

The Urban Futures Institute

Research on Population, Community Change and Land Use in British Columbia

The Context for Change and Growth in the Fraser Valley Regional District

A Discussion Paper Prepared
for the Fraser Valley Regional District

by

David Baxter, Executive Director, The Urban Futures Institute

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I. Introduction

There is no question that the communities in the Fraser Valley Regional District are going to change, and to grow, over the coming quarter century. There are, however, many questions about the extent to which change and growth will occur, the extent to which these can be controlled and managed, the extent to which these can be directed towards a community vision, and about the commitment, cooperation and resources that will be required to achieve this vision.

The purpose of this report is to briefly consider some of the factors that will affect growth and change in the Regional District and its communities over the coming years, and some of the questions that will arise in development of strategies to manage this growth and change. This report is to contribute to the discussion about growth and change, a discussion will continue throughout the process of articulating a growth management strategy for the Regional District and implementing it to achieve a regional vision.

II. The Context for Population Growth in the Fraser Valley Regional District

Ultimately, the issues of growth and change in the Fraser Valley Regional District are about people and their environment. It is changes in what people do, in the number of people doing things, and the places and resources they share while doing things, that raise the questions about growth and change. An appropriate starting point for the discussion of change and growth in the Fraser Valley Regional District is, therefore, a consideration of population trends that will affect it in the future.

The population context for growth and change in the Fraser Valley Regional District is the entire Lower Mainland of British Columbia, which includes the Fraser Valley and Greater Vancouver Regional Districts. To some extent, this has always been the case, as residents of the Lower Mainland have always used transportation and utility corridors through the Fraser Valley Regional District to connect them with the rest of the Province and of Canada. The settlement and growth of communities such as Spuzzum, Fort Hope and Yale in the 1840s and during the Cariboo Gold Rush, was a direct function of the area's importance in providing a connection between the Interior and the Lower Mainland. As population growth continued, especially in the western part of the Lower Mainland, the use and number of utility and transportation corridors, and employment associated with these, in the Fraser Valley Regional District have grown: in terms of infrastructure, the Fraser Valley Regional District has always been part of Canada's third largest metropolitan area, the metropolitan Vancouver region.

As the communities of the Fraser Valley Regional District developed, its economy became more diverse. Some communities became primarily agricultural (such as Sumas), others primarily dependent upon forestry (for example, Mission), and others on resource extraction (such as Clayburn). In this context, population growth in the Regional District was primarily shaped by the availability of specific local resources, with most of the residents attracted by the opportunity of employment. The work was primarily in the harvesting of resources (agricultural, forestry, mining), or the provision of business and personal services to people who were involved in these primary sector activities. During this phase of its

development, growth and change in jobs and population were related to resource factors, which were in turn somewhat dependent on proximity to markets in the growing metropolitan area in the western portion of the Lower Mainland.

In recent decades, the proximity of the Regional District to the growing metropolitan region has resulted in the development of another local resource based source of employment (and hence of population growth): recreation and tourism. The Regional District's many natural and developed tourist and recreation attractions have become part of the recreational and tourism patterns of residents of the entire Lower Mainland. While some residents may understandably be a bit annoyed with the people coming in to use these resources, particularly during summer weekends when roads to lakes and amenity areas are full of traffic, other residents are dependent on the weekenders and daytrippers from other parts of the Lower Mainland for their livelihood. As in the transportation and utility corridor context, the Fraser Valley Regional District is now part of the metropolitan region, in this context as part of the metropolitan area's recreational and tourism infrastructure.

In the previous examples, urban growth in the western part of the Lower Mainland affected population growth in the Fraser Valley Regional District indirectly, by stimulating employment in the Regional District, thereby attracting labour force participants, most of whom established residences in the district. More recently, metropolitan growth in the Lower Mainland has also had a direct effect on the population in the Fraser Valley Regional District, as the metropolitan region has expanded to include the Regional District. As the metropolitan Vancouver economy has grown, so to has the extent of the urban development this economy needs for both economic activity and housing. Given the geography of the region, growth of urban infrastructure, land use and housing had been primarily east from the Burrard Peninsula and North Shore origins of metropolitan Vancouver. The process of inclusion of the communities of the Fraser Valley Regional District is a continuation of a pattern that, in the past, incorporated Burnaby, Richmond, Surrey and Port Moody, and is now incorporating Langely, Maple Ridge and Abbotsford, into the fabric of the metropolitan region.

Gone is the day when population growth in the communities of the Fraser Valley Regional District was solely tied to employment serving utilities and transportation, or the harvesting of, or the playing in, the Regional District's natural resources. Now the accessibility of these communities to other parts of the region, and the availability of land for housing in these communities, has become the primary determinant of population growth in the Fraser Valley Regional District. Residents of the Lower Mainland now consider Abbotsford, Mission, and Chilliwack as part of the housing stock that they can choose from when seeking a home within the metropolitan region. The Regional District's communities are readily accessible to the rapidly growing employment opportunities in Surrey, Langely, and Tri-Cities areas of the GVRD, and offer housing that meet many household's affordability and life style criteria.

III. Population Yesterday and Today

The preceding description of the forces affecting population growth in the Fraser Valley Regional District over the past decades is shown in the historical data on population in the District and its communities. The Fraser Valley Regional District is currently (1996) estimated by BC Statistics to be home for 229,409 people, accounting for 11% of the Lower Mainland's population of 2,096,190, with the Greater Vancouver Regional District accounting for the other 89% (1,866,781 people, Table One).

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Municipal Population Estimates for Metropolitan Vancouver Region, 1991 to 1996

Estimates By BC Statistics, Tabulation and Analysis by The Urban Futures Institute

Metropolitan Vancouver is defined as the area included in the Fraser Valley and Greater Vancouver Regional Districts

	1991	1992	1993	1994	1995	1996	92/91	93/92	94/93	95/94	96/95	96/91	92/91	93/92	94/93	95/94	96/95	96/91	
Fraser Valley Regional District (1996 Definitions for all areas)							Estimated Percentage Increase in Population					Estimated Increase in Number of People							
Abbotsford	89,299	94,003	97,651	101,321	104,784	107,410	5.3%	3.9%	3.8%	3.4%	2.5%	20.3%	4,704	3,648	3,670	3,463	2,626	18,111	
Mission	26,964	28,368	29,590	30,367	31,150	31,677	5.2%	4.3%	2.6%	2.6%	1.7%	17.5%	1,404	1,222	777	783	527	4,713	
Chilliwack	50,971	53,607	56,437	59,092	60,991	62,582	5.2%	5.3%	4.7%	3.2%	2.6%	22.8%	2,636	2,830	2,655	1,899	1,591	11,611	
Harrison Hot Springs	674	643	730	967	1,023	1,060	-4.6%	13.5%	32.5%	5.8%	3.6%	57.3%	-31	87	237	56	37	386	
Kent	4,447	4,725	4,942	5,099	5,187	5,231	6.3%	4.6%	3.2%	1.7%	0.8%	17.6%	278	217	157	88	44	784	
Hope (est 91 & 92)	5,794	5,824	6,334	6,476	6,780	7,032	0.5%	8.8%	2.2%	4.7%	3.7%	21.4%	30	510	142	304	252	1,238	
Unorganized & Residual	13,554	13,858	14,003	14,372	14,497	14,417	2.2%	1.0%	2.6%	0.9%	-0.6%	6.4%	304	145	369	125	-80	863	
FVRD Total	191,703	201,028	209,687	217,694	224,412	229,409	4.9%	4.3%	3.8%	3.1%	2.2%	19.7%	9,325	8,659	8,007	6,718	4,997	37,706	
(% of Metro Vancouver)	10.4%	10.6%	10.8%	10.9%	11.0%	10.9%							16.8%	17.7%	16.4%	13.6%	9.5%	14.8%	
Greater Vancouver (1996 Definitions for all areas)																			
Anmore	763	825	891	814	831	863	8.1%	8.0%	-8.6%	2.1%	3.9%	13.1%	62	66	-77	17	32	100	
Belcarra	603	609	635	649	648	642	1.0%	4.3%	2.2%	-0.2%	-0.9%	6.5%	6	26	14	-1	-6	39	
Burnaby	163,476	167,930	170,968	173,535	176,032	178,922	2.7%	1.8%	1.5%	1.4%	1.6%	9.4%	4,454	3,038	2,567	2,497	2,890	15,446	
City of Langley	20,339	19,837	20,616	21,453	22,660	23,485	-2.5%	3.9%	4.1%	5.6%	3.6%	15.5%	-502	779	837	1,207	825	3,146	
Coquitlam	86,463	89,994	93,822	97,439	100,889	103,995	4.1%	4.3%	3.9%	3.5%	3.1%	20.3%	3,531	3,828	3,617	3,450	3,106	17,532	
Delta	91,564	92,904	94,644	95,658	96,815	97,936	1.5%	1.9%	1.1%	1.2%	1.2%	7.0%	1,340	1,740	1,014	1,157	1,121	6,372	
Langley	67,960	72,009	74,842	78,477	80,662	83,173	6.0%	3.9%	4.9%	2.8%	3.1%	22.4%	4,049	2,833	3,635	2,185	2,511	15,213	
Lions Bay	1,366	1,386	1,419	1,415	1,414	1,417	1.5%	2.4%	-0.3%	-0.1%	0.2%	3.7%	20	33	-4	-1	3	51	
Maple Ridge	49,830	51,717	53,495	55,099	56,712	58,342	3.8%	3.4%	3.0%	2.9%	2.9%	17.1%	1,887	1,778	1,604	1,613	1,630	8,512	
New Westminster	44,852	47,005	46,086	47,855	47,292	48,759	4.8%	-2.0%	3.8%	-1.2%	3.1%	8.7%	2,153	-919	1,769	-563	1,467	3,907	
North Vancouver C	39,553	40,507	40,916	40,752	41,560	41,918	2.4%	1.0%	-0.4%	2.0%	0.9%	6.0%	954	409	-164	808	358	2,365	
North Vancouver D	77,342	79,199	80,955	82,050	81,801	83,302	2.4%	2.2%	1.4%	-0.3%	1.8%	7.7%	1,857	1,756	1,095	-249	1,501	5,960	
Pitt Meadows	11,471	12,178	12,897	13,538	13,860	14,445	6.2%	5.9%	5.0%	2.4%	4.2%	25.9%	707	719	641	322	585	2,974	
Port Coquitlam	37,842	39,859	41,172	43,153	45,668	47,780	5.3%	3.3%	4.8%	5.8%	4.6%	26.3%	2,017	1,313	1,981	2,515	2,112	9,938	
Port Moody	18,222	18,895	19,721	20,017	20,447	21,200	3.7%	4.4%	1.5%	2.1%	3.7%	16.3%	673	826	296	430	753	2,978	
Richmond	130,305	132,710	136,345	139,601	143,683	148,311	1.8%	2.7%	2.4%	2.9%	3.2%	13.8%	2,405	3,635	3,256	4,082	4,628	18,006	
Surrey	252,301	265,057	273,700	281,298	292,265	300,581	5.1%	3.3%	2.8%	3.9%	2.8%	19.1%	12,756	8,643	7,598	10,967	8,316	48,280	
Vancouver	485,561	492,326	500,960	510,339	521,837	535,699	1.4%	1.8%	1.9%	2.3%	2.7%	10.3%	6,765	8,634	9,379	11,498	13,862	50,138	
West Vancouver	39,910	40,451	40,908	41,497	41,755	42,252	1.4%	1.1%	1.4%	0.6%	1.2%	5.9%	541	457	589	258	497	2,342	
White Rock	16,788	16,882	17,128	17,442	17,592	18,044	0.6%	1.5%	1.8%	0.9%	2.6%	7.5%	94	246	314	150	452	1,256	
Unorganized & Residual	12,380	12,818	13,357	14,216	14,629	15,715	3.5%	4.2%	6.4%	2.9%	7.4%	26.9%	438	539	859	413	1,086	3,335	
GVRD Total	1,648,891	1,695,098	1,735,477	1,776,297	1,819,052	1,866,781	2.8%	2.4%	2.4%	2.4%	2.6%	13.2%	46,207	40,379	40,820	42,755	47,729	217,890	
(% of Metro Vancouver)	89.6%	89.4%	89.2%	89.1%	89.0%	89.1%							83.2%	82.3%	83.6%	86.4%	90.5%	85.2%	
Metropolitan Vancouver	1,840,594	1,896,126	1,945,164	1,993,991	2,043,464	2,096,190	3.0%	2.6%	2.5%	2.5%	2.6%	13.9%	55,532	49,038	48,827	49,473	52,726	255,596	
(% of B.C.)	54.5%	54.5%	54.4%	54.3%	54.3%	54.4%							57.2%	50.2%	50.7%	53.8%	57.1%	53.8%	
British Columbia	3,379,800	3,476,868	3,574,601	3,670,825	3,762,859	3,855,111	2.9%	2.8%	2.7%	2.5%	2.5%	14.1%	97,068	97,733	96,224	92,031	101,311	475,370	

