

Demographic Assessment
for
Cowichan Valley School District
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Executive Summary

This report follows from the recommendation of the Minister's Special Advisor to: *consider commissioning a demographer to develop as accurate a picture as possible of the shifting demographic trends across the school district in order to inform Board decision-making about the capacity for supporting the future delivery of education services*

The report uses various Ministry of Education and other data to project enrolments (Part A) and comments on a variety of demographic variables which are the causal factors for these changing enrolments (Part B).

The key variables that determine a school's enrolment are the numbers of births and the number of children who are retained in the school from one year to the next as students move through the grades. The major declines in the birth rates and family size that followed the introduction of the birth control pill in the early 1960s are still impacting school enrolments.

The rises and declines of local enrolments mirror the trends at the provincial level. Over the last ten years elementary enrolments have declined substantially while secondary enrolments have remained quite steady. Over the next ten years however, it is projected provincially that the decline in the number of kindergarten students will reverse (following reversal in birth numbers five years previously) and elementary enrolments will slowly grow; while at the secondary level, the declines from the elementary grades will work their way through the system and that overall secondary enrolment will decline significantly.

At the District level, elementary enrolments have declined from 6,200 in 1998, to 4,800 in 2007. Over the same period, secondary enrolment has remained fairly constant between 4,000 and 4,200.

The good news is that births to residents of the CVSD were at their lowest in 2003 (544 births) and have stuttered upwards from there. It is projected that this is the start of a longer term growth pattern with the number of births in 2018 being 24% higher than currently. This pattern will be replicated in kindergarten enrolments and will then gradually make its way through the system.

This will have only a marginal effect on total elementary enrolments for the next ten years, but will continue after 2017 (the limit of the Ministry's projections) to at least 2023.

The secondary picture is more gloomy. From the current level of around 4,000 students, the projection is for a loss of 20% of students with a 2017 figure (Ministry) of just over 3,200. Our projections beyond that point indicate some further declines, to 2021.

The projection model used by YTA assesses each school independently and then matches the totality of these data to independently made total district projections and to the projection numbers of the Ministry. One input to this model is the breakdown of the district kindergarten totals by each zone and for each school. Our assessment, and therefore model assumptions, are that the south will gain a larger proportion of the District's kindergarten enrolment, while the Lake Zone will lose and the other two zones will remain as they are.

The implications of these projections (which all assume that future major economic conditions will not significantly vary from the present) for the four zones from 2008 to 2023 are as follows:

The Lake Zone will reverse its declines for the past ten years, but will grow only very slightly to 2023.

The North Zone will also see an end to major declines by 2010 for elementary but any re-growth in those ranks will be match by declines at the secondary level.

In the Central Zone, enrolments have not declined so steeply as in the Lake and North Zones, and the turnaround will come faster and be greater. The two factors which contribute to this healthy enrolment situation are the presence of First Nations students whose family sizes tend to be larger and where more families have children; and the presence of affordably priced housing.

In the South Zone, enrolment growth at the secondary level during the 1998 to 2001 period offset declines in the elementary grades to produce an overall growing zone (at a time when all other zones were declining). However since 2001, enrolment decline at the elementary level has more than offset growth at the secondary level. Since 2006, all levels have been declining, and this is projected to continue to 2013, by which time total enrolment will be growing again.

French Immersion enrolments have grown through the past ten years and are projected to continue growing until 2011 at the elementary level, 2014 at the middle school, and 2017 at the high school level. Once it is full 'grown out', there will be approximately 950 students in the French Immersion system.

Part B of the report offers a number of causal factors, beyond birth numbers, which must be borne in mind as these patterns of rising and falling enrolments are set in context.

- Changing Family Structures – there are many fewer 'families with children' living in the CVSD area now than there ever were in the past. Most housing that might once have had a family with children are now occupied by 'empty nesters', either having seen their kids grow up in the Cowichan Valley, or who have moved here from elsewhere in Canada.
- Only the First Nations population still has the majority of its households including children (over 70% as opposed to a regional average of less than 40%).
- There are few new international migrants, who tend to have larger families, living in the Valley.
- The increase in house prices over the last ten years but particularly over the last three years has meant increasing difficulty for young families to buy a house. Indeed almost all the inventory of new housing being built is oriented either to new retirees or early retirees, or to second home buyers. Where affordable housing is being built (in Duncan, in Central Zone), enrolment declines have been less steep.
- The rise in gasoline prices, which once made commuting into Victoria affordable, together with the rise in house prices and loss of some of the 'Malahat differential', will discourage everyone, especially younger families with children, from buying a house in the South Zone and commuting over the Malahat to work.
- The increase in the number of people able to work from home/telecommute, may offset this somewhat.
- The speed with which this demographic situation has changed has surprised many people and the implications of the trends, together with reworking the projections, is a major work item for many of the region's planners at present.

Appendix A also presents information on individual school enrolments.

Introduction

Planning is central and essential for school districts. The basis of planning is demographic analysis and projection. Many other governmental services are demographically stratified, but few are as reliant on long term projections as the school system.

At the same time, few services are as emotive as education; we will fight incredibly hard to ensure that our children have the best possible schooling.

This combination of demographic future imperfect and desired future perfect often leads to heated public meetings and strong words around the board table. Add in a funding process that is tied almost exclusively to demographics, and you have the situation that the Cowichan Valley School District (CVSD) finds itself in at the present.

Early in 2008, the Minister of Education appointed a Special Advisor to review the educational situation in the CVSD and to report to her on steps that should be taken to improve educational outcomes. The Special Advisor reported on May 15, 2008, and included a recommendation:

That the Board consider commissioning a demographer to develop as accurate a picture as possible of the shifting demographic trends across the school district in order to inform Board decision-making about the capacity for supporting the future delivery of education services.

The Board's administration moved rapidly to request that Yates, Thorn & Associates Inc. undertake this demographic assessment. This report therefore provides a comprehensive look at demographics in the Cowichan Valley. In part A, it looks in detail at the past and present enrolments at all schools, and projects those into the future. If that is the 'what', part B of the report addresses the 'why': how economic, social, environmental and cultural factors come together to create these enrolment patterns. It is only when these are all brought together that we can understand why there are, or are not, children attending public schools in the Cowichan Valley, both now and into the future.

Part A - Review of Enrolment Patterns

School enrolments are primarily driven by two factors: the number of children born and the number of children in the school in the previous year, which we refer to as the retention ratio. Behind those factors are a myriad of social, cultural, and economic influencers which influence the decisions made by parents. In this section of the report, we will look at these first level factors; later in the report will address the influencers.

Births

The invention of the birth control pill and its adoption in the early 1960s set in motion a decline in the number of births throughout the western world. In the 15 years from 1945 to 1960, many families had three or more children and the average was around 2.4 children per family. From 1960 to 1975, family size plummeted from 2.4 children to 1.4 children. By 1975, the children of the large post-war families were reaching the age of family formation and child bearing, and the number of births increased from 1975 through the next 15 years, although these families were still averaging only 1.4 or fewer children.

This pattern of wave-like high, low, high enrolments has been termed 'boom, bust and echo'. The boom was the 1950's; the bust was 1960 to 1975; and the echo came in the 1980s and 1990s. The wave pattern has also become longer and lower as generations have blurred and there have been no further precipitous declines in birth rates as was experienced in the 1960s.

Other factors have added to the complexity; for instance, new immigrant families have tended to maintain higher birth and family formation rates than Canadian families.

Overall however, these waves of births can still be seen in the school district today, although they are five to 20 years behind the swings in births. This lead time gives good notice of coming enrolments and makes short term projection of enrolments (say, 10 years) more stable. Longer term projections must still be based on how many babies are to be born which, speaking as both a demographer and aspiring grandparent, is more difficult to predict.

Retention Ratios

The number of children in grade 4 this year is likely to be very similar to the number in grade 3 last year...and grade 5 next year. It is true that children move in and out of schools during the year, and this transiency rate, in some schools, can be over 100%. But the net movements are surprisingly stable, in large part because the housing vacated by one family is normally reoccupied by another family.

The housing stock in a community therefore becomes a major determinant of the number of children and the change in this number over time. A family may live in an apartment or starter home when their children are in pre-school or kindergarten, but may move to a more affluent area as their children grow and their economic position improves. Schools in the starter home area may see a gradual decline in class size as children move up the grades, while at the schools in more affluent areas there may be more secondary aged students than those of elementary age.

This may also be true of whole communities: as we will note later in this report, the Cowichan Valley tends to be a net gainer of students through the grades.

Housing is obviously a very critical factor in influencing school enrolments, but it is important to make some key points at this stage of the report:

- With declining family size has come reduced housing occupancy: on average, each dwelling has fewer people living in it now than it did 20 or 30 years ago. There are many other factors that have caused this, but most notable is the aging of the population with more couples living longer in larger houses after their children have left home. And these are the baby boomers, so there are lots of them!
- New housing is often built with these baby boomers in mind, rather than families with children. And there is no way of ensuring that family housing, even when designated as such in development proposals, is occupied by families with children: a small, less expensive starter home is just as attractive to a retired couple as to a small family.
- Housing affordability is a critical issue for families with children especially in areas where land is expensive, such as the Cowichan Valley.
- And housing in areas which are attractive to retirees based on quality of life, will be occupied by those retirees, who likely drive up the housing price beyond the reach of families.

From a technical enrolment projection point of view, it is also important to stress that new housing has always been factored into enrolment projections...it is only when more new housing is being built than in past years is there the probability of more children ...and then only subject to the caveats noted above.

Provincial Enrolments

Data for school enrolments is as recorded by the Ministry of Education as of September 30th every year. They define elementary as grades K/7 and secondary as grades 8/12.

In 2007 (the 2007/8 school year), there were just over 300,000 elementary students and just under 250,000 secondary students.

