. This projection is excluded from further analysis because it is not based on an age cohort survival model or model of net migration, and the housing capacity figures used in that analysis are out of date.

Maple Ridge, Pitt Meadows, and the local Indian reserves. The District of Maple Ridge was factored out from the rest of the Local Health Area to obtain a population projection solely for the municipality. Using this approach, the projected population for Maple Ridge is 108,900 in 2031, representing a compound growth rate of 1.67% over the projection period. The population size is projected to be 95,700 in 2021 based on the projection. The BC Stats projection is based on an age cohort survival model and includes a model of net migration to the local health area. The BC Stats projection also provides a breakdown of population by 5-year age cohorts, which shows how age composition changes over the projection period. According to staff from the GVRD, the latest BC Stats P.E.O.P.L.E. projection does account for the new Fraser River Crossing.

The **GVRD's Growth Management Scenario 4.0** projects that the District's population will reach 97,200 by 2021, representing a compound growth rate of 2.05% since 1996. The GVRD is planning to update its Growth Management Scenario in 2004 and to extend its forecast to 2031. According to the GVRD, the Fraser River Crossing was included in the Growth Management Scenario 4.0.

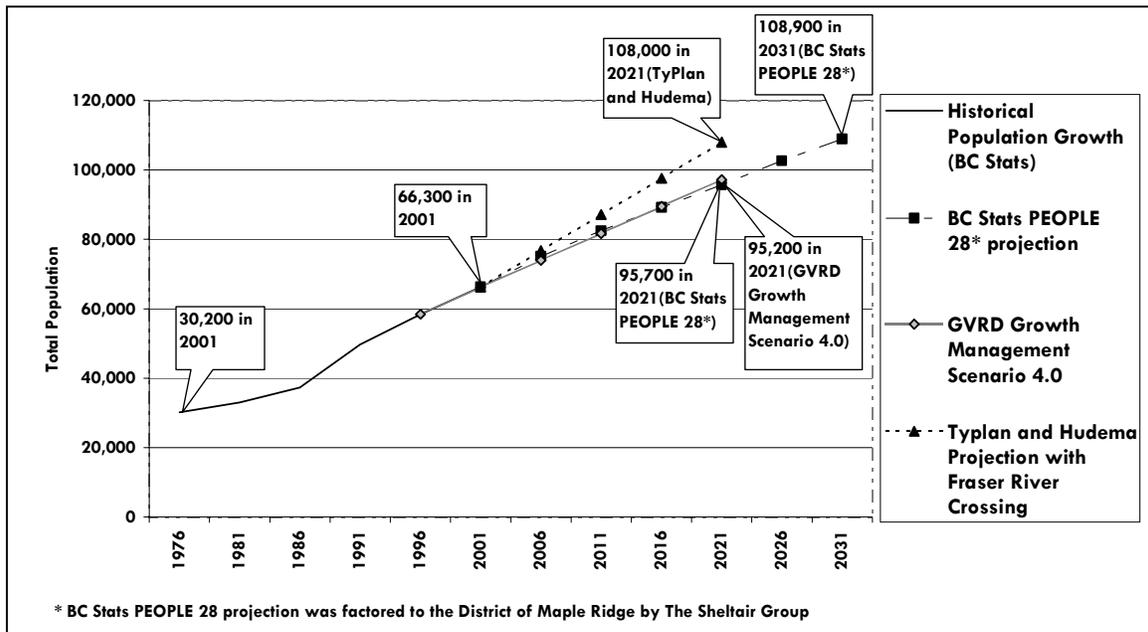
In comparison, the population projection from **Hudema and TyPlan** is for 108,000 people in 2021, which represents a compound growth rate of 2.47% from 2001 to 2021. This projection is almost 13,000 higher than the BC Stats and GVRD projections. Hudema and TyPlan were retained by the Fraser River Crossing project to conduct a comparative Socio-Community and Socio-Economic Impact Assessment of the proposed Fraser River Crossing. As part of this project, a study was conducted to examine the induced population growth resulting from the proposed crossing. The authors of the study contend that population growth will be faster than the rate projected by the GVRD's Growth Management Scenario 4.0 because of the benefits of improved access, new jobs in construction, commercial growth and development resulting from the project.

Hudema and TyPlan adjusted the GVRD projection upwards by approximately 4% based on an analysis of empirical population changes associated with the Mission Bridge (1973), the Iron Workers Memorial Bridge (1960), the Highway 90/91A and bridge (1986/89), and from a literature review of transportation projects in North America.

It is believed that the Hudema and TyPlan population projection does not account for several critical parameters:

- According to GVRD staff, the GVRD Growth Management Scenario 4.0 projection and the BC Stats P.E.O.P.L.E. already account for the bridge in their population projection. The BC Stats population projection shows a relatively high short-term population growth rate followed by declining growth rates past 2011. This is consistent with our view that the bridge would affect short term growth rates in the municipality, but in the long-term there would be no major difference in the population growth of the municipality.
- The Hudema and TyPlan population projection does not take into account housing capacity constraints. It is our view that the population growth rate will likely decline as housing capacity is reached. While new capacity can be made available through increases in residential density in the Official Community Plan and zoning bylaws, it is expected that these changes will be moderate over time. Therefore, population growth rates will likely be lower than the levels experienced over the past 30 years.
- The bridge is to be tolled, unlike the bridges considered in the Hudema and TyPlan analysis. The toll will likely constrain population growth and affect locational choices of households considering moving to Maple Ridge.

Figure 4-1: Comparison of Population Projections for Maple Ridge, 2001 to 2021/2031



For these reasons, we believe that the Hudema and TyPlan study represents an upper bound for future population growth in the district.

Based on our review of these three population projections, we concluded that the BC Stats P.E.O.P.L.E. 28 population figures are the most appropriate for our base case projection. The BC Stats data are within an acceptable range of the other population projections reviewed, and are also derived from sound and defensible methodology.

Base Case Projection

A base case projection was developed after reviewing the population projections and determining the drivers and constraints for Maple Ridge. The base case population projection is based on the BC Stats P.E.O.P.L.E. 28 population projection, but constrained by local housing capacity as indicated by the current OCP designations. A housing model was then developed to project housing allocations associated with the growth in population. These allocations were made in consideration of available residential housing supply.

Assumptions

Several assumptions were made in developing the base case population and housing projection:

- The housing capacities are based on existing OCP designations (i.e. future residential development is based on only infill and new development; not redevelopment to higher densities)
- Parkland remains fully intact and unavailable for residential development
- The Agricultural Land Reserve (ALR) remains relatively intact and any lands taken out of the ALR are developed to very low residential densities
- Commercial and industrial lands remain unavailable for residential development
- The urban reserve area is not available for development
- The age composition in the District of Maple Ridge over the next three decades has the same distribution as in the BC Stats PEOPLE 28 projection for the Maple Ridge Local Health Area

Data Sources

Several key data sources were used in developing the base case projection:

- BC Stats age distribution for the population of the Maple Ridge Local Health Area for the 2001 to 2031 projection period
- Standard Statistics Canada data from the 2001 Census of Canada
- Cross-tabulations from the 2001 Census of Canada on the average household size by structural type for the District of Maple Ridge
- Cross-tabulations from the 2001 Census of Canada on the household maintainer rates by structural type and by tenure type for the District of Maple Ridge as well as historical data from 1986
- Housing capacities based on the current OCP land use designations

Methodology

The population projection is based on the BC Stats PEOPLE projection for the Maple Ridge Local Health Area, which comprises Maple Ridge, Pitt Meadows and the local Indian reserves. The District of Maple Ridge was factored out from the rest of the Local Health Area using population proportions from the GVRD's Growth Management Scenario 4.0.

An integrated supply and demand housing model was developed to calculate housing projections in 5-year increments, out to the year 2031.

Housing capacity constraints, which act to limit the availability of new housing types, are made explicit on the supply side of the model. The current capacity estimated by the District of Maple Ridge is approximately 35,100 units. Since this figure does not include secondary suites, we also

made an assumption regarding the number of these suites that would become available over time. Assuming that 20% of single-detached homes would have secondary suites once capacity is reached, the total housing capacity in the district would be 39,100 units. This is a simplified assumption, as only detached houses within the district's urban area would likely be permitted to have secondary suites.

On the demand side of the model, demand for new housing types is estimated for future time periods by using projections of population structure and estimates of preferences for new housing types. In this way, latent demand for new housing is driven by two key factors: housing preferences and demographics. Age-specific housing type preferences are estimated for household maintainers of different age categories. These estimates are based on custom data tabulations from the 2001 Census Canada, which has household maintainer rates by structural type specifically for Maple Ridge. The maintainer data show the propensity of certain age groups to be maintainers of households by structural type. The household maintainer rates for Maple Ridge were projected out to 2031 based on linear trends observed between 1986 and 2001. To correct for unreasonable values, the linear projections were bounded using the 2001 household maintainer rates from the City of Coquitlam. This community currently has a similar housing mix to that of Maple Ridge once capacity is reached under the base case projection.