Table Two: Population in the Fraser Valley Regional District, 1921 to 1991

(Source: Statistics Canada, Census of Canada Publications)

	1891	1901	1911	1921	1931	1941	1951	1956	1961	1966	1971	1976	1981	1986	1991
Abbotsford (Current)				6,062	6,157	8,636	15,108	16,856	20,326	22,398	31,033	40,685	54,736	65,945	86,900
Abbotsford (1976 to 1991)				2,299	2,322	3,035	4,800	5,335	6,033	6,237	7,479	9,507	12,735	14,496	18,100
- Abbotsford (1921 to 1971)					510	562	785	830	888	792	706				
- Sumas (1921 to 1971)				2,299	1,812	2,473	4,015	4,505	5,145	5,445	6,773				
Matsqui (1921 to 1991)				3,763	3,835	5,601	10,308	11,521	14,293	16,161	23,554	31,178	42,001	51,449	68,000
Subdivision A (Central Fraser)						54	166	168	157	202	271	297	316	311	200
Indian Reservations (Central Fraser)						160	120	192	104	97	101	101	156	179	200
Chilliwack	1,683	3,608	9,172	4,928	8,263	11,462	19,340	23,647	26,555	28,751	32,874	37,055	40,609	41,337	49,500
Chilliwack City (1921 to 1976)			1,657	1,767	2,461	3,675	5,663	7,297	8,259	8,681	9,135	8,634			
Chilliwack Township (1921-76)	1,683	3,608	7,515	3,161	5,802	7,787	13,677	16,350	18,296	20,070	23,739	28,421			
Harrison Hot Springs							477	613	475	486	598	572	569	652	600
Hope						515	1,668	2,226	2,751	2,948	3,153	2,963	3,205	3,046	3,100
Kent						1,287	1,725	1,989	2,194	2,642	2,966	2,924	3,406	3,741	4,300
Subdivision A (Fraser Cheam)						1,532	2,416	2,370	2,763	2,612	3,090	3,922	3,926	3,768	4,100
Subdivision B (Fraser Cheam-1921-76)				720	984	1,195	1,494	1,920	1,671	1,787	2,002	2,562	3,175	3,276	3,900
Subdivision B (Fraser Cheam 1976 - 1991)													3,016	3,120	3,600
Subdivision C (Fraser Cheam 1976 - 1991)													159	156	200
Indian Reserves (Fraser Cheam)						1,880	1,200	1,618	1,607	1,363	1,414	1,432	2,044	2,115	2,900
Mission						4,675	7,135	7,721	8,575	8,763	10,220	14,997	20,056	21,985	26,200
Mission City						1,957	2,668	3,010	3,251	3,412					
Mission District (1921 to 1966)						2,718	4,467	4,711	5,324	5,351					
Subdivision A (Dewdney Alouette)						1,351	1,827	1,896	2,136	2,197	2,474	2,989	3,116	3,085	3,800
Indian Reservations (Dewdney Alouette)						17	88	43	117	75	96	179	284	304	200
Fraser Valley Regional District						28,089	45,629	53,538	60,856	65,558	90,292	110,678	135,598	149,744	186,200
Greater Vancouver Regional District				232,442	349,364	409,318	586,172	694,425	826,798	933,091	1,082,352	1,166,348	1,268,183	1,380,729	1,602,500
British Columbia				524,582	694,263	817,861	1,165,210	1,398,464	1,620,982	1,873,700	2,184,620	2,466,608	2,744,467	2,883,365	3,282,000

The population of the Fraser Valley Regional District is estimated to have grown by 19.7% over the past five years, compared with the 13.2% increase in the population of the Greater Vancouver Regional District, and the overall increase of 13.9% for the metropolitan region as a whole. The estimated 37,706 people added to the Fraser Valley Regional District's population over the past 5 years accounted for 14.8% of the total population increase in the metropolitan Vancouver region, with the 217,890 added to the GVRD accounting for 85.2% of the region's growth.

The highest population growth rates in the metropolitan region are at the edge of the urban portions of the region, where new development of ground oriented housing is facilitated. The top fastest growing municipalities in the region over the 1991 to 1996 period were, in order of percentage increase in population over the 1991 to 1996 period: 1. Harrison Hot Springs, 2. Port Coquitlam, 3. Pitt Meadows, 4. Chilliwack, 5. Langely Township, 6. Hope, 7. Abbotsford and Coquitlam (tied), 8. Surrey, 9. Mission, and 10. Kent. All of the municipalities in the Fraser Valley Regional District are in the top ten.

High population growth rates have existed in Fraser Valley Regional District communities for over two decades¹. From 1966 to 1991, the Regional District's population increased from a high of 37.7% over the 1966 to 1991 period, to a low of 10.4% during the 1981 to 1986 recession (Tables Two and Three). During the twenty five year period between the 1966 and 1991 censuses, the Fraser Valley Regional District always grew faster than the GVRD, sometimes at almost three times the GVRD's rate.

In terms of the District's major centres, Abbotsford (using its current boundaries) was, between 1966 and 1991, consistently the fastest growing community, with Mission generally having the second fastest rate of increase. Over the 1986 to 1991 period, Chilliwack's growth rate was sufficient to put it slightly ahead of Mission, while Abbotsford remain the fastest growing of the three. The 1991 to 1996 BC Statistics estimates indicate that Chilliwack was the fastest growing of the three from 1991 to 1996.

¹ To consider this historical pattern, it is necessary to change from the BC Statistics estimates to the Census of Canada publications: these two sources have a slightly different way of measuring population, and hence the 1991 figures from the two differ.

Table Three: Population Growth, Fraser Valley Regional District, 1921 to 1991

Population increase as the percentage increase in population over the indicated five year period. Derived from Table Two

	1951-56	1956-61	1961-66	1966-71	1971-76	1976-81	1981-86	1986-91
Abbotsford (Current)	11.6%	20.6%	10.2%	38.6%	31.1%	34.5%	20.5%	31.8%
Abbotsford (1976 to 1991)	11.1%	13.1%	3.4%	19.9%	27.1%	34.0%	13.8%	30.1%
- Abbotsford (1921 to 1971)	5.7%	7.0%	-10.8%	-10.9%				
- Sumas (1921 to 1971)	12.2%	14.2%	5.3%	24.4%				
Matsqui (1921 to 1991)	11.8%	24.1%	13.1%	45.7%	31.4%	34.7%	22.5%	32.3%
Subdivision A (Central Fraser)	1.2%	-6.5%	28.7%	34.2%	9.6%	6.4%	-1.6%	-32.5%
Indian Reservations (Central Fraser)	60.0%	-45.8%	-6.7%	4.1%	0.0%	54.5%	14.7%	24.0%
Chilliwack	22.3%	12.3%	8.3%	14.3%	12.7%	9.6%	1.8%	19.8%
Chilliwack City (1921 to 1976)	28.9%	13.2%	5.1%	5.2%	-5.5%			
Chilliwack Township (1921-76)	19.5%	11.9%	9.7%	18.3%	19.7%			
Harrison Hot Springs	28.5%	-22.5%	2.3%	23.0%	-4.3%	-0.5%	14.6%	0.5%
Hope	33.5%	23.6%	7.2%	7.0%	-6.0%	8.2%	-5.0%	3.3%
Kent	15.3%	10.3%	20.4%	12.3%	-1.4%	16.5%	9.8%	15.5%
Subdivision A (Fraser Cheam)	-1.9%	16.6%	-5.5%	18.3%	26.9%	0.1%	-4.0%	10.1%
Subdivision B (Fraser Cheam-1921-76)	28.5%	-13.0%	6.9%	12.0%	28.0%	23.9%	3.2%	19.1%
Subdivision B (Fraser Cheam 1976-1991)							3.4%	18.3%
Subdivision C (Fraser Cheam 1976-1991)							-1.9%	35.3%
Indian Reserves (Fraser Cheam)	34.8%	-0.7%	-15.2%	3.7%	1.3%	42.7%	3.5%	40.6%
Mission	8.2%	11.1%	2.2%	16.6%	46.7%	33.7%	9.6%	19.2%
Mission City	12.8%	8.0%	5.0%					
Mission District (1921 to 1966)	5.5%	13.0%	0.5%					
Subdivision A (Dewdney Alouette)	3.8%	12.7%	2.9%	12.6%	20.8%	4.2%	-1.0%	23.3%
Indian Reservations (Dewdney Alouette)	-51.7%	173.9%	-35.4%	27.0%	87.1%	58.7%	7.0%	-32.9%
Fraser Valley Regional District	17.3%	13.7%	7.7%	37.7%	22.6%	22.5%	10.4%	24.4%
Greater Vancouver Regional District	18.5%	19.1%	12.9%	16.0%	7.8%	8.7%	8.9%	16.1%
British Columbia	20.0%	15.9%	15.6%	16.6%	12.9%	11.3%	5.1%	13.8%

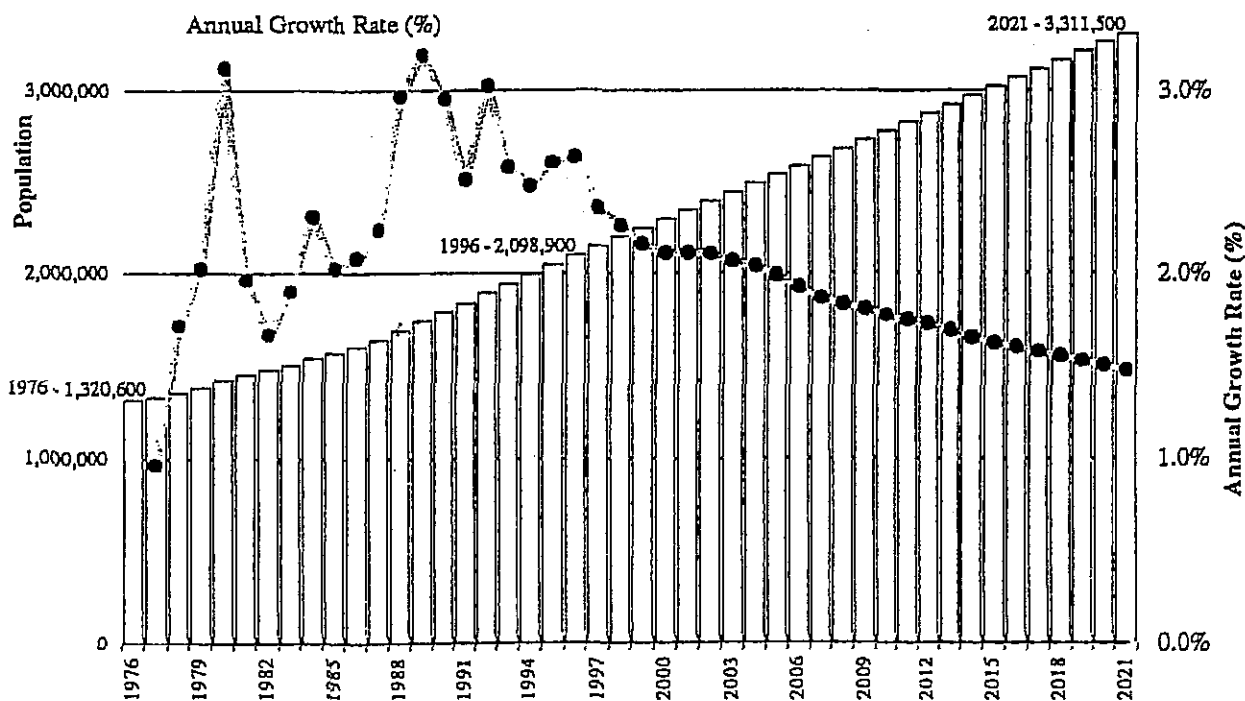
IV. Population and Housing in the Metropolitan Vancouver Region, 1996 to 2021

In the past, growth of the Regional District's population relied heavily on growth in the region's agricultural, tourism, and forest industries. Now, and in the future, while employment in these industries will continue to influence population growth, the major factor shaping population growth will be its ability to provide homes for residents of its metropolitan region. It will be the factors that affect people's housing choices and the demand for housing in this region that will set the context for population growth in the Fraser Valley Regional District. In the remainder of this section, this context is reviewed, first in terms of overall population growth, and then in terms of the housing demand that will accompany this growth. This section presents a very brief summary of a detailed analysis presented in "Homes in Metropolitan Vancouver's Future²": readers interested in greater detail may wish to consult this document.

a. Population Growth

According to BC Statistic's estimates, between 1976 and 1996, the population in the metropolitan region increased by 778,300 people, growing from 1,320,600 residents in 1976 to an estimated 2,098,900 in 1996 (Figure 1). This 59% growth over 20 years involved an average annual increase of 2.3% (an average of 38,900 more people each year). Between 1996 and 2021, according to BC Statistic's projections, the population will increase by 1,212,600 people, to reach 3,311,500 residents by 2021. This 58% increase over 25 years will mean an average annual increase of 1.8% (an average of 48,500 more people each year).