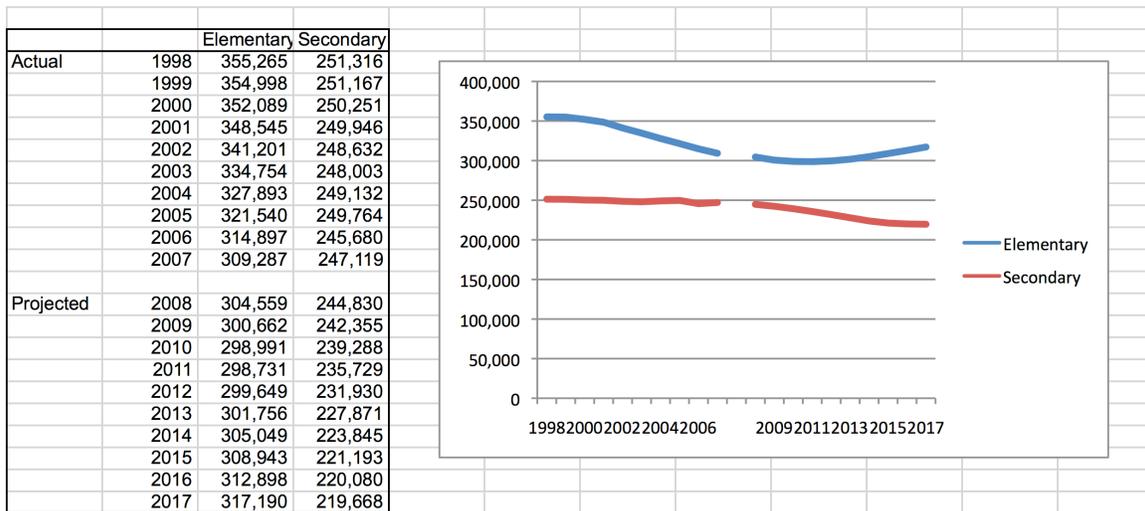


Figure 1 - Provincial Enrolment - 1998 to 2017

Over the ten years from 1998 to 2007, the elementary enrolment dropped by 45,000 students or 13%. The decline was steady from about 2001 onwards. This decline could be described as the ‘echo of the bust’: it was the children entering school whose parents were born in the 1960s. It should be noted that the average age of these students would be about 8 years or grade 3/4.

During this same period, the secondary enrolment changed little, hovering within a few thousand of 250,000. These students would be on average 15 years or grade 10...therefore seven years older than the elementary student cohort.

The future of the secondary school population is easier to project: the declines of the last ten years in elementary enrolments will work their way into and through the secondary schools, with the Ministry projecting 220,000 students in 2017, down almost 30,000 or 10.9% from 2007.

For the future of the elementary enrolments, the Ministry is projecting that the decline has almost ‘bottomed out’ (likely around 298,000), but will, by 2017 have climbed back to 317,000, a 6% increase over its lowest point.

This turnaround is naturally first projected in the kindergarten enrolments which were around 45,600 in 1998 and had declined to 34,900 in 2007. The Ministry is projecting that 2008’s kindergarten enrolment will be the first to be higher than the previous year since...before 1998.

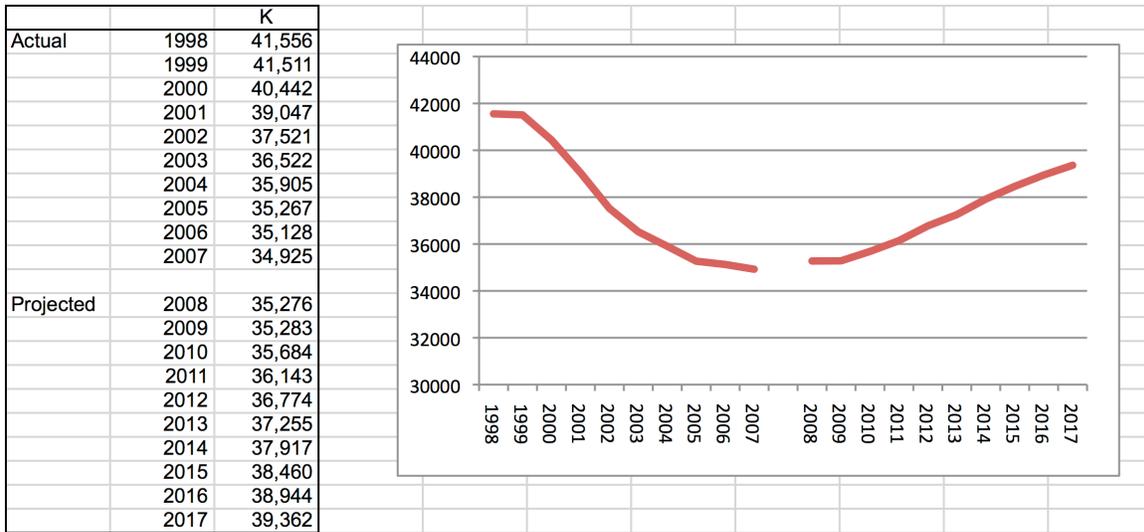


Figure 2 - Provincial Kindergarten Enrolments - 1998 to 2017

They have been projecting this turnaround for a couple of years as can be seen by comparing the 2003 projection with the 2007 projection. Not only has the 2007 projection delayed this turnaround point, but it also projects each year to be 200 or 300 lower than they had previously projected in 2003.

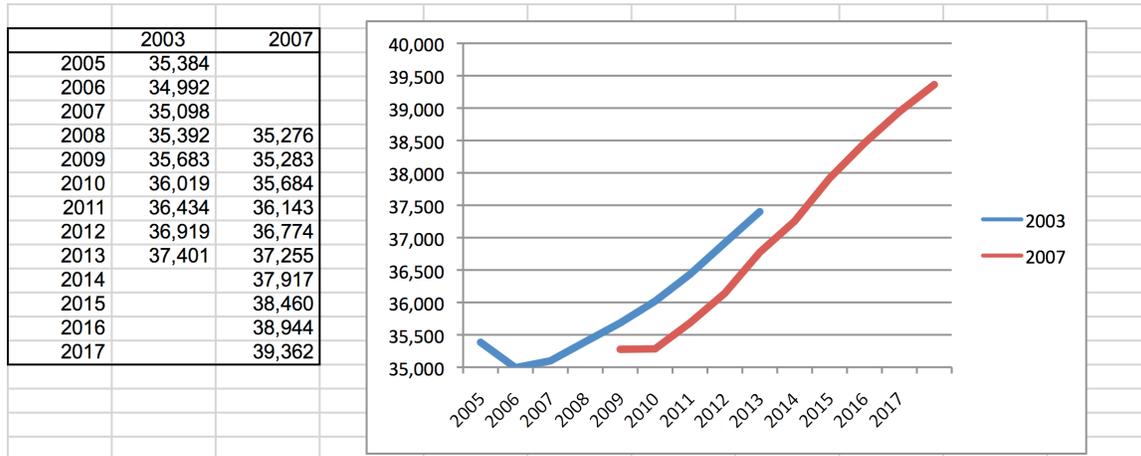


Figure 3 - Comparing Ministry Projections 2003 and 2007

In terms of overall provincial retention rates, the elementary and secondary patterns are shown as follows:

Year	K	1	2	3	4	5	6	7
1998	41,556	43,986	44,149	45,405	44,689	45,304	45,038	44,135
1999	41,511	42,546	44,064	44,404	45,646	45,005	45,725	45,540
2000	40,442	42,254	42,569	44,211	44,652	45,867	45,411	46,203
2001	39,047	41,492	42,506	43,037	44,469	45,098	46,341	46,031
2002	37,521	39,907	41,373	42,587	43,011	44,455	45,177	46,655
2003	36,522	38,652	40,326	41,775	42,997	43,363	44,885	45,749
2004	35,905	37,539	38,772	40,689	42,015	43,397	43,682	45,412
2005	35,267	36,871	37,824	39,220	41,172	42,467	43,941	44,372
2006	35,128	36,044	37,020	38,184	39,473	41,458	42,839	44,347
2007	34,925	36,087	36,390	37,418	38,657	40,006	41,908	43,505

Figure 4 - Tracking Provincial Retention Rates - Elementary

While 40,400 students started in kindergarten, another 1,000 joined in grade 1. Over the next several years, another 2,000 students were added by grade 7 representing a retention rate of 1.008. This indicates that the province is a net gainer of elementary students.

Year	8	9	10	11	12
1998	49,401	49,865	50,154	51,808	45,306
1999	45,913	50,461	51,567	52,391	47,243
2000	47,172	46,790	51,746	54,120	47,368
2001	48,107	47,969	48,464	54,248	48,284
2002	47,805	48,740	49,459	51,191	48,470
2003	48,676	48,794	50,394	51,608	46,093
2004	47,813	49,397	49,576	53,130	46,851
2005	47,526	48,747	51,394	51,273	48,470
2006	46,178	48,342	50,818	51,348	46,809
2007	46,245	47,096	51,019	51,612	49,253

Figure 5 - Tracking Provincial Retention Rates - Secondary

At the secondary level, there is a net gain between grades 8 and 9 and 9 and 10, but after grade 10, the retention ratio drops off reflecting early school leavers.

There is also a sizable gain between grade 7 and grade 8, reflecting a general transfer of students from home schooling and especially private schools, to the public secondary schools with their wealth of choice and friends. Normally around 1,500 students join the public system at this transition point.

District Enrolments

Historical enrolment data is published by the Ministry in its 1558B reports, which also include the Ministry's ten year projection. Past data for the CVSD is shown below:

Year	K	1	2	3	4	5	6	7	Elem Ungr	Elem.Sub
1998	659	682	769	844	810	839	794	777	17	6,191
1999	600	696	705	783	859	822	821	815	13	6,114
2000	608	644	694	713	793	848	814	829	18	5,961
2001	550	660	654	719	709	817	862	840	6	5,817
2002	563	588	660	670	718	711	816	868	3	5,597
2003	553	598	614	675	695	743	718	835	2	5,433
2004	525	589	615	628	672	718	755	730	5	5,237
2005	539	550	603	636	645	689	736	762	8	5,168
2006	498	569	544	624	635	654	692	722	4	4,942
2007	503	535	581	563	646	618	646	695	5	4,792

Figure 6 - CVSD Elementary Enrolment - 1998 to 2007

As with the province as a whole, every year there have been fewer students in kindergarten and, while retention ratios are positive, they fail to compensate for smaller kindergarten enrolments and the loss of larger grade 7 classes. Overall the district has fallen from a 1998 enrolment of 6,200 to 4,800 in 2007, a drop of 23%, considerably above the provincial loss of 13%.

The secondary grades have also shown the same minimal declines as seen at the provincial level. However there is very little gain between grades 7 and 8, which would indicate that the private school system is competing well at this transition.

Year	8	9	10	11	12	Sec Ungr.	Sec.SubTr	All grades	Home Sch	Grand Total
1998	837	891	985	836	612	104	4,265	10,456	4	10,460
1999	803	879	907	912	646	98	4,245	10,359	5	10,364
2000	813	866	883	912	656	129	4,259	10,220	5	10,225
2001	853	858	888	806	635	144	4,184	10,001	9	10,010
2002	851	871	887	855	600	109	4,173	9,770	7	9,777
2003	889	940	1003	802	640	11	4,285	9,718	1	9,719
2004	858	933	864	980	604	124	4,363	9,600	2	9,602
2005	741	843	956	907	735	112	4,294	9,462	1	9,463
2006	740	772	907	959	672	96	4,146	9,088	0	9,088
2007	719	762	855	897	740	49	4,022	8,814	1	8,815

Figure 7 - CVSD Secondary Enrolment - 1998 to 2007

Projecting District Enrolments

Projecting District enrolment starts with converting the number of births into kindergarten students. However it should be noted that not every baby born/registered in the Cowichan Valley enters kindergarten five years later. In fact, looking at 1997/2001 births it would seem that only about 80/86% become kindergarten students.