Our methodology takes the BC Stats population projection by age cohort and applies the marginal household maintainer rates to the new population to estimate housing demand. The household maintainer rates, in conjunction with anticipated changes in the size and composition of the population, are used to generate the basic housing demand profile.

We then match the housing demand with the available housing supply to conduct our housing allocations. On the demand side of the model, latent demand for new housing types is estimated in each time period by applying age-specific housing preferences to projected changes in the size and age composition of the population. On the supply side of the model, housing capacity constraints act to limit the latent demand for new housing types. The model automatically identifies situations where latent demand exceeds remaining housing capacity, and reallocates any excess demand to different structural types where there is available capacity. The user can change the housing capacity constraints in order to test different capacity assumptions for the District. Once latent housing demand is reallocated based on supply constraints, the model then updates the housing stock by adding new housing to the existing housing stock from the previous time period.

Limitations

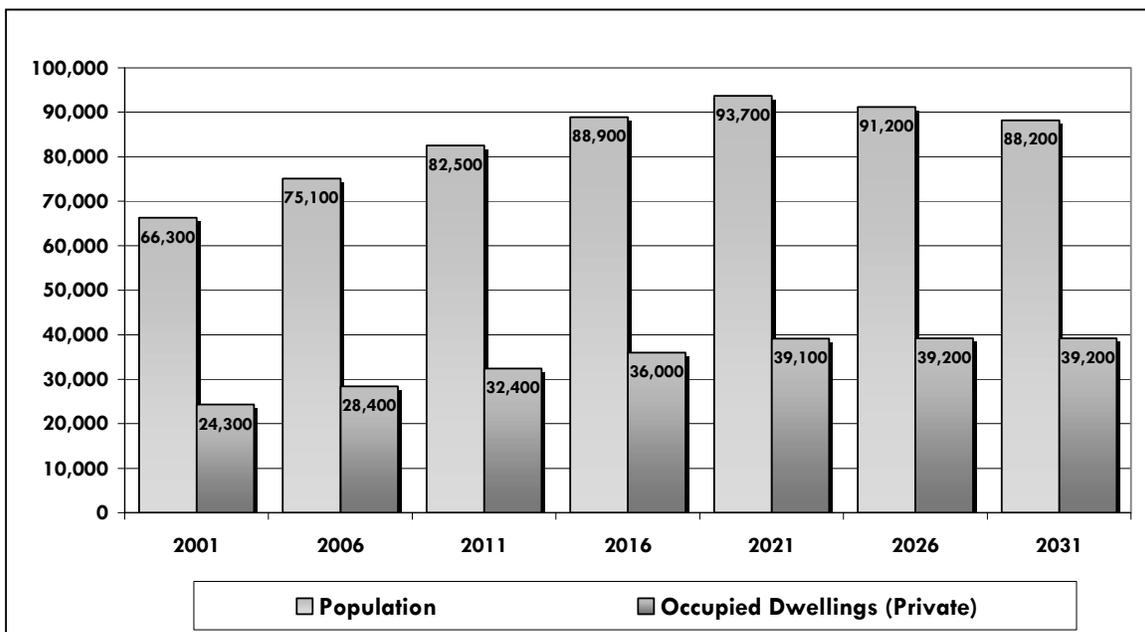
Our population and housing projection is intended to provide a long-term estimate of the future size and composition of the municipality's population and associated housing demand. This projection does not account for short-term fluctuations in population and housing demand. In addition, our housing demand model is primarily driven by demographics and constrained by housing capacity. The model does not account for other factors, such as the state of the economy, housing prices, incomes, and other housing preferences, that may influence actual housing demand.

Base Case Population Projection Results

Population Projected to Reach 93,700 in 2021

Under the base case projection, the population reaches a level of 93,700 in 2021 (Figure 4-2). The population growth rate is highest for the first 10 years of the projection and then declines as housing capacity is reached. The projection has a compound population growth rate of 2.2% between 2001 and 2011. This declines to a growth rate of 1.5% between 2011 and 2016 and then to 1.06% between 2016 and 2021 as housing capacity is approached. The housing capacity based on the existing land use designations is reached slightly after 2021, at which time 39,200 dwelling units are occupied. It is assumed for the base case that no new dwelling units become available once housing capacity is reached. As a result, the population declines after 2021 (to 88,200 in 2031) because the average household size is in decline. In 2031, the average private household size is estimated at 2.23 persons/household, down from 2.76 persons/household in 2001. Two different scenarios for how the community could increase its housing capacity are explored in the sensitivity analysis section below.

Figure 4-2: Base Case Projection of Population and Occupied Dwellings, Maple Ridge, 2001-2031

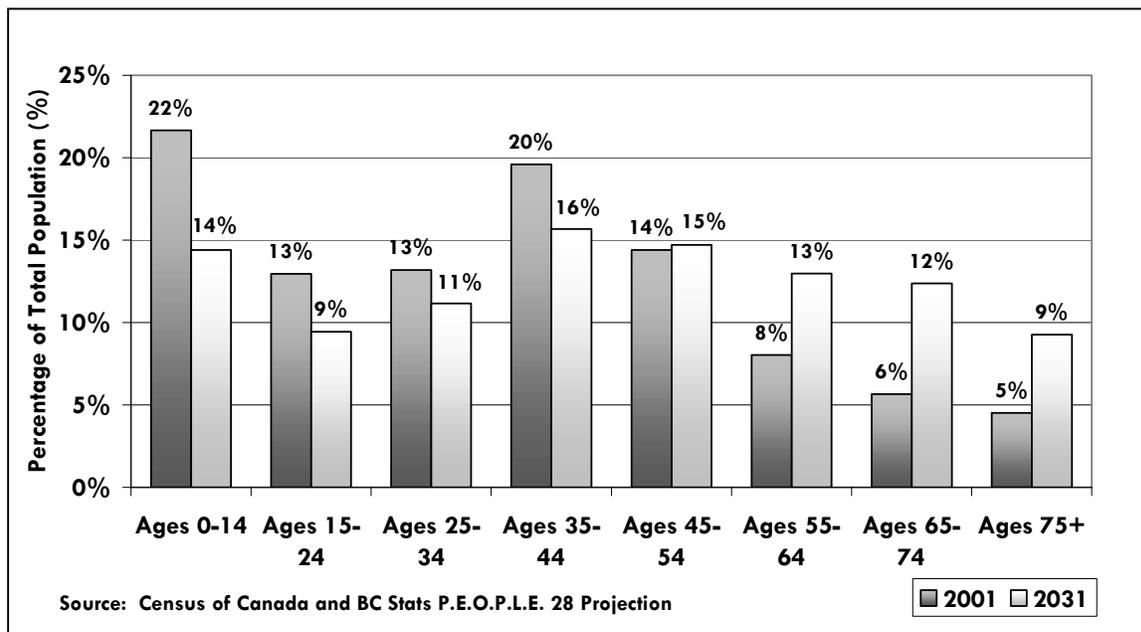


Population Ages Significantly Reflected by an almost Tripling of Seniors

The BC Stats population projection for the Maple Ridge Local Health Area indicates that the proportion of the population over the age of 65 is expected to increase from about 11% in 2001 to 21% by 2031. Including those 55 years of age and older, the proportion is expected to increase from 18% in 2001 to over 34% by 2031.

In absolute terms, the number of people aged 55 to 64 is anticipated to more than double (115% increase from 5,300 to 11,500). The number of people aged 65 to 74 is anticipated to almost triple (190% increase from 3,800 to 11,000). The number of people over the age of 75 years of age is also anticipated to almost triple (175% increase from 3,000 to 8,200).

Figure 4-3: Base Case Percentage of Population by Selected Age Groupings, Maple Ridge, 2001 and 2031



A Decline in Number of Children and Young Adults

The proportion of the population under the age of 25 is expected to decrease from 35% in 2001 to 23% by 2031. In absolute terms, the number of people under the age of 14 is expected to decline by over 10% between 2001 and 2031 (from 14,350 to 12,700). The number of people aged 15 to 24 is anticipated to slightly decline by less than 5% (from 8,600 to 8,400 although it is projected to increase to 10,900 in 2011).