Figure 1: Population Growth in Metropolitan Vancouver, 1976 to 2021



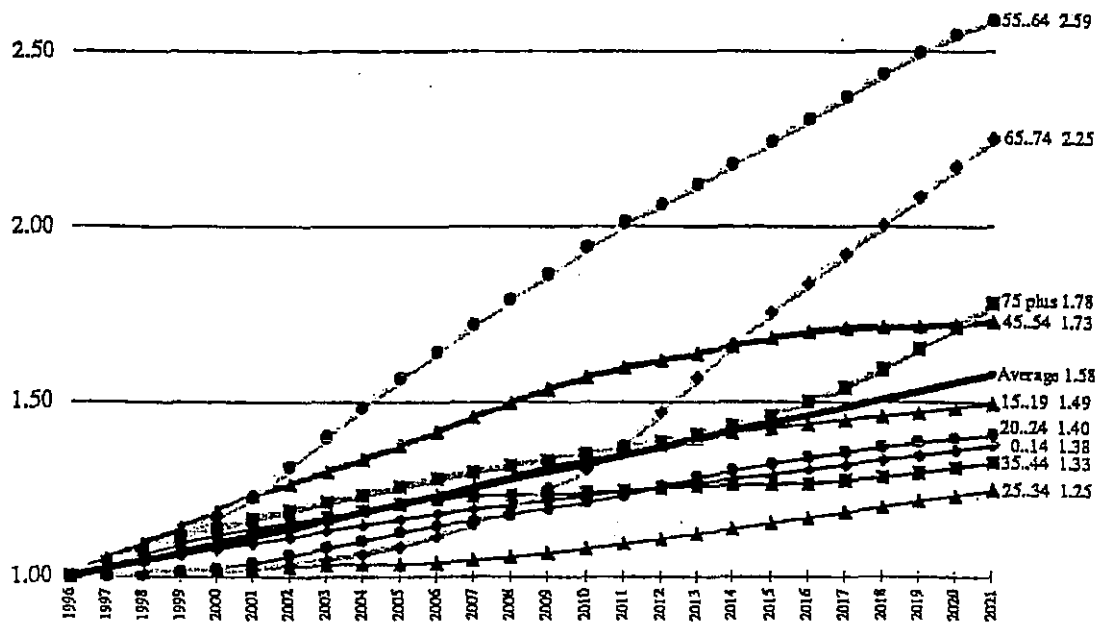
² "Homes in Metropolitan Vancouver's Future: Housing Demand by Structure Type", 1996 to 2021, The Urban Futures Institute, Vancouver, 1996.

This projection implies that the region will grow at a slower rate over the next quarter century than it has over the past two decades, but that the average number of people added each year will be about 25% more (48,500 per year compared to 38,900). The projected average annual growth rate of 1.8%, and the 48,500 average annual increment are both lower than the growth that is estimated to have occurred between 1991 and 1996, when an average of 51,700 persons were estimated to have been added to the region's population each year, resulting in a 2.6% average annual growth rate.

The projected population in the region in 2021 will be 1.58 times the estimated population in 1996. This average growth conceals a wide range of growth rates for individual age groups, with all age groups 45 and older growing faster than the average and all the younger age groups growing, but more slowly than the average (Figure 2).

Currently, the 45 to 54 age group is the most rapidly growing age group, the result of the front edge of the baby boom generation (those born between 1945 and 1955) aging into this age group between 1991 and 2001. The generation born before these first baby boomers is a relatively small generation: when the boomers age into an age group and the preceding generation ages out of it, the age group's size increases dramatically. Once the front edge of the boom generation has entered an age group, its growth rate slows, (e.g., the 45 to 54 age group from 2001 to 2011). And once all of the boomers have reached this age group, its growth slows even more (e.g., the 45 to 54 age group from 2011 to 2021), as there are just enough people in the generation that follows the baby boom to replace the boomers as they age out of an age group. Over the entire 1996 to 2021 period, the 45 to 54 age group will increase 1.73 times (a 73% increase), making it the fourth fastest growing age group over this 25 year period.

Figure 2: Age Group Growth Indices, Metropolitan Vancouver, 1996 to 2021



The most rapidly growing age group in the region between 1996 and 2021 will be the 55 to 64 age group, which will increase 2.59 times (a 159% increase). The rapid growth of this age group will start in 2001 when the first of the boomers reach the age of 55, and will continue for most of the following 20 years, as the last of the baby boomers (currently between the ages of 33 and 38) will not reach age 55 until 2018. Only then will the rate of growth of this age group decline. It is the growth of this age group that will play the greatest role in the changing age structure of the region's population.

The second most significant role in the changing of the region's age structure, and perhaps the most significant in terms of changing socio-economic factors, will be that of the 65 to 74 age group, which will increase 2.25 times (125%) over the 1996 to 2021 period. The growth rate for this age group will become significant by 2011, when the first of the baby boomers reach it: from this date onwards the age group will be the region's fastest growing. The increase in size of 75 and older age group will also be above average over the 1991 to 2021 period (1.78 times, a 78% increase), and hence will affect the regional demand for apartments towards the end of the period.

Unlike some other regions in Canada and the United States, all of the younger age groups in metropolitan Vancouver will also increase in size, albeit at rates slower than those of the 45 and older age groups. The generally younger age profile of migrants to the region, and the increasing number of births each year, explain the growth pattern for the post-baby boom generations. The 15 to 19 age group, which is the entry age group for the housing market, will grow 1.49 times (49%) over the 1996 to 2021 period. The two age groups on either side of this age group will grow slightly slower (1.40 times for the 20 to 24 age group and 1.38 times for the 0 to 14 age group. The slow growth of the other two age groups, the 35 to 44 age group (1.33 times) and the 25 to 34 age group (1.25 times), is the result of the aging of post baby boomers into these age groups over the next 15 to 20 years being significantly offset by the aging out of these age groups by the larger, older baby boom generation.

The increases in the size of age groups will not occur uniformly over the next twenty five years. The 45 to 54 age group, currently the fastest growing age group, is also the one that is increasing by the largest number of people (approximately 13,000 people per year). By 2001, the 55 to 64 age group will be the one that has both the largest annual increment and the highest rate of increase, growing by approximately 14,000 people per year. By 2011, the 65 to 74 age group will have its turn to become the fastest growing, increasing by 13,000 persons per year. This shifting pattern of growth rates and increments corresponds to the aging of the first of the baby boom generation into these age groups.

b. Housing Demand

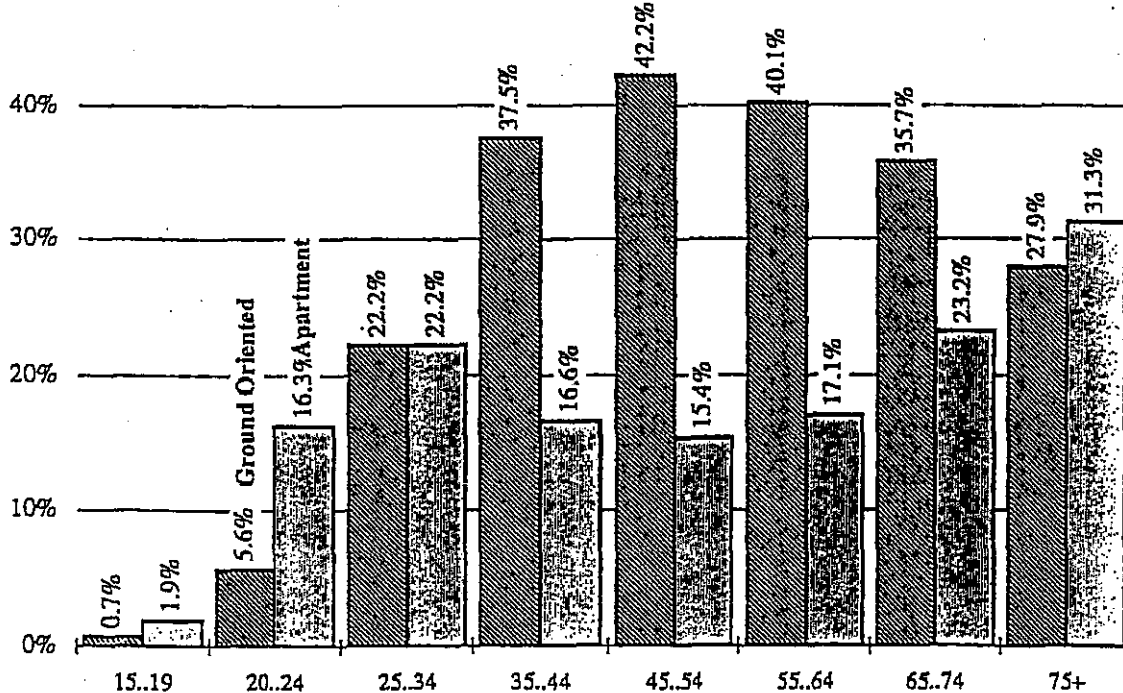
The connection between housing demand and the age composition of the population is the percentage of people in each age group who are "household maintainers", the person indicated by people living together as a household as being primarily responsible for the household's financial support. There is a distinct relationship between a household maintainer's age and the type of dwelling unit that a household occupies.

To consider this relationship, it is necessary to first define structure types of dwelling units. These come in two major categories, ground oriented and apartment. Ground oriented housing has at least one entrance to each individual household's dwelling unit that opens directly onto the ground: included in this category are single detached, side by side duplex, row housing, mobile homes, and single dwelling units attached to a non-residential building.

Apartments dwelling units do not have an entrance that opens directly onto the ground but rather have only entrances from a shared corridor: as well, apartments also most often have units that are stacked on top of each other. Most of the units in this category are dwelling units with only common corridor entrances in multi-unit buildings. In most statistical tabulations, up-down duplexes, and flats or suites inside single detached dwellings are also included in the apartment category. In these latter categories, some units may have their own entrances directly to the ground (and hence should be classified as ground oriented) while others may only have shared corridor entrances (and hence are classified as apartments). As a number of published sources place these units in the apartment category (for example, housing starts data from Canada Housing and Mortgage Corporation), they are placed in this category here. In reality, it is necessary to look at these units to see whether they "work" like ground oriented units or like apartments.

The relationship between age of household maintainers and household occupancy by structure type is shown on Figure 3, which indicates the percentage of people in each age group who were the primary household maintainers of a household living in one of the two structure types in the metropolitan Vancouver region in 1991. A person is more likely to be the maintainer of a household living in an apartment than one living in a ground oriented unit (Figure 3) when they are in the 15 to 19 age group (1.9% for apartments, 0.7% for ground oriented), the 20 to 24 age group (16.3% for apartments, 5.6% for ground oriented), and the 75 and older age groups (31.3% for apartments and 27.9% for ground oriented).

Figure 3: Percentage of Age Group Who Are Household Maintainers, Major Structure Types, Metropolitan Vancouver, 1991



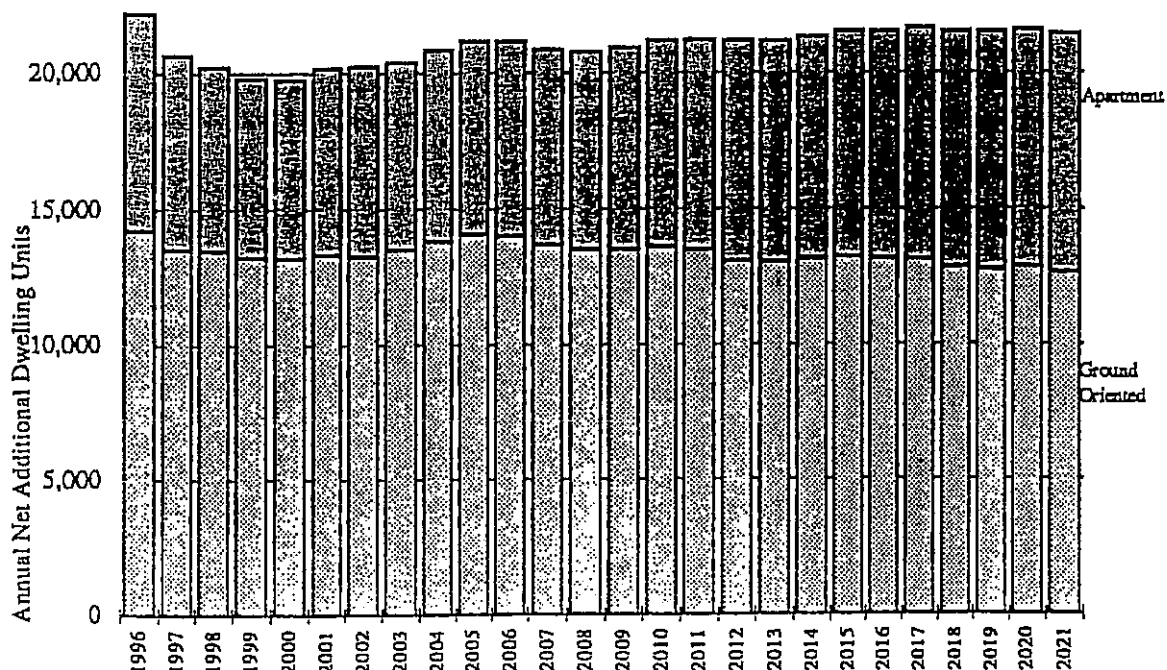
The 25 to 34 age group marks a change in housing occupancy patterns: the same percentage (22.2%) of people in this age group in this age group are maintainers of household living in ground oriented units as are maintainers of households living in apartments. Between the ages of 35 and 74, there is a much greater likelihood that a person will be the maintainer of a household living in a ground oriented unit. In the 35 to

44 age group, a person is more than twice as likely to be a maintainer of a household living in a ground oriented unit (42.2%) than an apartment, almost three times as likely in the 45 to 54 age group (42.2% to 15.4%) and more than twice as likely in the 55 to 64 age group (40.1% to 17.1%). In the transition 65 to 74 age group, while a person is still more likely to be a maintainer of a household living in a ground oriented unit than an apartment, the difference is not as great (35.7% to 23.2%).

