



DEMOGRAPHIC AND SOCIOECONOMIC TRENDS

IN THE

REGIONAL DISTRICT OF NANAIMO

MAY 2001

(Revised September 28, 2001)



CONTENTS

Acknowledgements	iv
1.0 Introduction	1
2.0 Approach	4
3.0 Demographic and Socioeconomic Trends	6
3.1 Population Change	6
3.1.1 Regional Population Distribution and Growth Rates.....	7
3.1.2 Migration.....	9
3.2 Social Trends.....	11
3.2.1 Age Trends	11
3.2.2 Household Size.....	17
3.2.3 Residential Home Ownership.....	19
3.3 Economic Trends.....	22
3.3.1 Occupations.....	22
3.3.2 Level of Income	24
3.3.3 Income Source.....	26
3.3.4 Education Levels.....	27
4.0 Population Projections	29
4.1 Approach.....	29
5.0 Growth Implications	47
5.1 Population Trend Implications.....	47
5.2 Socioeconomic Trend Implications.....	48
Appendix A	51
Appendix B	53
References	57

LIST OF TABLES

Table 1. Regional District of Nanaimo Administrative Boundary Changes.....	6
Table 2. Regional Population Distribution.....	7
Table 3. Population Growth Rates in the Regional District of Nanaimo.....	8
Table 4. Growth Rate Comparisons.....	9
Table 5. Proportion of Migrants in Total Population.....	10
Table 6. Age Trends.....	11
Table 7. Seniors: Population Growth Trends.....	12
Table 8. Older Adults: Population Growth Trends.....	13
Table 9. The Middle Aged: Population Growth Trends.....	14
Table 10. Young Adults: Population Growth Trends.....	15
Table 11. Children: Population Growth Trends.....	16
Table 12. Average Number of Persons per Household.....	18
Table 13. Household Size.....	18
Table 14. Owned Residences.....	19
Table 15. Comparison of Increase in Owned and Rented Dwellings.....	20
Table 16. Average Dwelling Value and Average Rent.....	21
Table 17. Employment by Industry.....	22
Table 18. Changes in Top Ten Occupations.....	23
Table 19. Number of Jobs per Household.....	24
Table 20. Average Income.....	25
Table 21. Income Distribution.....	26
Table 22. Income Source.....	27
Table 23. Level of Education.....	28
Table 24. Population Estimates 2000.....	30
Table 25. Projected Growth Rates and Population of the Regional District.....	31
Table 26. Urban Containment Boundary Areas Population Projections.....	44
Table 27. City of Nanaimo Nodes Population Projections.....	46
Table 28. Additional Population in the RDN and UCBs in 2026.....	48

LIST OF FIGURES

Figure 1. Municipalities and Electoral Areas in the Regional District of Nanaimo	2
Figure 2. Urban Containment Boundary Areas.....	2
Figure 3. Nodes in the City of Nanaimo	3
Figure 4. Regional District of Nanaimo Population Projection	32
Figure 5. City of Nanaimo Population Projection.....	33
Figure 6. City of Parksville Population Projection	34
Figure 7. Town of Qualicum Beach Population Projection	35
Figure 8. Area A – Cedar Population Projection	36
Figure 9. Area B – Gabriola Island Population Projection	37
Figure 10. Area C – Nanaimo Lakes Population Projection	38
Figure 11. Area D – Wellington Population Projection	39
Figure 12. Area E – Nanoose Population Projection	40
Figure 13. Area F – Errington Population Projection	41
Figure 14. Area G – French Creek	42
Figure 15. Area H – Bowser Population Projection.....	43

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1.0 Introduction

This report represents the second in a series of reports that highlight the demographic and socioeconomic trends in the Regional District of Nanaimo. The first, “*Population, Demographic, and Economic Forecasts for the Regional District of Nanaimo*” was completed in March 1995 (Westland, 1995). This report updates the demographic and socioeconomic information presented in the first report, and serves to provide information to regional planners, residents, and developers. This report also supports the review of the Regional District of Nanaimo’s Growth Management Plan (GMP).

Adopted in 1997, the GMP includes eight goals, listed below, that are meant to guide decisions and policies affecting land use in the region:

Strong urban containment	Improved mobility
Nodal Structure	Vibrant and sustainable economy
Protection of rural integrity	Efficient services and resource use
Environmental protection	Cooperation among jurisdictions

The GMP is now undergoing its first review. Periodic reviews are scheduled to take place every five years. This report will support the review by presenting:

- Information on changes in population and socioeconomic characteristics up to 1996, based primarily on Census data, for the RDN and its member municipalities and electoral areas. Population in 2000 is estimated for this report.
- Projections of population to 2026 for the RDN, member municipalities, and electoral areas, and for the areas inside Urban Containment Boundaries¹ (UCBs) and selected nodes², as defined in the GMP and associated Official Community Plans (Figures 1, 2, and 3).
- A discussion of apparent trends in terms of their implications for the GMP and its future implementation.

The population projections will also support a concurrent study, the Land Inventory Analysis, serving as a basis for estimating future housing capacity deficits and surpluses in the Regional District.

¹ An Urban Containment Boundary (UCB) defines the area outside of which urban development is discouraged

² Nodes are centres in urban areas that contain a diversity of services and housing, creating a smaller community of neighbourhood in the urban area.

Figure 1
Municipalities and Electoral Areas in the Regional District of Nanaimo

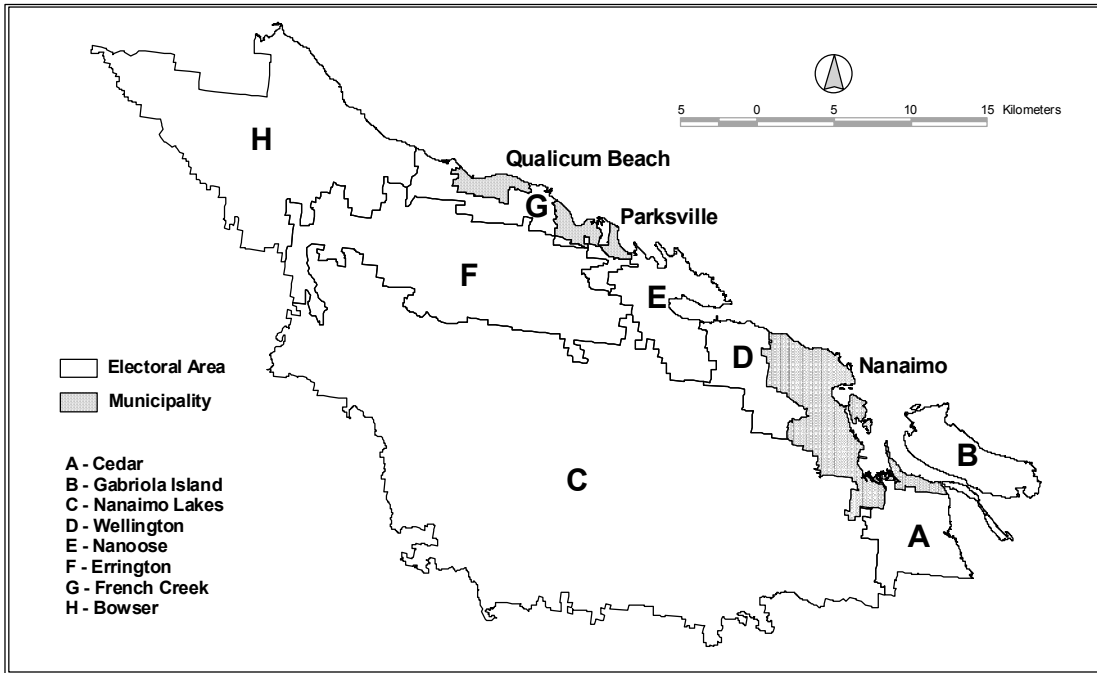
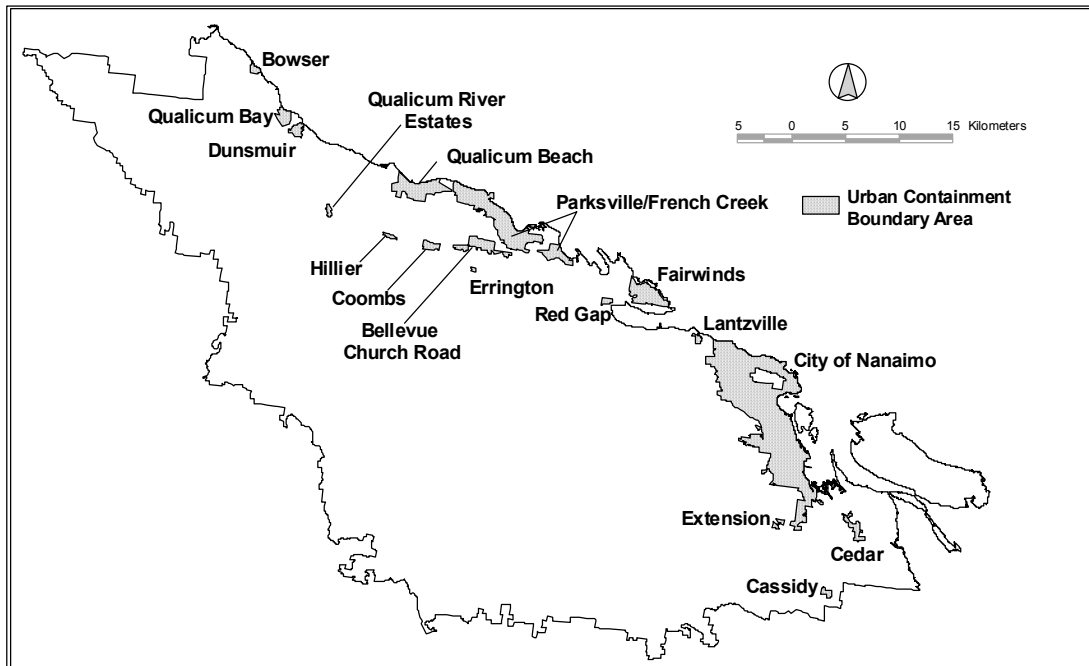
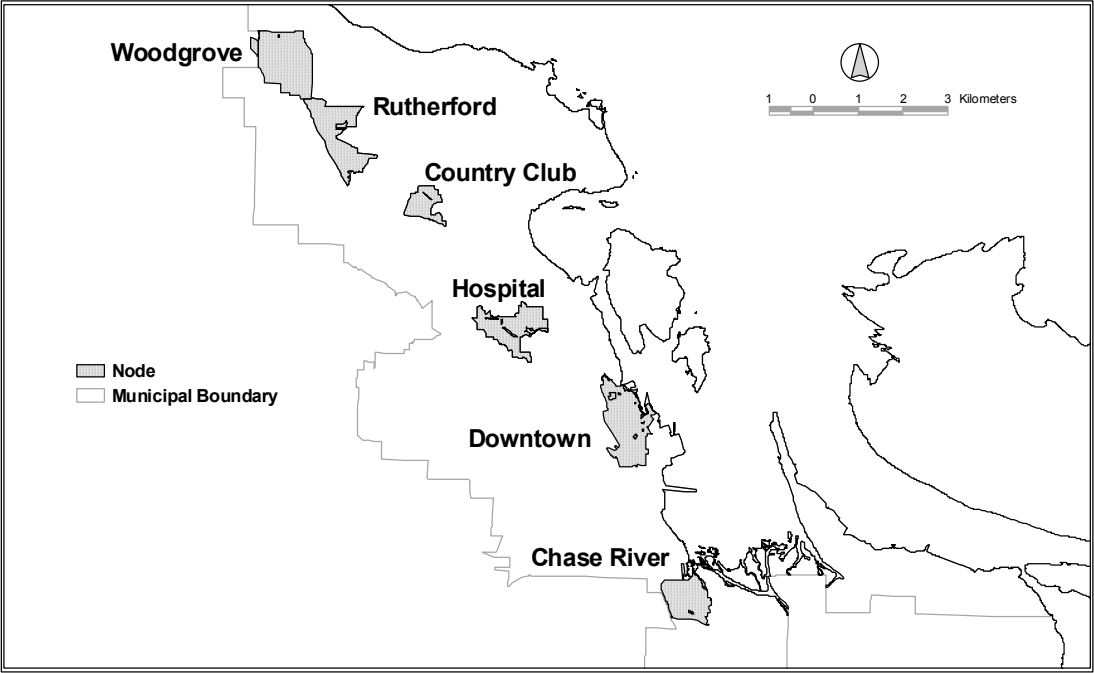


Figure 2
Urban Containment Boundary Areas



UCBs are defined in the RDN Growth Management Plan and in each Official Community Plan. Refer to these documents for exact boundaries.

Figure 3
Nodes in the City of Nanaimo



Nodes are defined in the RDN Growth Management Plan and in each Official Community Plan. Refer to the City of Nanaimo OCP for exact boundaries

2.0 Approach

Census data for 1996, the most recent census at the time of writing³, has been used to track changes in demographic and socioeconomic characteristics. Although these data do not reflect change since the adoption of the GMP in 1997, apparent trends may provide insight into factors affecting the future implementation of the GMP. While there may be other sources of data that provide more current information, a review of these data show that in many cases, the data do not cover the entire RDN, nor can they be accurately reported for the member municipalities and electoral areas. Using Census data allows for standard comparisons among jurisdictions and areas outside of the RDN, and increases the ability to easily update future reports in this series as new Census data become available.

Population estimates, as of December 31, 2000 are based on several data sources:

- BC Statistics population estimates, using the P.E.O.P.L.E. 25⁴ model
- BC Statistics households estimates, using multivariate regression analysis and age distribution data
- BC Assessment Authority data showing the number of buildings assessed as residential, multiplied by 2.4, the average number of persons per dwelling
- Estimates published in ‘Housing the Nanaimo Regional District’s Future Population: Demographics and Demand, 1996 to 2026’ by The Urban Futures Institute and The Land Centre. (Rosenburg *et al.* 1998)

Population projections to the year 2026, using the population estimates for 2000, are based on the estimated growth rates used in the BC Statistics P.E.O.P.L.E. 25 model for the RDN. The BC Statistics P.E.O.P.L.E. 25 model projects regional migration

“using a combination of historical trends and information on future major projects that are certain to have an impact on population. In general, the long-term (beyond five years) forecasts are based on historical trends with some very broad assumptions used to modify these trends. In the short-term, consideration is given to more specific events, which will drive the migration assumptions. Examples are mine openings and closures, changes to the Allowable Annual Cut for various Timber Supply Areas and Tree Farm Licenses, major construction activity, or other major projects” (BC Statistics website, 2000).