Proportional Decline of Adults Between 25 to 44 Years of Age

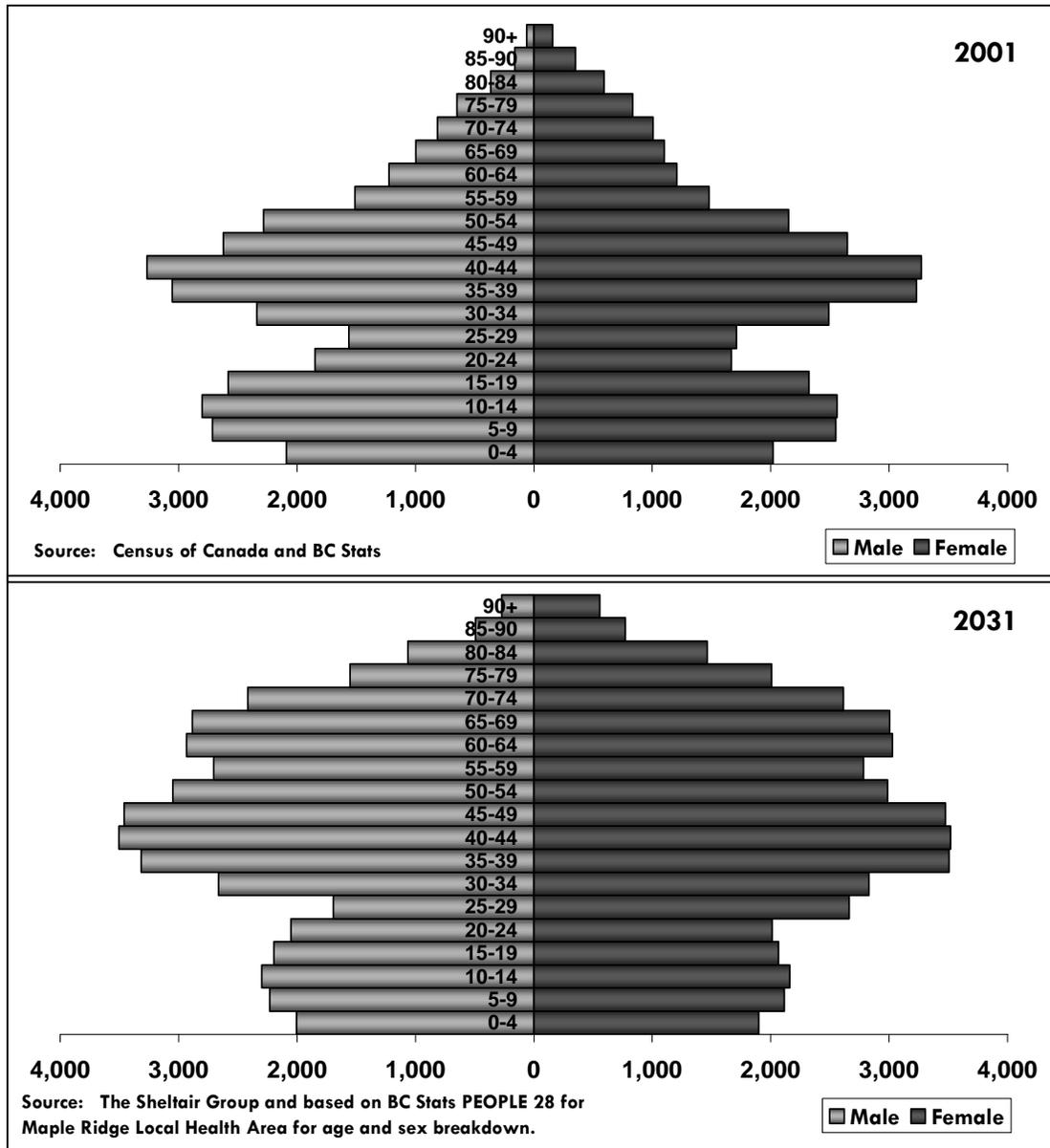
The proportion of the population aged 25 to 44 years of age is expected to decline from 2001 levels, but this change is not anticipated to be as pronounced as the other age categories. The population aged 25 to 34 is projected to decline from 13% in 2001 to 11% in 2031. Similarly, the population aged 35 to 44 is projected to decline from the 20% in 2001 to 16% in 2031.

Despite the decline as a percentage of the population, there is projected to be an absolute increase in the number of people in these age categories. In absolute terms, the number of people between 25 and 34 is expected to increase 9% (from 21,700 to 23,700) between 2001 and 2031.

Figure 4-4 shows population pyramids for Maple Ridge in 2001 and 2031 and how the age and sex composition of the population is projected to change over this 30 year period. The population pyramid shows how the bulges in the population structure, reflecting the Baby Boom and Baby Boom Echo (i.e. children of the baby boomers) move through the population pyramid. In 2031, all of the Baby Boomers will be 65 years of age and older, which reflects the top bulge. The second bulge is the Baby Boom Echo who would be between 36 and 51 years of age in 2031. The location of these two bulges higher up in the population pyramid reflect the fact that

the median age will increase from 36.3 years to 44.6 years of age over the time period based on the BC Stats PEOPLE 28 Population Projection for the Maple Ridge Local Health Area.

Figure 4-4: Population Pyramids for Maple Ridge, 2001 adjusted for Census Undercount and 2031 Projection



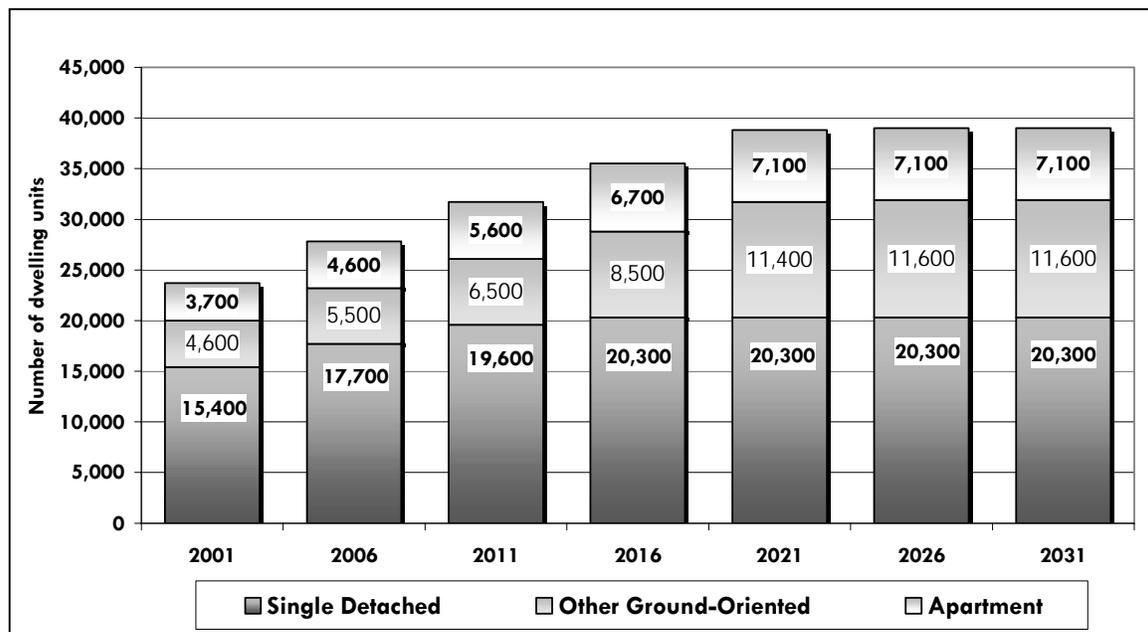
Base Case Housing Projection Results

Housing Capacity Reached just after 2021 and Capacity for Detached Homes Reached by 2016

The housing capacity in Maple Ridge is projected to be reached slightly after 2021 based on the existing land use designations in the OCP. Under the base case projection, the capacity for single detached homes is projected to be reached sometime between 2011 and 2016 depending on the actual rate of development of the remaining single detached lots. This estimate is based on the housing demand projection which is demographically based and does not take into account other factors, such as housing prices, household incomes, mortgage rates, and the actual rate of housing starts, which may extend the capacity for single detached houses to beyond 2016. In particular, the construction of single-detached homes is very sensitive to housing prices. Once total housing capacity is reached, there will be 20,300 single detached homes, 11,600 other ground-oriented homes, and 7,100 apartment units developed in the district (Figure 4-5).

The need for single detached homes will shift in the future as many smaller size households will look towards other ground-oriented units and apartments to meet their housing needs, especially if housing prices remain high.