Even without doing any math, it is easy to see the housing demand implications of this age and structure type specific pattern of housing maintainer rates and the projected growth rates of the various age groups in the metropolitan region's population. The two age groups that will have the largest absolute increases in size (the 55 to 64 age group is projected to increase by 270,000 people and 45 to 54 by 200,000 between 1991 and 2021) are the ones that have the highest ground oriented maintainer rates and the lowest and third lowest apartment maintainer rates. Unless there is a dramatic change in the housing preferences of people in these age groups in the future, housing demand in the metropolitan Vancouver region will be dominated by the demand for ground oriented housing. Having said this, the fact that the percentage in ground oriented declines with age after the 45 to 54 age group means that the effect of the rapid growth of the age group will be offset to some degree by the decline in the age specific ground oriented maintainer rate.

To project housing demand in the future, the population projection by age group is matched with the household maintainer rates by age group and structure type to obtain estimates of the number of dwelling units of each structure type that will be required in the future. Assuming that household maintainer rates shift towards higher density forms of housing as the region's population grows, and given the high growth rates of older age groups, the region will need approximately 20,000 additional dwellings per year (13,000 ground oriented and 7,000 apartments) between 1996 and 2021 (Figure 4).

Figure 4: Annual Net Additional Occupancy Demand by Structure Type, Metropolitan Vancouver Region, 1996 to 2021, Increasing Density Scenario



In total, the region will require an additional 500,000 dwellings over the next 25 years: 300,000 of these be ground oriented and 200,000 will be apartments. The single greatest growth management issue for the growth management in the Lower Mainland will be to determine where these dwelling units will be located. Because of the relative amounts of land required for apartments and for ground oriented units, the easy part will be the apartments: the hard part will be finding places for the 300,000 more ground oriented units.

The two regional districts in metropolitan Vancouver have to plan to accommodate this growth, as they have no direct way, and no effective indirect way, to control population growth. It is the attractiveness of the entire region, socially, physically, and economically, that will determine its future population: land use and transportation planning determine how this growth is shared throughout the region.

The only legal (and functional) mechanism that local areas can use to attempt to affect their share of total regional population through regulating the amount and location of new residential development, thereby determining the stock of dwellings in an area. However, there is no effective mechanism for regulating how this stock is used: doubling up, unit sharing, unauthorized suites, unauthorized duplexes, and unauthorized four plexus are becoming quite common in areas where development of new units is below the level that accommodation of new household formation would justify.

If not enough new housing is built, it will not stop people from coming to the region, nor will it stop us, and our children and grandchildren, from staying here. All that will happen is that the growth will not go in new, planned and inspected developments, but rather will be accommodated in what is referred to by some as the informal sector, by others as the unauthorized sector, and by still others as the illegal sector. If people have a reason to come here from other regions, they cannot be stopped: they will find a way to get accommodation, through the visible or the invisible market. What can be affected is where they seek accommodation. Planning can guide housing development to areas where population growth will enhance livability: not planning may mean that livability is not considered.

V. The Location of Growth Within the Lower Mainland

Where will the 200,000 additional apartments and 300,000 additional ground oriented units go? Two related things will determine the answer: land use planning and provision of transportation infrastructure. The people will be housed in places where they have accessibility to the jobs, services, and amenities of metropolitan Vancouver. Thus, places that are, or can be made, accessible to metropolitan Vancouver through the provision of transportation infrastructure are where people's housing can go. Land use planning provides the mechanism to select the best places for additional housing.

While planning directly deals with land use (dwellings, roads, etc.), growth is generally discussed in terms of population. In keeping with this common focus, the following discussion considers some of the alternatives as to how growth - population growth - might be allocated within the Lower Mainland. The important word at this point is might - the development of the Fraser Valley Regional District's growth management strategy will involve considering a very wide range of alternatives in the process of identifying a pattern of allocating population growth in the Lower Mainland that best meets the visions of the Regional District's residents. At this point, it is too early in the process to suggest what the vision - and hence the population growth rate that will result from seeking to attain the vision - might be.

It is, however, entirely appropriate to consider possible ways of allocation population growth in the Lower Mainland that have already been developed. As the entire Lower Mainland forms one regional housing market, one regional labour force and employment market, one transportation system, and one physical environment (in terms of air and water), any plan for one part of the region will have both direct and indirect impacts on all the other parts. Any growth management strategy for the Fraser Valley Regional District will have to consider growth management strategies articulated for the rest of the Lower Mainland, and all strategies will have to acknowledge the magnitude of the population growth that they share.

In this context, it is essential to review the publications and processes involved in the preparation of the Greater Vancouver Regional District's Livable Region Strategic Plan (LRSP). Such a review will indicate the wide range of factors that might be considered in the process of articulating a growth management strategy, the extent to which the Greater Vancouver Regional District (GVRD) looked to the effects on Fraser Valley Regional District (FVRD) of growth management within the GVRD, and the possible interactions between growth management in the FVRD and in the GVRD. In the following paragraphs, this process and contents of the GVRD's LRSP is very briefly reviewed; readers seeking greater detail are referred to the GVRD Strategic Planning Department.

In preparing its plan, the GVRD commenced with an extensive process of public and intergovernmental consultation to determine the values, visions and priorities of its residents; the results of this process were articulated in the *Creating Our Future* vision. One of the products of this process was the identification of 16 criteria for growth management. These criteria were subsequently used to evaluate alternative potential forms of future urban development in the Lower Mainland.

Each alternative represented a different scenario about the spatial distribution of population growth in this region. Examination of a number of specific scenarios indicated three component elements to urban growth patterns. The research showed that growth in population in the Lower Mainland can be accommodated by development that 1) expands the currently urbanized western portion of the region through new urban development in the eastern portion of the Lower Mainland on the south side of the Fraser River, 2) expands the current urbanized western portion of the region through new urban development in the eastern portion of the Lower Mainland on the north side of the Fraser River, and 3) increases the density of population within the currently urbanized western portion of the region through redevelopment.

Each scenario considered will involve, to a less or greater extent, some development in each of these three directions. What characterizes individual scenarios is how much growth would occur in each. As soon as the question involves "how much", it is necessary to use numbers. Growth management is about goals and values, but it is numbers that allows measurement of the costs and benefits of alternatives, the characterization of scenarios and the measurement of the degree of attainment of goals. While growth management is not about numbers, numbers tell us what growth management is about.

GVRD presented scenarios that generally characterized these three options at a conference on "Shaping Our Communities: Critical Choices", and in a number of other forums. The overall response favored a pattern that was heavily weighted towards an increasing the density of population in the currently urbanized western portion of the region, particularly on the Burrard Peninsula, the Tri-Cities area, and North Surrey - North Delta. This option, which had a working title of the Compact Metropolitan Region Option, after much review and amendment, came to be the basis for the Livable Region Strategic Plan (LRSP) approved by the GVRD Board in December of 1994.

The Plan's background, purpose and strategy's were precisely described in the document that received the GVRD's Board approval:

"The Livable Region Strategic Plan is the result of a four year public and intergovernmental consultation process. Early in the process, the public rejected a business as usual approach to regional growth that would spread population throughout the Fraser Valley. They rejected it because it would put development pressure on farmland, increase the distance between jobs and housing, cost too much for public services and utilities, and result in worsening air pollution from increased automobile use. The Strategic Plan provides a clear alternative that is more in keeping with the values of Creating Our Future. The Strategic Plan, incorporating policies, targets and maps, is based on four fundamental strategies: Protect the Green Zone ... Build Complete Communities ... Achieve a Compact Metropolitan Region ... Increase Transportation Choice."

This document does not mention, nor does it contain any reference to how many people would live in, the Fraser Valley Regional District (nor in any of its member municipalities). The document does make indirect reference to the Fraser Valley Region District, in the context of policy with respect to transportation: "In order to achieve a compact metropolitan region, the GVRD board will ... seek through partnerships on a compact metropolitan region ... achievement of travel across the GVRD eastern boundary in the peak hour and direction of not more than 5500 mixed traffic vehicles south of the Fraser River and 2000 mixed traffic vehicles north of the Fraser River".

In contrast to the Board approved document, the Livable Region Strategic Plan Growth Management Scenario³, and the associated Medium and Long Term Transportation Plan produced by Transport 2021 both explicitly and currently contain population, employment and household targets for the Fraser Valley Regional District and its member municipalities. While the document of the plan is silent on the pattern of development in the rest of the Lower Mainland, the technical work that underlies its growth management scenario has used and is using targets for the Fraser Valley Regional District. This must be the case, as the GVRD and the FVRD are but administrative areas within a single functional region: what happens in one regional district affects the other regional district, whether it is in the context of housing development, air quality, use of transportation infrastructure, employment location, or any one of a myriad of other aspects of the urban system of which they are parts.

As a starting point, it is useful to consider the "business as usual approach" that was rejected. In terms of numbers, this scenario⁴ saw the 2021 population of the GVRD being 2,564,000 people, and that of the Fraser Valley Regional District excluding Hope and the Canyon being 459,000: adding in the projected 11,000 for these two excluded areas from the same source gives a Regional District total of 470,000. This would certainly be in keeping with historical trends. The FVRD would double in size between 1996 and 2021, compared to the 2.8 times increase indicated by census data for the 1966 to 1991 period. More strikingly, between 1996 and 2021, the FVRD would grow by 241,000 people, twice the 121,000 added between 1966 and 1991. Over the same period, the GVRD would add 697,000 people, compared to 670,000 over the 1966 to 1991 period: the GVRD's population would grow by 1.37 times over the next twenty five years, compared to 1.72 times over the 25 years between 1966 and 1991.

³ For Example, see Key Facts 1996, page 44, GVRD July 1996, and Item 4.2.2 and Attachments, GVRD Technical Advisory Committee Agenda, July 19, 1996.

⁴ This scenario is referred to by the GVRD as the "Current Trends and Development Policies Projection". The most recent documentation of this scenario, dated March 1995, is reproduced in Appendix One of this Report.

In the place of such an approach, one that would "spread population throughout the Fraser Valley", a more compact metropolitan region was sought. In this growth management scenario (which underlies the LRSP) there is a target of 2,676,000 people in the GVRD by 2021, with 358,000 people in the FVRD⁵. This pattern would certainly see less growth in the Fraser Valley. The FVRD's population would increase by only 55%, adding only 130,000 people over the next twenty five years (about the same number as it added between 1966 and 1991), while the GVRD would add 810,000 more people (a 43% increase), about 140,000 more than it added between 1966 and 1991. It is this latter scenario that was used to generate the LRSP maximum numbers for vehicle travel between the two regional districts.

These two alternatives present somewhat distinct options for urban development in the Lower Mainland. In one context the numbers do not matter, as they merely are ways of representing two different visions of urban development. In other contexts, they are extremely important, as they represent very significant differences in the magnitude of the requirements of capital expenditure on infrastructure: the roads, schools and hospitals of the future are planned today, and they are planned on the basis of the numbers contained in growth scenarios. In the context of the FVRD, there is a 30% difference between the two scenarios, with the "business as usual" scenario resulting in 112,000 more people in the FVRD in 2021 than the compact metropolitan region growth management scenario that is the basis for the LRSP target for the GVRD.