³ Although 2001 is a Census year, many of the data of interest for 2001 will not be available until 2002.

⁴ Population Extrapolation for Organizational Planning with Less Error, run number 25, May 2000.

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

The Regional District of Nanaimo and member municipalities intend to direct new growth into urban areas. Implementation of the policies contained in the Growth Management Plan and in each jurisdiction's Official Community Plan can impact the rates of growth in each area.

Additional factors may influence the growth rates of the region. Economic development and performance, environmental restrictions, and costs of production inputs (i.e., energy) may have significant impacts on how quickly population increases.

Appendices A and B provide detailed descriptions of the methods used to estimate population in 2000 and to estimate population distribution among various jurisdictions. The estimates and projections made for this report may not agree exactly with estimates made using different methodologies for different purposes.

3.0 Demographic and Socioeconomic Trends

3.1 Population Change

Population figures are most accurately provided every five years by the Canada Census. Total population is reported for Census Areas, the smallest of which is the Census Enumeration Area. Population in the RDN, its member municipalities, and electoral areas can be ascertained by totaling the population counted in the enumeration areas in each respective municipal or electoral area boundary.

Using Census data and administrative areas such as the RDN, municipal or electoral area boundaries creates several challenges for tracking change over long time periods. The Census data are provided for enumeration areas of approximately 350 to 400 persons. In order to maintain this population range, enumeration area boundaries change over time as populations grow. Similarly, as populations grow, administrative boundaries often change to incorporate newly urbanized areas. These fluctuations in boundaries make comparisons of total population over time very difficult. Abrupt changes in population, and in the resulting growth rate can be misleading because they may simply reflect the change in an administrative area or enumeration area boundary. Accepted practice at BC Statistics is to note when boundary changes occur, so that the reader is alerted to the potential effect on the data. Table 1 shows RDN administrative boundaries that changed between Census years.

Table 1
Regional District of Nanaimo Administrative Boundary Changes

Area	Boundary Changes by Time Period					
	1971– 1976	1976– 1981	1981– 1986	1986– 1991	1991– 1996	1996– 2000
Nanaimo	√					
Parksville	√	√	√	√	√	√
Qualicum Beach		√	√		√	√
Area C – Nanaimo Lakes	√					
Area G – French Creek		√	√		√	√
Area E - Nanoose	√	√	√	√	√	√

Source: RDN

3.1.1 Regional Population Distribution and Growth Rates

Administrative boundary changes notwithstanding, Table 2 presents data on the population distribution among the member municipalities and electoral areas of the Regional District of Nanaimo. Total population is presented, as is the percent of the total regional population in each municipality and electoral area.

Table 2
Regional Population Distribution

Area	1981 ¹		1986 ¹		1991 ²		1996 ²		2000 ³	
	%	Pop	%	Pop	%	Pop	%	Pop	%	Pop
RDN (Total)	100	77,112	100	82,180	100	101,725	100	121,765	100	136,400
Nanaimo	61.1	47,069	59.7	49,029	59.4	60,434	57.7	70,313	56.6	77,202
Parksville	6.8	5,216	7.1	5,828	8.1	8,241	7.7	8,754	7.4	10,094
Qualicum Beach	3.7	2,855	4.2	3,410	5.0	5,108	5.7	6,931	6.5	8,866
A - Cedar	6.1	4,661	5.7	4,718	5.2	5,341	5.0	6,105	4.7	6,411
B - Gabriola Island	2.1	1,653	2.5	2,111	2.6	2,616	2.8	3,461	3.1	4,228
C - Nanaimo Lakes	1.5	1,180	1.5	1,218	1.1	1,142	1.1	1,366	1.1	1,500
D - Wellington	4.8	3,696	4.9	4,012	4.4	4,484	4.0	4,907	3.8	5,183
E - Nanoose	2.8	2,193	3.1	2,507	3.6	3,701	3.8	4,677	4.2	5,729
F - Errington	4.1	3,166	4.2	3,430	3.6	3,646	4.3	5,288	4.5	6,138
G - French Creek	4.9	3,765	5.0	4,112	4.6	4,655	5.1	6,226	5.3	7,229
H - Bowser	2.2	1,658	2.2	1,805	2.3	2,357	2.5	3,019	2.8	3,819

¹ Source: Westland 1995

² Source: Census 1991 and 1996

³ Source: Estimates produced for this report, see Appendix A for method

Changes in the proportion of population show that some areas of the region are growing more quickly or more slowly than others areas. While the total population in the RDN (and its constituent municipalities and electoral areas) has risen substantially in the last twenty years, the share of total populations has decreased in Nanaimo, Cedar, Nanaimo Lakes, and Wellington. Proportional increases have occurred in the Parksville, Qualicum Beach, Gabriola Island, Nanoose, Errington, French Creek, and Bowser.

Table 3 shows population growth rates for each municipality and electoral area, and for the Regional District in its entirety.

Table 3
Population Growth Rates in The Regional District of Nanaimo

Area	Change in Population by Census Period (%)			
	1981–1986	1986–1991	1991–1996	1996–2000
RDN (Total)	6.6	23.8	19.7	12.0
Nanaimo	4.2	23.3	16.3	9.8
Parksville	11.7	*41.4	14.9	6.6
Qualicum Beach	19.4	*49.8	35.7	27.9
A – Cedar	1.2	13.2	14.3	5.0
B - Gabriola Island	27.7	23.9	32.3	22.2
C - Nanaimo Lakes	3.2	-6.2	19.6	9.8
D - Wellington	8.5	11.8	9.4	5.6
E - Nanoose	14.3	*47.6	26.4	22.5
F - Errington	8.3	*6.3	45.0	16.1
G - French Creek	9.2	13.2	33.7	16.1
H - Bowser	8.9	30.6	28.1	26.5

* Administrative boundary changes may be the cause of particularly high increases
Source: based on populations presented in Table 2.

Between 1981 and 2000, growth rates varied considerably across the region. In general, most areas experienced relatively low growth during the economic downturn of the early 1980s, followed by higher growth between 1986 and 1996. Since 1996, growth rates have again slowed, primarily due to slow economic growth in the province. Qualicum Beach, Gabriola, Nanoose, and Bowser have maintained relatively higher growth since 1981, regardless of regional trends, indicating that growth may be less dependent on regional economic performance than on other factors.

Since 1996, growth rates have slowed not only in the Regional District of Nanaimo, but also in the Capital Regional District (CRD), the Greater Vancouver Regional District (GVRD) and British Columbia overall. Table 4 presents a comparison of the RDN growth rates and those of the CRD, the GVRD, and British Columbia.

Growth rates have varied over the last 25 years. The economic ‘bust’ of the early 1980s had a dramatic effect on the RDN, with the growth rate dropping from 25% to 8%, while the urban centres of the CRD and GVRD were not affected at all. Economic recovery after 1986 benefited all areas, although the growth rate in the RDN again almost doubled

those in the CRD and province. Since the latest economic downturn, growth rates have fallen to their lowest point since 1976.

Although the growth rate in the RDN has fluctuated according to economic conditions, between 1976 and 1981 the growth rate in the RDN was more than double that of the province, and more than three times higher than those of the CRD and GVRD. It appears that growth in the RDN is highly dependent on economic performance, and it is reasonable to expect that a stronger economy in the future may cause growth rates in the RDN to increase accordingly.

**Table 4
Growth Rate Comparisons**

Census Period	Growth rates (%) by Area			
	RDN	CRD	GVRD	B.C.
1976-1981	25	8	8	12
1981-1986	8	8	10	6
1986-1991	23	12	20	12
1991-1996	21	8	20	15
1996-2000	7	1	5	5
% change 1976-2000	113	42	80	60

Source: BC Statistics Population Estimates for Regional Districts

Note: rates may not agree exactly with other figures derived directly from Census data for this report

3.1.2 Migration

Migrants originate from other areas in the province, from other provinces, or from other countries. Table 5 compares the proportion of migrants in the total population for 1991 and 1996, based on whether they moved from within British Columbia, from another province, or from another country, for 1991 and 1996.

It is clear that people moving to the region from other parts of British Columbia make up the largest migration component by far. In 1991, nearly one-fifth of all people in the Regional District of Nanaimo had moved to the region from somewhere else in British Columbia during the previous year. The substantial decline in growth rates during the 1990s is reflected in the proportion of migrants from British Columbia. Between 1991 and 1996, the average proportion of migrants from British Columbia fell almost 65

percent. Even so, the percentage of migrants from British Columbia in 1996 was at least double those for migrants from other provinces in all jurisdictions.

Between 1991 and 1996, the proportion of migrants from other provinces remained relatively stable, and migrants from other countries continued to make up less than one percent of the total population in most areas.

Table 5
Proportion of Migrants in Total Population

Area	Percent of Migrant Population					
	1991			1996		
	From BC *	Other Province	Other Country	From BC*	Other Province	Other Country
RDN (Total)	19	3	<1	6	2	0
Nanaimo	21	3	<1	5	2	1
Parksville	18	3	<1	10	3	<1
Qualicum Beach	18	4	1	7	3	<1
A – Cedar	13	1	<1	5	0	0
B – Gabriola Island	16	5	0	7	2	0
C – Nanaimo Lakes	20	2	0	4	1	0
D – Wellington	13	3	1	5	0	0
E – Nanoose	15	4	<1	5	2	<1
F – Errington	19	3	<1	8	2	0
G – French Creek	18	2	0	7	1	<1
H – Bowser	14	6	0	11	4	1

* does not include people who move from one address to another in the RDN

Source: Census 1991 and 1996, one year mobility status

3.2 Social Trends

3.2.1 Age Trends

People of different ages have different housing and government service requirements. These age-specific requirements need to be reflected in planning decisions. Table 6 presents the change in the numbers of people and the proportion of RDN residents by age groups between 1986 and 1996.

The number of seniors, older adults and middle-aged people has grown the most in the regional district in the last ten years. The number of people under 34, particularly between the ages of 20 and 34, has grown more slowly.

Table 6
Age Trends

Age	Population in Each Age Group (percent of total population)			
	1986 ¹	1991 ²	1996 ²	% Increase 1986-1996
Senior: 65+	12,574 (15)	17,410 (17)	21,140 (18)	68
Older Adults: 50-64	1,356(17)	15,905 (16)	19,320 (16)	42
Middle Aged: 35-49	15,934 (19)	22,285 (22)	28,595 (23)	79
Young Adults: 20-34	17,669 (22)	19,920 (19)	21,815 (18)	23
Children: 0-19	22,353 (27)	26,205 (26)	30,700 (26)	37

¹ Source: Westland 1995

² Source: Census 1991 and 1996

Children aged 19 and under have been the largest single group since 1986, although the proportion of children is slowly decreasing. The proportions of young adults and older adults have also been decreasing, while the proportions of seniors and middle-aged people have been increasing. The aging of the ‘baby boomers’ accounts for the increasing proportions of middle-aged people, and the attractiveness of the region to retirees may account for the rise in seniors.

The following tables present population age trends, by age group, for each municipality and electoral area in the RDN. 1991 and 1996 proportions for the Victoria Census Metropolitan Area (CMA), the Vancouver CMA, and British Columbia have also been included for comparison.

Seniors (65+ years)

Seniors make up an increasing proportion of the population in the region, although this trend varies among areas (see Table 7). In Nanaimo, Parksville, and Qualicum Beach, the proportions of seniors are rising steadily; in Nanaimo Lakes, Wellington, Nanoose, and French Creek the proportions are rising more slowly, and in Cedar, Gabriola Island, Errington, and Bowser, the proportions are remaining fairly stable.

In 1996, seniors made up 18 percent of the population region-wide, but had a much larger share in Parksville and Qualicum Beach, and a much lower share in Cedar and Errington.

The highest rate of increase between 1986 and 1996 occurred in Qualicum Beach, where the number of seniors rose by 172 percent. Cedar and Nanaimo Lakes experienced the lowest rates of increase between 1986 and 1996, at 10 and 30 percent respectively.

**Table 7
Seniors: Population Growth Trends**

Area	Total people 65+ and as proportion of population (%)			
	1986 ¹	1991 ²	1996 ²	10 year population increase*
RDN (Total)	12,574 (15)	17,140 (17)	21,140 (18)	68
Nanaimo	6,521 (13)	8,770 (14)	10,475 (15)	61
Parksville	1,492 (26)	2,380 (29)	2,695 (29)	81
Qualicum Beach	866 (25)	1,580 (31)	2,355 (34)	172
A – Cedar	588 (11)	625 (12)	645 (11)	10
B - Gabriola Island	410 (19)	515 (20)	610 (17)	49
C - Nanaimo Lakes	127 (10)	140 (12)	165 (12)	30
D - Wellington	421 (11)	490 (11)	670 (13)	59
E - Nanoose	544 (22)	780 (21)	985 (21)	81
F - Errington	340 (10)	340 (10)	480 (9)	41
G - French Creek	909 (22)	965 (21)	1,360 (22)	50
H - Bowser	450 (25)	555 (23)	700 (23)	56
Victoria CMA	-	(18)	(18)	-
Vancouver CMA	-	(12)	(12)	-
British Columbia	-	(13)	(12)	-

* based on change in total population in age category

¹ Source: Westland 1995

² Source: Census 1991 and 1996

Older Adults (50 – 64 years)

In general, the proportion of older adults in the regional population has remained stable, although the proportions have been decreasing in Nanimo, Gabriola Island, Nanoose, and Bowser (see Table 8).

In 1996, older adults made up 16 percent of the population region-wide, but in Nanaimo, where most of the regional population lives, older adults make up only 13 percent of the population. Qualicum Beach, Gabriola Island, Nanoose, French Creek and Bowser support much higher proportions of older adults (between 21 and 23 percent).

The highest rate of increase occurred in Qualicum Beach, where the number of older adults more than doubled in ten years. Parksville, Gabriola Island, Nanoose, Errington, and Bowser also had a ten-year increase above the regional rate of 42 percent.

