



REGIONAL DISTRICT
of
NORTH OKANAGAN



File No.: 3045.10.06

TO: Regional Growth Management Advisory Committee
FROM: Anthony Kittel, Regional Growth Strategy Coordinator
DATE: February 9, 2010
SUBJECT: North Okanagan Population and Housing Forecast 2031

RECOMMENDATION:

That it be recommended to the Board of Directors that the report dated February 1, 2010 from the Regional Growth Strategy Coordinator regarding North Okanagan Population and Housing Forecast 2031 be received for information;

And further, that the Population and Housing: Trends and Projections: 2008-2031 dated January 7, 2010 be endorsed.

PURPOSE:

The purpose of this report is to present proposed population and housing forecasts to the year 2031 and the technical background information used to derive the forecasts. These forecasts will be used within the Regional Growth Strategy process and inform the CommunityViz Base Case Model.

DISCUSSION:

This staff report and attached '**Population and Housing Trends and Forecast: 2008-2031**' Report provide a summary of the updated and revised population and housing forecasts for the Regional District of North Okanagan and its six member municipalities and five electoral areas to the year 2031. The population and housing forecasts have been developed in consultation with Regional and local municipality planning staff, utilizing the most current information available to prepare projections. The forecasts are the product of a number of assumptions that are based on current demographic trends. The Regional forecasts are also based upon the provincial P.E.O.P.L.E. 33 forecasts.

The North Okanagan population and housing forecasts were prepared with the assumption that the North Okanagan will continue to be an attractive place to live and work and that the Region will continue to experience long-term economic viability.

There is a level of uncertainty attached to any forecasting exercise. Consequently, long-term forecasts are to be used with caution. Unexpected changes to the assumptions, such as a shift in current immigration levels or major economic changes could alter the outlook. It is the Regional District's intention to continue to carefully monitor the forecasts.

The comparative 'North Okanagan Population, Housing and Employment Forecast Study: 2008-2031, undertaken by CTQ Consultants Limited, was presented to the Regional Growth Management

Advisory Committee (RGMAC) on September 23, 2009. The RGMAC determined that the presented forecasts may not be representative of the North Okanagan and Regional staff was directed to re-examine and refine the forecast to be more reflective of the North Okanagan.

Staff have consulted with local municipal staff throughout the preparation of these forecasts and made appropriate changes based on their feedback.

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 the North Okanagan. Due to the significant influence of the Greater Vernon area on past population growth trends and future projections, the North Okanagan regional projections will reflect that influence. Actual internal and external forces and uncertainties will ultimately affect the population and housing growth in the North Okanagan. As population growth in the North Okanagan is entirely driven by net migration, population growth rates are anticipated to fluctuate widely from year-to-year.¹ Net migration is also much more difficult to predict than changes in the natural increase in the population.

Based on Statistics Canada 2006 Census estimates, the Regional District of North Okanagan (RDNO) population was 77,301 in 2006. The Regional District experienced an increase of 5.6% (4,074 people) at an annual average rate of 1.12% per year between 2001 and 2006. Compared to the rest of the province, the Regional District has an older population – the average North Okanagan resident is 4 years older than their British Columbian counterpart.

Key findings from the population projection are:

- The North Okanagan will continue to experience a net natural decrease in population throughout the projection period (i.e. more deaths than births);
- The population growth to 2031 will be driven solely by net migration to the North Okanagan;
- The population is projected to increase from 78,877 in 2006 to over 104,233 in 2031;
- The population is projected to increase by an average annual compound growth rate of 1.12% between 2006 and 2031;
- The fastest growing communities within the North Okanagan will be within the Greater Vernon Area, including the City of Vernon (1.45%), District of Coldstream (1.26%) and Electoral Area 'C' (0.77%) and 'B' (0.25%). The established urban communities of Armstrong (1.52%), Enderby (1.46%) and Lumby (0.82%) are expected to experience strong growth as well.
- The Township of Spallumcheen and the Electoral Areas are expected to have moderate to little growth over the next 23 years, although the Electoral Areas contain the most growth potential in non-resident housing demand.
- This growth will be characterized by discernable changes in the composition of the population. The greatest increase will be seen in the 65-plus population, which will grow at an annual rate of 2.7% and, by 2031, is projected to grow by 2.3 times its size in 2006. As a result, whereas seniors constituted only 19% of the population in 2006, a third of the population will be over the age of 65 in 2031.