Figure 4-5: Base Case Projection of Private Households by Structural Type, Maple Ridge, 2001-2031



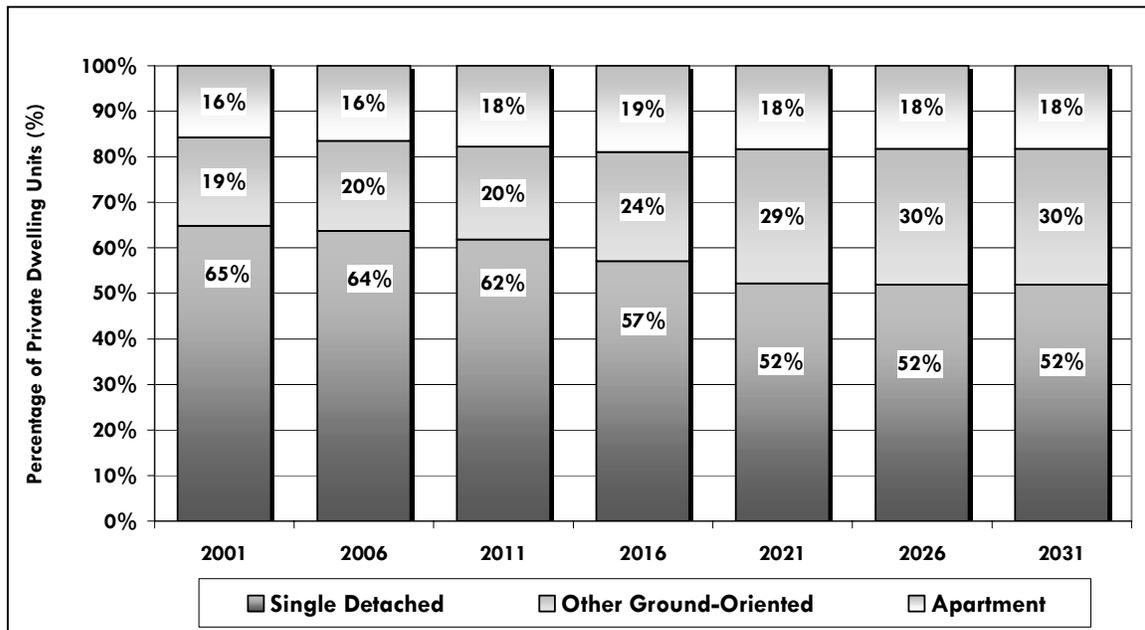
Share of Detached Homes Declines to Just Over 50% of Dwellings

Under the base case projection, the percentage of single-detached homes will fall from 65% in 2001 to 52% in 2021 and remain at that level until 2031 as alternative forms of housing become developed in greater numbers (Figure 4-6). This trend is similar to the decline experienced by the City of Coquitlam between 1986 and 2001 when its share of single-detached homes fell from

65% to 51%. The base case projection shows that a similar decline is anticipated to occur over a 20 year period in Maple Ridge, compared to a 15 year period experienced in Coquitlam.

The number of apartment units will almost double from 3,700 units in 2001 to 7,100 units in 2031. Other ground-oriented units will more than double in number from 4,600 units in 2001 to 11,600 units in 2031.

Figure 4-6: Base Case Percentage of Dwellings by Structural Type, Maple Ridge 2001-2031



The base case projection becomes constrained by the availability of residential land for housing after 2021. After this point in time, housing demand outstrips the supply of housing. In reality, as the housing capacity is approached the municipality might respond by pursuing policies to increase housing capacity. Some of these policy options are explored in greater detail in the following sensitivity analysis.

Sensitivity Analysis

A sensitivity analysis was conducted in conjunction with the base case population and housing projection to better understand how the results vary with changes in underlying assumptions. In general, sensitivity analyses are used to increase the understanding of how model response variables or results respond to changes in the assumptions and inputs to a model. For the population and housing projection model, the key assumptions tested in the sensitivity analysis are: (1) the housing capacity, (2) the population growth rate, (3) average household size, and (4) the percentage of single-detached homes that have secondary suites.

Changes in Housing Capacities

The District has control over the amount of residential land that is made available for certain types and densities of housing. Three main options available to the District are to 1) make more land available for residential development, 2) redevelop existing areas at higher housing densities, or 3) a combination of the above. In all cases, it is assumed that the Agricultural Land Reserve remains intact. Based on these generic options, three different assumptions of housing supply were tested in the sensitivity analysis:

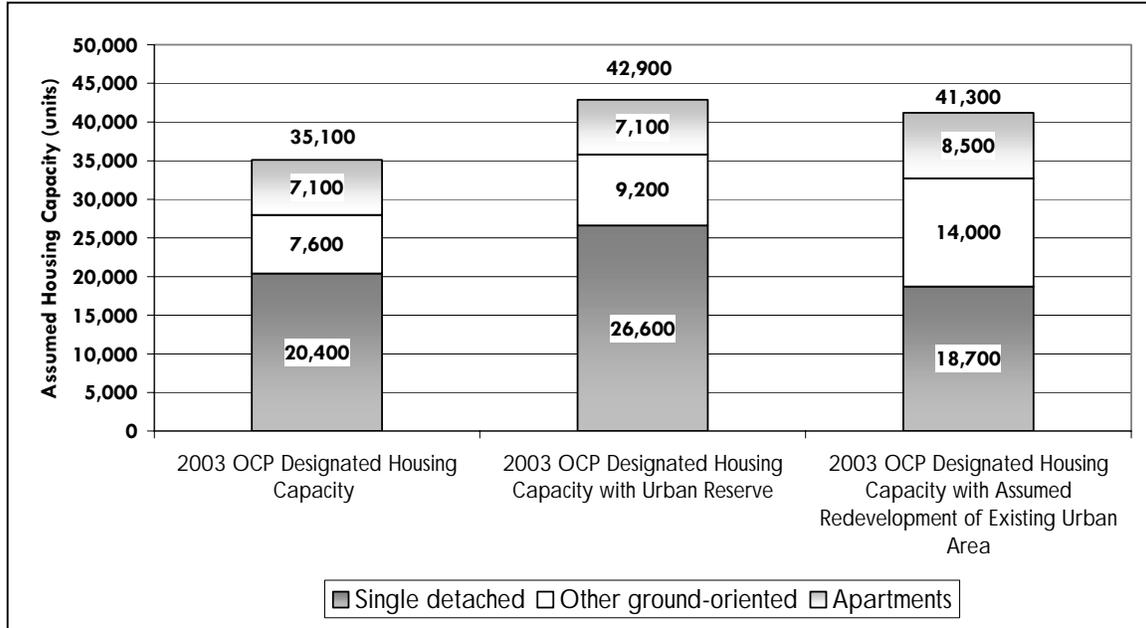
- The housing capacities from the existing land use designations in the current OCP are used
- Development is allowed in the Urban Reserve, which would make available up to an additional 7,550 units of capacity (based on a study conducted by UMA Engineering conducted in 1988), and
- The existing urban area is redeveloped, which could increase the housing capacity by approximately 6,100 units

The primary sources for OCP designated capacity is the District of Maple Ridge. The primary source for the additional capacity due to the Urban Reserve is from a report by UMA Engineering entitled Urban Growth Study and Conceptual Plan report (1988). The redevelopment option was based on the following assumptions made by The Sheltair Group:

- 1) The total projected housing demand for apartments is fully satisfied;
- 2) Redevelopment occurs on land currently designated for single detached lots in the existing urban area;
- 3) The actual dwelling unit densities for the redeveloped areas are three times higher than under current OCP land use designations; and,
- 4) The redeveloped land has a distribution of 15% small lot single-detached units, 70% other ground-oriented units, and 15% apartment units.

These are rough estimates made by the consultant to explore how the population and housing projection varies with different assumptions about housing capacities. These assumptions are not based on any current planning initiatives of the District of Maple Ridge. The District may wish to explore these numbers in greater detail, in which case revised housing capacity figures can be inputted into the population and housing projection model to explore different assumptions regarding redevelopment and housing capacities.

Figure 4-7: Assumed Housing Capacities Under Various Development Options for Sensitivity Analysis



Changes in the Population Growth Rate

Three different assumptions of population growth rate were tested:

- 1.5% compound annual population growth rate
- 2.0% compound annual population growth rate
- 2.5% compound annual population growth rate.

The last two growth rates correspond approximately to the population projections to 2021 conducted by the GVRD (Growth Management Scenario version 4.0), and Hudema Consulting and TyPlan Consulting. The 1.5% growth rate was selected to provide a lower bound to the base case growth rate of 1.67%, which was taken from the BC Stats PEOPLE 28 population projection.

Changes in Average Household Size

Three different assumptions of average household size projections were tested:

- Average household size changes over the next three decades. This is a linear change from 2001 to 2031, based on estimates of average household size for each dwelling type in the year 2031 (Table 4-2). These estimates have been derived from a variety of sources and professional judgement.⁸

⁸ The average household size assumptions for 2031 are based on a variety of sources and professional judgement. The consultant team reviewed average household sizes from other municipalities that have a higher median age than Maple Ridge (e.g. White Rock) to obtain a proxy for certain dwelling types such as single-detached houses. For secondary suites, an average household size was obtained from a Secondary Suites: A Tenant Survey conducted throughout BC from the Tenants' Rights Action Coalition (the average household size for secondary suites was estimated at 2.1 persons per dwelling). Average household size for apartments has been increasing in the GVRD over the last several census periods. It was therefore assumed that the average household size for apartments in Maple Ridge would increase to a level equal to the current regional average. (The increase in average household

- Average household size for each dwelling type is 10% less than those estimated in the preceding case (i.e. 10% less than the figures shown in Table 4-2).
- Average household size for each dwelling type remains the same over the next three decades (i.e. no change from 2001).