Table 8
Older Adults: Population Growth Trends

Area	Total people 50 - 64 and as proportion of population (%)			
	1986 ¹	1991 ²	1996 ²	10 year population increase (%)*
RDN (Total)	13,560 (17)	15,905 (16)	19,320 (16)	42
Nanaimo	7,354 (15)	8,425 (14)	9,730 (13)	32
Parksville	979 (17)	1345 (16)	1,555 (16)	59
Qualicum Beach	713 (21)	1080 (21)	1,480 (22)	108
A – Cedar	731 (16)	845 (16)	1,000 (16)	37
B - Gabriola Island	450 (21)	500 (19)	720 (21)	60
C - Nanaimo Lakes	188 (15)	180 (16)	215 (16)	14
D - Wellington	638 (16)	750 (16)	835 (17)	31
E - Nanoose	647 (26)	890 (24)	1,060 (23)	64
F - Errington	491 (14)	485 (13)	730 (14)	49
G - French Creek	962 (23)	895 (19)	1,350 (22)	40
H - Bowser	395 (22)	510 (21)	645 (21)	63
Victoria CMA	-	(14)	(14)	-
Vancouver CMA	-	(14)	(14)	-
British Columbia	-	(14)	(15)	-

* Based on change in total population in age category

¹ Source: Westland 1995

² Source: Census 1991 and 1996

Middle Aged (35 – 49 years)

The proportion of middle-aged people in the regional population has been increasing since 1986, in all jurisdictions (see Table 9). These increases indicate that this age group is growing more quickly than some other age groups in all areas of the region.

In 1996, middle-aged people comprised 23 percent of the region’s population. There is not much variation from this regional proportion among areas. Middle-aged people make up 29 percent of the population in Errington (the highest in the region), while in Qualicum Beach, they make up 19 percent (the lowest in the region).

The number of middle-aged people more than doubled in Parksville, Qualicum Beach, Gabriola Island, Nanoose, Errington, and Bowser between 1986 and 1996. Wellington, with an increase of 44 percent in the same time period, shows the lowest rate of increase in middle-aged people.

**Table 9
The Middle Aged: Population Growth Trends**

Area	Total people 35 - 49 and as proportion of population (%)			
	1986 ¹	1991 ²	1996 ²	10 year population increase (%)*
RDN (Total)	15,943 (19)	22,285 (22)	28,595 (23)	79
Nanaimo	9,610 (20)	13,350 (22)	16,775 (23)	75
Parksville	874 (15)	1,495 (18)	1,856 (20)	112
Qualicum Beach	587 (17)	910 (18)	1,240 (18)	111
A – Cedar	986 (21)	1,245 (23)	1,540 (25)	56
B - Gabriola Island	420 (20)	650 (25)	900 (27)	114
C - Nanaimo Lakes	223 (18)	290 (26)	375 (28)	68
D - Wellington	939 (23)	1,185 (27)	1,355 (28)	44
E - Nanoose	469 (19)	805 (22)	1,165 (26)	148
F - Errington	748 (22)	945 (25)	1,495 (29)	100
G - French Creek	703 (17)	950 (21)	1,330 (23)	89
H - Bowser	285 (16)	460 (20)	655 (23)	130
Victoria CMA		(22)	(24)	
Vancouver CMA		(23)	(25)	
British Columbia		(23)	(25)	

* Based on change in total population in age category

¹ Source: Westland 1995

² Source: Census 1991 and 1996

Young Adults (20 to 34)

The proportion of young adults in the regional population has been decreasing steadily in all areas, because growth in other age categories outpaced the growth in the 20 - 34 age group (see Table 10).

In 1996, young adults made up 18 percent of the regional population. Most areas in the region had a similar proportion, although young adults made up only 9 percent of the population in Qualicum Beach.

Between 1986 and 1996, the increase in the number of young adults in each area was less than 50 percent in all cases. Most significantly, Nanaimo Lakes and Wellington lost people in this age group, even though these areas experienced population growth over this time period.

Table 10
Young Adults: Population Growth Trends

Area	Total people 20 - 34 and as proportion of population (%)			
	1986 ¹	1991 ²	1996 ²	10 year population increase (%)*
RDN (Total)	17,669 (22)	19,920 (19)	21,815 (18)	23
Nanaimo	11,669 (24)	13,320 (22)	14,400 (20)	23
Parksville	1,049 (18)	1,275 (15)	1,505 (16)	43
Qualicum Beach	515 (15)	560 (11)	625 (9)	21
A - Cedar	1,071 (23)	1,125 (21)	1,150 (19)	7
B - Gabriola Island	327 (16)	345 (13)	445 (13)	36
C - Nanaimo Lakes	300 (25)	230 (21)	275 (20)	-8
D - Wellington	738 (18)	780 (17)	685 (14)	-7
E - Nanoose	374 (15)	515 (14)	550 (12)	47
F - Errington	737 (21)	760 (21)	1,005 (19)	36
G - French Creek	625 (15)	1,725 (15)	795 (13)	27
H - Bowser	280 (16)	325 (13)	380 (13)	36
Victoria CMA		(23)	(22)	
Vancouver CMA		(27)	(24)	
British Columbia		(24)	(22)	

* Based on change in total population in age category

¹ Source: Westland 1995

² Source: Census 1991 and 1996

Children (0 to 19 years)

Since 1981, the number of children as a proportion of the regional population has been declining, although there is variation in this trend for each area (see Table 11). Parksville, Qualicum Beach, and Nanaimo Lakes show the largest proportional declines. Nanaimo, Cedar, Wellington, Errington, and French Creek show more moderate declines.

In 1996, children made up 26 percent of the regional population, the largest single age groups. Errington had the highest proportion of children (30 percent) while Qualicum Beach had the lowest (17 percent).

Although proportional declines have been occurring, the number of children in the region has increased. The number of children in Nanoose almost doubled between 1986 and 1996, and all other areas showed increases of between 30 and 60 percent, with the exception of Wellington (14 percent), and Nanaimo Lakes (-16 percent).

**Table 11
Children: Population Growth Trends**

Area	Total people 0 - 19 and as proportion of population (%)			
	1986 ¹	1991 ²	1996 ²	10 year population increase (%)*
RDN (Total)	22,353 (27)	26,205 (26)	30,700 (26)	37
Nanaimo	13,777 (28)	16,445 (27)	18,995 (27)	38
Parksville	1,405 (24)	1,790 (21)	1,945 (21)	38
Qualicum Beach	747 (22)	960 (19)	1,175 (17)	57
A - Cedar	1,448 (31)	1,480 (28)	1,680 (28)	16
B - Gabriola Island	471 (22)	600 (24)	715 (20)	52
C - Nanaimo Lakes	381 (32)	275 (24)	320 (21)	-16
D - Wellington	1,224 (31)	1,270 (29)	1,395 (28)	14
E - Nanoose	469 (19)	710 (19)	900 (19)	92
F - Errington	1,101 (32)	1,110 (30)	1,545 (30)	40
G - French Creek	933 (23)	1,065 (23)	1,375 (22)	47
H - Bowser	401 (22)	500 (21)	635 (21)	58
Victoria CMA		(23)	(22)	
Vancouver CMA		(24)	(27)	
British Columbia		(27)	(26)	

* Based on change in total population in age category

¹ Source: Westland 1995

² Source: Census 1991 and 1996

3.2.2 Household Size

Since 1981, the average number of persons per household has been slowly declining in the regional district. This is consistent with a Canada-wide trend toward smaller households, as shown by the drop in average person per household from 3.9 in 1961 to 2.6 in 1996 across the country, a 33 percent decline (Statistics Canada website, May 2001).

The trends in average number of persons per household for the regional district, each municipality, and each electoral area are shown in Table 12. 1991 and 1996 averages for the Victoria CMA, Vancouver CMA, and British Columbia are also included for comparison.

The average number of persons per household has remained relatively stable in Nanaimo, Wellington, Nanoose, French Creek, and Bowser. Decreases can be seen for Parksville, Qualicum Beach, Cedar and Gabriola Island. The greatest decreases in the average number of persons per household have occurred in Nanaimo Lakes (particularly between 1981 and 1991), and Errington, and may be linked to the large increase in the number of rented dwellings in these areas (see section 3.2.3).

In 1991, three of the eleven municipalities and electoral areas had a higher number of average persons per household than the average for British Columbia. In 1996, only Wellington remained above the provincial average. Parksville, Qualicum Beach, and Gabriola Island had the lowest average at 2.2 persons per household, while Wellington and Cedar had the highest at 2.6 and 2.8 persons per household respectively.

Table 13 shows the trends in household size and reveals that most of households in the regional district are made up of only one or two persons. Between 1981 and 1996, the proportion of households with one or two people increased, while the proportion of households with three persons, or four or more persons has decreased.

Table 12
Average Number of Persons per Household

Area	Average Number of People per Household			
	1981 ¹	1986 ¹	1991 ²	1996 ²
RDN (Total)	2.6	2.5	2.5	2.4
Nanaimo	2.6	2.5	2.5	2.5
Parksville	2.4	2.3	2.3	2.2
Qualicum Beach	2.5	2.4	2.3	2.2
A – Cedar	2.8	2.7	2.7	2.6
B - Gabriola Island	2.3	2.3	2.2	2.2
C - Nanaimo Lakes	3.1	2.8	2.5	2.5
D - Wellington	2.9	2.8	2.7	2.8
E - Nanoose	2.4	2.3	2.4	2.4
F - Errington	2.9	2.7	2.7	2.5
G - French Creek	2.5	2.4	2.5	2.4
H - Bowser	2.4	2.4	2.3	2.3
Victoria CMA	-	-	2.3	2.3
Vancouver CMA	-	-	2.6	2.6
British Columbia	-	-	2.6	2.6

¹ Source: Westland 1995

² Source: Census 1991 and 1996

Table 13
Household Size

Size	Proportion (%) of Households by Size			
	1981 ¹	1986 ¹	1991 ²	1996 ²
1 person	21	23	23	23
2 persons	37	38	41	41
3 persons	16	15	15	15
4 or more persons	27	24	22	21

¹ Source: Westland 1995

² Source: Census 1991 and 1996

3.2.3 Residential Home Ownership

The proportion of owned residences in the regional district is significantly higher than those found in the Victoria CMA, Vancouver CMA, or even the province (see Table 14). Only Nanaimo, the largest urban centre in the region, with about 66 percent of residences owned, shows similar proportions to Victoria, Vancouver, and the province. All other municipalities and electoral areas in the region have substantially higher proportions of owned residences than the provincial average.

Table 14
Owned Residences

Area	Proportion of residences owned			
	1981 ¹	1986 ¹	1991 ²	1996 ²
RDN (Total)	72	71	72	73
Nanaimo	67	65	66	66
Parksville	64	65	73	71
Qualicum Beach	81	78	83	83
A – Cedar	86	83	86	83
B - Gabriola Island	84	80	83	79
C - Nanaimo Lakes	-	-	91	84
D - Wellington	87	85	88	88
E - Nanoose	89	86	87	91
F - Errington	86	82	81	74
G - French Creek	85	87	87	86
H - Bowser	84	82	81	78
Victoria CMA	-	-	61	62
Vancouver CMA	-	-	57	59
British Columbia	-	-	64	65

¹ Source: Westland 1995

² Source: Census 1991 and 1996

While the proportion of owned residences in the region appears to be relatively stable, a general decrease in the proportion of owned residences can be seen in Cedar, Gabriola Island, Nanaimo Lakes, Errington, and Bowser, indicating that, proportionally, the numbers of rental residences in these areas are rising.

Between 1991 and 1996, in Victoria, Vancouver, and the province, the number of owned dwellings increased at about twice the rate of rented dwellings (Table 15). In the regional district, none of the municipalities or electoral areas followed this trend. In general, the number of owned dwellings and the number of rented dwellings increased at the same rate, significantly higher than the provincial average.

Table 15
Comparison of Increase in the Number of Owned and Rented Dwellings

Area	Number of Residences					
	Owned			Rented		
	1991	1996	% change*	1991	1996	% change
RDN (Total)	29,300	35,760	22	11,085	13,410	21
Nanaimo	15,635	18,600	19	8,145	9,355	15
Parksville	2,575	2,985	16	965	1,225	27
Qualicum Beach	1,845	2,550	38	385	540	40
A – Cedar	1,685	1,905	13	260	370	42
B - Gabriola Island	925	1,235	34	195	345	77
C - Nanaimo Lakes	400	445	11	40	85	113
D - Wellington	1,415	1,535	8	185	165	-11
E - Nanoose	1,335	1,795	34	205	195	-5
F - Errington	1,095	1,545	41	255	525	106
G - French Creek	1,610	2,170	35	255	340	33
H - Bowser	780	995	28	195	265	36
Victoria CMA	72,730	80,390	11	46,340	48,920	6
Vancouver CMA	349,965	411,350	18	258,710	281,290	9
British Columbia	793,958	928,990	17	446,910	491,540	10

Source: Census 1991 and 1996

In each municipality and electoral area, substantial variation from the regional trend occurred. While Nanaimo, Qualicum Beach, French Creek, and Bowser all had generally similar rates of increase in owned and rented dwellings, the rates of increase in rented dwellings in Parksville, Cedar, Gabriola Island, and Errington were almost two, and in some cases, three times higher than the rates for owned dwellings. The rate of increase of rented dwellings in Nanaimo Lakes was ten times that of owned dwellings. Wellington and Nanoose actually showed a loss of rented dwellings between 1991 and 1996. A number of factors could influence the trends shown: a higher than average rate of rental

unit development; a poor real estate market leading owners to rent instead of sell; or a reduction in the economic ability of residents to purchase homes. Future data, as they become available, may help to identify the main factor responsible for changing trends.

Table 16, showing the average value of dwellings and the average rents in 1991 and 1996, indicates that the value of dwellings in the RDN had increased significantly and at a higher rate than the provincial average in most jurisdictions. Overall, the average dwelling values are lower in the RDN than in the province, with the exception of Nanoose. There is much higher variability in the average rent. In general, the province, Victoria CMA and Vancouver CMA have seen a decrease in the value of rents. Substantial increases in the average rent have occurred in Parksville, Qualicum Beach, Cedar, Nanaimo Lakes, Nanoose, French Creek, and Bowser.