¹ Sheltair Group. 2006. Population and Housing Profile and Projection for the City of Vernon: 2001-2031. Prepared for the City of Vernon by the Sheltair Group, December 2006, Vancouver, BC.

Some of the key findings from the housing projection are:

- The number of North Okanagan housing units is projected to increase from 35,241 units in 2006 to 46,136 units in 2031, based upon on population growth.
- Non-residential (second or vacation home) housing demand, based upon 2006 Census figures, may increase the North Okanagan housing projection by an additional 1,505 units (or a total of 47,287)
- The majority of new housing is anticipated to occur within Greater Vernon (City of Vernon, District of Coldstream, Electoral Areas 'B' and 'C'), representing 81.5% of the housing demand within the North Okanagan. Although strong population growth is projected in the City of Armstrong, City of Enderby and Village of Lumby, with their relatively small populations, will only comprise approximately 14.5% of the housing demand.
- The share of single-detached homes in 2031 is expected to remain at approximately the same level as in 2006 (60%);
- The average household size is projected to fall from 2.4 persons per household in 2006 to 2.2 persons in 2031; although household size will vary by community, and
- There is sufficient residentially zoned or designated land to accommodate all the projected housing growth and housing demand to 2031, although the City of Armstrong is anticipated to approach full build out by the end of the projection horizon.

BACKGROUND/HISTORY:

As part of the North Okanagan Regional Growth Strategy, the Regional District of North Okanagan commissioned CTQ Consultants with the development of a North Okanagan Population, Housing and Employment Forecast Study; 2006-2031. The background information, regional population projections, based upon BCStats P.E.O.P.L.E (Population Extrapolation for Organizational Planning with Less Error) 33 population projections for the Regional District of North Okanagan, and future household size projections are based upon CTQ Consultants' efforts.

Regional District of North Okanagan planning staff, with assistance from municipal planning staff, refined the municipal and electoral area population and housing projections based upon local knowledge and a share-of-growth ratio methodology. The refinement of sub-regional projections was at the direction of the Regional Growth Management Advisory Committee and Board of Directors of the Regional District of North Okanagan.

The approach used to forecast population and housing for the Regional District, municipalities and electoral areas involved two major steps. The first focused on the demographics of the Regional District of North Okanagan, member municipalities and electoral areas, with a review of the components of population change that have shaped the region over the past twenty five years. The trend projection of the Region's population from 2006 to 2031 establishes the demographic basis for future housing occupancy demand, which represents the second step of the approach.

Several approaches were considered and the "share of growth" ratio method was used by Regional staff to allocate the Regional population to local municipal and Electoral Areas. One approach is to consider the percentage distribution of current population.

Regional and Local Municipal staff met on several occasions to review the proposed regional growth allocation methods and forecasts. There was agreement among Regional and Local Municipal staff regarding the reasonability of the 'share of growth' ratio method and resulting local forecasts. The

population growth for each Local Municipality is illustrated in the attached 'Population and Housing Trends and Forecasts: 2008-2031' Report.

ANALYSIS AND OPTIONS

A projection is a description of what the future would look like if certain changes occur between now and then. Predictions, forecasts, projections, and extrapolations are essentially statements about what could result given a defined set of assumed circumstances. Being dependent on assumptions about the future and, given the inherent uncertainty about the future, projections are necessarily limited. They should not be seen as precise statements about the future, but rather an outlook of what might happen under a set of stated conditions.

Projections show us the direction and relative magnitude of the change that might occur given what we know today based on assumptions about the future.

Within the framework of strategic planning, land use issues of tomorrow may not be those of yesterday. Concerns with the effective containment and management of growth will become included in the broader and more fundamental issues of the effective management of change in providing the required infrastructure and services for a rapidly aging population.