The FVRD, therefore, must articulate a vision of its future, and a growth management strategy to achieve it, in order to both plan for land use within the Regional District, and to ensure that it has the necessary infrastructure, both within it and connecting it to the rest of the region. This vision have to account for, and be accounted for in, the growth management strategy for the rest of the region, and strategies will have to, collectively, account for how they will accommodate the future projected population of the entire region.

The GVRD's growth management scenario was prepared a couple of years ago. In the light of more recent population projections, it takes on a different light. If, in 2021, the GVRD attains the 2,676,000 population LRSP target, then, given current population projections for the Lower Mainland, the FVRD will accommodate 635,000, almost twice the 358,000 used in the GVRD's growth management scenario and Transportation Plans. What happened? - The projected total population for the Lower Mainland in 2021 was increased by 10%, from 3,034,000⁶ to 3,311,000.

The total population in 2021 of the two regional districts that is used in the GVRD's growth management scenario and its companion transportation plans is 3,023,000 (plus the 11,000 for excluded areas): BC Statistics current population projection for 2021 is that these two regional districts will accommodate 3,311,000 residents by 2021. This means that another 277,000 people must be accounted for in the land use and transportation planning of the region. If the GVRD's LRSP is achieved, the GVRD will be home to 2,676,000 people in the year 2021. By subtraction, the FVRD would have to accommodate to accommodate 635,000 people. The GVRD's LRSP does not say this, but it is the consequence of exactly achieving the LRSP's target for the GVRD.

⁵ 347,000 in the FVRD excluding Hope and the Canyon plus 11,000 for these two areas. The most recent documentation of this scenario, dated February 1995, is reproduced in Appendix Two of this Report.

⁶ 3,023,000 plus 11,000 for Hope and the Canyon

A 2021 population of 635,000 people in the FVRD would mean an increase of 406,000 people (almost tripling its population). The GVRD would add 810,000 people, an increase of 43% compared to the FVRD's increase of 177%. This would mean the GVRD would have only 81% of the region's 2021 population (compared to 89% today), while the FVRD would have 19% (compared to 11% today). For every two people added to the GVRD's population, one would be added to the FVRD's.

The 635,000 population of the FVRD implied by the LRSP target for the GVRD and the total population projection of 3.311 million for the Lower Mainland is 277,000 (80%) more people than the 358,000 of the GVRD's growth management scenario and transportation plans. Again, while it is important not to become trapped by numbers, and hence lose sight of the goals and values that they represent, having 635,000 people in the FVRD will require a significant difference in intra and inter regional infrastructure than that required by 358,000 or 470,000 people.

And this is assuming that the GVRD targets are achieved. The LRSP target for the GVRD is ambitious, as it asks the already built up communities of the western portion of the region to add 810,000 more people over the next 25 years, compared to 670,000 they added in the 25 years between 1966 and 1991. As the GVRD has noted, "it appears that there will be difficult for many (GVRD municipalities) in meeting those targets"⁷. It will not be known until February 1998 whether collectively the GVRD communities will have a strategy to attain the 2,676,000 target in 2021, but if they do not, then the projected growth in the FVRD would be even higher than the 635,000 figure.

If the net result of the municipal process is that the GVRD only has its "business as usual" population of 2,564,000, in 2021, then the FVRD would have had to accommodate 747,000 people in 2021. This would mean that while the population in the GVRD increased 1.37 times, from 1,867,000 in 1996 to 2,564,000 in 2021, while the population in the FVRD would increase by 3.26 times, from 229,000 to 747,000. In adding 518,000 people to its population, the FVRD would take 42% of the region's total population growth, and come to account for 22% of the region's population.

Alternatively, the residents of the GVRD may have such a commitment to the visions and values of a compact metropolitan region that they will be willing to see even greater densities in their communities than is conceived of in the LRSP. If this were the case, it may be possible that in 2021 the GVRD would accommodate even more than the 2,676,000 LRSP target.

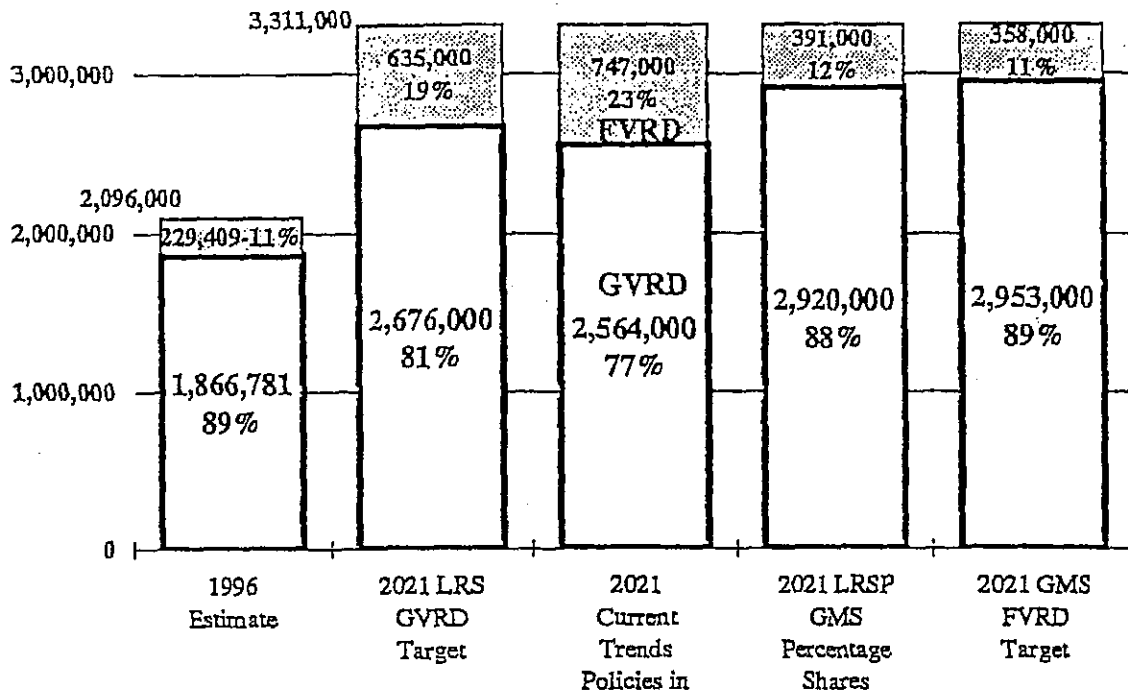
For example, GVRD residents may accept the 88.5% share of the region's population that is represented as the LRSP target of 2,676,000 out of the 3,023,000, rather than the target itself. In this case, regardless of what the 2021 total is, the GVRD would have 88.2% of the population and the FVRD would have 11.8%. In the case of the 3,311,000 projection for the Lower Mainland's 2021 population, this split would result in the GVRD's 2021 population being 2,920,000 people (244,000 more than the LRSP target), and the FVRD's population being 391,000 (33,000 more than the GVRD's growth management scenario target). The FVRD would grow by 70% (161,000 more people), taking 13% of the region's population growth between 1996 and 2021.

⁷ Item 4.2.2 and Attachments, GVRD Technical Advisory Committee Agenda, July 19, 1996, page 3.

Table 4: Population Growth Patterns in Alternative Allocation Assumptions

	1993 Population Projection				1996 Population Projection				
	Census 1991	2021 Current Trends and Policies	2021 GVRD Growth Manage Scenario		BC Statistics Revised 1991	2021 LRS GVRD Target	2021 Current Trends Policies in GVRD	2021 Growth Manage Scenario % Shares	2021 GMS FVRD Target
1991 Census Base									
Metro Region	1,781,000	3,023,000	3,023,000	Metro Region	1,832,000	3,311,000	3,311,000	3,311,000	3,311,000
GVRD	1,603,000	2,564,000	2,676,000	GVRD	1,649,000	2,676,000	2,564,000	2,930,941	2,952,000
FVRD (ex. Hope & Canyon)	178,000	459,000	347,000	FVRD	183,000	635,000	747,000	380,059	359,000
	Share of Region				Share of Region				
GVRD	90.0%	84.8%	88.5%	GVRD	90.0%	80.8%	77.4%	88.5%	89.2%
FVRD (ex. Hope & Canyon)	10.0%	15.2%	11.5%	FVRD	10.0%	19.2%	22.6%	11.5%	10.8%
	Growth 1991 to 2021				Growth 1991 to 2021				
Metro Region		1,242,000	1,242,000	Metro Region		1,479,000	1,479,000	1,479,000	1,479,000
GVRD		961,000	1,073,000	GVRD		1,027,000	915,000	1,281,941	1,303,000
FVRD (ex. Hope & Canyon)		281,000	169,000	FVRD		452,000	564,000	197,059	176,000
	Share of Growth				Share of Growth				
GVRD		77.4%	86.4%	GVRD		69.4%	61.9%	86.7%	88.1%
FVRD (ex. Hope & Canyon)		22.6%	13.6%	FVRD		30.6%	38.1%	13.3%	11.9%
	Rate of Growth				Rate of Growth				
Metro Region		69.7%	69.7%	Metro Region		80.7%	80.7%	80.7%	80.7%
GVRD		60.0%	66.9%	GVRD		62.3%	55.5%	77.7%	79.0%
FVRD (ex. Hope & Canyon)		157.9%	94.9%	FVRD		247.0%	308.2%	167.7%	96.2%
1996 BC Statistics Base									
	1993 Population Projection				1996 Population Projection				
			2021 GVRD Growth Manage Scenario				2021 Current Trends Policies in GVRD	2021 LRSP GMS Percentage Shares	2021 GMS FVRD Target
	1996 Estimate	2021 Current Trends and Policies			1996 Estimate	2021 LRS GVRD Target			
Metro Region	2,096,190	3,034,000	3,034,000	Metro Region	2,096,190	3,311,000	3,311,000	3,311,000	3,311,000
GVRD	1,866,781	2,564,000	2,676,000	GVRD	1,866,781	2,676,000	2,564,000	2,920,315	2,953,000
FVRD	229,409	470,000	358,000	FVRD	229,409	635,000	747,000	390,685	358,000
	Share of Region				Share of Region				
GVRD	89.1%	84.5%	88.2%	GVRD	89.1%	80.8%	77.4%	88.2%	89.2%
FVRD	10.9%	15.5%	11.8%	FVRD	10.9%	19.2%	22.6%	11.8%	10.8%
	Growth 1996 to 2021				Growth 1996 to 2021				
Metro Region		937,810	937,810	Metro Region		1,214,810	1,214,810	1,214,810	1,214,810
GVRD		697,219	809,219	GVRD		809,219	697,219	1,053,534	1,086,219
FVRD		240,591	128,591	FVRD		405,591	517,591	161,276	128,591
	Share of Growth				Share of Growth				
GVRD		74.3%	86.3%	GVRD		66.6%	57.4%	86.7%	89.4%
FVRD		25.7%	13.7%	FVRD		33.4%	42.6%	13.3%	10.6%
	Rate of Growth				Rate of Growth				
Metro Region		44.7%	44.7%	Metro Region		58.0%	58.0%	58.0%	58.0%
GVRD		37.3%	43.3%	GVRD		43.3%	37.3%	56.4%	58.2%
FVRD		104.9%	56.1%	FVRD		176.8%	225.6%	70.3%	56.1%

Figure 5: Population in the Metropolitan Vancouver Region - 1996 Projection Based



With just the four options discussed in the preceding paragraphs, there is a range in the possible population in the FVRD in 2021 of between 359,000 to 747,000 people (summarized on Figure 5 and Table 4). These are simply numbers, describing possible consequences for the FVRD of various land use scenarios for the GVRD. The numbers do not describe, nor are they derived from, an analysis of the vision of the FVRD's residents or of the capacity of the FVRD to accommodate population. What these numbers do show is that there is a large range of population growth that the FVRD might accommodate, and the need for the FVRD, and the GVRD, to consider the implications for the region as a whole, and for each other, of their visions and scenarios for future growth. As well, they show the need for a "made in the Fraser Valley" vision, as the implications raised by scenarios that can be derived from the projected Lower Mainland population and growth management in the region are of great current and future significance.

Capital investment decisions are being made today about everything from site reservation for, and construction of, local schools and hospitals to regional transportation improvements, on the basis of a scenario about the distribution of population growth in the Lower Mainland. The wide range of variance for future population growth in the FVRD that emerges from considering these regional scenarios is too great to be useful for any capital or long term investment planning. Without consensus on the magnitude of growth in the various sub-areas of the region, investments that should have been made won't be, and that shouldn't have been made will be.

VI. Population Growth and Transportation Infrastructure

It is particularly important for the two regional district to reach some consensus on population, employment and transportation infrastructure. Of particular concern are the specific numeric limits on peak hour vehicle counts at the GVRD's eastern boundary that are set as maximum targets in the LRSP, without mention of population or employment in the FVRD. For a number of reasons, caution is warranted when considering such limits particularly if they are presented as being independent of the future population within the FVRD. To support the GVRD's LRSP limits on peak hour vehicle traffic on its eastern border requires accepting the assumption that employment in the FVRD will grow significantly faster than population, thereby internalizing much of what would otherwise be commuter travel, and hence rationalizing the limiting of peak hour trips between the two regional districts.