Table 16
Average Dwelling Value and Average Rent

Area	Dollars (constant, 2000 ¹)					
	Average Value			Average Rent		
	1991	1996	% change*	1991	1996	% change
RDN (Total)	136,027	183,800	35	684	705	3
Nanaimo	126,928	171,328	35	697	704	1
Parksville	134,248	161,505	20	654	738	13
Qualicum Beach	187,646	222,381	19	721	806	12
A - Cedar	118,545	174,138	47	534	644	21
B - Gabriola Island	130,930	204,561	56	630	682	8
C - Nanaimo Lakes	95,824	156,468	63	530	674	27
D - Wellington	168,848	229,758	36	911	632	-31
E - Nanoose	193,571	281,630	45	593	650	10
F - Errington	123,479	180,105	46	600	590	-2
G - French Creek	146,687	207,281	41	690	827	20
H - Bowser	159,206	190,209	19	597	678	14
Victoria CMA	197,729	248,343	26	780	774	-1
Vancouver CMA	259,163	347,335	34	850	767	-10
British Columbia	201,893	254,130	26	757	746	-1

Source: Census 1991 and 1996

¹ Inflation rate: http://www.bankofcanada.ca/en/inflation_calc.htm

3.3 Economic Trends

3.3.1 Occupations

In 1996, more than 50 percent of the regional population was employed in retail trade, construction, health and social services, accommodation and food services, and manufacturing industries. Business services, government services, and educational services employed an additional 16 percent of regional residents. Table 17 lists the total employed population and proportion of employed by industry.

Table 17
Employment by Industry

Occupation	Total Employees and (percent of total labour force)		Labour Force Change*
	1991	1996	1991 - 1996
Agriculture and related	605 (1)	775 (1)	28
Fishing and trapping	1,010 (2)	885 (1)	-12
Logging and forestry	1,355 (3)	1,440 (2)	6
Mining, quarrying, oil wells	20 (<1)	120 (<1)	500
Manufacturing	4,485 (9)	4,525 (8)	1
Construction	4,875 (10)	5,865 (10)	20
Transportation and storage	1,940 (4)	2,285 (4)	18
Communication and utilities	1,300 (3)	1,400 (2)	8
Wholesale trade	1,730 (4)	2,000 (3)	16
Retail trade	7,475 (15)	8,680 (15)	16
Finance and insurance	1,125 (2)	1,565 (3)	39
Real estate and insurance agents	1,125 (2)	1,340 (2)	19
Business service	1,910 (4)	2,765 (5)	45
Government service	2,880 (6)	3,140 (5)	9
Educational service	2,840 (6)	3,650 (6)	29
Health and social service	4,010 (8)	5,845 (10)	46
Accommodation and food service	4,420 (9)	5,260 (9)	19
Other service	3,515 (7)	4,230 (7)	20

* Based on total employed per category
Source: Census 1991 and 1996

Table 18 presents the ten largest occupation categories in order and the percent change in total employed in each between 1991 and 1996. While the regional labour force grew by 22 percent, seven of the top ten occupations drew less than 22 percent of the new labour force. Occupations in Health and social service, educational services, and business services grew at a faster rate than the labour force.

Table 18
Changes in the Top Ten Occupations

Occupations (top 10 categories)	Total Employees		% Change*
	1991	1996	1991 - 1996
Retail trade	7,475	8,680	16
Construction	4,875	5,865	20
Health and social service	4,010	5,845	46
Accommodation & food service	4,420	5,260	19
Manufacturing	4,485	4,525	1
Other service	3,515	4,230	20
Educational service	2,840	3,650	29
Government service	2,880	3,140	9
Business service	1,910	2,765	45
Transportation and storage	1,940	2,285	18
Total Labour Force	48,805	59,285	22

* Based on total employed per category

Between 1991 and 1996, the number of jobs per household remained stable Nanaimo, Parksville, and Qualicum Beach, but in each case, the number of jobs per household was lower than the provincial average (Table 19). While there were 1.06 jobs per household in the region, there was considerable variation among the municipalities and electoral areas. In both 1991 and 1996, Nanaimo, Cedar, Nanaimo Lakes, Wellington, and Errington had a higher number of jobs per household than the regional average. Parksville, Qualicum Beach, Gabriola Island, Nanoose, French Creek, and Bowser had a lower number of jobs per household than the regional average.

The trends shown could be the result of a number of factors. Areas with relatively higher numbers of people not participating in the work force (i.e., retirees) may show lower numbers of jobs per household. A drop in the number of jobs per household has also

been linked to increasing wages⁵. Presumably, a higher paying job may allow other family members to reduce the amount of hours they work or to stop working altogether. An increase in the number of jobs per household may indicate an improving economy. Future data, as they become available, may help to identify the main factor responsible for changing trends.

Table 19
Number of Jobs per Household*

Area	1991			1996		
	Jobs	Households	Jobs per household	Jobs	Households	Jobs per household
RDN (Total)	42,705	40,385	1.06	52,215	49,300	1.06
Nanaimo	26,335	23,780	1.11	31,215	28,030	1.11
Parksville	2,985	3,550	0.84	3,495	4,200	0.83
Qualicum Beach	1,605	2,195	0.73	2,245	3,085	0.73
A – Cedar	2,380	1,985	1.20	2,660	2,290	1.16
B - Gabriola Island	815	1,130	0.72	1,445	1,560	0.93
C - Nanaimo Lakes	525	435	1.21	670	530	1.26
D - Wellington	2,170	1,600	1.36	2,425	1,750	1.39
E - Nanoose	1,525	1,540	0.99	2,040	1,980	1.03
F - Errington	1,630	1,355	1.20	2,415	2,075	1.16
G - French Creek	1,840	1,850	0.99	2,485	2,515	0.99
H - Bowser	895	965	0.93	1,120	1,270	0.88
Victoria CMA	138,420	119,110	1.16	148,890	129,340	1.15
Vancouver CMA	812,130	609,095	1.33	908,265	692,915	1.31
British Columbia	1,568,780	1,243,895	1.26	1,773,285	1,424,635	1.24

* based on total population employed and total private households

3.3.2 Level of Income

The average income in the regional district (Table 20) was approximately \$27,000 per person per year in 1997, an increase of six percent over 1993. The lowest average incomes are reported for Parksville and the four electoral areas included in Census Subdivision A: Cedar, Gabriola Island, Nanaimo Lakes, and Wellington. Since 1993,

⁵ “As wages rise, the number of jobs-per-household will fall from 1.5 to 1.3 by 2020.” (Snyder, 2001)

relatively little change has occurred in these trends. Parksville, which had the lowest average income in 1997, shows the highest rate of increase in income, at nine percent. The average incomes throughout the region are below the average income reported for the CRD, the GVRD and the province.

Data from Revenue Canada (Table 21) show that between 1993 and 1997, the distribution of income, as seen in the proportions of the regional population according to income range, has also remained relatively stable. Even so, looking at the percent change between 1993 and 1997, it can be seen that the rate of growth in the \$50,000 per year or more is double that of any other income range. Moderate growth rates occurred in all other ranges, with the exception of the \$15,000 to \$20,000 income range, where a loss occurred. Approximately one-third of the regional residents who filed an income tax return earned more than \$30,000 per year (the average income, as noted above, is \$27,174).

Table 20
Average Income

Area	Average Income (constant dollars, 2000) ¹					
	1993	1994	1995	1996	1997	% change 1993-1997
RDN	25,544	27,704	27,342	27,534	27,174	6
Nanaimo	25,880	28,167	27,649	27,963	27,447	6
Parksville	23,456	25,029	25,704	25,904	25,600	9
Qualicum Beach	26,324	28,220	27,889	27,749	27,237	3
Subdivision A*	24,806	27,551	26,302	26,445	26,605	7
Subdivision B**	25,944	27,855	27,788	27,501	28,081	8
CRD	28,873	31,719	30,861	31,245	31,055	8
GVRD	29,179	31,317	30,747	31,033	30,606	5
BC	27,556	30,069	29,470	29,711	29,315	6

*Includes: Electoral areas A (Cedar), B (Gabriola Island), C (Nanaimo Lakes), and D (Wellington)

**Includes: Electoral areas E (Nanoose), F (Errington), G (French Creek), and H (Bowser)

¹ Inflation rate: http://www.bankofcanada.ca/en/inflation_calc.htm

Source: Revenue Canada Income and Taxation Data

Table 21
Income Distribution

Income (\$000)	1993	1994	1995	1996	1997	% change in total income 1993-1997*
Under 5	10.9	10.5	11.1	11.4	11.3	11.8
5 to 10	13.8	12.9	13.5	13.5	13.5	5.9
10 to 15	16.7	16.3	16.5	16.5	15.9	3.4
15 to 20	11.5	11.0	11.4	10.6	10.3	-2.5
20 to 30	16.6	16.0	16.1	15.9	16.0	4.0
30 to 40	11.9	11.6	12.2	12.2	12.4	12.7
40 to 50	7.8	7.7	7.6	7.8	8.0	11.5
Over 50	10.8	14.1	11.6	12.1	12.5	25.0

*Based on total filed returns per category
Source: Revenue Canada Income and Taxation Data

3.3.3 Income Source

In the regional district, between 1991 and 1996, the proportion of people receiving income from paid work showed a slight increase from 66.3 percent to 68.5 percent; the proportion of people receiving income from the government increased from 14.4 percent to 17.1 percent; and the proportion of people receiving income from other sources decreased slightly from 14.8 percent to 14.5 percent (Table 22)⁶.

In 1996, Nanaimo, Cedar, Nanaimo Lakes, and Wellington had higher proportions of people receiving income from paid work than in the region as a whole, and lower proportions of people receiving income from the government. These areas also have some of the lowest proportions of people aged 65 and over. Conversely, in 1996 Parksville, Qualicum Beach, Gabriola Island, Nanoose, Errington, French Creek, and Bowser had lower proportions of people receiving income from paid work, and higher proportions of people receiving income from the government. In particular, Parksville, Qualicum Beach, and Gabriola Island have the lowest proportions of people receiving income from paid work, and the highest proportions of people receiving income from the government or other sources.

⁶ Monies received as student loans are not included in this analysis.

**Table 22
Income Sources**

Area	Proportion of Population Receiving Income from Source					
	Work ¹		Government ²		Other ³	
	1991	1996	1991	1996	1991	1996
RDN	66.3	68.5	14.4	17.1	14.8	14.5
Nanaimo	71.5	71.6	13.6	16.0	11.7	12.4
Parksville	53.0	55.2	17.1	25.5	19.2	19.3
Qualicum Beach	44.9	47.2	16.0	20.7	30.1	32.2
A – Cedar	70.6	74.3	13.2	15.0	11.7	10.7
B - Gabriola Island	52.2	55.8	20.9	22.5	27.0	21.7
C - Nanaimo Lakes	76.7	76.2	12.6	13.8	10.7	10.0
D - Wellington	65.8	73.2	10.5	13.5	14.9	13.4
E - Nanoose	56.4	*62.7	14.8	*19.2	21.6	*18.1
F - Errington	73.3	*62.7	15.7	*19.2	11.0	*18.1
G - French Creek	61.5	*62.7	15.7	*19.2	16.9	*18.1
H - Bowser	53.7	*62.7	21.4	*19.2	23.5	*18.1
Victoria CMA	66.1	69.2	11.7	13.7	19.6	17.2
Vancouver CMA	75.1	78.2	8.6	10.6	12.4	11.2
British Columbia	76.0	75.5	11.0	12.7	13.0	11.8

¹ Income from work includes wages earned from paid employment and from self-employment

² Income from government includes pensions, unemployment insurance, social services

³ Income from other sources includes income from investments, alimony, child support, bursaries, royalties, and income earned outside of Canada

* Proportion estimated by Statistics Canada as data were unavailable

Source: Census 1991 and 1996

A comparison of the proportions in each income category between the regional district and British Columbia shows that there are proportionally more people in the regional district with income from government and other sources, and proportionally less people with income from paid work than in the province.

3.3.4 Education Levels

The level of education attained by the residents of the regional district (aged 15 and over) has steadily increased since 1981 (Table 23). By 1996, 45 percent of the regional residents have some high school, or have completed high school, while 55 percent have

some post-secondary education. Since 1981, the proportion of the regional population with high school graduation or less has fallen, while there have been increases in the proportions of the population holding trades certificates, having some university education, or holding a university degree.

Since 1991, while the number of people aged 15 and over has grown by 20%, the number of people holding a university degree has risen 54 percent, and the number of people with some university education by 42 percent.

Table 23
Level of Education

Category	1981 ¹	1986 ¹	1991 ²	1996 ²	% change 1991–1996*
Total population 15 +	-	-	80,805	97,115	20
High School graduation or less	58	55	49	45	9
Trades Certificate or other non university	26	29	33	34	23
University without degree	3	9	10	12	42
University with degree	8	7	7	9	54

* Based on total population 15 +

¹ Source: Westland 1995

² Source: Census 1991 and 1996

4.0 Future Population Projections

4.1 Approach

This report contains estimates of the year 2000 population for the regional district, each municipality, and all electoral areas (see Appendix A for methodology). In addition, estimates of year 2000 populations inside regional Urban Containment Boundaries (UCBs) and selected nodes have been provided by the regional district's GMP Indicator program (see Appendix B for methodology) and the City of Nanaimo respectively. These population estimates, presented in Table 24, form the basis for projecting future population. **Estimates made for this report may not agree exactly with estimates made by others using alternative methodologies or for different uses.**

Population projections to 2026 have been calculated using the projected growth rates of the BC Statistics P.E.O.P.L.E. 25 model. These growth rates, although published only for the regional district in its entirety, have been applied to each municipality, electoral area, UCB, and node. No adjustments have been made to the projections based on historical trends shown in the proportion of population in each area (see Section 3.1.1). Instead, the projections resulting from P.E.O.P.L.E. 25 are presented as a 'moderate growth' scenario. In addition, the 'moderate' growth rates have been increased by 50% to provide a 'high growth' scenario, and decreased by 50% to provide a 'low growth' scenario.

Table 25 lists the annual growth rates used for all three scenarios. Future economic events or changes in planning policies may affect which of the scenarios proves closest to the actual population and its distribution in 2026.