Table 4-2: Average Household Size in Maple Ridge, 2001 and Assumptions for 2031

	2001 Census	Assumed in 2031
Single-detached house	3.08	2.45
Semi-detached and apartment/flat in a duplex	2.67	2.10
Row house	2.61	2.14
Apartment in a building that has fewer than five storeys	1.68	1.82
Apartment in a building that has five or more storeys	1.43	1.64
Other	1.65	2.0

Changes in Share of Detached Houses with Secondary Suites

Three different assumptions of the share of detached houses with secondary suites were tested⁹:

- 10% of all detached homes in the district have a secondary suite available for occupation
- 20% of all detached homes in the district have a secondary suite available for occupation
- 30% of all detached homes in the district have a secondary suite available for occupation

Realistically, only detached homes within the existing urban area would be permitted to have secondary suites. However our assumptions were based on all detached homes in the district. This simplifying assumption was made because our analysis was not conducted at a submunicipal level.

Results Of Sensitivity Analysis

Table 4-3 shows the results of the sensitivity analysis when varying the population growth rate and the housing capacities. The data in the table have the same assumptions for average household size and for the share of detached houses with secondary suites.

The results of the sensitivity analysis indicate that under either a lower population growth rate of 1.5% or a higher growth rate of 2.5%, and varying the assumptions on housing capacity, the population would fall within a range of 88,200 to 109,500 in 2031. In 2021, the population size is projected to also fall between 88,200 and 108,600 based on the same variation of assumptions.

size for apartments is, in part, due to the fact that many households who would otherwise live in single detached houses will have to live in other ground oriented units or apartments because of housing supply constraints.)

⁹ Realistically, only detached homes within the existing urban area would be permitted to have secondary suites. However our assumptions were based on all detached homes in the district. This simplifying assumption was made because our analysis was not conducted at a submunicipal level.

Table 4-3: Projected Population Based on Variations in Growth Rate & Housing Capacity Assumptions, 2021 and 2031

Assumed Housing Capacity	Compound Annual Population Growth Rate	2021	2031	Period Single-detached Housing Capacity Reached*	Period Total Housing Capacity Reached
Using capacities based on land use designations in current OCP	1.5%	88,200	88,200	2016-2021	2021-2026
	Base case (1.67%)	93,700	88,200	2011-2016	2021-2026
	2.0%	94,200	88,200	2011-2016	2016-2021
	2.5%	94,200	88,200	2011-2016	2016-2021
Including Urban Reserve capacities	1.5%	88,200	98,500	After 2031	After 2031
	Base case (1.67%)	93,700	108,900	2026-2031	After 2031
	2.0%	96,100	109,500	2026-2031	2026-2031
	2.5%	108,600	109,500	2021-2026	2021-2026
Including potential capacities from redevelopment of existing urban area	1.5%	89,100	99,100	2011-2016	After 2031
	Base case (1.67%)	95,600	99,500	2006-2011	2026-2031
	2.0%	98,300	99,500	2006-2011	2021-2026
	2.5%	106,100	99,500	2006-2011	2016-2021

* The housing demand projection is demographically-based. Other factors may delay the estimated time when capacity for single-detached homes is reached, such as housing prices, interest rates, actual housing start rates, etc.

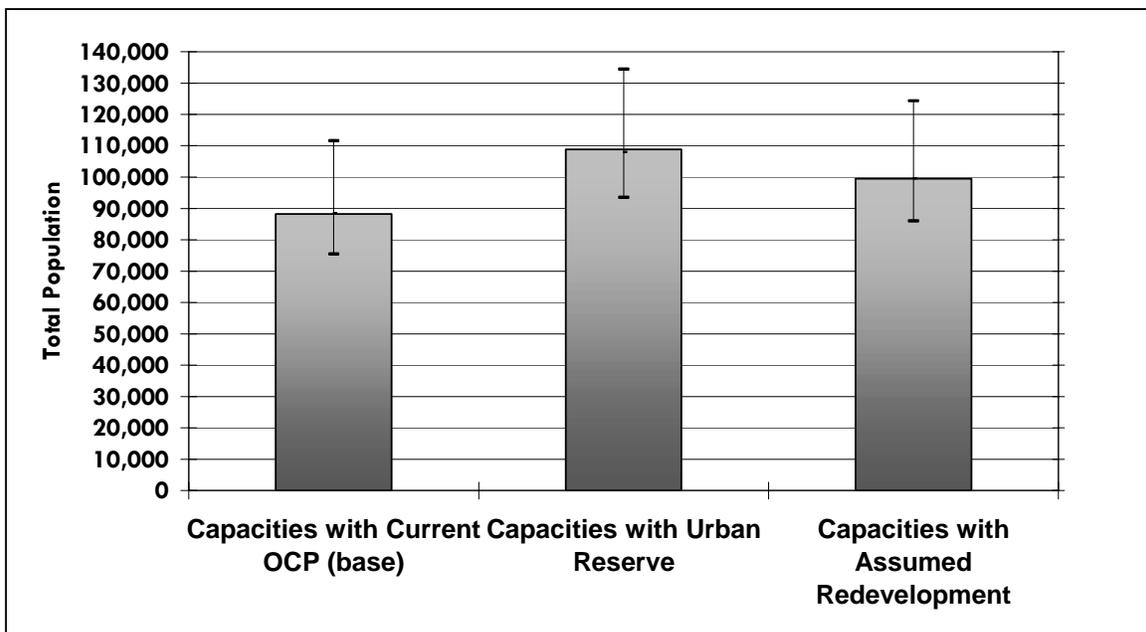
The housing capacity is reached or almost reached by 2031 in all of the above variations on the base case projection. At a 2.5% population growth rate, housing capacity would be reached by 2021 under the base case and redevelopment option, and by 2026 if the urban reserve were made available. The capacity is reached for single detached houses earliest in the base case projection and the assumed redevelopment option. The projected housing demand, which is demographically based, indicates that the demand for this type of housing will be high and could be reached as soon as over the next decade using estimates of currently available capacity. A slower population growth rate would extend the period when the capacity is reached for single detached houses. In addition, making land available in the urban reserve would also extend the supply of this type of housing as far as 2031 under the base case population growth rate.

The time it takes for housing capacity to be reached is highly sensitive to assumptions regarding average household size and the share of single-detached houses that have secondary suites. With all other factors being equal, lower average household sizes would result in the housing

capacity being reached sooner than in a case with higher household sizes. Similarly, a higher share of secondary suites would extend the length of time it takes for housing capacity to be reached because of the increased capacity from secondary suites.

Figure 4-8 shows the range in projected population resulting from changes in all the assumptions. In the most extreme case, the municipality's population would reach 134,400 in 2031 if (1) the population growth rate was 2.5%, (2) average household sizes in 2031 are the same as current levels in Maple Ridge, (3) a high share of secondary suites is available (i.e. 30% of detached houses), and (4) the Urban Reserve is developed (Under these conditions, the population is anticipated to reach a lower population since it is unlikely that there would be a high portion of secondary suites - e.g. 30% - allowed in the Urban Reserve.)

Figure 4-8: Population in Maple Ridge in 2031 Under Three Housing Capacity Assumptions (showing extreme ranges from Sensitivity Analysis)



Conversely, the lower bound for the projected population in 2031 is 75,500 people. This population would be achieved if (1) the population growth rate is 1.5%, (2) average household sizes in 2031 are 10% lower than that assumed for the base case projection, (3) a low share of secondary suites is available (i.e. 10% of detached houses), and (4) no other housing capacity is made available other than that presently identified under the OCP land use designations.

Under the base case population growth rate, the share of single-detached houses in 2031 would vary from 42% for a redevelopment option to 52% based on the existing land use designations to 58% for the Urban Reserve option. All of these shares represent a significant decrease from the 2001 level of 65%.

Under all scenarios, there will be a significant increased demand in the coming decades for apartments and ground-oriented units such as row houses. Demand for apartment units will in fact exceed the available capacity based on the existing land use designations or the Urban Reserve option. As a result, the redevelopment option may be more suitable than the other scenarios from

the perspective of meeting future housing needs. The District will be conducting a Housing and Residential Lands Policy Review in 2004, which will explore these and other housing issues in much greater detail.

Summary and Conclusions

A projection is an estimate of what the future could look like based on a set of assumptions. The projection developed in this report is one possible view of how the future population size, age distribution, and housing growth could look like in Maple Ridge. The projection indicates the relative magnitude of change that can be anticipated over the next three decades. Actual internal choices, particularly regarding the choices that the district makes about the availability of land for residential development for certain types of housing, as well as external forces and uncertainties will ultimately affect the population and housing growth in Maple Ridge.

Key findings from the population and housing projection are:

- The population is projected to reach 93,700 in 2021 as housing capacity is reached just after 2021 and then decline to 88,200 in 2031 as the average household size declines;
- The share of the population aged 55 years and older will increase markedly and account for over 34% of the population by 2031, up from 18% in 2001;
- Housing capacity is projected to be reached just after 2021 and the capacity for single-detached homes will be reached between 2011 and 2016 under the base case population projection; and,
- The share of single-detached homes in 2031 is projected to fall to 52% by 2021 from 2001 levels of 65%.