This report reviews historical trends in regional population and housing within the Regional District of North Okanagan and provides a set of trend-based long-range projections of change for the region to 2031. Projections within this report are intended to serve as a basis for future discussions with regard to the development of the Regional Growth Strategy.

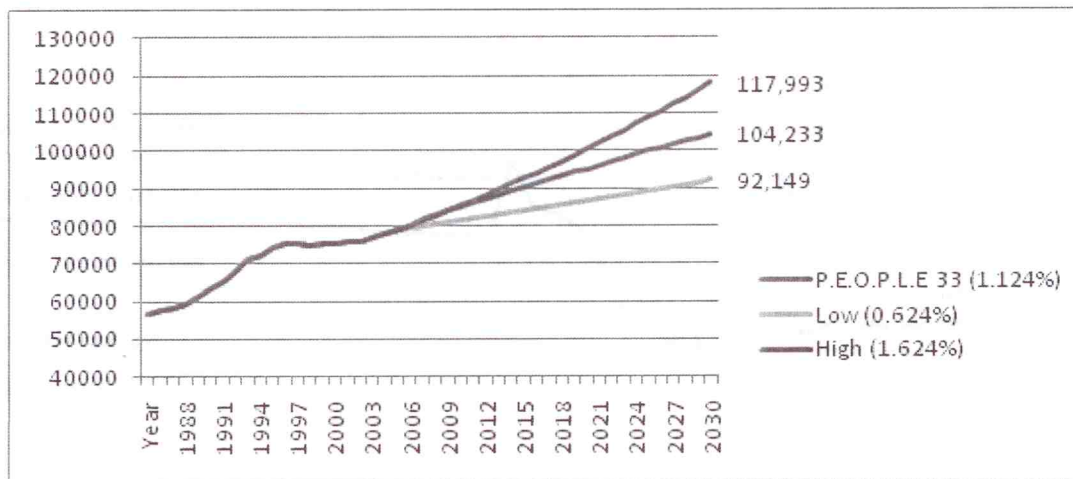
This staff report and attached 'Population and Housing Trends and Forecast: 2008-2031' Report provide a summary of the updated and revised population and housing forecasts for the Regional District of North Okanagan and its six member municipalities and five electoral areas to the year 2031. The population and housing forecasts have been developed in consultation with Regional and local municipality planning staff, utilizing the most current information available to prepare projections. The forecasts are the product of a number of assumptions that are based on current demographic trends and on Regional and local land use policy. The Regional forecasts are also based upon the provincial P.E.O.P.L.E. 33 forecasts.

The Regional District have consulted with local municipal staff throughout the preparation of these forecasts and made appropriate changes based on their feedback.

Population and Housing Forecasts 2008-2031

The Regional population projections were provided by CTQ Consultants using the BC Stats P.E.O.P.L.E. 33 population projection for the Regional District of North Okanagan. It must be noted that the provincial projections for regional districts include Indian Reserve populations and therefore slightly overestimate the total population growth for municipalities and electoral areas within the North Okanagan.

Figure 1: Population of the Regional District, 2006-2031, Varying Growth Rates



The BC Stats P.E.O.P.L.E. 33 projected a compound growth rate of 1.12% per annum, from 2006 to 2031. The Regional District population projections were based upon this compound growth rate to a 0.5% tolerance for the high and low growth rates was then applied as a reasonable estimation of the high and low growth rate for the period. Using the growth rate of 1.12% from the BC Stats P.E.O.P.L.E. 33 projection, a higher growth rate of 1.6%, and a lower growth rate of 0.6% per year were used to determine the high and low projections for the population of the North Okanagan Regional District. Using the range of growth rates forecasted out to 2031 the high, median and low population ranges are 117,993, 104,305, and 92,149 people respectively. These are considered to be reasonable assumptions for growth over the 25 year period (2006-2031) given the continued decline of the natural increase of the population, and fluctuating net migration within the region. The following figure illustrates the three growth rates and population projections.