Figures 4 through 15 present projected populations under each scenario for the RDN, each municipality, and each electoral area. Tables 26 and 27 present population projections for each UCB and for City of Nanaimo nodes respectively.

It is important to note that the population projections made for this report are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction will remain at the estimated levels for 2000.

The Regional District of Nanaimo and member municipalities intend to direct new growth into urban areas. Implementation of the policies contained in the Growth Management Plan and in each jurisdiction's Official Community Plan can impact the rates of growth in each area.

Table 24
Population Estimates 2000

Area	Estimate	Area	Estimate
Jurisdictions¹		UCBs²	
RDN	136,400	Bowser	81
Nanaimo	77,202	Qualicum Bay	84
Parksville	10,094	Dunsmuir	227
Qualicum Beach	8,866	Qualicum River Estates	0
A – Cedar	6,411	Qualicum Beach	5,389
B - Gabriola Island	4,228	Hillers	146
C - Nanaimo Lakes	1,500	Coombs	188
D - Wellington	5,183	Bellevue / Church Road	245
E - Nanoose	5,729	Parksville (two areas)	13,618
F - Errington	6,138	Errington	32
G - French Creek	7,229	Red Gap	423
H - Bowser	3,819	Fairwinds	302
		Lantzville	31
		Nanaimo	76,500
		Extension	245
		Cedar	1,636
		Cassidy	446
		Population inside UCBs	102,276
		% of RDN population	75
Nodes³			
Woodgrove	1,222		
Country Club	706		
Hospital	1,314		
Chase River	588		
Downtown	2,619		
Rutherford	961		

¹ Source: Westland 1995, Census 1991 and 1996, see Appendix A for method

² Source: RDN GMP Indicators, see Appendix B for method

³ Source: City of Nanaimo

Estimates made for this report may not agree exactly with estimates made by others using alternative methodologies or for different uses.

Table 25
Projected Growth Rates and Population of the Regional District

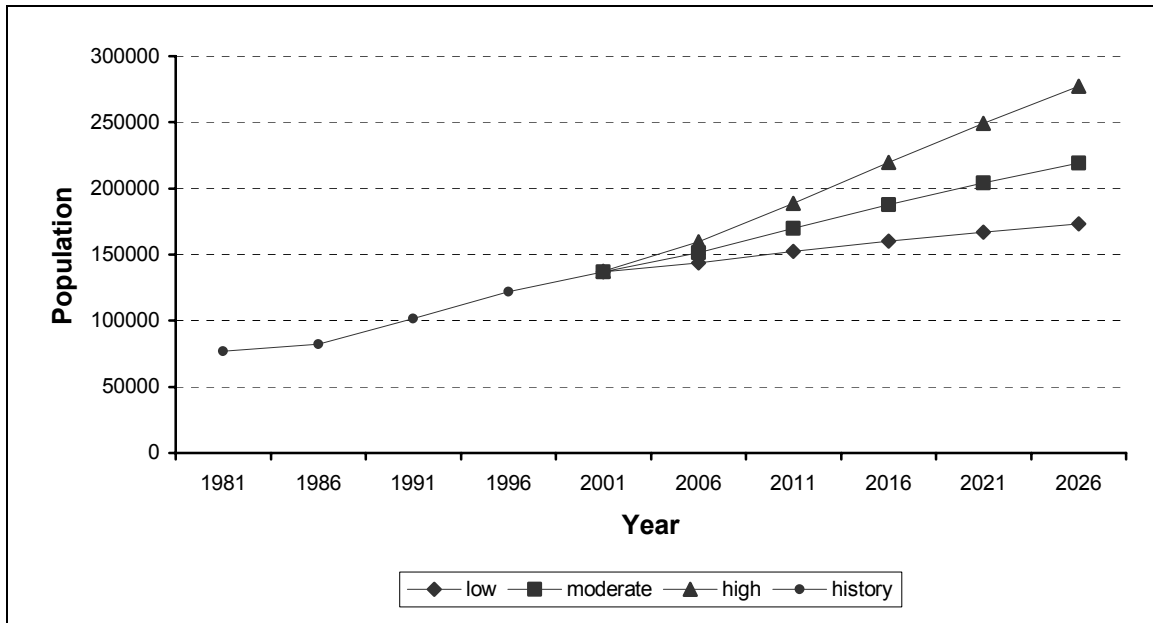
YEAR	BC Statistics P.E.O.P.L.E. 25		LOW		HIGH	
	growth rate ²	Population ¹	50 % of rate ²	Population ²	150% of rate ²	Population ²
2000		136,400³		136,400³		136,400³
2001	1.915	137,003	0.957	136,702	2.872	137,305
2002	2.036	139,626	1.018	138,010	3.054	141,248
2003	2.092	142,469	1.046	139,415	3.139	145,562
2004	2.116	145,450	1.058	140,874	3.174	150,130
2005	2.130	148,528	1.065	142,364	3.195	154,896
2006	2.224	151,692	1.112	143,881	3.336	159,845
2007	2.299	155,066	1.150	145,481	3.449	165,178
2008	2.337	158,631	1.168	147,153	3.505	170,875
2009	2.269	162,338	1.134	148,872	3.403	176,864
2010	2.184	166,021	1.092	150,561	3.276	182,883
2011	2.128	169,647	1.064	152,205	3.192	188,874
2012	2.083	173,257	1.042	153,825	3.125	194,903
2013	2.054	176,866	1.027	155,427	3.080	200,993
2014	1.998	180,498	0.999	157,023	2.997	207,184
2015	1.923	184,104	0.961	158,591	2.884	213,393
2016	1.838	187,644	0.919	160,116	2.756	219,548
2017	1.769	191,092	0.884	161,587	2.653	225,599
2018	1.716	194,472	0.858	163,016	2.574	231,585
2019	1.660	197,809	0.830	164,415	2.490	237,545
2020	1.590	201,092	0.795	165,779	2.385	243,459
2021	1.540	204,290	0.770	167,097	2.310	249,267
2022	1.492	207,436	0.746	168,384	2.237	255,025
2023	1.434	210,530	0.717	169,640	2.152	260,730
2024	1.373	213,550	0.686	170,856	2.059	266,341
2025	1.312	216,481	0.656	172,029	1.968	271,824
2026		219,321		173,157		277,173

¹ Source: BC Statistics P.E.O.P.L.E. 25

² Source: calculated

³ Source: estimated for this report, see Appendix A for method

**Figure 4
Regional District of Nanaimo Population Projection**

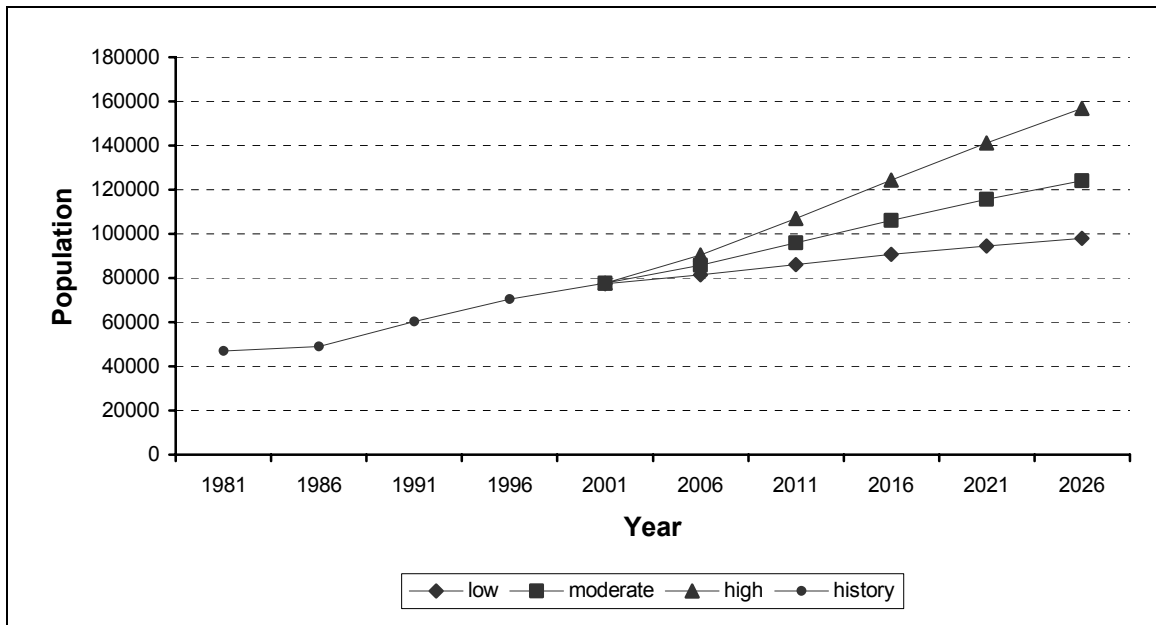


Growth Rate	2001	2006	2011	2016	2021	2026
low	136,702	143,881	152,205	160,116	167,097	173,157
moderate	137,003	151,692	169,647	187,644	204,290	219,321
high	137,305	159,845	188,874	219,548	249,267	277,173

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

The Regional District of Nanaimo and member municipalities intend to direct new growth into urban areas. Implementation of the policies contained in the Growth Management Plan and in each jurisdiction's Official Community Plan can impact the rates of growth in each area.

**Figure 5
City of Nanaimo Population Projection**

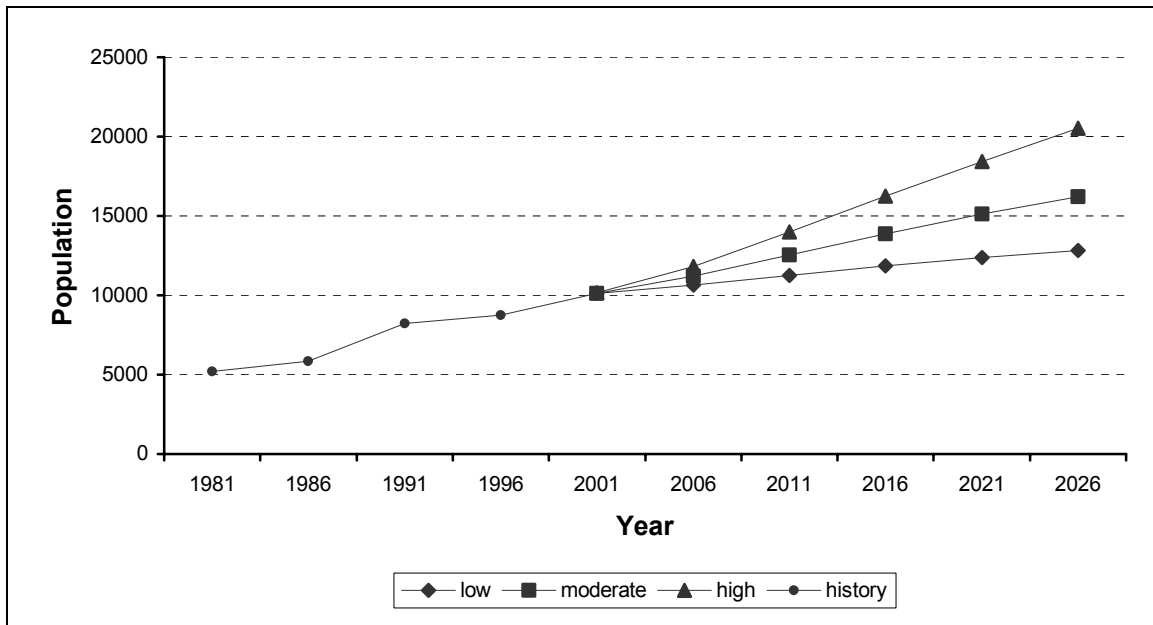


Growth Rate	2001	2006	2011	2016	2021	2026
low	77,373	81,437	86,148	90,626	94,577	98,007
moderate	77,544	85,858	96,020	106,207	115,628	124,136
high	77,715	90,472	106,903	124,264	141,085	156,880

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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**Figure 6
City of Parksville Population Projection**

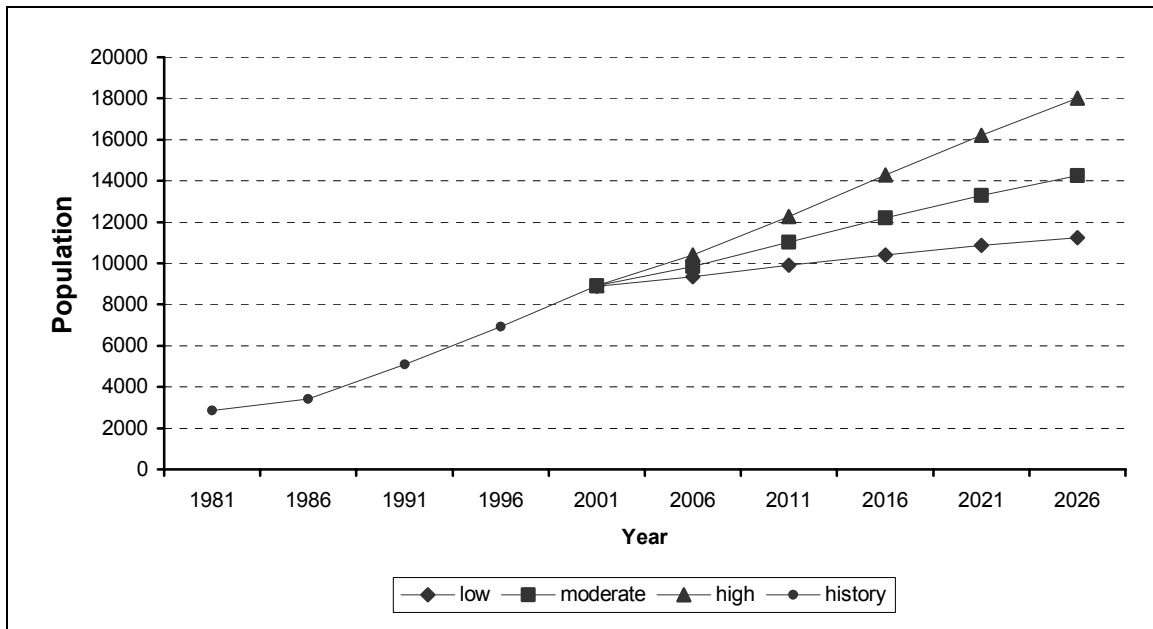


Growth Rate	2001	2006	2011	2016	2021	2026
low	10,116	10,647	11,263	11,849	12,365	12,814
moderate	10,138	11,225	12,554	13,886	15,117	16,230
high	10,161	11,829	13,977	16,247	18,446	20,511