5. Further Research

Recommendations for Further Research

The population and housing projection in this report provides a foundation for the next stages in the OCP process, and helps to inform planning decisions in the District. Additional research would help to provide the District with information that complements the findings from this report. Key recommendations for further research are:

- The population and housing projection is quite sensitive to assumptions concerning housing capacities. In particular, it is unclear how the current land use designations might be altered as the current designated housing capacities are approached. Therefore, we recommend that the district explore in more detail the impacts of different housing capacity options on population and housing growth.
- Population and housing growth are closely tied to economic and employment growth in the area. Therefore, we recommend that the District conduct a complementary study to better understand future employment patterns in the municipality and surrounding area and how these relate to population and housing growth.
- The housing projection does not provide a detailed projection of specific types of housing demand for seniors. Therefore, we recommend that additional research be undertaken to better understand the future housing needs of the seniors market.
- One way to explore the key assumptions about population and housing growth in Maple Ridge is through developing scenarios. Scenarios can be thought of as “what if” experiments or “stories” about the future. We recommend that a local scenarios workshop be conducted as part of the District’s OCP process to better understand the external forces and internal choices that will shape Maple Ridge’s population and housing growth, and to develop various ‘stories’ of how population and housing growth might occur in Maple Ridge. This workshop would allow the municipality to investigate many of the assumptions made in this report’s sensitivity analysis.
- Significant capacity for housing could be accommodated through secondary suites. We recommend that additional research be conducted on the potential housing capacity associated with secondary suites, including estimates of average household sizes.
- We recommend that the population and housing projection contained in this report be revised if major assumptions change, such as if there are significant boundary changes to the Agricultural Land Reserve.
- Finally, we recommended that a revised base case population and housing projection be prepared if a major change in policy regarding residential capacities is made as part of the OCP review process. This revised base case projection should be included in the district’s updated OCP.

Bibliography

- Baxter, David and Andrew Ramlo. 1999. Housing British Columbia's Seniors in the Next 30 Years. Urban Futures Institute Report 29.
- Baxter, David and Jim Smerdon. 1999. Housing Metropolitan Vancouver's Population: Demographics and Long Run Housing Demand, 1999 to 2040. Urban Futures Institute Report 42.
- Baxter, David and Andrew Ramlo. 2000. The Next Century of Population Growth and Change: A Projection of Metropolitan Vancouver's Population, 1999 to 2101. Prepared for the Greater Vancouver Regional District.
- BC Stats. August 2003. P.E.O.P.L.E. 28 Projection for Maple Ridge Local Health Area.
- Boutilier and Associates. May 1996. Report on Telephone Survey of GVRD Residents on Attitudes Towards Ground-oriented Medium-Density Housing.
- Canada Mortgage and Housing Corporation. *Rental Market Report - Vancouver.*
- Canada Mortgage and Housing Corporation. *Housing Now - Vancouver.*
- Canada Mortgage and Housing Corporation. *Seniors' Housing Market Survey - Metro Vancouver.*
- Canada Mortgage and Housing Corporation. Housing Outlook Conference 2003 - Ride the Next Wave Conference Presentation Slides. November 5, 2003, Vancouver.
- Clayton Research Ltd. October 1995. Demographic Analysis of Maple Ridge: An OCP Review Discussion Paper. Number 1 in a Series of 11 Prepared for the Official Community Plan Review.
- Clayton Research Associates. November 1995. Housing: An OCP Review Discussion Paper. Number 3 in a Series of 11 Prepared for the District of Maple Ridge Official Community Plan Review.
- District of Maple Ridge. 1996. Official Community Plan.
- District of Maple Ridge. 2001. Maple Ridge Community Profile.
- District of Maple Ridge. 2003. Census Profile of District of Maple Ridge (Draft).
- Foot, David K. with Daniel Stoffman. 1996. Boom, Bust & Echo: How to Profit from the Coming Demographic Shift. Toronto: Macfarlane, Walter & Ross.
- Fraser Valley Regional District. April 1999. Fraser Valley Regional District Housing Survey.

- Global Frameworks Ltd. and Urban Futures Institute. September 2003. Population and Housing Demand for the [Central Okanagan Regional District], 2001-2031. Published by The Real Estate Foundation of BC and The Land Centre.
- GVRD Policy and Planning Department. June 1999. Dwellings by Structure Type in Greater Vancouver: 1996 Census Data and Selected Historical Trends.
- GVRD Policy and Planning Department. February 2003. Census Bulletin #6 - Immigration.
- GVRD Policy and Planning Department. March 2002. Review of Municipal Secondary Suite Policies in the Greater Vancouver Regional District.
- Hudema Consulting and TyPlan Consulting Ltd. 2003. New Fraser River Crossing Project Socio-Community and Socio-Economic Comparative Assessment.
- InterVISTAS Consulting. November 2002. "Economic Impact of the Winter Olympic and Paralympic Games: An Update." Final report prepared by for the Minister of State for Community Charter and Olympic Bid.
- Jim Woodward & Associates Inc., Eberle Planning and Research, Deborah Kraus Consulting, Judy Graves, and May Communications. July 2002. Research Project on Homelessness in Greater Vancouver. Prepared for the Greater Vancouver Regional District.
- Mercer Human Resource Consulting. 2003. Overall Rankings - Quality of Life Survey 2003.
- Anne K. Morrison Consulting Ltd., Warren Sommer and Cherie Enns. February 2002. Community Profile - Snapshot 2002: Maple Ridge, Pitt Meadows, Katzie. Prepared for Building Community Solutions Steering Committee.
- Mustel Group. March 2003. District of Maple Ridge Strategic Plan Community Survey. Prepared for District of Maple Ridge.
- Seniors Housing Information Program. 2002. Seniors Housing Development Forecast Tool (SHDFT): A Guide for Thinking About Developing Seniors Housing. Funded by the Real Estate Foundation of BC. Researched by Diana Hurford.
- John Talbot and Associates and Domain Consulting Ltd. December 1995. Summary of Public Response - Housing. Prepared for the District of Maple Ridge Official Community Plan Review.
- Translink. 2003. Fraser River Crossing Project Website.
- Translink. 2003. March 2003. The New Fraser River Crossing - Facts.
- Translink. 2003. New Fraser River Crossing Project. Vol. 3. Socio-community assessment application for an Environmental Assessment Certificate dated Sept 15, 2003.
- UMA Engineering. July 1988. Urban Growth Study and Conceptual Plan report. Prepared for the District of Maple Ridge.

Appendix A - Glossary

Items denoted by an asterisk () are from the 2001 Census Dictionary, Statistics Canada.*

Apartments - for the purpose of this report, apartments include the two census categories of apartments: apartments five or more stories, or apartments less than five stories

Apartment, detached duplex* - One of two dwellings, located one above the other, but not attached to any other dwelling or structure (except its own garage or shed). The two units together have no other dwellings attached to the back, front, or sides, and have open space on all sides.

Apartment, five or more storeys* - A dwelling unit in a high-rise apartment building which has five or more storeys

Apartment less than five storeys* - A dwelling unit attached to other dwellings, commercial units or other non-residential space in a building that has fewer than five storeys.

Collective Dwelling* - Dwelling used for commercial, institutional or communal purposes, such as a hotel, a hospital or a work camp.

Household Maintainer* - Refers to the person or persons in the household who pay the rent, or the mortgage, or the taxes, or the electricity, etc., for the dwelling. If no person in the household is responsible for such payments, Person 1 is considered to be the only household maintainer.

Maple Ridge Local Health Area - the Maple Ridge Local Health Area is an administrative unit that comprises the District of Maple Ridge, District of Pitt Meadows, the Katzie and other local Indian reserves as defined by BC Stats.

Movable dwelling* - A single dwelling used as a place of residence, but capable of being moved on short notice, such as a mobile home, tent, recreational vehicle, travel trailer or houseboat.

Occupied Private Dwelling* - A separate set of living quarters which has a private entrance either directly from outside or from a common hall, lobby, vestibule or stairway leading to the outside, and in which a person or a group of persons live permanently.

Other ground-orient units - for the purpose of this report, includes row houses, semi-detached houses, other single-attached houses, movable dwellings / mobile homes, apartments in a detached duplex, and secondary suites

Other single-attached house* - A single dwelling that is attached to another building and that does not fall into any of the other categories, such as a single dwelling attached to a non-residential structure (e.g. a store or a church) or occasionally to another residential structure (e.g. an apartment building).

P.E.O.P.L.E. Population Projection - This is the population projection model used by BC Stats and is an acronym for Population Extrapolation for Organizational Planning with Less Error. It is a

small area population projection using a "component / cohort-survival" population model to area-specific assumptions regarding fertility, mortality, and migration.

Recent Immigrants* - Refers to persons who immigrated to Canada between 1996 and Census Day, May 15, 2001.

Row house* - One of three or more dwellings joined side by side (or occasionally side to back), such as a town house or garden home, but not have any other dwellings either above or below

Semi-detached house* - One of two dwellings attached side by side (or back to front) to each other, but not to any other dwelling or structure (except its own garage or shed). A semi-detached dwelling has no dwellings either above it or below it, and the two units together have open space on all sides.