Births		K Enrolment		
1997	687	2002	563	81.95%
1998	659	2003	553	83.92%
1999	625	2004	525	84.00%
2000	620	2005	539	86.94%
2001	576	2006	498	86.46%

Figure 8 - CVSD - Converting Births to Kindergarten Enrolment

The main reason is that kindergarten is neither full day (for most students) nor compulsory, so some students stay at home, while others attend Montessori, Waldorf and other full-day programs. However it should be noted that the percentage opting for kindergarten increased during these years.

The number of births in the CVSD area, together with the projection of BC Stats is shown in the following chart. While there have historically been peaks and dips, the high birth years of the early and mid 1990s can be contrasted with the steep decline of 1996 to 2003.

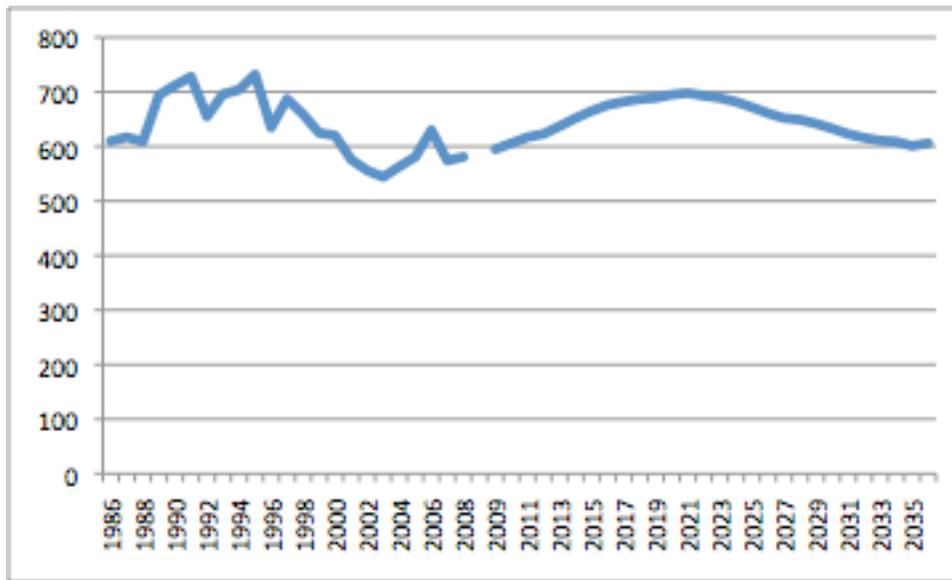


Figure 9 - CVSD - Births 1986 to 2035

From a low in 2003, births have increased to the present and are projected to continue increasing for the next 10 years to 2018, by which time they will be 24% higher than they were in 2002.

The births of 2002 became the kindergarten students of 2007, so we can estimate that the kindergarten enrolments of 2017 will be 12% higher and by 2023 will be 24% higher than those of 2007.

Births		K Enrolment	
2002	556	2007	100%
2003	544	2008	98%
2004	563	2009	101%
2005	581	2010	104%
2006	630	2011	113%
2007	574	2012	103%
2008	581	2013	104%
2009	595	2014	107%
2010	606	2015	109%
2011	617	2016	111%
2012	623	2017	112%
2013	637	2018	115%
2014	652	2019	117%
2015	665	2020	120%
2016	676	2021	122%
2017	682	2022	123%
2018	687	2023	124%

Figure 10 - CVSD - Kindergarten Enrolment Percentage Growth

The Ministry’s kindergarten projections, which only go to 2017, agree with this estimate, however it should be noted that this vital injection into the enrolment system will continue for another eight years past this date.

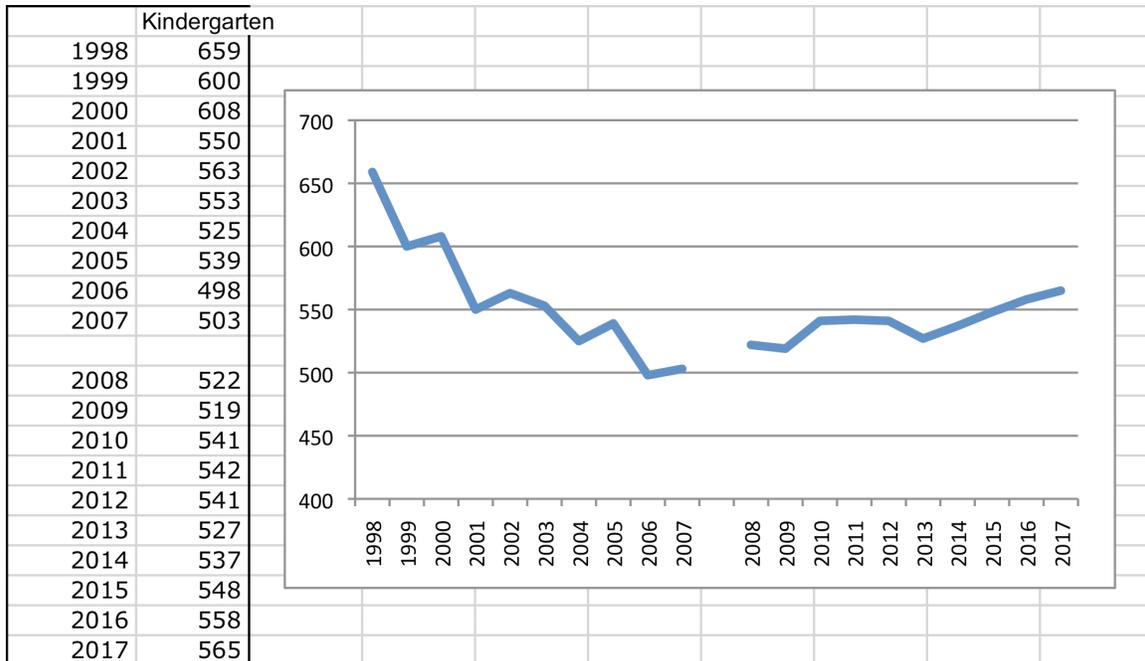


Figure 117 - CVSD - Ministry Kindergarten Projections to 201

The Ministry’s elementary enrolment projections show a similar pattern with the long decline turning into a recovery with 2017 being on a par with 2007 at around 4,700 students.

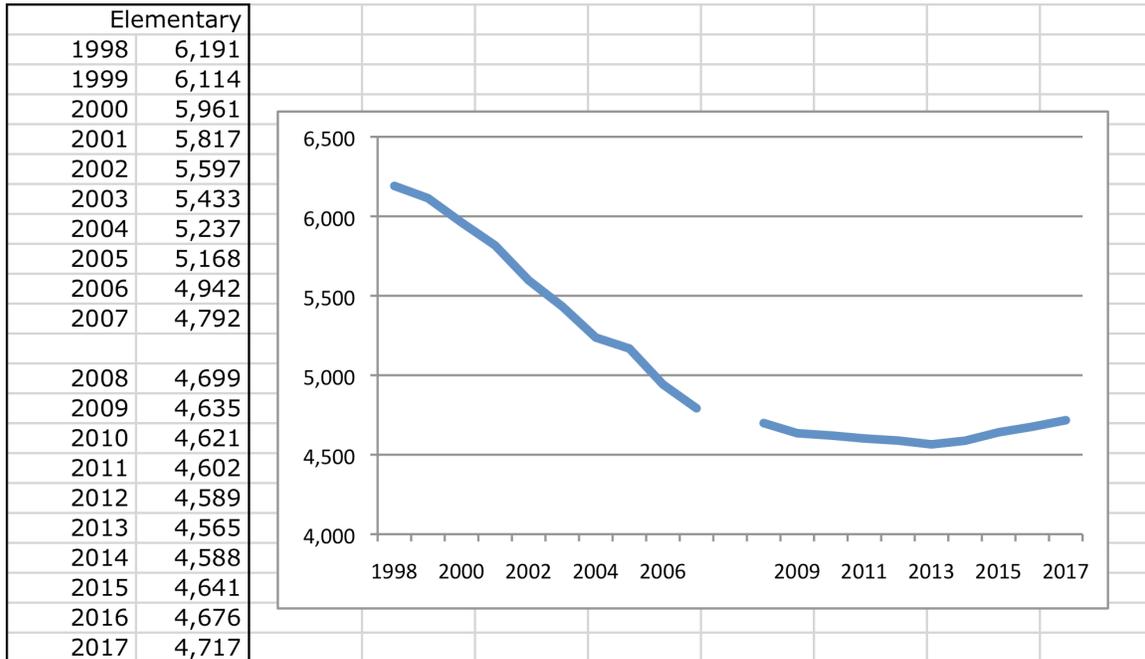
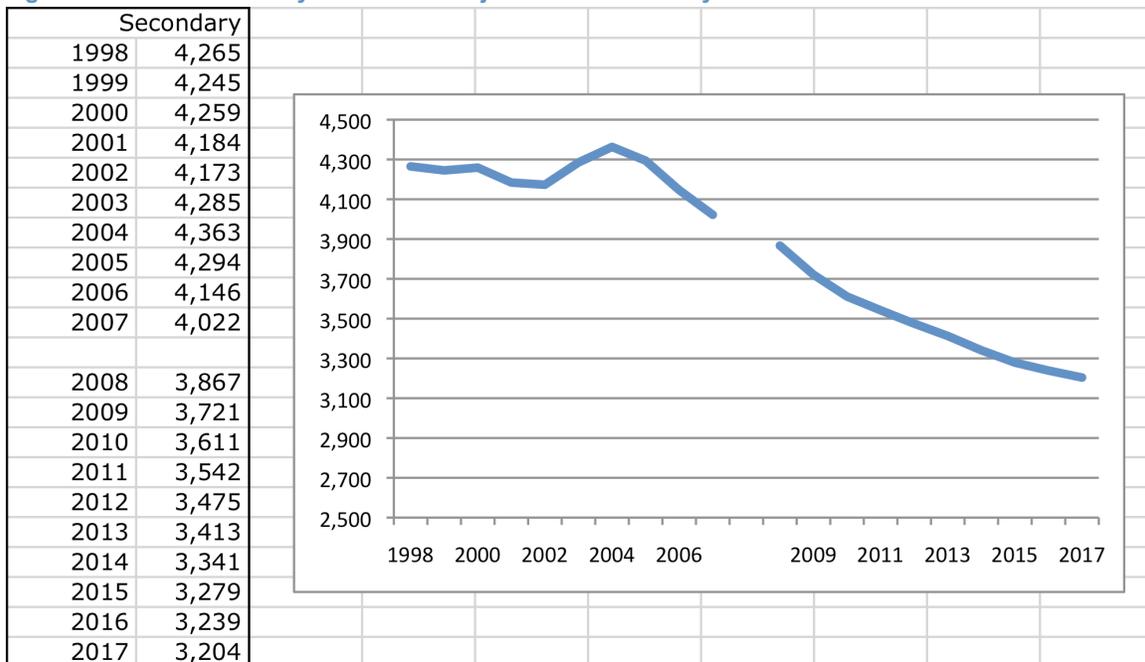


Figure 12 - CVSD - Ministry Enrolment Projections - Elementary

However the long decline for elementary in the past ten years heralds poor news for secondary enrolments next ten.