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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**Figure 7
Town of Qualicum Beach Population Projection**

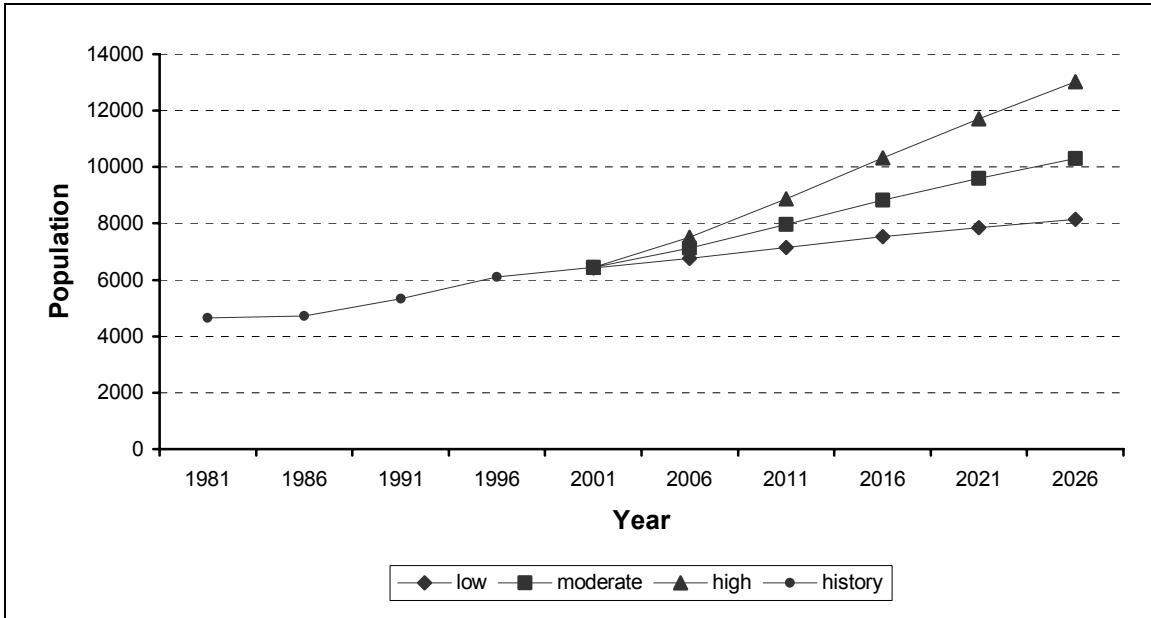


Qualicum Beach	2001	2006	2011	2016	2021	2026
low	8,886	9,352	9,893	10,408	10,861	11,255
moderate	8,905	9,860	11,027	12,197	13,279	14,256
high	8,925	10,390	12,277	14,271	16,202	18,016

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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**Figure 8
Area A – Cedar Population Projection**

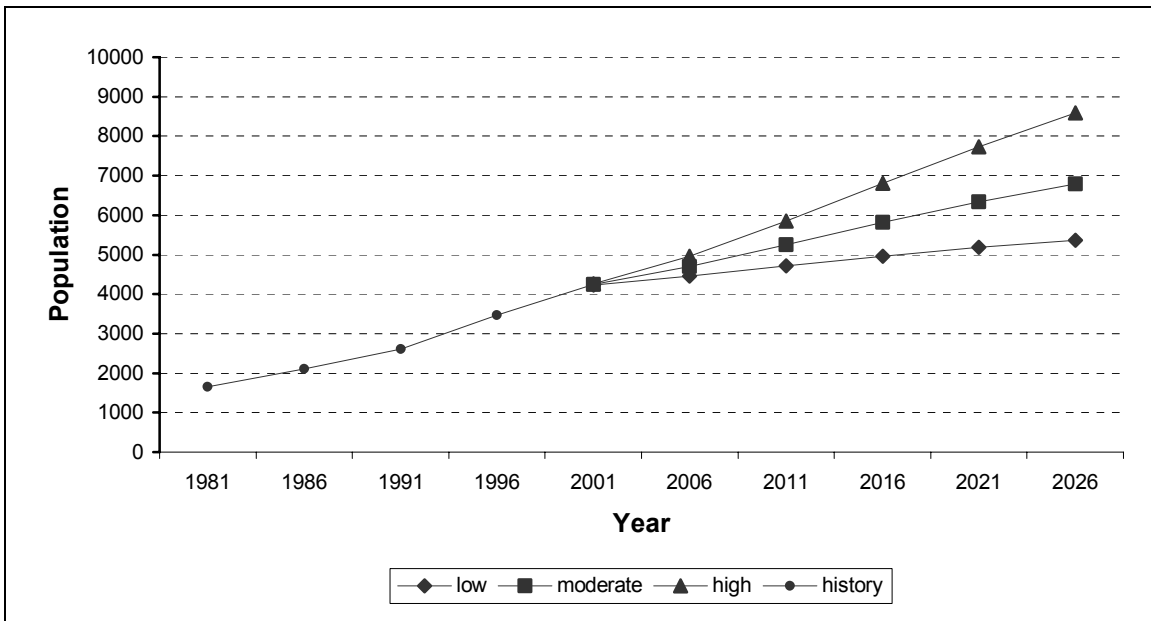


Growth Rate	2001	2006	2011	2016	2021	2026
low	6,425	6,762	7,154	7,525	7,854	8,138
moderate	6,439	7,130	7,973	8,819	9,602	10,308
high	6,453	7,513	8,877	10,319	11,716	13,027

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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**Figure 9
Area B – Gabriola Island Population Projection**

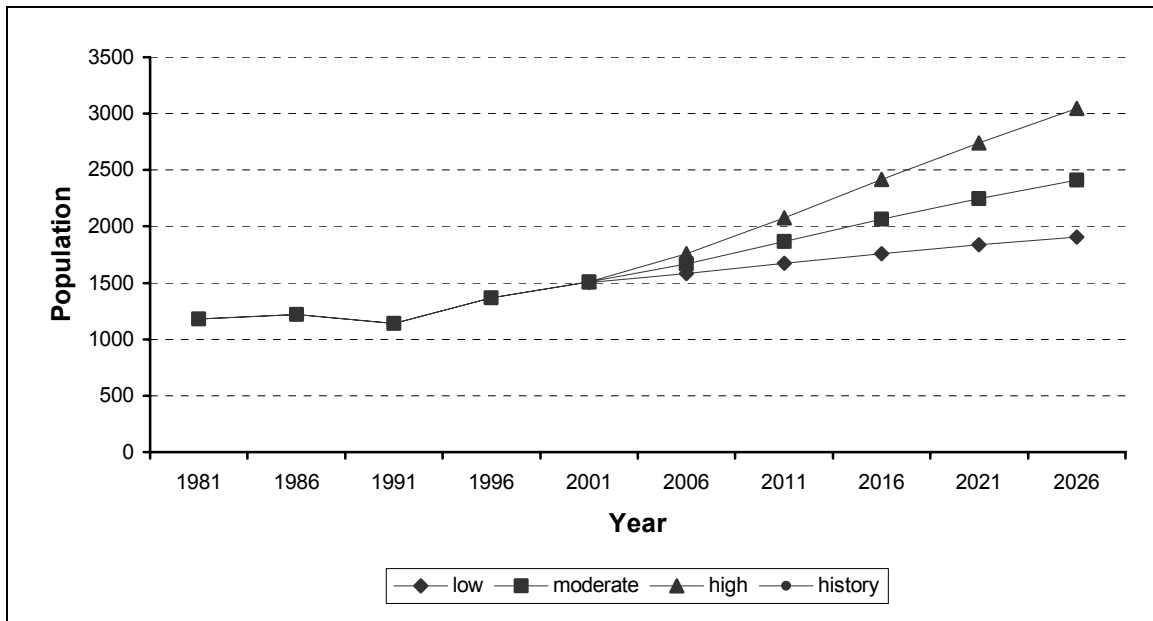


Growth Rate	2001	2006	2011	2016	2021	2026
low	4,238	4,460	4,718	4,964	5,180	5,368
moderate	4,247	4,702	5,259	5,817	6,333	6,799
high	4,256	4,955	5,855	6,806	7,727	8,592

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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**Figure 10
Area C – Nanaimo Lakes Population Projection**

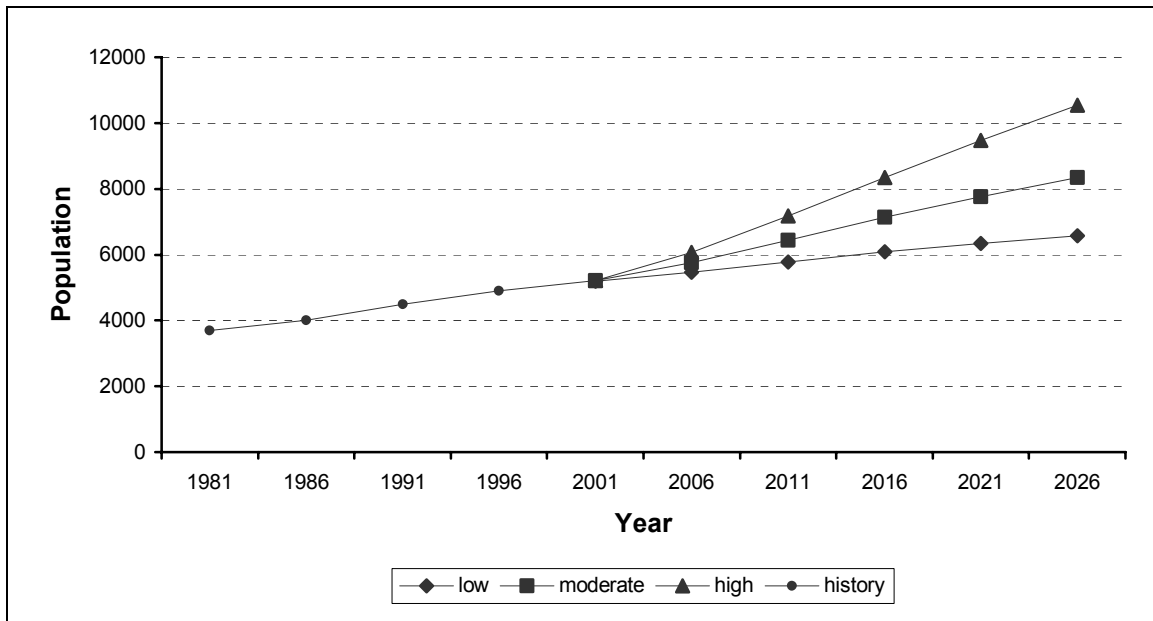


Growth Rate	2001	2006	2011	2016	2021	2026
low	1,504	1,583	1,674	1,761	1,838	1,905
moderate	1,507	1,669	1,866	2,064	2,247	2,413
high	1,510	1,758	2,078	2,415	2,742	3,049

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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Figure 11
Area D – Wellington Population Projection

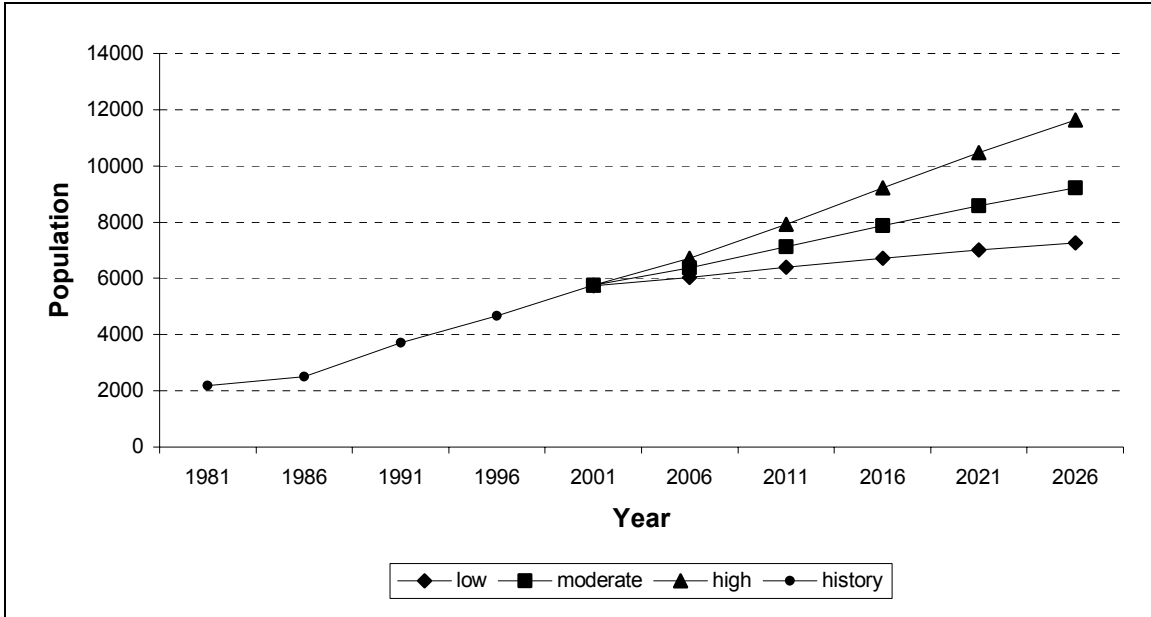


Growth Rate	2001	2006	2011	2016	2021	2026
low	5,195	5,467	5,784	6,084	6,350	6,580
moderate	5,206	5,764	6,447	7,130	7,763	8,334
high	5,218	6,074	7,177	8,343	9,472	10,533

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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Figure 12
Area E – Nanoose Population Projection