Sheltered Homeless - those people without a home who spent the night in an emergency shelter. Typically, these people are not counted in the census.

Single-detached house* - A single dwelling not attached to any other dwelling or structure (except its own garage or shed). A single-detached house has open space on all sides, and has no dwellings either above it or below it.

Street Homeless - Are those who did not stay in shelters, either staying with friends or sleeping outside. Typically, these people are not counted in the census.

Visible Minority* - "Refers to the visible minority group to which the respondents belongs. The Employment Equity Act defines visible minorities as 'persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour'.

Appendix B: Housing Trends and Preferences Workshop

Agenda, List of Participants, and Discussion Questions

Maple Ridge Housing Market Trends & Preferences Workshop

WORKSHOP AGENDA

Tuesday, December 9, 2003
9:00 a.m. - 12:00 p.m.
Blaney Room, Ground Floor
District of Maple Ridge Municipal Hall
11995 Haney Place
Maple Ridge

Agenda

9:00 - 9:10 a.m.	Welcome and Introductions	(Jane Pickering, District of Maple Ridge)
9:10 - 9:20 a.m.	Context Overview and Relationship to OCP Update Process	(Christine Carter, District of Maple Ridge)
9:20 - 9:30 a.m.	Demographics and Housing Profile	(The Sheltair Group)
9:30 - 9:50 a.m.	Population and Housing Drivers and Constraints - <i>discussion</i>	(The Sheltair Group)
9:50 - 10:15 a.m.	Preliminary Results of Population and Housing Projection (Base Case) - <i>discussion</i>	(The Sheltair Group)
10:15 - 10:25 a.m.	BREAK	
10:25 - 10:40 a.m.	Local Results of CMHC Consumer Intent to Buy a Home Survey	(The Sheltair Group)
10:40 - 11:00 a.m.	Home Buyers' Market - <i>discussion</i>	(The Sheltair Group)
11:00-11:20 a.m.	Rental Market - <i>discussion</i>	(The Sheltair Group)
11:20-11:45 a.m.	Seniors' Housing Market - <i>discussion</i>	(The Sheltair Group)
11:45-12:00 p.m.	Workshop Wrap Up	(The Sheltair Group, Jane Pickering and Christine Carter)

Maple Ridge Housing Trends & Preferences Workshop

December 9, 2003
Blaney Room
District of Maple Ridge Municipal Hall
9:00 a.m. -12:00 p.m.

Attendees

Consulting Team:

Lyle Walker, The Sheltair Group
Scott Akenhead, The Sheltair Group
Joe Kelly, Kelly & Associates Resource and Environmental Consulting

External:

Maureen Enser, Executive Director, Urban Development Institute
Peter Hayes, Homelife Classic Realty
Rolf Gullmes, Royal Lepage, Brookside Realty
Bob Denboer, Greater Vancouver Regional District
Dale Nelson, Executive Director, Chamber of Commerce
Paul Harrison, Purchasing and Transportation Manager, School District 42

District of Maple Ridge:

Brock McDonald, Director, Licenses, Permits and Bylaws
Pieter Den Uyl, Manager Inspection Services
Jim Rule, Chief Administrative Officer
Moreno Rossi, Planner
Christine Carter, Manager, Community Planning
Jane Pickering, Director of Planning
Sue Wheeler, Special Project, Parks and Leisure Services

Maple Ridge Housing Trends & Preferences Workshop -Discussion Questions-

Population and Housing Drivers & Constraints

1. What additional drivers may affect the population and housing projection?
2. What additional constraints may limit the size of population or form of housing?
3. Should the base case projection include the housing capacity from the urban reserve area?
4. How much capacity do you think will be available from secondary suites in new housing? Is there a demand for detached secondary suites?

Preliminary Results of Population and Housing Projection

1. What choices for housing types and locations do people make throughout their lives, in the context of Maple Ridge?
2. How do you think the market or District will respond when Maple Ridge approaches its capacity for single detached homes?
3. How do you think this unmet demand for single detached houses will shift in terms of housing choices and locations?
4. How will the vacancy rate respond when capacity is approached?

Home Buyers' Market / Local Results of CMHC Consumer Intent to Buy a Home Survey

1. Does the CMHC market survey paint a reasonable picture of home buyers? If not, what differences do you see in the market?

Rental Market

1. How widespread do you think the demand will be for secondary suites in Maple Ridge?
2. How do you think the rental market will respond when capacity for single detached houses is approached in the district?
3. What other market trends are there in Maple Ridge for the rental market?

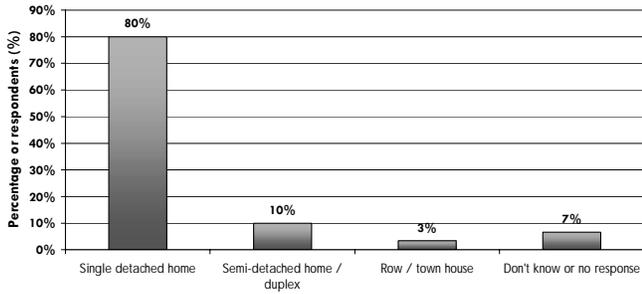
Seniors' Housing Market

1. What are the housing needs and preferences of seniors' or areas that need attention?
2. When housing capacity is approached for single detached homes, what form of housing will seniors' prefer?
3. What geographic location will seniors' choose – more urban or stay in same community?
4. What are the other market trends for the seniors' housing in Maple Ridge?

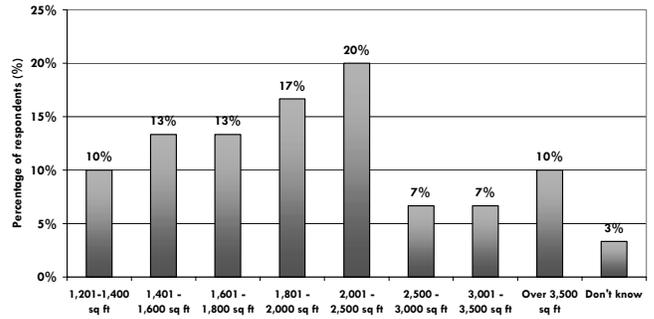
Appendix C: Results from CMHC Consumer Intent to Buy A Home Survey, Maple Ridge and Pitt Meadows, 2001 and 2002*

* See Section 2 for background and limitations about the survey

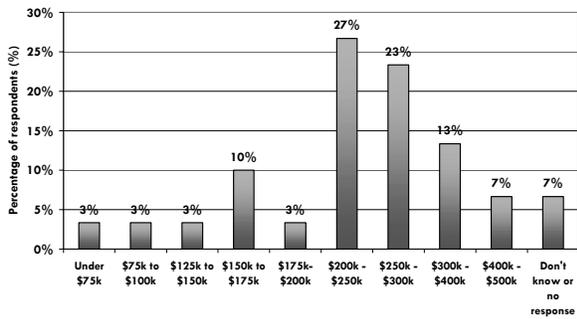
What type of home structure would you purchase?



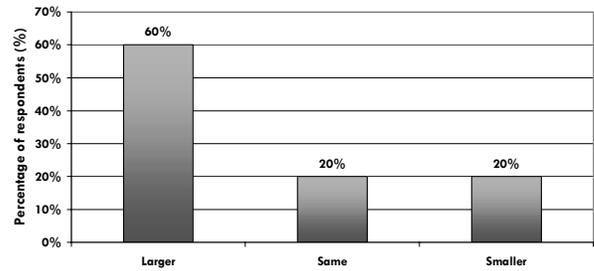
How many square feet are you looking for?



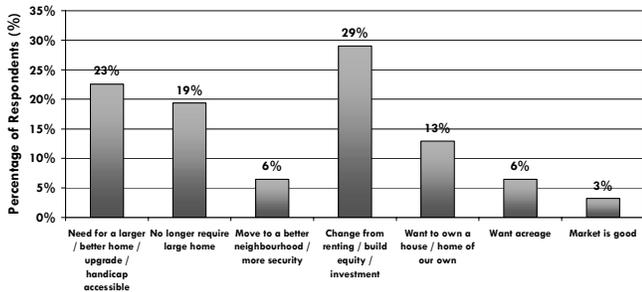
How much do you expect to pay for your next home?



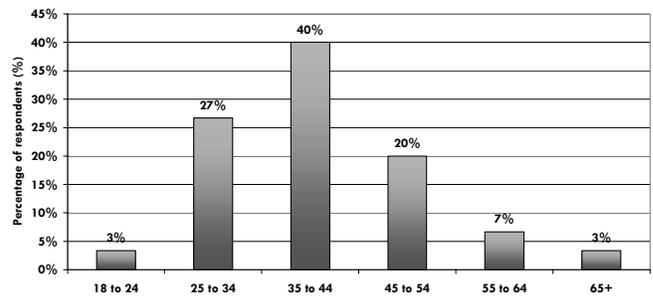
Size of home you are thinking of buying compared to your present residence?