The assumption that employment will, or even can, grow much faster than population in the FVRD requires a great deal of substantiation before it can be used as the basis of policy. The FVRD currently has approximately 35.6 jobs for every 100 residents and GVRD has approximately 50.6 per 100 residents. The LRSP Growth Management Scenario, on which the transportation capacity figures are based, assumes that the ratio of jobs to people in the FVRD will increase to 46.5 job per hundred residents by 2021. For this to occur, employment in the FVRD must increase 2.5 times, from 60,000 to 160,000 jobs, between 1991 and 2021. If growth in the FVRD between 1991 and 2021 adds more than 170,000 people to its population, or less than 100,000 jobs to its employment, then the ratio that is the basis for the peak hour capacity limits cannot be attained.

Certainly employment will grow in the FVRD. Resident population serving employment will follow population growth. Further, as resident demand in the FVRD passes economic thresholds, resident serving employment previously located outside of the regional district will prosper within it, thereby leading to employment growth that is somewhat faster than population growth.

Growth in resident population serving employment, however, will not bring the FVRD up to the 46.5 jobs per 100 residents level. For this it needs to have an increasing share of region serving and exporting employment. It is growth in these forms of employment that will be most problematic. A map of the Lower Mainland shows why. The FVRD is at the eastern end, not in the middle, not on Georgia Strait, and not adjacent to two freeways. Firms seeking proximity to regional markets, to the regional labour force, to ports, to airports, to US and Asian markets, are going to be drawn to the most accessible portions of the region, which, given the current transportation system, are in the centre and western portion of the Lower Mainland. Only when the FVRD can offer competitive accessibility to these locations will it be able to capture an increasing share of the region's employment through competition with other parts of the Lower Mainland for region serving and export based employers.

And competition will be the effective word: municipal councils every where have been, at least historically, protective of their non-residential tax bases and active promoters of employment within their boundaries. Before considering any limit on accessibility to the FVRD based on the assumption that employment in the FVRD will grow significantly faster than population, it is necessary to have a realistic and viable region wide program to ensure that the employment side can be delivered: there will be no problem getting the population. Limiting transportation infrastructure to the FVRD may hamper its employment growth, thereby increasing, rather than limiting, the relative commuting between the two regional districts.

Further, even if the number of jobs in the FVRD approaches the regional average of 1 for every 2 residents, it does not mean that the people who will live there will work there, or that those who will work there will live there. The factors that influence people's residential and employment location decisions are extremely complex, going far beyond minimizing the journey to work. Increasing specialization of employment and diversification of life styles, combined with the mobility and flexibility of contemporary working patterns, communication technology and transportation, mean that residential location criteria are much less linked to proximity to work than they once were. Affordably, structure type, neighborhood and life style are of increasing importance to today's urban households, with transportation to work often seen as a problem to be solved rather than a determinant of location. As a result, even with a "balance" of jobs and work in the FVRD, it is likely that travel between the FVRD and the GVRD will increase significantly.

Once the FVRD has articulated its growth management strategy and targets, and mechanisms for directing a disproportional share of the region's employment growth to it have been identified, then it may be appropriate to consider limits on peak hour vehicle flows. Until then, it may be more useful to examine recent trends in employment, and housing, location in the region as the basis for determining the required peak hour vehicle capacity for links in the regional transportation system.

VII. Controlling Growth

What will happen if the growth management targets for the FVRD and the GVRD combined do not provide for enough capacity to build the additional 300,000 ground oriented and 200,000 apartments units the region will require to accommodate the 3.3 million person projected population in 2021. Can these two areas, by not providing sufficient land designated for housing development, limit the population of the Lower Mainland?

The answer is no. The Canadian Charter of Rights and Freedoms prohibits any policies intended to limit the right of persons legally in Canada to take up residence in any part of the country. Immigration levels in Canada are determined by national labour force and demographic issues, not by individual region's population objectives. So long as our economy is able to provide a high standard of living, and so long as the West Coast life style and climate provide an attraction, our population will grow.

Once here, people have shown themselves extremely inventive in finding ways to house themselves. Their general preference is for affordable housing formally constructed to suit their needs. If they do not have this alternative, they seek other arrangements: they double up in existing units, move into illegal suites, and convert single detached houses to illegal duplexes, triplexes and four plexes. The adaptability of people to fit into the existing housing stock is particularly strong on the part of young adults. Three quarters of the people moving here from the rest of Canada. Two thirds of the people migrating from other countries are under the age of 35. One third of the region's current population is under the age of 25.

If our region is attractive, economically and climatically, people will continue to come here, we and our kids will stay here, and, one way or another, we will all figure out how to secure housing that suits our needs. No metropolitan area in the world that offers an attractive life style and employment opportunities can limit its population growth.

What local, regional and infrastructure planning can do is determine where in the Lower Mainland people will live. The future population of the GVRD and the FVRD will be determined by urban dynamics that are much more complicated than is implied by simply subtracting target population numbers for one part of this single region from the projected regional total population to determine what the population of the rest of the area will be. What will determine the population in one part of the region is how that part functions within the region, in terms of its relative location, amenities, infrastructure and land use capabilities, given the region-wide context of demographic, economic, social and technological change. The extent to which growth management strategies in any one part of the region can influence the resultant pattern of change is limited by the underlying urban dynamics of the region, and by the strategies of other parts of the region.

These are the reasons that the words "growth management strategy" are now used rather than "plans". Experience has shown that to achieve objectives with respect to the urban environment, it is necessary to have strategies to manage both the growth and the change that urban dynamics bring. Targets and plans are part of this process only insofar as they provide measures of the effectiveness of management to move towards objectives: they are not the objectives in themselves.

VIII. Growth Management in The Fraser Valley Regional District

The foregoing sections have considered the context of growth management in the Fraser Valley Regional District. They have considered both the region wide population and housing issues that growth management strategies must address, and some of the issues raised for the FVRD by the GVRD's Livable Region Strategic Plan.

This review is but a small step in the journey to the implementation of a growth management strategy for the Fraser Valley Regional District. Other, and more significant, steps, will involve consideration of the characteristics of the Regional District, in terms of its resources and constraints; of the goals and objectives of its residents and of others who, while not residents, are involved with its communities; and of the forces and concerns that affect all of the region, be it the quality of our air, the aging of our population, or the changing of the region's economy.

A growth management strategy for the Fraser Valley Regional District must set out the realistic visions and objectives of its communities, and the realistic steps to achieve these objectives. Realism is very important here: no matter how desirable objectives and visions are, if they cannot actually be achieved, then the exercise of growth management will be one of futility. Realism will mean that the management strategy must acknowledge that growth will occur in the Fraser Valley Regional District, that the extent of the growth will be influenced by what happens in the rest of the region, and that we cannot anticipate a sufficiently dramatic change in human behaviour over the next twenty-five years to solve growth management issues. This means that both internally in its growth management strategy, and with the GVRD, the FVRD must deal with the single largest urban development issue, where to locate the 300,000 odd ground-oriented dwelling units that the region will require over the next quarter century.

Appendix One:

Greater Vancouver Regional District's
Current Trends and Development Policies Scenario
March 1995

This projection reflects current municipal official community plans and development trends. It does not incorporate official community plan amendments that are under discussion or those that may occur in the future.

	Total Population			Ground Oriented Households			Apartment Households			Total Households		
	1991 Census	2008	2021	1991 Census	2008	2021	1991 Census	2008	2021	1991 Census	2008	2021
Anmore	740	1,140	1,223	260	451	499	5	3	3	285	454	502
Belcarra	590	760	816	210	301	332	0	2	2	210	303	334
Burnaby	158,860	188,387	182,034	38,685	40,398	43,763	26,065	34,878	38,919	62,750	75,274	82,682
Coquitlam	84,035	127,110	139,795	22,568	38,552	40,835	6,885	10,544	14,405	29,453	47,096	55,240
New Westminster	43,585	58,384	72,788	7,335	9,706	10,582	13,870	19,900	30,043	21,205	29,808	40,605
North Delta	48,906	50,122	54,270	13,640	14,875	18,689	1,175	1,501	1,584	14,815	18,376	18,283
North Surrey	175,587	252,084	400,124	47,460	75,729	112,050	10,500	18,826	44,707	57,960	94,555	158,757
Port Coquitlam	38,774	55,009	67,876	10,638	15,318	21,226	1,475	2,387	4,501	12,111	17,705	25,727
Port Moody	17,710	30,696	41,695	5,250	9,183	13,190	940	1,628	2,806	6,190	10,811	15,996
University Endowment Lands	4,535	5,878	5,937	910	1,183	1,294	645	1,059	1,264	1,555	2,242	2,558
Vancouver	473,215	561,024	591,358	89,000	118,835	143,334	100,940	131,889	139,779	199,940	251,724	283,113
Growth Concentration Area	1,044,637	1,310,800	1,557,882	243,854	323,528	403,774	182,600	222,017	278,023	408,464	546,148	681,797
Electoral Area C	2,486	3,371	3,589	954	1,500	1,858	5	0	0	959	1,500	1,858
Langley City	19,765	29,064	29,198	4,525	4,845	5,035	3,105	4,958	7,729	7,830	8,803	12,784
Langley District	66,570	180,268	206,247	21,039	57,680	68,914	690	2,711	5,779	21,729	80,391	74,693
Lions Bay	1,325	2,928	3,107	455	1,030	1,129	5	27	28	480	1,057	1,157
Maple Ridge	48,432	79,627	116,088	14,533	31,759	40,373	2,365	3,980	5,588	16,898	35,739	45,961
North Vancouver City	38,718	41,583	41,887	7,570	9,033	9,819	10,735	12,152	12,406	18,305	21,185	22,225
North Vancouver District	75,408	95,229	101,387	22,515	29,235	31,884	3,555	5,161	7,254	26,070	34,396	39,118
Pitt Meadows	11,327	14,827	15,285	3,425	3,925	4,734	355	795	1,279	3,780	4,720	6,013
Rest of Delta	40,530	60,488	62,857	12,127	17,289	18,979	2,025	3,607	5,821	14,152	20,898	24,800
Rest of Surrey	69,806	130,046	137,187	21,945	40,954	44,905	2,350	6,489	7,237	24,295	47,443	52,142
Richmond	126,825	184,524	224,137	32,950	51,656	58,816	11,505	20,150	37,772	44,455	71,806	90,588
West Vancouver	40,665	43,980	49,364	11,150	13,716	15,011	5,105	5,997	7,470	18,255	19,713	22,481
White Rock	16,315	15,087	15,538	4,025	4,884	5,178	3,925	3,413	3,479	7,950	8,097	8,657
GVRD Total	1,802,607	2,201,328	2,563,723	401,107	580,835	710,180	208,225	292,057	379,885	608,392	882,882	1,090,064
Abbotsford & CF Sub. A	87,362	121,564	179,166	22,635	34,876	47,166	7,205	14,338	23,225	29,840	49,014	70,391
Chilliwack	50,884	78,157	182,397	15,993	24,442	62,828	3,000	5,035	10,609	18,893	29,477	73,435
Harrison, Kent & FC Sub. B C	9,948	14,130	18,296	3,311	4,990	6,688	255	437	482	3,566	5,427	7,170
Mission & DA Sub. A	30,204	47,383	79,069	9,339	17,905	26,207	615	735	1,244	8,954	18,640	27,451
Rest of Rr	178,380	261,234	458,928	61,278	8	142,887	11,076	20,645	36,680	82,353	102,	178,447

Current Trends and Development Policies Projection

This projection reflects current municipal official community plans and development trends. It does not incorporate official community plan amendments that are under discussion or those that may occur in the future.