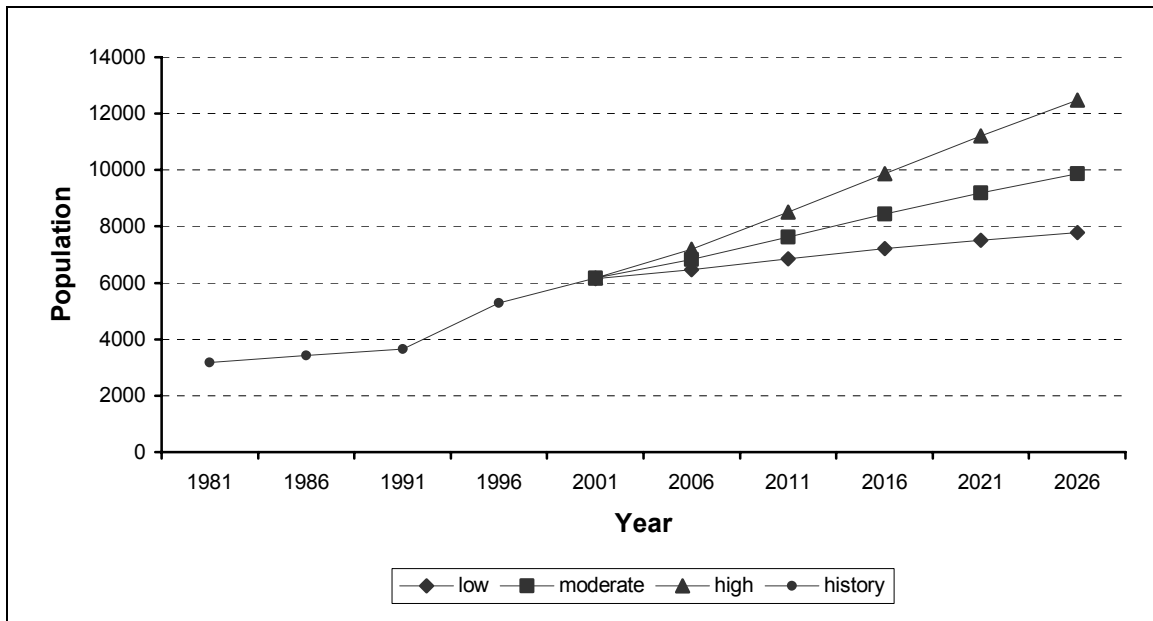


Growth Rate	2001	2006	2011	2016	2021	2026
low	5,741	6,043	6,393	6,725	7,018	7,273
moderate	5,754	6,371	7,125	7,881	8,580	9,211
high	5,767	6,713	7,933	9,221	10,469	11,641

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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Figure 13
Area F – Errington Population Projection

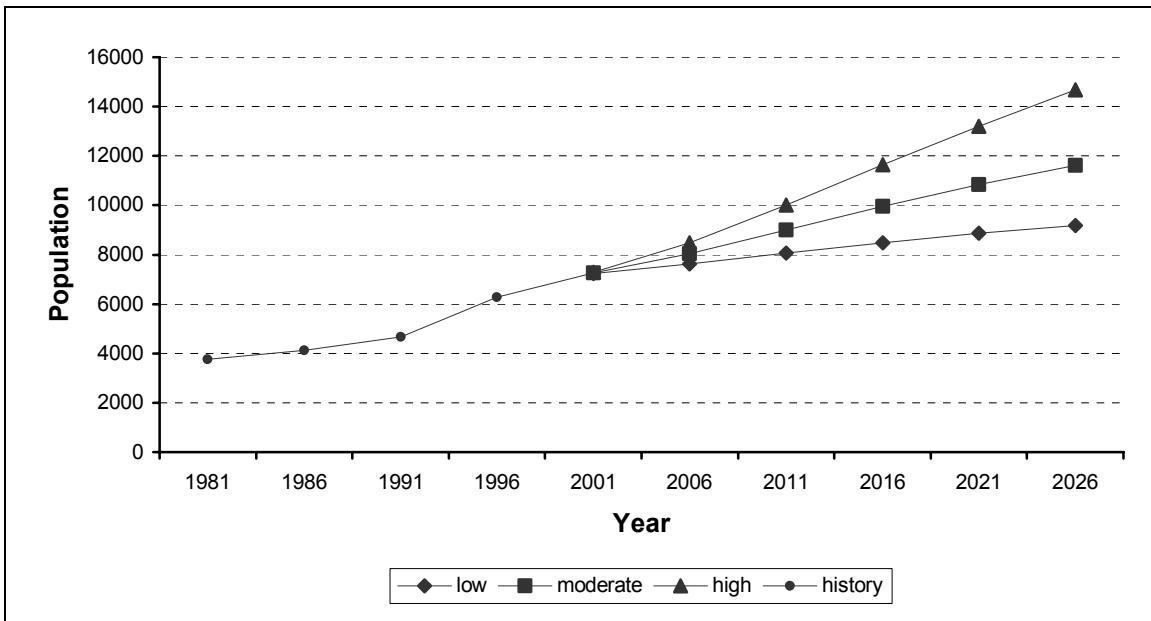


Growth Rate	2001	2006	2011	2016	2021	2026
low	6,152	6,475	6,849	7,205	7,519	7,792
moderate	6,165	6,826	7,634	8,444	9,193	9,869
high	6,179	7,193	8,499	9,880	11,217	12,473

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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Figure 14
Area G – French Creek Population Projection

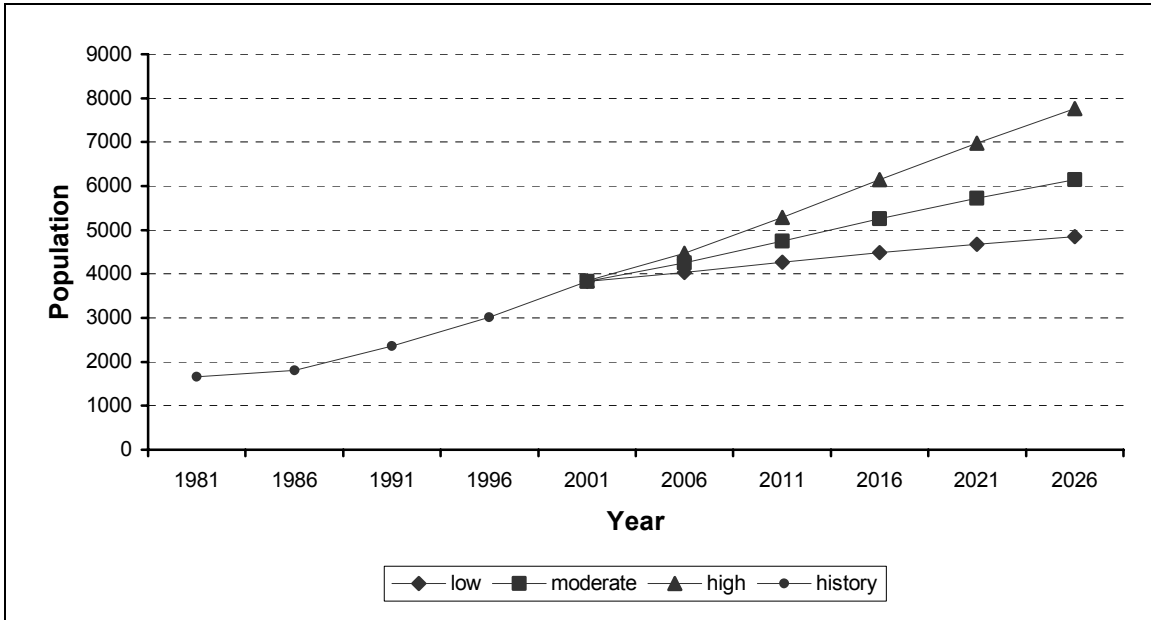


Growth Rate	2001	2006	2011	2016	2021	2026
low	7,245	7,626	8,067	8,486	8,856	9,177
moderate	7,261	8,040	8,991	9,945	10,827	11,624
high	7,277	8,472	10,010	11,636	13,211	14,690

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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**Figure 15
Area H – Bowser Population Projection**



Growth Rate	2001	2006	2011	2016	2021	2026
low	3,828	4,029	4,262	4,483	4,679	4,848
moderate	3,836	4,247	4,750	5,254	5,720	6,141
high	3,845	4,476	5,288	6,147	6,979	7,761

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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Table 26
Urban Containment Boundary Area Population Projections

Urban Containment Area	Growth	2001	2006	2011	2016	2021	2026
Bowser	low	81	85	90	95	99	103
	moderate	81	90	101	111	121	130
	high	81	95	112	130	148	164
Qualicum Bay	low	84	88	93	98	102	106
	moderate	84	93	104	115	125	134
	high	84	98	116	135	153	170
Dunsmuir	low	227	239	253	266	278	288
	moderate	228	252	282	312	340	365
	high	228	266	314	365	414	461
Qualicum River Estates*	low	0	188	199	210	219	227
	moderate	0	199	222	246	268	287
	high	0	203	247	288	327	363
Qualicum Beach	low	5,401	5,684	6,013	6,326	6,601	6,841
	moderate	5,412	5,993	6,702	7,413	8,071	8,665
	high	5,424	6,315	7,462	8,674	9,848	10,950
Hillers	low	146	154	162	171	178	185
	moderate	146	162	181	200	218	234
	high	147	171	202	234	266	296
Coombs	low	189	198	210	221	230	239
	moderate	189	209	234	259	282	303
	high	189	220	261	303	344	382
Bellevue / Church Road	low	246	259	274	288	301	311
	moderate	246	273	305	337	367	394
	high	247	287	340	395	448	499
Parksville/French Creek	low	13,648	14,365	15,196	15,986	16,683	17,288
	moderate	13,678	15,145	16,937	18,734	20,396	21,897
	high	13,708	15,959	18,857	21,919	24,886	27,673

Refer to Figure 2 for UCB boundaries.

*There is no population in Qualicum River Estates currently, although subdivision has occurred. RDN planners estimate 153 dwellings in this UCB by 2026. These estimates assume the area will be fully developed in 2026 under the high growth scenario.

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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Table 26, continued
Urban Containment Boundary Area Population Projections

Urban Containment Area	Growth	2001	2006	2011	2016	2021	2026
Errington	low	32	34	36	38	39	41
	moderate	32	36	40	44	48	52
	high	32	38	45	52	59	65
Red Gap	low	424	446	472	496	518	537
	moderate	425	470	526	582	633	680
	high	426	496	586	681	773	859
Fairwinds	low	302	318	336	354	369	383
	moderate	303	335	375	415	452	485
	high	304	353	418	485	551	613
Lantzville	low	31	33	35	37	38	40
	moderate	31	35	39	43	47	50
	high	32	37	43	50	57	64
Nanaimo	low	76,690	80,717	85,387	89,825	93,741	97,141
	moderate	76,859	85,099	95,172	105,268	114,607	123,039
	high	77,028	89,673	105,958	123,166	139,839	155,494
Extension	low	245	258	273	287	300	310
	moderate	246	272	304	336	366	393
	high	246	287	339	394	447	497
Cedar	low	1,640	1,726	1,826	1,921	2,004	2,077
	moderate	1,643	1,820	2,035	2,251	2,451	2,631
	high	1,647	1,917	2,266	2,634	2,990	3,325
Cassidy	low	447	470	498	523	546	566
	moderate	448	496	555	613	668	717
	high	449	523	617	718	815	906

Refer to Figure 2 for UCB boundaries.

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Table 27
City of Nanaimo Nodes Population Projections

Nodes	Growth	2001	2006	2011	2016	2021	2026
Woodgrove	low	1,225	1,290	1,364	1,435	1,498	1,552
	moderate	1,228	1,360	1,521	1,682	1,831	1,966
	high	1,231	1,433	1,693	1,968	2,281	2,484
Country Club	low	707	744	787	828	864	896
	moderate	709	785	878	971	1,057	1,134
	high	710	827	977	1,136	1,316	1,434
Hospital	low	1,317	1,386	1,466	1,542	1,609	1,668
	moderate	1,319	1,461	1,634	1,807	1,968	2,112
	high	1,322	1,539	1,819	2,114	2,450	2,669
Chase River	low	589	620	656	690	720	746
	moderate	590	653	731	808	880	945
	high	591	689	814	946	1,096	1,194
Downtown	low	2,625	2,763	2,923	3,075	3,209	3,325
	moderate	2,631	2,913	3,258	3,604	3,923	4,212
	high	2,637	3,070	3,627	4,216	4,886	5,323
Rutherford	low	963	1,014	1,073	1,128	1,178	1,220
	moderate	966	1,069	1,196	1,322	1,440	1,546
	high	968	1,127	1,331	1,547	1,793	1,953

Refer to Figure 3 for node boundaries

Population projections are based entirely on the BC Statistics P.E.O.P.L.E. 25 model growth rates for the region. The projections assume that growth will occur at the same rate in all parts of the region, and that the proportion of the total population in each jurisdiction, UCB, or node will remain at the estimated levels for 2000.

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5.0 Population and Demographic Implications for the Growth Management Plan

5.1 Population Trend Implications

When the Growth Management Plan was being prepared in the mid-1990s, it was thought that implementing the plan could either accelerate population growth in the region, or discourage growth and economic development. The trends identified in this report suggest that the changes in population growth rates and demography of the region have resulted from broad influences, such as the aging of the “baby boomers” and provincial economic booms and busts. While the Growth Management Plan has no influence over population aging and the provincial economy, it does influence how future growth is accommodated.

The change in population growth rates between 1991 and 1996 (19.7%), and 1996 and 2000 (12.0%) highlights the wisdom of the “growth rate neutral” approach taken by the Growth Management Plan. The Growth Management Plan calls for growth, regardless of rate, to be accommodated in well-designed mixed-use nodes inside designated urban containment boundaries. The Growth Management Plan’s policies are intended to protect environmental, social, and economic values of the region whether many or few additional residents need to be accommodated. If all jurisdictions in the RDN are diligent about creating nodes that have high design quality and create excellent environments for living and working, the region will remain an attractive place to live, making the region a preferred destination for future migrants.

The projected increase in population to the year 2026 indicates that the RDN could see nearly 83,000 more residents. Under the “low” projection, this figure may be as small as 37,000. Under the “high” projection, the population could more than double, adding 141,000 new residents. Even under the “low” growth forecast, in the next 25 years the population could grow by the equivalent of today’s population of Parksville, Qualicum Beach, Cedar, Wellington, and French Creek *combined*. This growth will bring investment, residents with new ideas and skills, and stimulus for change; it is important that these factors be effectively managed to maximize benefits to the quality of life in the region. The Growth Management Plan was designed to direct growth in ways that protect or improve the environmental, social, and economic conditions in the region.