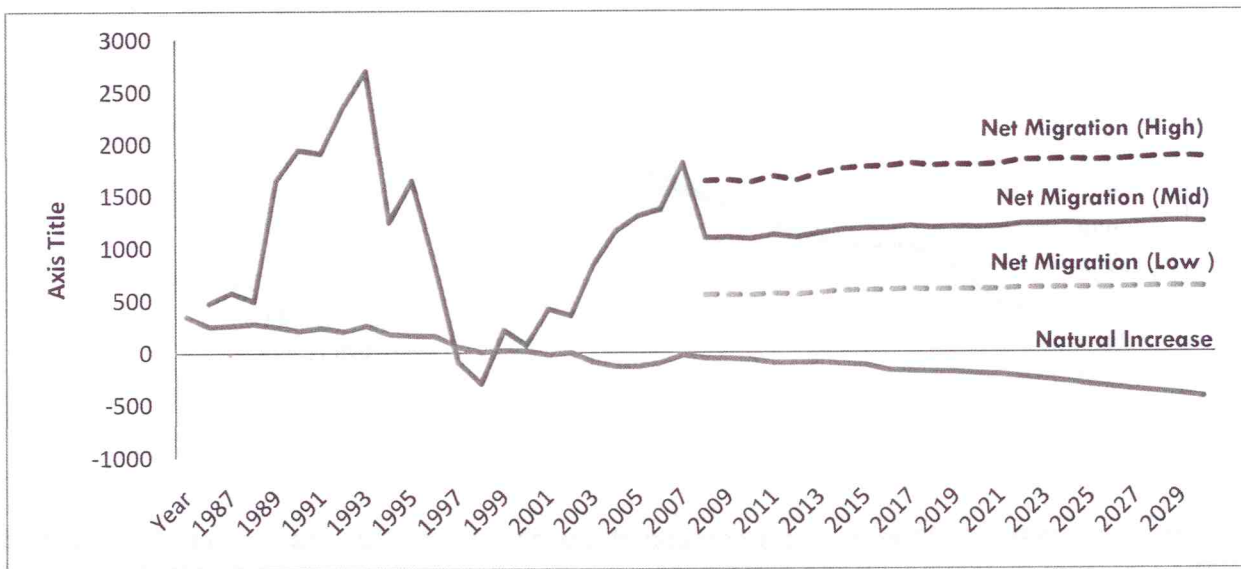
The two components of growth are Net Migration and Natural Increase of a region. The Natural Increase does not tend to fluctuate drastically, while the Net Migration may fluctuate dramatically from year to year. The following figure illustrates the Net Migration and Natural Increase projected by the BC Stats P.E.O.P.L.E. data from 2006 through 2031. Also illustrated are the historical fluctuations in the Net Migration, as well as the steadily declining Natural Increase in the population from 1986 through 2006.

Also depicted in the following figure are the resultant ranges for Net Migration for the low and high rates of growth depicted above, if the Natural Increase is held at the BC Stats P.E.O.P.L.E. 33 projections. As Natural Increase is in decline, for illustrative purposes the Net Migration has been varied to show the range of Net Migration that would be required to meet the low or high population projections to 2031.

In order to plan for the future needs of the residents of the North Okanagan, it is important to define the demographics and how the population trends are anticipated to change over time.

The Regional District of North Okanagan will face significant challenges over the next 25 years, as the number of seniors continues to increase dramatically. Growth in the older age groups of the North Okanagan populations is projected to continue increasing considerably faster than for the province as a whole, as the Okanagan remains a preferred retirement relocation centre for seniors from Canada and the US and as the local 'Baby Boom' population ages.

Figure 2: Net Migration vs. Natural Increase, Regional District, 1986-2031



The forecast was that the number of North Okanagan seniors aged 65+ would increase by 148% between 2006 and 2031. It was also forecast that as a group, seniors aged 65+ would make up 37% of the population by 2031, as opposed to 19% in 2006.