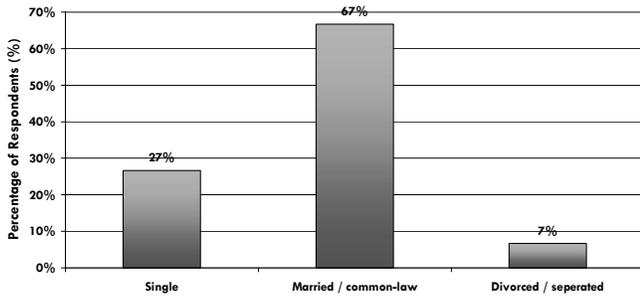
Most important reason why thinking of purchasing a home in next year?



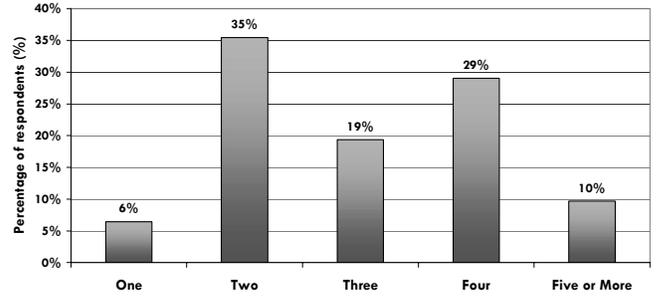
Home Purchase Intender: Age of Respondent



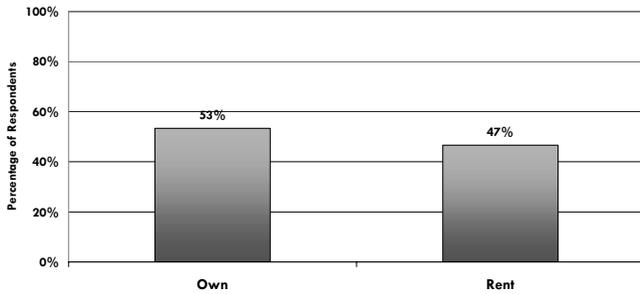
Home Purchase Intender: What is your marital status?



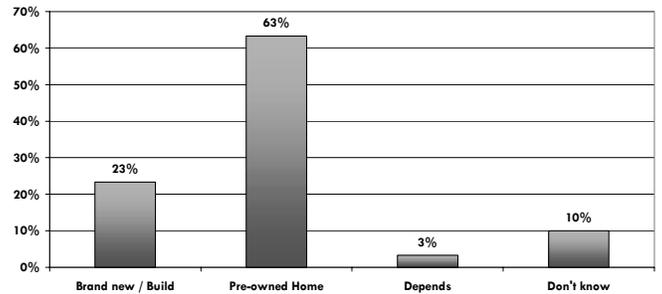
Home Purchase Intender: How many people currently live in your household?



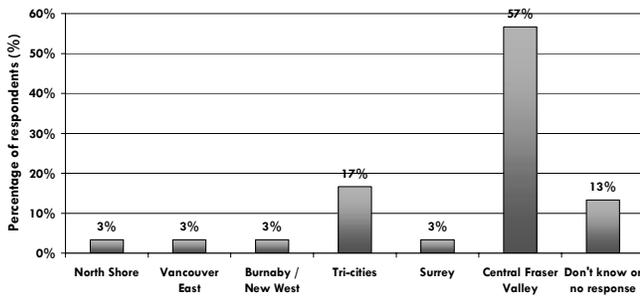
Home Purchase Intender: Own or Rent Current Home



Type of home looking for / Intending to Buy



Place of Residence of Respondent



Appendix D: Detailed Results of Base Case Population Projection

Demographic Analysis and Population and Housing Projection for Maple Ridge (MARCH 2004)

Projection Name: Base Case Population Projection

Main Assumptions: BC Stats PEOPLE 28 for Maple Ridge Local Health Area used to underly projection
 Housing Capacity (excluding secondary suites): 35,100
 % of detached homes with secondary suites: 20%

Summary Results: Population in 2031: 88,200
 Occupied Dwellings in 2031: 39,200
 Total housing capacity reached: 2026 (between 2021 and 2026)
 Single-detached capacity reached: 2016 (between 2011 and 2016)

Annual Compound Population Growth Rate:
 2001-2021: 1.75%
 2001-2031: 0.96%

<i>Detailed Results:</i>	2001*	2006	2011	2016	2021	2026	2031
Total Population	66,300	75,100	82,500	88,900	93,700	91,200	88,200
Annualized compound population growth rate (previous 5 year period)		2.53%	1.90%	1.51%	1.06%	-0.54%	-0.66%
Population in Private Dwellings	65,400	74,100	81,400	87,700	92,400	90,000	87,000
Total Private Dwellings	24,300	28,400	32,400	36,000	39,100	39,200	39,200
Avg Num of People in Occupied Private Dwellings	2.76	2.67	2.57	2.47	2.38	2.31	2.23
<i>Dwellings by Type:</i>							
Single Detached	15,400 65%	17,700 64%	19,600 62%	20,300 57%	20,300 52%	20,300 52%	20,300 52%
Other ground-oriented units	4,600 19%	5,500 20%	6,500 20%	8,500 24%	11,400 29%	11,600 30%	11,600 30%
Apartments	3,700 16%	4,600 16%	5,600 18%	6,700 19%	7,100 18%	7,100 18%	7,100 18%
Median Age	37.3	38.1	40.0	41.2	42.2	43.4	44.6
<i>Population by Age Cohort:</i>							
Ages 0-4	4,050 6.1%	3,870 5.2%	4,130 5.0%	4,420 5.0%	4,580 4.9%	4,310 4.7%	4,460 5.1%
Ages 5-9	5,150 7.8%	4,610 6.1%	4,380 5.3%	4,570 5.1%	4,780 5.1%	4,620 5.1%	4,350 4.9%
Ages 10-14	5,150 7.8%	5,520 7.4%	4,890 5.9%	4,620 5.2%	4,740 5.1%	4,620 5.1%	4,460 5.1%
Ages 15-19	4,810 7.3%	5,290 7.0%	5,540 6.7%	4,880 5.5%	4,560 4.9%	4,360 4.8%	4,260 4.8%
Ages 20-24	3,780 5.7%	5,020 6.7%	5,330 6.5%	5,580 6.3%	4,850 5.2%	4,230 4.6%	4,060 4.6%
Ages 25-29	3,540 5.3%	4,390 5.8%	5,510 6.7%	5,780 6.5%	5,940 6.3%	4,930 5.4%	4,360 4.9%
Ages 30-34	5,200 7.8%	4,790 6.4%	5,540 6.7%	6,560 7.4%	6,720 7.2%	6,470 7.1%	5,490 6.2%
Ages 35-39	6,470 9.8%	6,520 8.7%	5,930 7.2%	6,550 7.4%	7,450 8.0%	7,110 7.8%	6,820 7.7%
Ages 40-44	6,510 9.8%	7,280 9.7%	7,180 8.7%	6,490 7.3%	7,000 7.5%	7,350 8.1%	7,020 8.0%
Ages 45-49	5,200 7.8%	6,840 9.1%	7,560 9.2%	7,400 8.3%	6,620 7.1%	6,610 7.2%	6,940 7.9%
Ages 50-54	4,340 6.5%	5,270 7.0%	6,840 8.3%	7,500 8.4%	7,250 7.7%	6,020 6.6%	6,030 6.8%
Ages 55-59	2,970 4.5%	4,420 5.9%	5,280 6.4%	6,790 7.6%	7,340 7.8%	6,570 7.2%	5,490 6.2%
Ages 60-64	2,360 3.6%	3,080 4.1%	4,450 5.4%	5,250 5.9%	6,630 7.1%	6,630 7.3%	5,960 6.8%
Ages 65-69	1,990 3.0%	2,400 3.2%	3,070 3.7%	4,350 4.9%	5,050 5.4%	5,880 6.4%	5,890 6.7%
Ages 70-74	1,760 2.7%	1,950 2.6%	2,320 2.8%	2,900 3.3%	4,020 4.3%	4,330 4.7%	5,030 5.7%
Ages 75-79	1,410 2.1%	1,620 2.2%	1,800 2.2%	2,100 2.4%	2,590 2.8%	3,300 3.6%	3,560 4.0%
Ages 80-84	930 1.4%	1,220 1.6%	1,390 1.7%	1,530 1.7%	1,750 1.9%	2,000 2.2%	2,530 2.9%
Ages 85-89	460 0.7%	660 0.9%	840 1.0%	960 1.1%	1,040 1.1%	1,110 1.2%	1,270 1.4%
90 Plus	200 0.3%	360 0.5%	510 0.6%	660 0.7%	770 0.8%	780 0.9%	830 0.9%

* Note: data for 2001 has been adjusted from census levels to levels consistent with the BC Stats Projection.