Assuming that the proportion of regional population living inside UCBs remains constant at 75% regardless of the amount of growth occurring, even under the low growth scenario, more than 9,000 additional people are projected to move into areas outside UCBs (Table 28). Under a high growth scenario, the number of people outside UCBs

could more than double to 35,000. The most likely projection shows that nearly 21,000 more people could settle in rural areas by 2026. The ability of the RDN to accommodate these forecast population increases inside and outside UCBs is analyzed in the *Land Inventory Analysis*, published separately by the RDN.

Table 28
Additional Population in the RDN and UCBs in 2026

Area	Current Population 2000*	New population 2026 Medium Growth**	New population 2026 High Growth**	New population 2026 Low Growth**
RDN	136,400	82,921	140,773	36,757
Inside UCBs	102,276	62,177	105,556	27,562
Outside UCBs	34,124	20,744	35,217	9,195

* estimated for this report

** assumes that 25% of RDN population remains outside of UCBs between 2000 and 2026

The ability of the Growth Management Plan to achieve its goal of protecting rural integrity could be tested by the forecast growth outside of UCBs. Forecasts show that unless more population is housed inside UCBs than prevails in 2000, rural parts of the region could see a demand to accommodate 21,000 more people in the next 25 years. Even the low growth forecasts of 9,000 new rural residents would more than equal the present population of Qualicum Beach. Costs of servicing new residential development in these areas could be prohibitive, and the environmental and health impacts of inadequately serviced development could prove high. The current difficulties in accommodating legitimate resource uses in rural resource areas due to opposition by rural residents would only increase if significant rural residential development were to occur.

5.2 Socioeconomic Trend Implications

The most rapidly growing age groups in the region since 1986 have been those of middle age (35-49 years) and seniors (65+ years). The slowest-growing group is young adults (20-34 years). The age structure of populations has changed in different ways in the RDN's various jurisdictions. Qualicum Beach, for instance, has experienced a staggering 172 percent increase in the number of seniors since 1981, whereas the senior population in Cedar grew by only 10 percent. Some areas actually experienced a falling population of young adults and children. Planners, developers, and elected representatives in each jurisdiction need to recognize the nature of the demographic shifts occurring in their areas, and adapt the implementation of the Growth Management Plan's policies accordingly.

The decrease in average numbers of persons per household can be accommodated under the Growth Management Plan. For example, the increase in the proportion of households having one or two persons will create a strong market for moderate density housing that can be created in mixed-use nodes. Shrinking household size, combined with the aging of the regional population, makes providing services close to housing an increasingly important land use policy.

The growth in middle aged and older adult (49-65 years) groups may create pressure for large lot residences in rural areas. These groups often have established careers in fields unrelated to the rural economy, and seek rural residential properties on which to build homes rather than to operate commercial farms, woodlots, or other rural economic businesses. The Growth Management Plan recognizes the existing inventory of rural residential properties, but also seeks to control their expansion, which could harm the integrity of the rural environment, resources, and economy.

The majority of dwellings in the RDN are owned rather than rented (73% in 1996), although the region has experienced a rate of growth in rented dwellings that is higher than the provincial average. The average value of owned dwellings, \$183,800 in constant dollars, 2000, increased by 35% between 1991 and 1996, but remains significantly lower than the average values in Victoria, Vancouver, and the province. Lower dwelling values in the region could continue to draw new residents from the Victoria and Vancouver areas, particularly retirees.

Statistics show that the shift in the region's economic base from the primary sector to services continues unabated. In 1996, services of various kinds accounted for 67 percent of employment in the region. Locating an increasing proportion of these service jobs near to people's homes through nodal development, as called for in the Growth Management Plan, is feasible and desirable. The Growth Management Plan encourages healthy agriculture and forestry sectors and protection of rural integrity by focusing new residential and service related development inside urban containment boundaries and in nodes.

Encouraging a strong economy is important in the region, as the average income in the RDN is lower than the provincial average. On the positive side, the population earning more than \$50,000 per year is growing more than twice as fast as any other income group. As the educational level of the RDN population increases, the potential for increased earnings also grows.

In conclusion, the results of the population and demographic analysis suggest that the Growth Management Plan is suitable for the characteristics and numbers of RDN

residents today and in the foreseeable future. The Plan recognizes the need to adapt the design of nodes to reflect local conditions, a need that is underscored by the demographic variety that characterizes the region. Nothing in the population forecasts and economic data indicates that changes to the Growth Management Plan are needed. Rather, the importance of diligent implementation of Growth Management Plan policies is reinforced by the prospect of substantial growth and change that will occur in the next 25 years.

Appendix A Population and Regional Distribution Estimate Methods

Population growth rates and regional population distribution for 2000 were estimated using the following data and methods:

The total regional population is an average of four estimates provided by:

- BC Statistics (derived from the P.E.O.P.L.E. 25 Model)
- BC Statistics Household projections (all households x 2.4, the average persons per household).
- BCAA data (all residential buildings x 2.4, the average persons per dwelling)
- Rosenberg (1998) report for the Urban Futures Institute and The Land Centre

The average number of persons per household is the number reported by the 1996 Census for the Regional District of Nanaimo. Table A provides the population estimates and calculation results.

Table A
Estimate of the RDN population in 2000

Method	# of households	persons per dwelling	2000
BC Statistics P.E.O.P.L.E. 25	n/a	n/a	134,849
BC Statistics Household Estimates	56,926	2.4	136,628
BC Assessment Authority Residences	56,694	2.4	136,066
Urban Futures Inst. and The Land Centre	n/a	n/a	138,000
AVERAGE			136,400

Given an estimated population of 136,400 in the regional district in 2000, the distribution of the population among the municipalities and electoral areas was estimated by extending the trends shown in the proportion of regional population in each area between 1981 and 1996, as reported in Westland (1995) and in the 1991 and 1996 Census'. The differences between each five-year period were averaged to provide preliminary estimated change between 1996 and 2000. In order to compensate for rounding in the calculations, 0.1 percent was added to the preliminary estimate for every area, with the exception of Nanaimo. Table B shows the historical trends and the estimated proportions for 2000.

Table B
Estimates of Municipal and Electoral Area Populations in 2000

Area	Percent of RDN population in each jurisdiction					2000 Population Estimate
	1981	1986	1991	1996	Trend	
RDN	100.0	100.0	100.0	100.0	100.0	136,400
Nanaimo	61.1	59.7	59.4	57.7	56.6	77,202
Parksville	6.8	7.1	8.1	7.2	7.4	10,094
Qualicum Beach	3.7	4.2	5.0	5.7	6.5	8,866
A – Cedar	6.1	5.7	5.2	5.0	4.7	6,411
B - Gabriola Island	2.1	2.5	2.6	2.8	3.1	4,228
C - Nanaimo Lakes	1.5	1.5	1.1	1.1	1.1	1,500
D - Wellington	4.8	4.9	4.4	4.0	3.8	5,183
E - Nanoose	2.8	3.1	3.6	3.8	4.2	5,729
F - Errington	4.1	4.2	3.6	4.3	4.5	6,138
G - French Creek	4.9	5.0	4.6	5.1	5.3	7,229
H - Bowser	2.2	2.2	2.3	2.5	2.8	3,819

Appendix B Estimating the Proportion of Population in UCBs

The RDN Geographic Information System (GIS) was used to analyze existing BC Assessment Authority data and Census 1991 and 1996 data. Three methods were used to derive historical estimates of the population UCB boundaries:

Method 1: Where UCB boundaries and Census enumeration areas matched reasonably, total population of all enumeration areas inside the UCB provided the population for 1991 and 1996 in each UCB. The 1991 and 1996 populations were then used to calculate the proportion of the regional population inside the UCBs. An average of the proportion, rather than a trend, was used to estimate the populations in 2000, as there were data for only two Census years.

This method was used to calculate population density for Qualicum Beach, Parksville, and Nanaimo UCBs. Note that these UCB boundaries are not the same as the municipal boundaries, and so population estimates will vary from those used for the municipalities.

Method 2: Where UCB boundaries and Census enumeration areas did not match reasonably, the BC Assessment Authority data, which shows the type and location of all assessed properties in the region, were used to help estimate the ratio of residences in the portion of each Census Enumeration Area inside any particular UCB⁷. The ratio is applied as a weighting factor to estimate population. Figure 1A and Table C give a simplified example. The 1991 and 1996 populations were then used to calculate the proportion of the regional population inside the UCBs. An average of the proportion, rather than a trend, was used to estimate the populations in 2000, as there were data for only two Census years.

When used to estimate historical population, this method relies on the assumption that growth patterns have remained similar over time. The BCAA data reflect residential development as of 2000, even though the ratio is being applied to 1991 and 1996 census data. RDN staff members were asked to review each UCB and assess whether growth had generally continued in the same areas or whether new areas had been opened to development. This method was believed to be appropriate for all UCBs outside of Qualicum Beach, Parksville and Nanaimo, with the exception of the Fairwinds UCB. Future data sets from BCAA and Census Canada will be created in the same year and so actual growth patterns will be reflected accurately.

Method 2 also assumes that all types of residential buildings are evenly distributed throughout the enumeration area. It is possible that apartment buildings are clustered

⁷ All properties with BCAA actual use code between 00 and 100 (residential) are counted.

together; in which case, using the ratio of residential buildings as a weighting factor may underestimate population if apartment buildings are clustered inside a UCB.

The current data show only one residential point per building, whether it is an apartment building, duplex, or detached single-family dwelling. When and if the number of dwelling units associated with each building is available from BCAA, the estimates could be adjusted to include the additional dwellings.

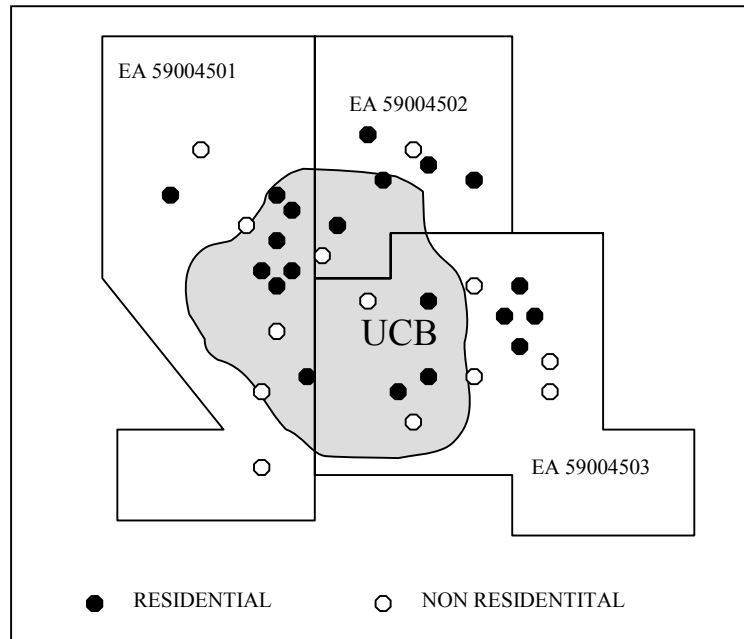
In addition, the house numbering/lot boundary data is not complete. For municipal areas, approximately 95% of the data are complete. Outside of municipalities, mobile home parks are underrepresented as only one point is created to represent the entire park although it may contain a large number of mobile homes.

Method 3: Where unusual growth patterns were identified, archived plan maps showing actual built residences were retrieved, and all built residences shown on the maps were counted. This method was used only for Fairwinds UCB. As all of the residences fall in one Census enumeration area, the average persons per dwelling in 1991 and 1996 were used to estimate total historical population inside the UCB. In the future, Fairwinds population can be estimated using Method 2. Table D shows the calculations made to estimate the historical population of Fairwinds UCB in 1991 and 1996. The 1991 and 1996 populations were then used to calculate the proportion of the regional population inside the UCBs. An average of the proportion, rather than a trend, was used to estimate the populations in 2000, as there were data for only two Census years.

This method uses average persons per dwelling to estimate total population, based on the number of residences identified. Dwellings associated with multiple household buildings, such as apartment complexes, will not be counted and this method may under-represent total population.

Table E presents the final proportions and estimates for population in 2000.

**Figure 1A
Method 2 Example**



**Table C
Estimating Population inside UCBs**

EA number	Total Residences in EA	Total Residences inside UCB	Ratio of Residences inside UCB	Total population in EA	Estimate of Population in UCB
	A	B	B/A	C	B/A * C
59004501	8	7	0.88	25	22
59004502	5	2	0.40	15	6
59004503	7	3	0.49	21	10
Total Estimated Population inside UCB					38

**Table D
Estimating Population Using Historical Plan Maps**

Year	Total Residences (shown on map)	Average persons per dwelling (Census data)	Population Estimate
1991	61	2.2	134
1996	172	2.2	378

Table E
Estimates of UCB Populations in 2000

Percent of RDN Population in UCBs	1991	1996	Average	2000 Population Estimate
Bowser ²	0.062	0.057	0.059	81
Qualicum Bay ²	0.061	0.062	0.061	84
Dunsmuir ²	0.184	0.149	0.166	227
Qualicum River Estates ²	0.000	0.000	0.000	0
Qualicum Beach ¹	3.878	4.024	3.951	5,389
Hillers ²	0.104	0.109	0.107	146
Coombs ²	0.140	0.136	0.138	188
Bellevue / Church Road ²	0.175	0.185	0.180	245
Parksville (two areas) ¹	9.240	10.728	9.984	13,618
Errington ²	0.023	0.025	0.024	32
Red Gap ²	0.320	0.300	0.310	423
Fairwinds ³	0.132	0.310	0.221	302
Lantzville ²	0.025	0.021	0.023	31
Nanaimo ^{1*}	59.055	57.052	56.1	76,500
Extension ²	0.168	0.191	0.179	245
Cedar ²	1.236	1.164	1.200	1,636
Cassidy ²	0.340	0.314	0.327	446

¹ method 1

² method 2

³ method 3

* The decreasing trend has been followed due to the large population inside the Nanaimo UCB. This brings the estimate in line with estimates of population for the City of Nanaimo.

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