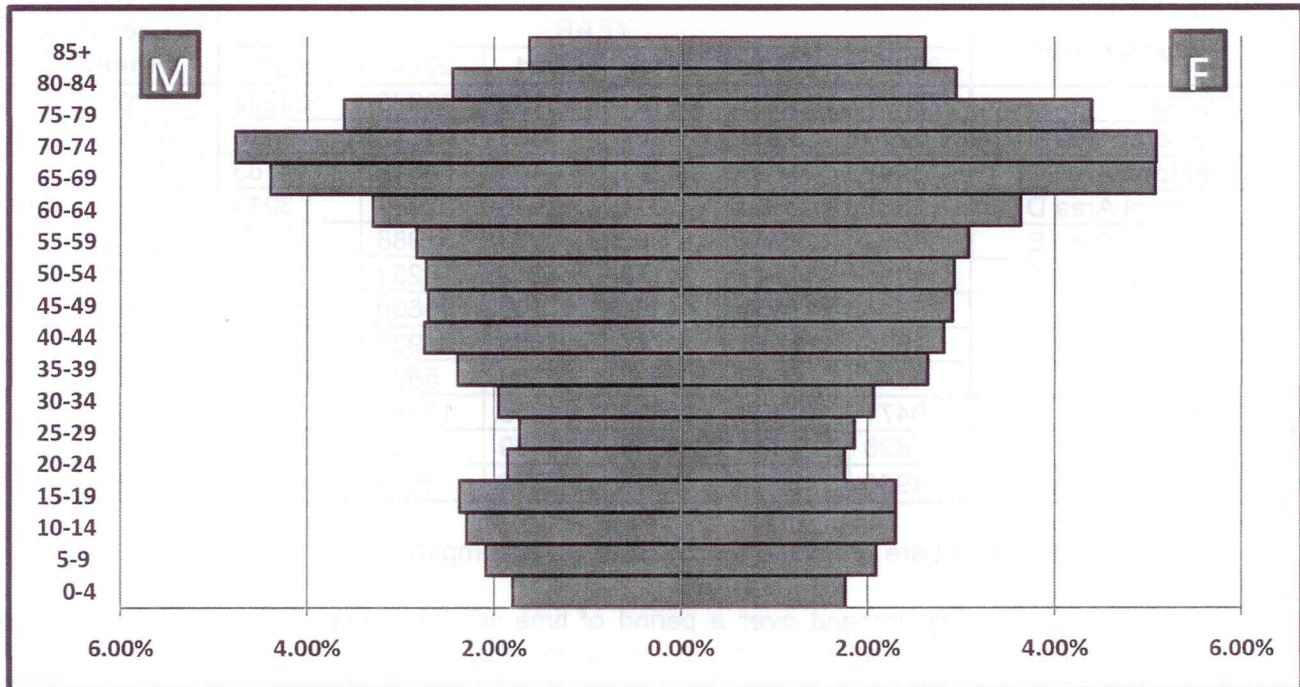
It is anticipated that, based upon past demographic trends, that all demographic groups under 65 year of age will experience slight absolute growth or decline, although their percentage of population will continue to decline as the population ages. Within the North Okanagan, especially with a deepening negative natural increase and declining birth rates, present demographic trends, and older cohort migration, may become amplified.

The 0-19 age group is expected to slightly decline from 18,268 (2006) to 16,966 (2031), although the share of population will drop from 23% to 17%. The 20-44 cohort is expected to decline slightly from 22,041 (2006) to 21,759 (2031), with the share of population dropping from 28% to 22%. The 45-64 cohorts is expected to increase slightly by 780 people, although share of population will also decline from 30% to 24%.

Although these trends appear to be extreme, British Columbia local governments with similar demographic profiles have observed impacts from an aging population, lower birth rates and out-migration of younger age groups. The District of North Cowichan² revised their 2002 population projections in 2008 due to major observed changes in the 2006 Census. The North Cowichan OCP projected that by 2016, the 65+ population would comprise 18% of the total population. This percentage has been reached by 2006. At the other end of the age spectrum, the North Cowichan OCP projected that by 2016 the 0-19 age group would comprise only 22% of the total population, reduced from 28% in 1996. By 2006, it had fallen to 16.5%. In short: the District of Cowichan was getting older at a much faster rate than expected in 2002.