Figure 13 - CVSD - Ministry Enrolment Projections - Secondary



At the secondary level, the projection is for a loss of 800 students or 20% by 2017, with a turnaround coming 8 years after the elementary turnaround, in 2021.

Our projections run to 2023, and are based on slightly revised data. They are shown on the following page.

Year	K	1	2	3	4	5	6	7	Elem Ungr.	Elem.SubT	8	9	10	11	12	Sec Ungr.	Sec.SubTot	All grades	Home Schc	Grand Total	Yearly chan
1998	659	682	769	844	810	839	794	777	17	6191	837	891	985	836	612	104	4265	10456	4	10460	
1999	600	696	705	783	859	822	821	815	13	6114	803	879	907	912	646	98	4245	10359	5	10364	-0.92%
2000	608	644	694	713	793	848	814	829	18	5961	813	866	883	912	656	129	4259	10220	5	10225	-1.34%
2001	550	660	654	719	709	817	862	840	6	5817	853	858	888	806	635	144	4184	10001	9	10010	-2.10%
2002	563	588	660	670	718	711	816	868	3	5597	851	871	887	855	600	109	4173	9770	7	9777	-2.33%
2003	553	598	614	675	695	743	718	835	2	5433	889	940	1003	802	640	11	4285	9718	1	9719	-0.59%
2004	525	589	615	628	672	718	755	730	5	5237	858	933	864	980	604	124	4363	9600	2	9602	-1.20%
2005	539	550	603	636	645	689	736	762	8	5168	741	843	956	907	735	112	4294	9462	1	9463	-1.45%
2006	498	569	544	624	635	654	692	722	4	4942	740	772	907	959	672	96	4146	9088	0	9088	-3.96%
2007	503	535	581	563	646	618	646	695	5	4792	719	762	855	897	740	49	4022	8814	1	8815	-3.00%
		1.06	1.02	1.03	1.02	1.01	1.01	1.01			1.01	1.04	1.05	0.98	0.75						
		1.06	1.02	1.03	1.01	1.01	1.01	1.00			1.00	1.03	1.03	1.00	0.75						
		1.06	1.01	1.03	1.02	0.99	1.00	0.99			0.98	1.04	1.09	1.00	0.76						
		1.07	1.02	1.03	1.04	0.97	0.99	1.00			1.00	1.03	1.11	0.99	0.77						
		1.07	1.01	1.03	1.02	1.00	1.00	1.00			1.00	1.03	1.07	0.99	0.76						
		1.07	1.01	1.02	1.03	1.00	1.00	1.01			1.02	1.05	1.08	1.00	0.79						
2008	503	536	543	593	580	645	618	652	5	4675	709	755	823	855	709	49	3899	8574	1	8575	97%
2009	509	536	544	554	610	579	645	624	5	4606	666	744	815	823	675	49	3773	8378	1	8379	98%
2010	526	543	544	555	570	609	579	651	5	4581	637	699	804	815	650	49	3654	8235	1	8236	98%
2011	570	560	551	555	571	569	609	584	5	4575	664	668	755	804	644	49	3584	8159	1	8160	99%
2012	519	607	568	562	571	570	569	615	5	4588	596	697	722	755	635	49	3454	8042	1	8043	99%
2013	526	553	616	580	579	570	570	575	5	4574	627	626	753	722	596	49	3373	7948	1	7949	99%
2014	538	560	562	629	597	578	570	576	5	4614	586	659	676	753	570	49	3293	7908	1	7909	100%
2015	548	574	568	573	648	596	577	576	5	4665	587	616	712	676	595	49	3235	7899	1	7900	100%
2016	558	584	582	580	590	646	596	583	5	4725	587	617	665	712	534	49	3164	7888	1	7889	100%
2017	564	595	593	594	597	589	646	602	5	4784	595	617	666	665	562	49	3154	7938	1	7939	101%
2018	576	601	604	605	612	596	589	653	5	4839	614	625	666	666	525	49	3145	7984	1	7985	101%
2019	590	614	610	616	623	610	596	595	5	4858	666	645	675	666	526	49	3226	8084	1	8085	101%
2020	602	629	623	622	634	622	610	602	5	4948	606	699	696	675	526	49	3251	8199	1	8200	101%
2021	612	641	638	636	640	633	622	616	5	5042	614	637	755	696	533	49	3284	8326	1	8327	102%
2022	617	652	651	651	655	639	633	628	5	5129	629	645	688	755	550	49	3315	8444	1	8445	101%
2023	622	657	661	664	670	653	639	639	5	5211	640	660	696	688	596	49	3330	8540	1	8541	101%

A Caveat - These projections are made by projecting district total kindergarten enrolment and using district level retention ratios. The projections for each of the zones which are given on the following pages are made by using this same technique but at the school level, and then adding the school enrolments together. The zone totals were then added together to get a district total. This total is then fine tuned to bring it as close as possible to the overall district projection given above, however these figures never match. There are various reasons for this, the main one being that there are a number of small programs not included in the zone plus French Immersion totals. In the past this has averaged about 200 students. Over the next five years, we have worked to minimize the difference in the two projections, however beyond that, the sum of the schools projection is higher than the district total projection. In other words, the school projections may in fact be too high and the enrolment growth we are projecting may be greater than the eventual actual enrolments – we have preferred to err on the optimistic side.

Looking at Each Zone and French Immersion

The CVSD is divided administratively along geographic lines with four zones as follows:

Lake Zone

Lake Cowichan Secondary	6/12	
Stanley Gordon Elem-Middle		Closed June 2003
A.B. Greenwell Elem.	K+ 1/5	
Palsson Elem.	K+ 1/5	
Yount Elem.	K+ 1/7	Closed June 2007
Honeymoon Bay Elem.		Closed June 2001

North Zone

Chemainus Secondary	8/12	
Chemainus Elem.	K+ 1/7	Absorbed North Chemainus Elem students in 2001
Crofton Elem.	K+ 1/7	
Thetis Island Elem.	K+ 1/6	
Mt. Brenton Elem.		Closed June 2002

Central Zone

Cowichan Secondary	10/12	
Mt Prevost	7/9	100% Feeds to Cowichan Sec.
Quamichan Middle	7/9	100% Feeds to Cowichan Sec.
Khowhelum Elem.	K+ 1/6	100% Feeds to Mt Prevost
Drinkwater Elem.	K+ 1/6	100% Feeds to Mt Prevost
Somenos Elem.	K+ 1/6	100% Feeds to Mt Prevost
Tansor Elem.	K+ 1/6	100% Feeds to Mt Prevost
Alex Aitken Elem.	K+ 1/6	100% Feeds to Quamichan
Alexander Elem.	K+ 1/6	100% Feeds to Quamichan
Maple Bay Elem.	K+ 1/6	100% Feeds to Quamichan
Koksilah Elem.	K+ 1/6	100% Feeds to Quamichan
Sahtlam Elem. Annex		Closed June 2001

South Zone

Kelsey Secondary	9/12	
Bonner Middle	6/8	
Cobble Hill Elem.	K+ 1/5	Includes Mill Bay regular (K/1) enrolment pre-closure
Mill Bay Elem.		French Immersion (see separate spreadsheet)
Discovery Elem.	K+ 1/5	Includes Elsie Miles enrolment pre-closure
Bench Elem.	K+ 1/5	
Cowichan Station Elem.		Closed June 2007

In addition, there are several schools that deliver the District's French Immersion program.

Cowichan Secondary	10/12	
Mt Prevost	7/9	100% Feeds to Cowichan Sec.
Duncan Elem.	K+ 1/6	100% Feeds to Mt Prevost
Mill Bay Elem.	K+ 1/2	

Allocating Kindergarten Enrolment

Earlier in this report, we commented on how the projected number of births are used to project kindergarten enrolment. This total number is used in the projection process for the total district. However it is also important to disaggregate kindergarten projections to zones (note that the numbers noted below do not include French Immersion students). The process of disaggregation was as follows:

Zones	Lake	North	Central	South	Total		Lake	North	Central	South
1998	75	77	273	201	626	1998	12.0%	12.3%	43.6%	32.1%
1999	73	77	230	184	564	1999	12.9%	13.7%	40.8%	32.6%
2000	63	81	243	168	555	2000	11.4%	14.6%	43.8%	30.3%
2001	60	74	212	170	516	2001	11.6%	14.3%	41.1%	32.9%
2002	59	59	215	161	494	2002	11.9%	11.9%	43.5%	32.6%
2003	49	65	187	174	475	2003	10.3%	13.7%	39.4%	36.6%
2004	57	62	181	149	449	2004	12.7%	13.8%	40.3%	33.2%
2005	50	63	194	139	446	2005	11.2%	14.1%	43.5%	31.2%
2006	31	58	208	121	418	2006	7.4%	13.9%	49.8%	28.9%
2007	39	56	203	123	421	2007	9.3%	13.3%	48.2%	29.2%

Figure 15 - Kindergarten Enrolments by Zone - 1998 to 2007

- The proportion of kindergarten historically found in each zone was established:
 - In the Lake Zone, the proportion had peaked in 1999 at almost 13% but had declined since then to a low of 7.4% in 2006. In absolute terms, this is a decline from 75 students to 30+ students.
 - In the North Zone, while 1998 kindergarten enrolments were close in number to those in the Lake Zone, they had only fallen to 56 students, and maintained their percentage of the overall total at around 13%.
 - The Central Zone had also declined in absolute numbers but had maintained and indeed increased its percentage of the total from the low 40s to the high 40s.
 - The South Zone had been stable in terms of relative number of kindergarten students, but with a steep absolute decline. The declines in the past two years are presumed to reflect the reopening of Mill Bay Elementary for French Immersion.

Zones	Lake	North	Central	South	Total
2008	45	54	194	119	412
2009	46	55	200	125	426
2010	46	57	207	130	440
2011	49	62	224	142	477
2012	43	57	204	130	435
2013	43	57	207	133	440
2014	43	59	212	137	451
2015	42	60	216	141	459
2016	42	61	220	145	467
2017	41	61	222	147	472
2018	41	63	227	152	482
2019	41	64	232	157	494
2020	40	65	237	161	504
2021	40	67	241	165	512
2022	39	67	243	168	516
2023	38	68	244	170	520

Figure 16 - Projected Kindergarten Enrolment by Zone - 2008 to 2023

- Using the rate increases projected for overall births to project the increased total number of kindergarten students, and then projecting the changed percentage between zones, the following projections were made for kindergarten students by zone:

- The Lake Zone is projected to decline from 11% to 7% of total kindergarten students over the next 15 years to 2023. Even though the overall district kindergarten enrolment is growing, this means that this zone will be largely unchanged, in absolute numbers.
- The North Zone is projected to keep its current 13%. In absolute terms, this will yield a slight increase from the present kindergarten enrolment.
- The Central Zone will maintain its 47% of kindergarten enrollees, and see an absolute increase in enrolments to 244 in 2023.
- With a slightly increasing percentage of new housing going in to the South Zone in the next few years, it is projected that its kindergarten enrolments will grow in both absolute and relative terms. One caveat on this is that growth in the French Immersion program might absorb some of these students.