Region Total	1991		2008		2021	
	Census	1991	Census	2008	Census	2021
Abbotsford & CF Sub. A	3,020	784	3,095	1,124	2,095	1,124
Chilliwack	2,095	1,124	2,095	1,124	2,095	1,124
Harrison, Kerr & FC Sub. B & C	237	270	5,083	28,883	62,000	29,700
Mission & DA Sub. A	644	535	17,047	7,344	92,248	17,047
Rest of the Region	5,898	2,704	67,828	19,501	168,000	19,501
GVRD Total	18,284	15,302	768,502	45,496	1,280,000	1,280,000
Electoral Area C	100	0	33	8	187	3
Langley City	120	175	9,980	2,979	32,400	29,739
Langley Township	2,390	2,795	21,415	46,348	55,800	29,739
Lions Bay	0	0	150	34	72	2
Maple Ridge	695	401	13,330	20,884	37,000	20,884
North Vancouver City	130	131	21,889	22,277	29,000	21,889
North Vancouver District	285	88	1,079	19,915	22,277	19,915
Pitt Meadows	515	263	2,315	1,705	2,000	1,705
Rest of Delta	967	870	20,694	38,137	42,000	20,694
Rest of Surrey	1,948	2,166	19,403	45,884	54,000	19,403
Richmond	1,510	1,223	81,215	120,848	154,000	81,215
West Vancouver	135	58	13,280	11,335	13,000	11,335
White Rock	40	175	7,758	1,280,000	8,000	7,758
Regional Total	22,280	18,008	818,390	1,089,048	1,463,000	1,463,000

Goods Producing and Handling	1991		2008		2021	
	Census	1991	Census	2008	Census	2021
Amnora	5	5	5	5	5	5
Belcarra	5	5	5	5	5	5
Burnaby	1,893	1,397	86,345	108,520	128,500	86,345
Coquitlam	260	134	24,005	32,610	45,000	24,005
New Westminister	235	132	27,843	35,100	45,000	27,843
North Delta	28	15	7,333	9,038	12,000	7,333
North Surrey	867	1,186	18,032	49,862	70,789	18,032
Port Coquitlam	240	124	12,180	25,808	35,400	12,180
Port Moody	110	23	4,880	6,627	9,500	4,880
University Endowment Lands	6	4	11,761	16,028	17,500	11,761
Vancouver	4,840	4,164	308,905	344,968	401,700	308,905
Growth Concentration Area	7,429	7,189	32,603	62,907	83,600	32,603
Electoral Area C	0	0	301	187	284	0
Langley City	6,841	5,521	24,043	37,590	45,281	24,043
Langley Township	7,732	6,203	13,010	37,590	45,281	13,010
Lions Bay	7	5	100	68	235	7
Maple Ridge	2,020	1,681	18,912	34,920	45,281	18,912
North Vancouver City	11,012	8,557	17,088	37,590	45,281	17,088
North Vancouver District	6,506	4,10	1,090	1,425	1,554	1,090
Pitt Meadows	24,577	19,158	17,308	1,405	1,747	17,308
Rest of Delta	20,381	15,805	27,913	31,307	31,307	27,913
Rest of Surrey	73,823	57,851	61,772	78,824	88,508	61,772
Richmond	1,211	971	12,374	7,85	10,306	12,374
West Vancouver	279	231	7,350	410	7,669	279
White Rock	382,028	299,838	881,667	49,793	887,608	382,028
Goods Producing and Handling	402,028	318,036	1,030,880	785,006	1,030,880	785,006

Retail and Services	1991		2008		2021	
	Census	1991	Census	2008	Census	2021
Amnora	45	45	45	45	45	45
Belcarra	45	45	45	45	45	45
Burnaby	65,763	60,911	85,763	108,520	128,500	65,763
Coquitlam	21,420	21,920	29,995	32,610	45,000	21,420
New Westminister	22,583	18,116	29,046	35,100	45,000	22,583
North Delta	8,096	11,111	11,111	13,333	17,000	8,096
North Surrey	36,028	49,914	124,966	49,862	70,789	36,028
Port Coquitlam	12,438	18,026	18,026	25,808	35,400	12,438
Port Moody	4,888	7,444	4,888	6,627	9,500	4,888
University Endowment Lands	11,739	16,011	17,482	25,808	35,400	11,739
Vancouver	232,095	259,260	295,500	344,968	401,700	232,095
Growth Concentration Area	385,220	455,658	699,493	1,089,048	1,463,000	385,220
Electoral Area C	284	187	301	187	284	0
Langley City	6,835	5,521	24,043	37,590	45,281	6,835
Langley Township	7,732	6,203	13,010	37,590	45,281	7,732
Lions Bay	100	68	235	100	235	100
Maple Ridge	18,075	14,25	1,090	1,425	1,554	18,075
North Vancouver City	17,105	13,505	17,088	1,405	1,747	17,105
North Vancouver District	13,505	8,557	1,090	1,425	1,554	13,505
Pitt Meadows	24,577	19,158	17,308	1,405	1,747	24,577
Rest of Delta	20,381	15,805	27,913	31,307	31,307	20,381
Rest of Surrey	73,823	57,851	61,772	78,824	88,508	73,823
Richmond	1,211	971	12,374	7,85	10,306	1,211
West Vancouver	279	231	7,350	410	7,669	279
White Rock	382,028	299,838	881,667	49,793	887,608	382,028
Goods Producing and Handling	402,028	318,036	1,030,880	785,006	1,030,880	402,028

Total Employment (Excluding Construction)	1991		2008		2021	
	Census	1991	Census	2008	Census	2021
Amnora	55	55	55	55	55	55
Belcarra	55	55	55	55	55	55
Burnaby	86,345	108,520	128,500	168,000	200,000	86,345
Coquitlam	24,005	32,610	45,000	54,000	70,000	24,005
New Westminister	27,843	35,100	45,000	54,000	70,000	27,843
North Delta	7,333	9,038	12,000	15,000	20,000	7,333
North Surrey	18,032	49,862	70,789	90,000	110,000	18,032
Port Coquitlam	12,180	25,808	35,400	45,000	60,000	12,180
Port Moody	4,880	6,627	9,500	12,000	16,000	4,880
University Endowment Lands	11,761	16,028	20,000	25,000	35,000	11,761
Vancouver	308,905	344,968	401,700	480,000	600,000	308,905
Growth Concentration Area	62,907	83,600	108,000	140,000	180,000	62,907
Electoral Area C	33	8	187	33	33	0
Langley City	9,980	2,979	32,400	45,281	55,800	9,980
Langley Township	21,415	46,348	55,800	70,000	90,000	21,415
Lions Bay	150	34	235	150	235	150
Maple Ridge	13,330	20,884	37,000	45,281	55,800	13,330
North Vancouver City	17,088	1,405	1,747	1,405	1,747	17,088
North Vancouver District	13,505	8,557	1,090	1,425	1,554	13,505
Pitt Meadows	24,577	19,158	17,308	1,405	1,747	24,577
Rest of Delta	20,381	15,805	27,913	31,307	31,307	20,381
Rest of Surrey	73,823	57,851	61,772	78,824	88,508	73,823
Richmond	1,211	971	12,374	7,85	10,306	1,211
West Vancouver	279	231	7,350	410	7,669	279
White Rock	382,028	299,838	881,667	49,793	887,608	382,028
Goods Producing and Handling	402,028	318,036	1,030,880	785,006	1,030,880	402,028

Appendix Two:

Greater Vancouver Regional District's
Livable Region Strategic Plan
Growth Management Scenario
February 1995

The Livable Region Strategic Plan (LRSP) establishes Growth Management Targets for the GVRD and the Growth Concentration Area within the GVRD. The Growth Management Scenario represents one way to meet those targets. It is not part of the LRSP and has not been approved by member municipalities or the GVRD Board. The Scenario is on-going research on how the LRSP targets can be achieved and is subject to change.

It should be used for technical information only. For the latest Growth Management Scenario numbers, please contact GVRD Strategic Planning Department.

	Total Population			Ground Oriented Households			Apartment Households			Total Households		
	1991 Census	2008	2021	1991 Census	2008	2021	1991 Census	2008	2021	1991 Census	2008	2021
Anmore	740	1,992	4,360	280	765	1,741	5	5	5	265	770	1,748
Belcarra	590	1,329	2,808	210	510	1,160	0	0	0	210	510	1,180
Burnaby	158,880	238,807	281,930	36,685	64,788	77,388	26,065	35,021	52,453	62,750	99,809	129,841
Coquitlam	84,035	177,190	219,520	22,568	52,085	62,524	6,885	13,180	23,216	29,453	65,286	85,740
New Westminster	43,585	64,109	78,783	7,335	11,693	16,491	13,870	19,838	24,839	21,205	31,531	41,130
North Delta	48,908	55,977	57,970	13,640	16,719	18,046	1,175	1,282	1,384	14,815	18,001	19,440
North Surrey	175,587	347,569	427,784	47,460	93,333	125,668	10,500	33,781	37,731	57,960	127,114	163,399
Port Coquitlam	36,774	65,632	80,915	10,838	20,303	24,283	1,475	2,267	5,227	12,111	22,570	29,510
Port Moody	17,710	32,214	45,380	5,250	10,741	13,344	940	868	3,746	6,190	11,707	17,090
University Endowment Lands	4,535	6,729	12,325	910	1,786	4,138	845	1,587	1,239	1,555	3,373	5,377
Vancouver	473,215	528,123	610,128	99,000	119,938	146,211	100,940	119,946	145,389	189,940	238,884	291,600
Growth Concentration Area	1,044,637	1,619,671	1,832,002	243,954	392,661	490,984	162,500	227,973	295,039	408,454	620,534	786,033
Electoral Area C	2,488	3,110	3,184	954	1,405	1,484	5	5	5	959	1,410	1,488
Langley City	19,765	24,698	34,839	4,525	6,955	5,612	3,105	4,039	9,398	7,630	9,894	15,010
Langley District	88,570	86,311	117,898	21,039	28,445	40,763	690	1,873	2,199	21,729	30,318	42,962
Lions Bay	1,325	1,827	2,945	455	628	1,065	5	27	28	460	655	1,093
Maple Ridge	48,432	82,587	100,253	14,533	26,929	32,701	2,385	4,415	7,730	16,898	31,344	40,431
North Vancouver City	38,718	40,480	45,074	7,570	8,318	11,085	10,735	11,803	12,375	18,305	19,921	23,480
North Vancouver District	75,408	83,705	104,235	22,515	26,297	32,867	3,555	4,622	7,745	26,070	30,919	40,412
Pitt Meadows	11,327	12,053	13,275	3,425	3,648	3,814	355	764	1,381	3,780	4,412	5,195
Rest of Delta	40,530	47,268	49,764	12,127	13,914	14,589	2,025	3,438	4,709	14,152	17,350	19,298
Rest of Surrey	69,808	108,562	121,554	21,945	35,375	40,008	2,350	4,958	7,366	24,295	40,333	47,372
Richmond	126,625	160,808	184,558	32,950	44,490	48,159	11,505	18,411	34,049	44,455	63,901	80,208
West Vancouver	40,665	44,482	49,441	11,150	12,795	14,558	5,105	6,118	8,027	18,255	18,911	22,585
White Rock	16,315	17,164	17,197	4,025	5,240	5,499	3,925	3,649	3,983	7,950	8,889	9,482
GVRD Total	1,802,507	2,232,702	2,676,999	401,187	608,100	740,998	208,226	292,791	384,034	609,392	888,891	1,136,030
Abbotsford & CF Sub. A	67,362	104,742	152,350	22,635	26,953	46,731	7,205	12,426	12,274	29,840	39,379	59,005
Chilliwack	50,884	59,790	85,732	15,993	18,703	30,127	3,000	4,945	5,157	18,893	23,648	35,284
Harrison, Kent & FC Sub. B C	9,946	10,717	14,185	3,311	3,862	5,420	255	275	256	3,566	4,137	5,675
Mission & DA Sub. A	30,204	54,629	84,387	9,339	17,038	29,796	615	2,170	3,738	9,954	19,206	33,532
Rest of Region	178,398	229,878	348,864	51,278	68,664	112,074	11,076	19,818	21,422	62,353	88,370	133,498
Region Total	1,740,903	2,462,580	3,022,663	462,445	672,654	853,070	219,300	312,607	415,458	671,745	985,261	1,269,528

Livable Region Strategic Plan - Growth Management Scenario

The Livable Region Strategic Plan (LRSP) establishes Growth Management Targets for the GVRD and the Growth Concentration Area within the GVRD. The Growth Management Scenario represents one way to meet these targets. It is not part of the LRSP and has not been approved by member municipalities or the GVRD Board. The Scenario is ongoing research on how the LRSP targets can be achieved and is subject to change. It should be used for technical information only. For the latest Growth Management Scenario numbers, please contact GVRD Strategic Planning Department.