² Suderman, Beverly. 2008. District of North Cowichan Population and Housing Forecast. Prepared for the District of Cowichan, May 2008.

Figure 3.5: North Okanagan Age Pyramid: 2031



Due to the high percentage of seniors, the small number of residents between 20-44 years of age, a high proportion of the population between 45-64 years old, a declining birth rate and the attraction of the Okanagan for retiree (55+) in-migration, seniors (65+) will dominate the population over the next 23 years.

With the ratio method, future population is assigned to a jurisdiction is based on its historic share of the Regional District of North Okanagan's population growth. For example, if Coldstream captured five percent of the North Okanagan's historic (1986-2006) population growth, it would be assigned five percent of future population growth during the first forecast period as a starting point.

Using the 'share of growth method, each jurisdiction were assigned a share of the Region growth forecast to 2031, based upon a 25 year historic share of Regional population growth. Electoral Areas, due to the small amount of data, used census information for 1996, 2001 and 2006 to determine share-of-growth. The City of Vernon Official Community Plan population forecasts were used within this population projection for the sake of consistency. **Table 1** provides an overview of the sub-regional population projections.

To forecast the nature and extent of future housing demand in the North Okanagan, the projections were tabulated using projected persons per household to 2031³ and **Section 3.2: Sub-Regional Population Projections: 2006-2031**. The analysis provides the estimated number of dwelling units by community.

³ CTQ Consultants. 2009. North Okanagan Population, Housing and Employment Forecast Study: 2008-2031. Prepared for the Regional District of North Okanagan by CTQ Consultants Limited, Kelowna, BC, August 26th, 2009.

Table 1: Sub-Regional Population Projections 2006-2031 Based on the Ratio Method

Jurisdiction	YEAR						% Growth/ annum
	2006	2011	2016	2021	2026	2031	
RDNO	78877	85023	90191	95199	99975	104233	1.20%
Electoral Area B	3211	3260	3300	3336	3377	3416	0.25%
Electoral Area C	3947	4125	4291	4445	4618	4783	0.77%
Electoral Area D	2837	2880	2914	2946	2981	3015	0.24%
Electoral Area E	934	949	962	973	986	999	0.27%
Electoral Area F	4091	4141	4178	4212	4251	4288	0.19%
Vernon	35944	41400	44300	47200	49600	51600	1.45%
Lumby	1634	1713	1787	1856	1933	2007	0.82%
Armstrong	4241	4645	5036	5399	5809	6198	1.52%
Coldstream	9471	10200	10899	11549	12281	12978	0.26%
Enderby	2828	3087	3336	3569	3830	4079	1.46%
Spallumcheen	4960	5111	5246	5372	5514	5649	0.52%

The projections in this report are premised on the following assumptions:

- A change in housing demand over a period of time will be presented a net change in the number of dwelling units occupied, i.e. the difference between the number of occupied residences at one point in time and the number of occupied residences at an earlier point in time.
- Growth in demand can be accommodated by new construction or by households occupying units that existed but were vacant or used by non-permanent residents at the beginning of the period. Therefore, the change in occupancy demand over a period of time is not necessarily the same as the number of dwelling units constructed during that period.

Table 3.2: Anticipated Regional Permanent Residential Housing Demand: 2009-2031

	Household Size: 2031	Population increase/annum	Housing Unit/annum	Housing need - 23 years	Total Population Increase
EA B	2.4	8.20	3.42	79	189
EA C	2.5	33.44	13.38	308	769
EA D	2.4	7.12	2.97	68	164
EA E	2.2	2.60	1.18	27	60
EA F	2.3	7.88	3.43	79	181
Armstrong	2.1	78.28	37.28	857	1800
Coldstream	2.5	140.28	56.11	1291	3226
Enderby	2	50.04	25.02	575	1151
Lumby	2.2	14.92	6.78	156	343
Spallumcheen	2.5	27.56	11.02	254	634
Vernon	2	626.24	313.12	7202	14404
RDNO		996.56	473.70	10895	22921

SUMMARY

The important components of change to consider in projecting demographic change for the region are its natality and mortality rates, mobility trends and the current age profile of the North Okanagan. Combining the projected levels and compositions of migration to and from the RDNO with natural increase and the aging of its current residents provides a baseline projection of population growth and, more importantly, its change.