Lake Zone

While once there were several elementary schools around the lake, there are now only two, Palsson and Greenwell. These elementary schools have had varying configurations, but have mainly been K/5. Up until 2002, grade 5 students attended Stanley Gordon Middle School for grades 6/8, but this closed as of June 2002. At this time, Lake Cowichan Secondary changed its configuration from 9/12 to 6/12.

		K	1/5	6/8	9/12	Total
Actual	1998	75	389	234	365	1063
	1999	73	365	258	353	1049
	2000	63	381	255	321	1020
	2001	60	350	251	305	966
	2002	59	314	226	280	879
	2003	49	313	228	278	868
	2004	57	296	195	283	831
	2005	50	285	178	290	803
	2006	31	267	196	255	749
	2007	39	240	174	260	713
Projected	2008	45	241	162	243	692
	2009	46	264	135	236	681
	2010	46	269	144	226	685
	2011	49	276	146	210	681
	2012	43	300	148	187	679
	2013	43	306	149	178	675
	2014	43	303	158	184	687
	2015	42	299	175	177	694
	2016	42	295	182	189	709
	2017	41	285	187	196	709
	2018	41	282	184	205	712
	2019	41	279	179	222	721
	2020	40	277	171	231	720
	2021	40	274	170	229	712
	2022	39	270	169	225	703
	2023	38	267	167	220	692

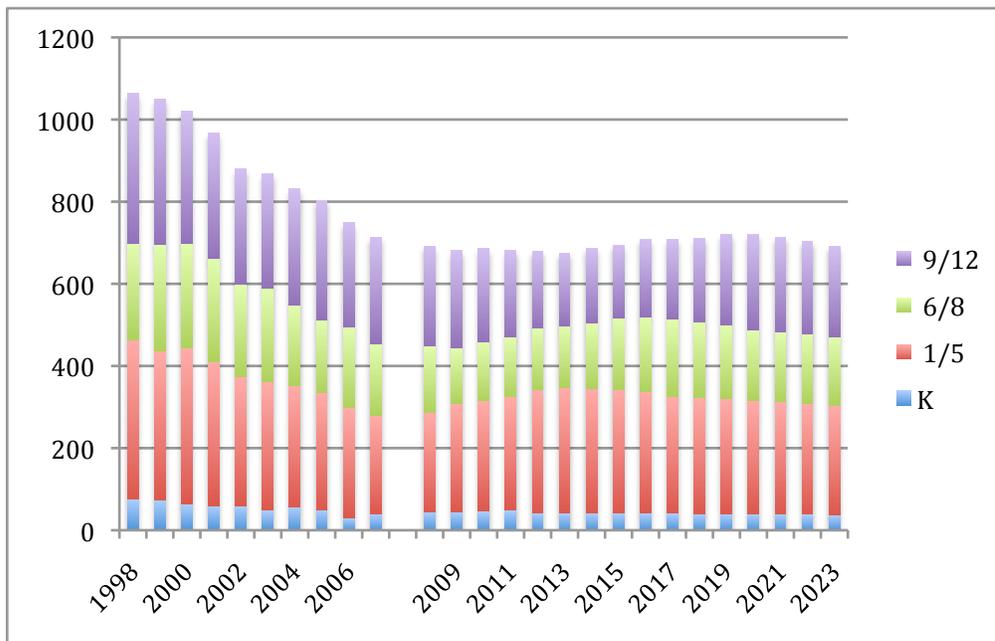


Figure 17 - Lake Zone - Projected Enrolments to 2023

In broad terms, the stabilizing of the kindergarten enrolment for the Lake Zone as a whole will allow all enrolments to stabilize at levels not unlike the 2007 enrolments.

Elementary enrolments will grow from the present 240 students to around 300 students over the next five years, but will gradually decline after that to around 270 by 2023.

Middle school (grades 6/8) will stay at about the current level of 160 to 170 students.

Secondary grades will fall steadily to around 180 students in 2015, but increase slowly from there to 220/230 students by 2020.

These projections of course assume that the current patterns of economic life in the zone continue. For the Lake Zone this means that the forestry industry will continue its decline in employment terms, with some land being transferred from forest use to housing. However this housing will be around the Lake (waterfront or water view), will command high prices and will appeal to families without children or to families as second homes. What affordable housing does develop, if any, will be in the Town of Lake Cowichan.

North Zone

In the North Zone, there are two main elementary schools, both enrolling K/7 at Chemainus and Crofton, with a very small school (K/6) on Thetis Island. Mt. Brenton Elementary used to serve the Saltaire area in the north of the District, but it was closed in 2001. There is no middle school, and students attend Chemainus Secondary for grades 8/12.

	K	1/7	8/12	Total
1998	77	657	487	1221
1999	77	651	497	1225
2000	81	614	493	1188
2001	74	591	490	1155
2002	59	554	471	1084
2003	65	528	503	1096
2004	62	528	493	1083
2005	63	527	481	1071
2006	58	508	445	1011
2007	56	466	415	937
2008	54	459	360	873
2009	55	435	358	848
2010	57	429	342	828
2011	62	423	337	822
2012	57	431	314	802
2013	57	422	318	797
2014	59	426	298	782
2015	60	428	293	781
2016	61	435	284	779
2017	61	441	284	787
2018	63	445	278	786
2019	64	446	288	797
2020	65	454	288	807
2021	67	463	291	820
2022	67	471	294	832
2023	68	479	296	843

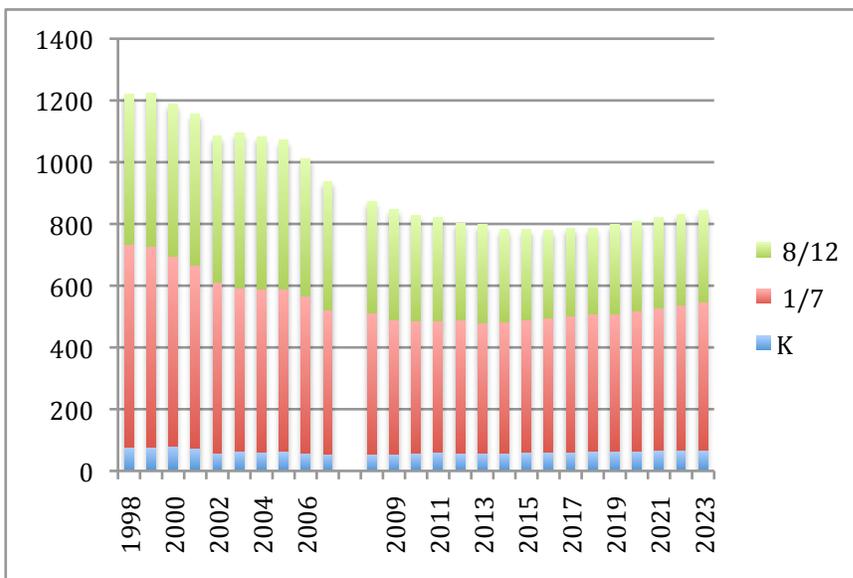


Figure 18 - North Zone Enrolment Projections to 2023

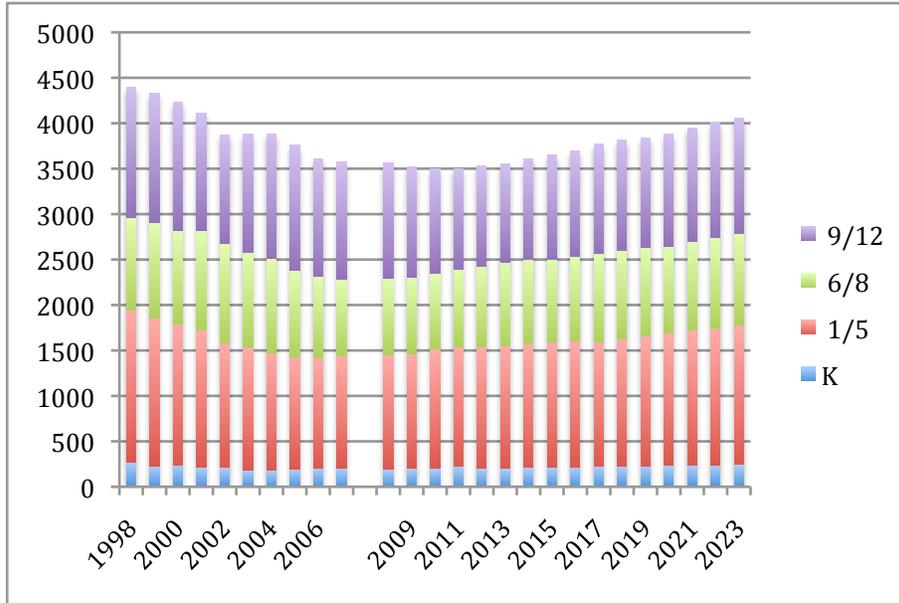
The North area's elementary enrolment will stabilize around the current level of 450 to 470 students, after declining to around 420 in 2013.

Secondary enrolment will fall most quickly in the next couple of years from the current (2007) 415, to around 280 to 300 by 2014, stabilizing at around those levels.

Again these projections are based on a continuation of the existing economic patterns in the North Zone which includes continued uncertainty in the forest and timber processing industries, and aging population and some limited growth in the tourism industry.

Central Zone

The Central Zone around Duncan has one major secondary school, currently enrolling grades 10/12, two middle schools enrolling grades 7/9, and eight elementary schools. The only school closed in the zone was Sahtlem, which was an annex to Tansor Elementary. Also in this zone, but not included in these figures, is Duncan Elementary which serves as the home of the French Immersion program.