Area	1991 Census		2006 Census		2021 Census	
	1991	2006	1991	2006	1991	2021
Primary	835	1,369	1,082	10,500	13,492	15,849
Aurora	5	0	0	5	23	89
Betzona	5	0	0	5	22	92
Lansbury	5	0	0	5	22	92
Cocumham	260	143	148	1,950	5,518	7,518
New Westminster	235	141	146	1,940	1,338	2,049
Flinth Dale	26	21	18	342	356	299
Flinth Dale	240	130	140	2,090	6,849	7,834
Port Moody	110	25	25	1,880	1,388	1,388
University Endowment Land	6	6	4	18	143	689
Vanouver	4,840	4,247	4,632	25,550	31,381	35,238
Growth Concentration Area	7,429	7,177	8,207	48,207	72,888	91,854
Manufacturing	133	34	34	133	0	0
1991	133	34	34	133	0	0
2006	133	34	34	133	0	0
2021	133	34	34	133	0	0
T.C.U.	133,008	115,898	133,008	80,540	115,898	133,008
1991	133,008	115,898	133,008	80,540	115,898	133,008
2006	133,008	115,898	133,008	80,540	115,898	133,008
2021	133,008	115,898	133,008	80,540	115,898	133,008
Wholesale	93	22	22	93	0	0
1991	93	22	22	93	0	0
2006	93	22	22	93	0	0
2021	93	22	22	93	0	0
Retail	110	33	33	110	110	110
1991	110	33	33	110	110	110
2006	110	33	33	110	110	110
2021	110	33	33	110	110	110
F.I.F.	1006	1991	1991	1006	1991	1991
1991	1006	1991	1991	1006	1991	1991
2006	1006	1991	1991	1006	1991	1991
2021	1006	1991	1991	1006	1991	1991
Electoral Area C	100	0	0	85	23	19
Langley City	120	168	191	1,625	3,022	3,787
Langley Township	2,390	2,432	2,801	3,036	3,398	5,110
Lions Bay	0	0	0	0	15	63
Maple Ridge	895	388	438	1,690	1,570	2,201
North Vancouver City	130	133	148	1,385	1,481	1,648
North Vancouver District	285	111	106	2,960	3,847	4,718
Pitt Meadows	616	270	285	515	215	117
Rest of Delta	867	837	957	5,508	6,620	9,070
Rest of Surrey	1,948	2,067	2,408	3,829	8,424	9,329
Richmond	1,610	1,165	1,358	14,646	18,173	21,268
West Vancouver	135	62	64	320	383	681
White Rock	40	189	198	170	138	101
GVRD Total	16,284	15,098	17,138	88,888	122,728	148,881
Abbotsford & C.F. Sim. A	3,020	891	811	3,530	3,710	5,868
Chilliwack	2,095	1,105	1,169	1,580	2,238	3,197
Harrison, Kent & F.C. Sub. B	207	275	272	271	348	510
Mission & D.A. Sub. A	644	565	583	1,183	2,976	5,845
Rest of the Region	5,986	2,918	2,839	8,934	8,283	18,418
Region Total	22,280	18,015	18,991	88,862	131,881	161,008
1991	22,280	18,015	18,991	88,862	131,881	161,008
2006	22,280	18,015	18,991	88,862	131,881	161,008
2021	22,280	18,015	18,991	88,862	131,881	161,008

The Livable Region Strategic Plan (LRSP) establishes Growth Management Targets for the GVRD and the Growth Concentration Area within the GVRD. The Growth Management Scenario represents one way to meet those targets. It is not part of the LRSP and has not been approved by member municipalities or the GVRD Board. The scenario is on-going research on how the LRSP targets can be achieved and is subject to change. It should be used for technical information only. For the latest Growth Management Scenario numbers, please contact GVRD Strategic Planning Department.

Total Employment (Excluding Construction)

Area	1991	2008	2021	1991	2008	2021	1991	2008	2021	1991	2008	2021	1991	2008	2021	1991	2008	2021
Annex	0	43	180	10	55	215	10	55	215	10	55	215	10	55	215	10	55	215
Bellaire	0	29	120	10	36	143	10	36	143	10	36	143	10	36	143	10	36	143
Bunbury	12,850	20,090	26,402	18,885	23,491	30,743	18,885	23,491	30,743	18,885	23,491	30,743	18,885	23,491	30,743	18,885	23,491	30,743
Cogitlam	4,695	9,876	14,528	5,345	11,273	16,136	5,345	11,273	16,136	5,345	11,273	16,136	5,345	11,273	16,136	5,345	11,273	16,136
New Westminster	6,665	9,393	12,215	4,910	5,231	8,228	4,910	5,231	8,228	4,910	5,231	8,228	4,910	5,231	8,228	4,910	5,231	8,228
North Delta	1,753	2,850	2,865	2,010	2,464	2,622	2,010	2,464	2,622	2,010	2,464	2,622	2,010	2,464	2,622	2,010	2,464	2,622
North Surrey	9,082	31,965	42,366	10,258	28,018	38,447	10,258	28,018	38,447	10,258	28,018	38,447	10,258	28,018	38,447	10,258	28,018	38,447
Port Coquitlam	2,135	5,683	8,832	1,875	3,747	6,822	1,875	3,747	6,822	1,875	3,747	6,822	1,875	3,747	6,822	1,875	3,747	6,822
Port Moody	860	2,016	3,683	1,045	1,885	3,740	1,045	1,885	3,740	1,045	1,885	3,740	1,045	1,885	3,740	1,045	1,885	3,740
University Endowment Land	10,858	11,523	12,849	482	613	944	482	613	944	482	613	944	482	613	944	482	613	944
Vancouver	47,815	52,125	65,846	93,396	89,373	108,885	93,396	89,373	108,885	93,396	89,373	108,885	93,396	89,373	108,885	93,396	89,373	108,885
Growth Concentration Area	88,813	145,886	180,188	138,398	187,287	216,926	138,398	187,287	216,926	138,398	187,287	216,926	138,398	187,287	216,926	138,398	187,287	216,926
Electoral Area C	50	8	32	70	11	45	70	11	45	70	11	45	70	11	45	70	11	45
Langley City	1,000	1,414	2,745	2,320	3,328	5,270	2,320	3,328	5,270	2,320	3,328	5,270	2,320	3,328	5,270	2,320	3,328	5,270
Langley Township	3,805	4,136	8,001	3,840	3,084	6,897	3,840	3,084	6,897	3,840	3,084	6,897	3,840	3,084	6,897	3,840	3,084	6,897
Luna Bay	10	5	21	20	7	31	20	7	31	20	7	31	20	7	31	20	7	31
Maple Ridge	3,150	4,313	5,493	2,850	4,313	5,817	2,850	4,313	5,817	2,850	4,313	5,817	2,850	4,313	5,817	2,850	4,313	5,817
North Vancouver City	4,500	4,301	5,090	5,235	3,930	4,895	5,235	3,930	4,895	5,235	3,930	4,895	5,235	3,930	4,895	5,235	3,930	4,895
North Vancouver District	3,010	3,150	5,043	5,585	3,816	5,924	5,585	3,816	5,924	5,585	3,816	5,924	5,585	3,816	5,924	5,585	3,816	5,924
Pill Meadows	280	185	215	465	337	405	465	337	405	465	337	405	465	337	405	465	337	405
Rest of Delta	2,618	2,778	3,073	3,687	3,125	3,582	3,687	3,125	3,582	3,687	3,125	3,582	3,687	3,125	3,582	3,687	3,125	3,582
Rest of Surrey	1,973	3,249	4,816	3,848	6,275	8,808	3,848	6,275	8,808	3,848	6,275	8,808	3,848	6,275	8,808	3,848	6,275	8,808
Richmond	6,290	7,912	11,177	16,500	18,266	21,847	16,500	18,266	21,847	16,500	18,266	21,847	16,500	18,266	21,847	16,500	18,266	21,847
West Vancouver	2,025	1,844	2,934	4,608	2,785	3,895	4,608	2,785	3,895	4,608	2,785	3,895	4,608	2,785	3,895	4,608	2,785	3,895
White Rock	1,700	2,644	2,805	1,480	1,565	1,658	1,480	1,565	1,658	1,480	1,565	1,658	1,480	1,565	1,658	1,480	1,565	1,658
GVRD Total	127,055	181,998	241,394	188,842	218,128	285,897	188,842	218,128	285,897	188,842	218,128	285,897	188,842	218,128	285,897	188,842	218,128	285,897
Abbotsford & CF Sub. A	5,305	5,900	10,094	5,490	8,473	13,718	5,490	8,473	13,718	5,490	8,473	13,718	5,490	8,473	13,718	5,490	8,473	13,718
Chilliwack	3,145	3,559	5,787	3,835	3,360	6,243	3,835	3,360	6,243	3,835	3,360	6,243	3,835	3,360	6,243	3,835	3,360	6,243
Fraser, Kent & F.C. Sub B	122	203	458	847	1,160	2,882	847	1,160	2,882	847	1,160	2,882	847	1,160	2,882	847	1,160	2,882
Mission & D.A. Sub. A	2,007	2,998	7,318	1,310	2,873	8,051	1,310	2,873	8,051	1,310	2,873	8,051	1,310	2,873	8,051	1,310	2,873	8,051
Rest of the Region	10,808	12,658	23,657	11,882	15,868	31,284	11,882	15,868	31,284	11,882	15,868	31,284	11,882	15,868	31,284	11,882	15,868	31,284
Region Total	137,864	193,884	264,881	188,324	231,895	318,881	188,324	231,895	318,881	188,324	231,895	318,881	188,324	231,895	318,881	188,324	231,895	318,881
2008 Census	1091	2008	2021	1091	2008	2021	1091	2008	2021	1091	2008	2021	1091	2008	2021	1091	2008	2021
1991 Census	1991	2008	2021	1991	2008	2021	1991	2008	2021	1991	2008	2021	1991	2008	2021	1991	2008	2021
1991 Census	1991	2008	2021	1991	2008	2021	1991	2008	2021	1991	2008	2021	1991	2008	2021	1991	2008	2021

Total Employment (Excluding Construction)

Area	1991	2008	2021
Annex	0	43	180
Bellaire	0	29	120
Bunbury	12,850	20,090	26,402
Cogitlam	4,695	9,876	14,528
New Westminster	6,665	9,393	12,215
North Delta	1,753	2,850	2,865
North Surrey	9,082	31,965	42,366
Port Coquitlam	2,135	5,683	8,832
Port Moody	860	2,016	3,683
University Endowment Land	10,858	11,523	12,849
Vancouver	47,815	52,125	65,846
Growth Concentration Area	88,813	145,886	180,188
Electoral Area C	50	8	32
Langley City	1,000	1,414	2,745
Langley Township	3,805	4,136	8,001
Luna Bay	10	5	21
Maple Ridge	3,150	4,313	5,493
North Vancouver City	4,500	4,301	5,090
North Vancouver District	3,010	3,150	5,043
Pill Meadows	280	185	215
Rest of Delta	2,618	2,778	3,073
Rest of Surrey	1,973	3,249	4,816
Richmond	6,290	7,912	11,177
West Vancouver	2,025	1,844	2,934
White Rock	1,700	2,644	2,805
GVRD Total	127,055	181,998	241,394
Abbotsford & CF Sub. A	5,305	5,900	10,094
Chilliwack	3,145	3,559	5,787
Fraser, Kent & F.C. Sub B	122	203	458
Mission & D.A. Sub. A	2,007	2,998	7,318
Rest of the Region	10,808	12,658	23,657
Region Total	137,864	193,884	264,881

Construction

Area	1991	2008	2021
Annex	30	55	274
Bellaire	20	65	183
Bunbury	10	25	7,009
Cogitlam	4,187	4,187	4,187
New Westminster	281	835	1,915
North Delta	848	1,350	1,713
North Surrey	4,186	5,580	8,863
Port Coquitlam	1,831	800	1,049
Port Moody	757	1,049	1,358
University Endowment Land	1,138	461	12,217
Vancouver	13,058	14,665	32,603
Growth Concentration Area	27,564	39,881	52,803
Electoral Area C	5	60	9
Langley City	494	385	548
Langley Township	881	1,390	1,537
Luna Bay	7	8	15
Maple Ridge	565	1,518	1,253
North Vancouver City	555	1,330	1,163
North Vancouver District	557	1,330	1,342
Pill Meadows	58	136	73
Rest of Delta	883	1,405	1,183
Rest of Surrey	977	1,801	1,408
Richmond	8,317	3,455	5,883
West Vancouver	479	785	847
White Rock	183	410	424
GVRD Total	39,728	50,881	69,058
Abbotsford & CF Sub. A	9,442	9,08	2,047
Chilliwack	6,005	1,445	3,321
Fraser, Kent & F.C. Sub B	1,003	301	447
Mission & D.A. Sub. A	8,845	611	1,876
Rest of the Region	26,285	5,687	7,884
Region Total	85,021	63,000	87,022

2008 Census

Area	1991	2008	2021
Annex	30	55	274
Bellaire	20	65	183
Bunbury	10	25	7,009
Cogitlam	4,187	4,187	4,187
New Westminster	281	835	1,915
North Delta	848	1,350	1,713
North Surrey	4,186	5,580	8,863
Port Coquitlam	1,831	800	1,049
Port Moody	757	1,049	1,358
University Endowment Land	1,138	461	12,217
Vancouver	13,058	14,665	32,603
Growth Concentration Area	27,564	39,881	52,803
Electoral Area C	5	60	9
Langley City	494	385	548
Langley Township	881	1,390	1,537
Luna Bay	7	8	15
Maple Ridge	565	1,518	1,253
North Vancouver City	555	1,330	1,163
North Vancouver District	557	1,330	1,342
Pill Meadows	58	136	73
Rest of Delta	883	1,405	1,183
Rest of Surrey	977	1,801	1,408