The demographic projections show a population that will grow larger between 2006 and 2031 albeit at a much slower annual rate than has been seen historically. Over the coming decades the region's population is projected to increase from 78,877 (adjusted) residents today (2006) to 104,233 by 2031. Growth of 25,356 new residents over the projection period, or 32 percent, compares to the past two decades (1986-2006) which saw the RDNO grow by approximately 23,800 residents or by 43 percent.

One of the greatest drivers of population growth and change over the next 23 years will be the aging of the Baby Boom (born between 1946 and 1964) into the retirement (65-plus) stage of the lifecycle. This effect will be compounded by increasing life expectancies and the relatively small size of the seniors group currently. Whereas every age group under 45 is expected to decline, all the ages above 45 are expected to grow in the North Okanagan. In addition to impacting the future of housing demand, the significance of these shifts also lies in the observation that there will be a decreasing supply of people in the workforce to support the inevitable increase in demand for health care and services required by the older age groups.

In considering the projections presented throughout this report, it is important that strategic discussions focus on the "why" rather than the "how many". The RDNO will experience much more change in the coming years than it will growth. The regional population projection shows total population growth of 32 percent over the projection period with growth in the 65 plus population of almost 148 percent. Thus, while it has become a convention of regional planning to equate plans with growth management, it is essential that such planning be conducted within a wider context of change management.

Recommendations for Further Research

The population and housing projection in this report provides a foundation for the next stages in the Regional Growth Strategy process. Additional research would help to provide the Regional District of North Okanagan with information that refines the findings from this report. The recommendations for further research are to:

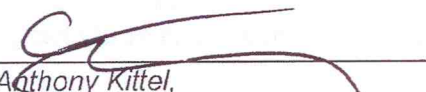
- Further analyze the existing seniors housing market and future housing needs of seniors in the North Okanagan, especially within the urban communities;
- Further explore the impact that the seniors population will have on economic development and labour force, municipal and regional service provision and other areas within the authority of local and regional governments;
- Investigate the extent of second home ownership in the North Okanagan, seasonal occupation patterns and the corresponding average household size;
- Conduct a projection of second home demand by dwelling type and associated residential land consumption;
- Revise the population and housing projection to incorporate any major changes in assumptions, such as significant boundary changes to the city or exclusions to the Agricultural Land Reserve;

- Revise the population and housing projection if there are major changes in the performance of the BC and Alberta economies as all the population growth in the North Okanagan is due to net migration; and
- Update the baseline for the population projection after the 2011 Canadian Census and during the Regional Growth Strategy 5-year Review, using a more comprehensive Traffic Management Zone (TMZ) methodology which has become the industry standard. To that end, the North Okanagan Transportation Model and Regional Growth Strategy Projection Model should form the foundation of that population and housing forecast model.

CONCLUSION:

The forecasts were developed in consultation with Regional and municipal planning staff. The population and housing growth rates that are anticipated to occur in the Regional District of North Okanagan through to the year 2031 come with a number of challenges and opportunities. Accommodating this level of growth will be a challenge. Significant investment in water and wastewater servicing, transportation infrastructure and human services is required to support this growth. Both the Federal and Provincial governments will need to be partners in providing a large portion of this investment. The North Okanagan will continue to face a number of growth management challenges in maintaining its economic competitiveness and high quality of life. The Regional Growth Strategy, as a key strategic planning document, will address these challenges. The forecasts will continue to be reviewed at least every five years to coincide with the availability of Census results and the five year review of the Regional Growth Strategy.

Submitted by:


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