	K	1/5	6/8	9/12	Total
1998	273	1,670	1,018	1,433	4,394
1999	230	1,631	1,047	1,419	4,327
2000	243	1,548	1,032	1,408	4,231
2001	212	1,515	1,094	1,289	4,110
2002	215	1,372	1,090	1,198	3,875
2003	187	1,356	1,041	1,298	3,882
2004	181	1,297	1,031	1,371	3,880
2005	194	1,237	947	1,378	3,756
2006	208	1,217	895	1,284	3,604
2007	203	1,238	846	1,287	3,574
2008	194	1,258	842	1,271	3,565
2009	200	1,260	842	1,218	3,520
2010	207	1,307	840	1,144	3,498
2011	224	1,321	850	1,106	3,501
2012	204	1,335	888	1,102	3,529
2013	207	1,339	929	1,083	3,558
2014	212	1,361	931	1,109	3,612
2015	216	1,377	913	1,146	3,652
2016	220	1,387	924	1,167	3,698
2017	222	1,378	971	1,199	3,769
2018	227	1,401	977	1,208	3,813
2019	232	1,427	977	1,201	3,837
2020	237	1,453	958	1,239	3,886
2021	241	1,480	976	1,255	3,951
2022	243	1,507	995	1,266	4,011
2023	244	1,535	1,011	1,270	4,060

Figure 19 - Central Zone Enrolment Projections to 2023

The Central Zone's kindergarten enrolment, which has picked up somewhat in the last couple of years, will continue to grow slowly but steadily in line with overall birth rates. This will provide an injection to the elementary grades which will also increase from the current level of 1,240 students to over 1,500 students by 2023.

Middle school enrolments (grades 6/8) will also grow from the current 850 students to around 1,000 by 2023.

At the secondary level (grades 9/12), enrolment will fall from the current level of 1,287 to just under 1,100 in 2013, but increasing again to 1,270 by the end of the projection period (2023).

Note: these figures do not include French Immersion students at Duncan Elementary, Mt Prevost Middle or Cowichan Secondary Schools.

Again these projections assume current economic conditions continue which in the case of the central zone assumes that Duncan's role as a service centre continues and there are no significant changes in the patterns of enrolment between the public school system and the Band and private schools.

South Zone

The South Zone has three elementary schools (grades K through 5) – Cobble Hill, Bench and Discovery – feeding to one middle school (George Bonner – grades 6/8) and one secondary school (Kelsey – grades 9/12). Several smaller elementary schools have closed in the last few years – Mill Bay, which has reopened with a French Immersion program, Elsie Miles, and Cowichan Station. Again, French Immersion numbers are not included in this assessment.

	K	1/5	6/8	9/12	Total
1998	201	1237	776	946	3160
1999	184	1224	747	988	3143
2000	168	1143	797	1084	3192
2001	170	1101	793	1143	3207
2002	161	1045	815	1131	3152
2003	174	990	778	1213	3155
2004	149	982	753	1208	3092
2005	139	934	734	1248	3055
2006	121	869	691	1206	2887
2007	123	806	672	1170	2771
2008	119	814	620	1117	2671
2009	125	777	631	1062	2595
2010	130	783	602	1041	2557
2011	142	773	628	981	2524
2012	130	807	580	977	2494
2013	133	818	583	941	2474
2014	137	838	560	946	2481
2015	141	855	577	923	2496
2016	145	869	588	894	2496
2017	147	870	623	882	2522
2018	152	892	634	875	2553
2019	157	916	638	900	2611
2020	161	940	631	939	2671
2021	165	965	648	960	2738
2022	168	991	666	976	2800
2023	170	1017	682	981	2851

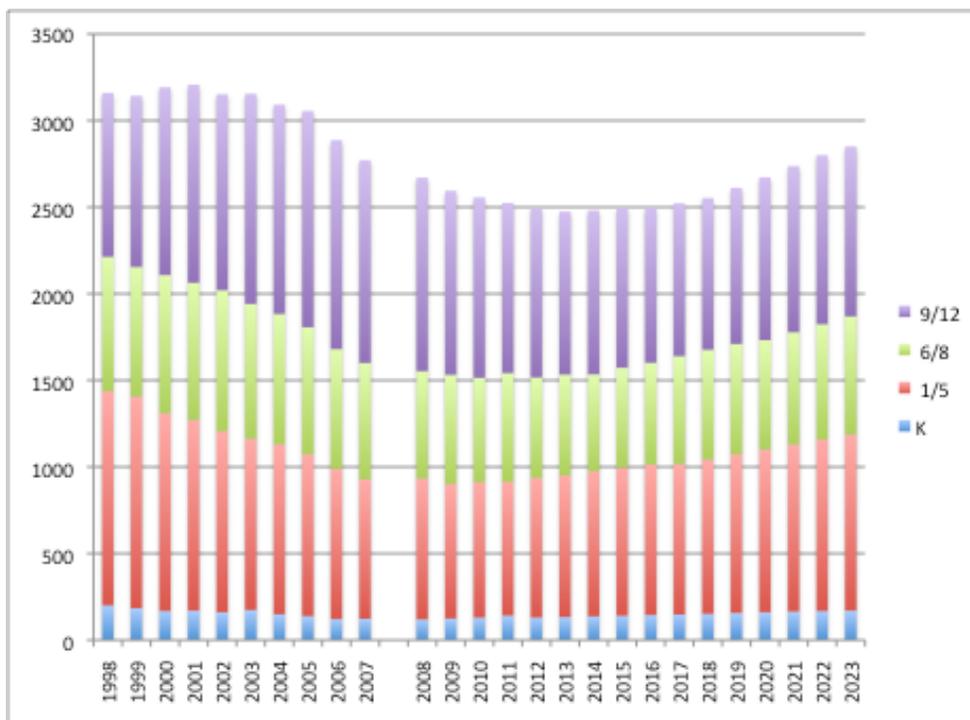


Figure 20 - South Zone Enrolment Projections to 2023

Over the last ten years, kindergarten, elementary and middle school enrolments have fallen steadily, while secondary enrolment has increased to peak at 1,248 in 2005, but has declined from there.

These patterns will reverse over the next 15 years.

Kindergarten enrolments will grow steadily from the current level to 170 by 2023.

Elementary enrolments will stay around 780/800 students until 2012, when they will start growing and top 1,000 in 2023.

Middle school enrolments will decline slowly until 2014, when the level of 560 will be reached, and then grow slowly to reach 680 in 2023.

Secondary enrolment will fall to 2018, when it will be around 875, and will grow from there to 980 in 2023.

Again, this pattern of enrolments assumes continuation of the current economic conditions. New housing will continue to be built in the area, but will be expensive for younger families and will largely be marketed to more wealthy in-migrants without school age children living at home. More housing will be zoned in or close to the 'village' centres of Shawnigan Lake, Cobble Hill and Mill Bay, and it will be more affordable and may allow families to live in these areas and commute to work in Victoria. However the increasing cost of gas may cause this pattern to change, but may be somewhat offset by trends such as telecommuting and four day weeks.

French Immersion

Historically, French Immersion students attended Duncan Elementary for kindergarten to grade 6, Mt Prevost Middle School for grades 7/9, and Cowichan Secondary for grades 10/12. In 2005, a French Immersion kindergarten was started at Mill Bay Elementary to serve students in the South Zone; it has added one grade per year and currently enrolls grades K/2, with grade 3 starting in September 2008.

	K	1/5	6/8	9/12
1998	45	207	84	82
1999	54	213	77	78
2000	68	226	82	68
2001	54	224	88	63
2002	69	231	99	74
2003	73	258	85	69
2004	82	281	80	76
2005	88	296	89	77
2006	83	308	109	68
2007	89	347	120	75
2008	86	373	128	84
2009	86	396	133	102
2010	86	418	148	106
2011	86	424	170	122
2012	86	429	190	130
2013	86	426	213	135
2014	86	426	220	159
2015	86	426	224	175
2016	86	426	222	194
2017	86	426	222	209
2018	86	426	222	213
2019	86	426	222	216
2020	86	426	222	215
2021	86	426	222	215
2022	86	426	222	215
2023	86	426	222	215

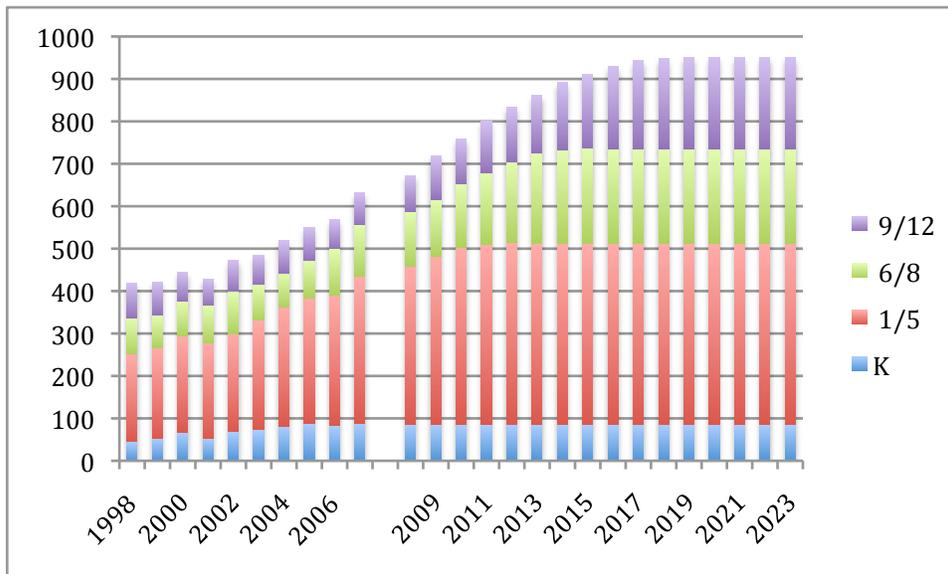


Figure 21 - French Immersion Enrolment Projections to 2023

Our projection of French Immersion enrolment assumes that kindergarten enrolments do not grow overall from their present level, and that this will lead to the eventual stabilization of the total enrolment in the program of around 950 students.

The distribution of the elementary students between Duncan Elementary and Mill Bay Elementary is a policy decision, as are most other issues related to French Immersion planning.

Part B - Environmental Scan

Part 1 of this report lays out enrolments, past and projected future, in the CVSD. The projections were created with a thorough knowledge not only of the way enrolments function, but also of the factors that cause or may cause school enrolments to vary. In this section we look at some of these 'why' issues. Where possible we will use hard data to back up our conclusions, but above all we hope that what we are saying resonates with those who read this report.

While there is no particular order to the presentation of these factors, we are generally moving from the individual family situation to more global issues and then to what might be termed data aggregation issues.

Changing Family Structures

Back in the 1950s, when many of the schools in the Cowichan Valley were being planned or built, most houses were occupied by families and most families had several children. While we don't have the Cowichan Valley figure, for BC as a whole in 1961, 84% of families had children living at home. Even in 1991, 55% of households in the Cowichan Valley were defined by the census for that year as being 'families with children at home'. This figure fell to 48% in 2001 and 36% in 2006.

The reasons for this are both complicated and quite simple: couples/women either delaying childbirth completely or opting for only one child; couples living longer after their children leave home, and often relocating to places that offer a high quality of life for older people.

Even examining the implications of the decline from 48% in 2001 to 36% in 2006, shows a startling increase in the number of houses in the Cowichan Valley occupied by families without children.

There is one exception to this trend as shown below:

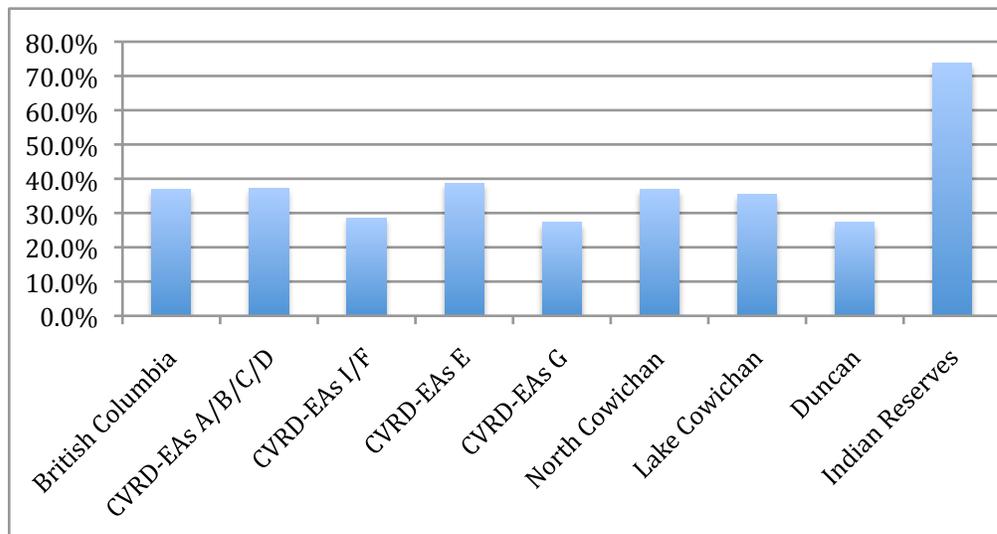


Figure 22 - Families with Children at Home - 2006

Indian Reserves¹, primarily the Cowichan Tribes, still have over 70% of their households containing children, when expressed as a percentage of total private households.

While some of these children attend the Band School in Glenora, or private schools, most attend CVSD schools, and these children are one reason that enrolments have declined more slowly in the Central Zone than in other zones.

There is no data on family size for aboriginal people living off-reserve, but it is likely that they too have higher family formation rates than non-aboriginal people. In the 2006 census, there were 5,230 people who identified themselves as having an aboriginal identity. Of these one third lived on reserve, one third live in North Cowichan and 10% live in the City of Duncan.

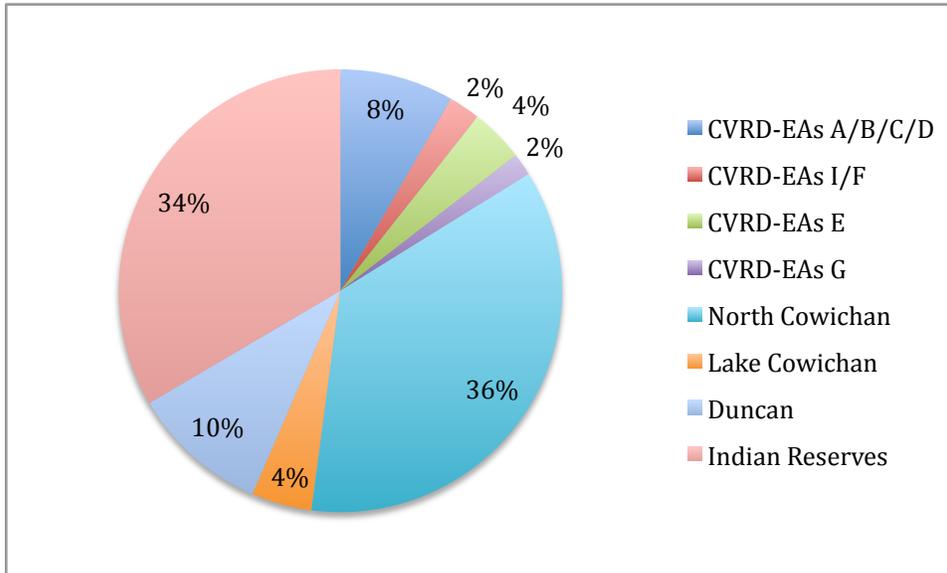


Figure 23 - Distribution of Persons of Aboriginal Origin - 2006

¹ The term 'Indian Reserves' is the one used by Statistics Canada in their census reporting.

New Migrants and Mobility

Enrolments in the CVSD have also declined because of who is not here. In other parts of BC, especially in the Lower Mainland, enrolment declines are much less, and in some cases are still increasing. In those districts the main growth is coming from new immigrant populations. Most of the Cowichan Valley population of immigrants arrived before 1991.

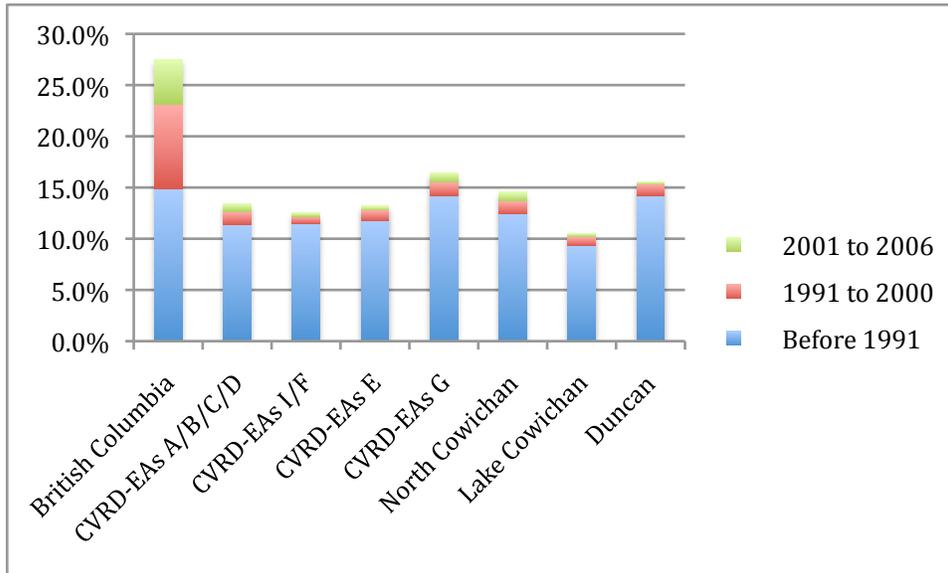


Figure 24 - Immigrants by Period of Immigration - 2006

This is not to say that the Cowichan Valley has not in the past five years seen in-migration, but only a small percentage came from another country. Most moved from elsewhere in BC or from a different province.

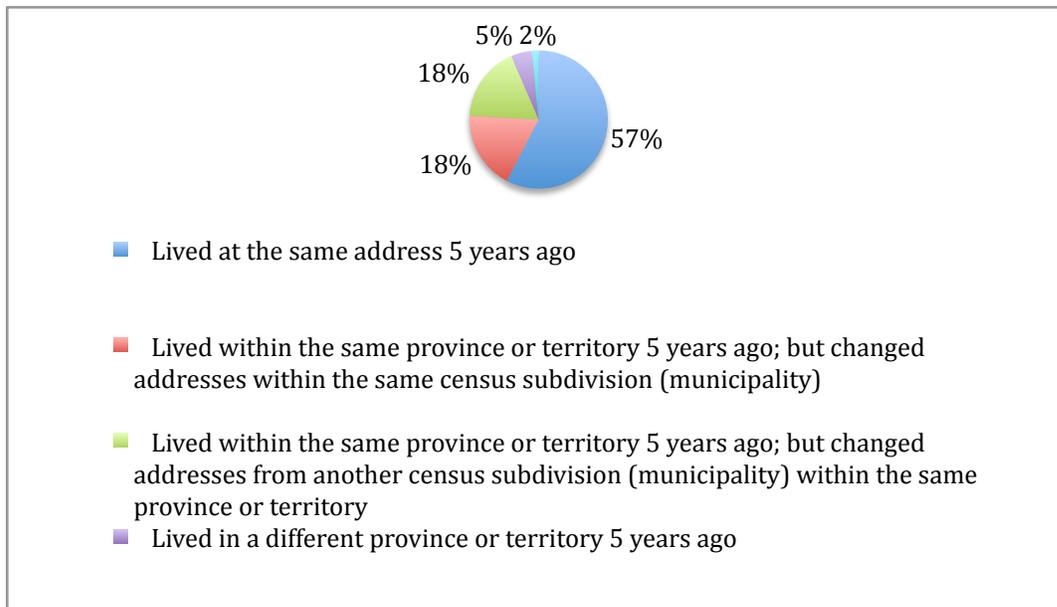


Figure 25 - Mobility - 2006

Increasing House Prices and Associated Issues

Affordable home ownership was another part of the Canadian post World War II dream, and made it possible for a family to have two or more children based on the income of one wage earner.

House prices have increased dramatically in many parts of the world in the last decade, and the Cowichan Valley is no exception.

	Sales	Average Price	Median Price
2000	487	\$152,400	
2001	688	\$154,500	\$133,000
2002	826	\$167,800	\$162,000
2003	888	\$180,400	\$169,000
2004	862	\$215,900	\$207,000
2005	895	\$264,600	\$256,000
2006	995	\$284,200	\$282,000
2007	987	\$350,000	\$339,400
2008		\$417,000	\$368,000

Annual MLS Sales Summary Data
Duncan Region of VIREB
Includes all Cowichan Valley
Single Family Residential Units

Figure 26 - Housing Sales and Prices - 2000 to 2008

Of course, all things are relative, and prices in the Cowichan Valley are more affordable than those in Victoria, even in the Western Communities.

	Cowichan Valley	Western Communities	Difference	Percent
2001	\$154,500	\$208,000	\$53,500	74%
2002	\$167,800	\$221,050	\$53,250	76%
2003	\$180,400	\$263,100	\$82,700	69%
2004	\$215,900	\$323,150	\$107,250	67%
2005	\$264,600	\$380,550	\$115,950	70%
2006	\$284,200	\$401,450	\$117,250	71%
2007	\$350,000	\$444,250	\$94,250	79%
2008	\$417,000	\$472,750	\$55,750	88%

Figure 27 - Relative House Prices - 2001 to 2008

Up until 2006, the average price of a house in the Cowichan Valley was around 70% of the equivalent price in the Western Communities (Colwood and Langford) and this meant a notional saving of over \$100,000. But in the last year or so, house prices in both jurisdictions have risen, with the Cowichan Valley notionally 'catching up'. As can be noted in the previous table, the average price is outstretching the median price. Together these facts indicate that the housing coming onto the market is very much 'high end', likely large dwellings on large lots, and not oriented to families with children.

Coming back to the dream of affordable housing. Even at 2006 prices, which are likely over \$100,000 less than the final 2008 figures, housing was outstretching incomes.

	Average Price	Average Family Income	Times Family Income
1996	\$156,900	\$51,332	3.1
2001	\$154,500	\$51,446	3.0
2006	\$284,200	\$60,105	4.7

Figure 28 - Comparing House Prices to Income - 1996, 2001, 2006

It should also be remembered that these are family incomes and the comment at the beginning of this section referred to 'the wage of a single earner'.

Housing is a key variable for couples as they consider their hopes and aspirations: jobs and careers, nice house, raising a family. They are hard choices and often 'just one child after we've built our careers and have a nice home' leads to what demographers refer to as 'a completed family formation rate of less than one child per family'.

Changing Travel to Work Patterns

Especially in the south of the district, many people traveled over the Malahat to jobs in Victoria, and these commutes were done almost exclusively by car. In other areas, car or truck was the primary way of getting to work.

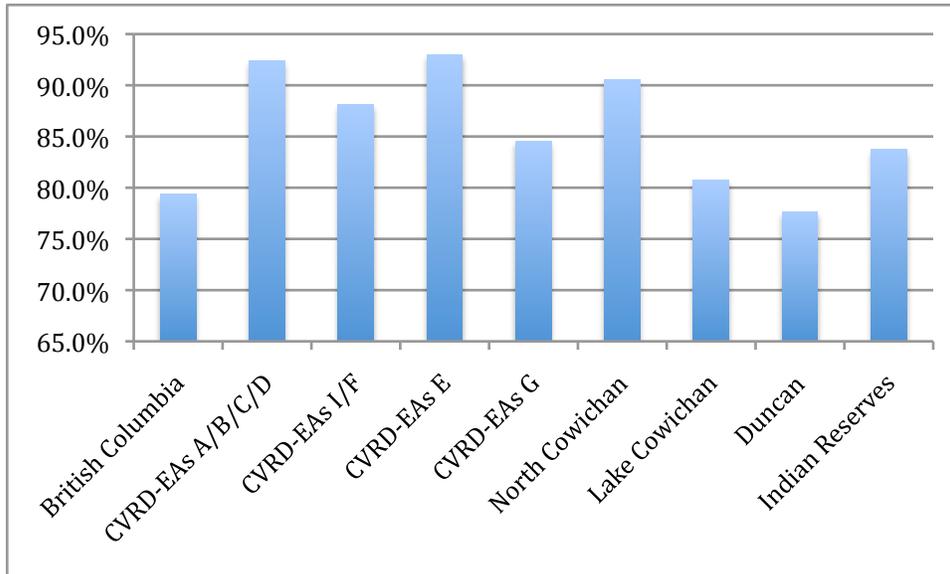


Figure 29 - Travel to Work by Car, etc - 2006

Indeed the difference in house price noted earlier made this a reasonable trade-off. Decisions involving houses and jobs are not changed easily or quickly, but the equation will look different to newcomers if the price of gasoline either stays where it is, or continues to increase.

Gasoline and fuel oil, average retail prices by urban centre (monthly)					
(Victoria)	Feb-08	Mar-08	Apr-08	May-08	Jun-08
	cents per litre				
Victoria	110.7	116.9	123.6	134.9	144.7
	Regular unleaded gasoline at full service filling stations				

Figure 30 - Rising Gas Prices - Victoria

Evolution of the gasoline price index

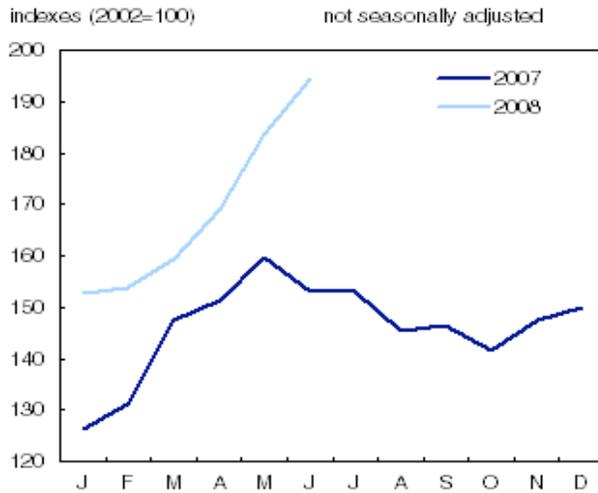


Figure 31 - Rising Gas Prices - Canada

These increases will have a chilling effect on people considering long commutes, unless they can reduce them to once or twice per week by working from home. While still only a small percentage of the population work in this manner, it does offer opportunities for those living far from work.

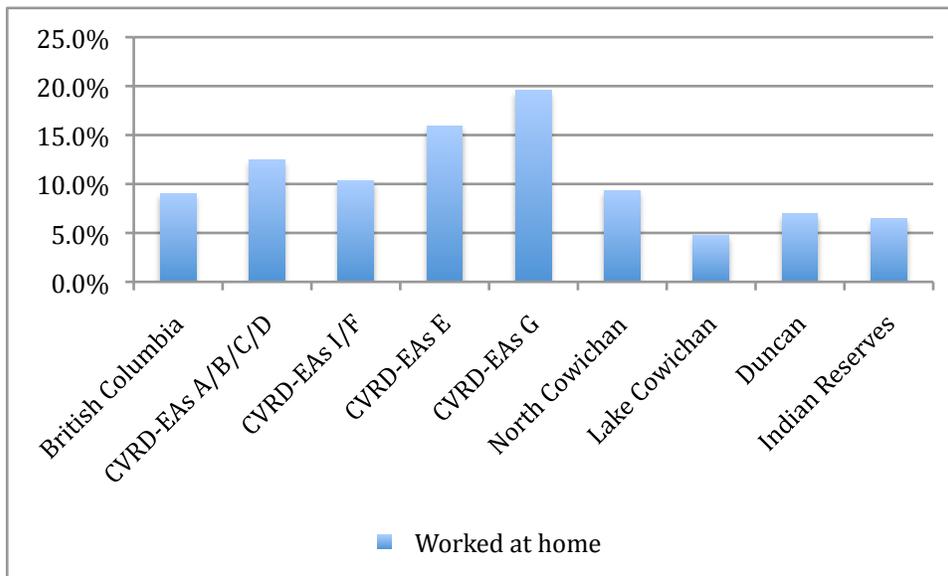


Figure 32 - Percent of Workers Working from Home - 2006

Speed of Development

New additions to the housing stock in a community bring opportunities for additional children to enroll in school. For a principal or parent volunteer, it is easy to look at a new housing development and say 'see; more children on the way'.

However there have always been new housing developments and these 'additional students' are already built into the enrolment projections since retention ratios assume past practices will continue. Thus it is the rate of development that is the critical variable: the relative number of new houses, not the absolute number.

The historical pattern is as follows:

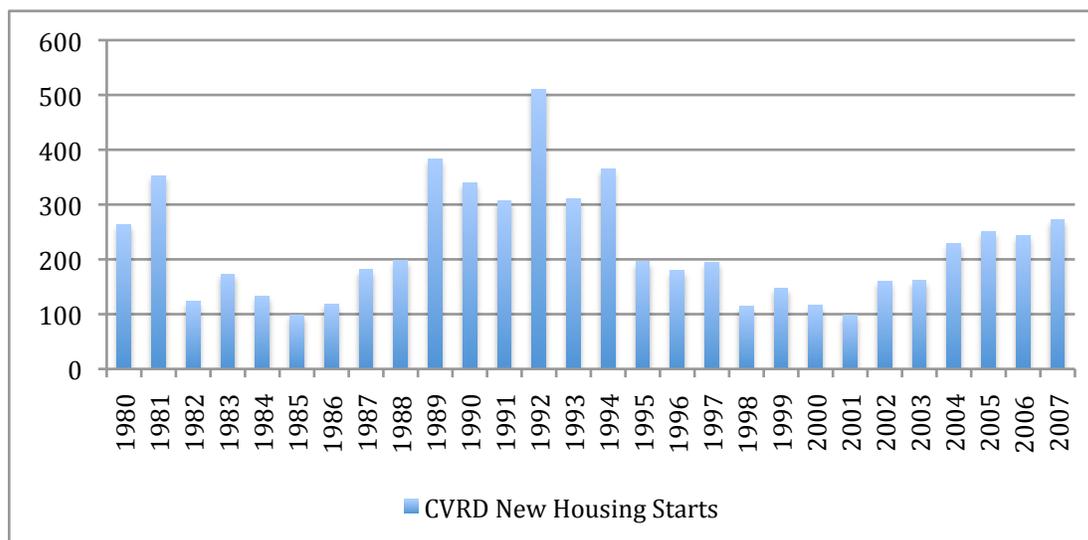


Figure 33 - CVRD - New Housing Starts - 1980 to 2007

The average new housing starts per year since 1980 in the CVRD area is 222, with peaks in the early 1980s and early 1990s. Certainly in the last few years the number of new starts has been increasing, but has yet to reach the frenzy of these two previous peaks. Has this development been occurring more particularly in the South Zone (EAs A/D); the answer seems to be that the pattern in the south matches the overall pattern in the CVRD, but with a slightly higher proportion of new starts in the last five years than previously.

	Total	1981/5	1986/90	1991/95	1996/00	2001/5
CVRD	31265	2440	2550	4675	2760	2330
EAs A/D	7540	710	760	1190	730	745
% South Zone	24%	29%	30%	25%	26%	32%

Figure 34 - Age of Dwellings - 1981/5 to 2001/5

And a review of the current housing developments underway indicates that they are at the higher end of development, with little 'affordable family housing' that might lead to more students...or rather more students than in past years.

Changing Forecasts

What are other agencies projecting in terms of demographics? Two studies are underway at the present time: North Cowichan are starting the review of their OCP, and the CVRD are part way through the OCP revision process for the Cobble Hill/Shawnigan Lake Electoral Areas.

North Cowichan have revised their population projections considerably; the previous projection was made in 2002. Both are projections of the 2016 population.

	0/19 age group		20/39 age group		Total Population
	#	%	#	%	
Actual 1996	7,125	28%	6,425	25%	25,345
2002 Projection of 2016 Population	8,240	22%	8,870	24%	37,100
2008 Projection of 2016 Population	6,224	20%	6,184	20%	31,664

Figure 35 - North Cowichan Municipal Population Projections to 2016

The following points can be noted:

- The overall projected population for 2016 is lower than previously projected, down from 37,100 to 31,700. This is largely because the growth to 2006 was less than projected. This in turn was caused by two factors: more older people moving into the municipality than projected; and lower levels of housing occupancy than projected (ie fewer people in each house)...which of course was because the in-migrants were older and had few if any children.
- The proportion of those in the age cohorts 0/19 and 20/39 are revised downward. Fewer mothers of child bearing age and fewer children.

The report summarizes these trends and changes in projections as follows:

The proportion of residents in the family formation stages of life (20-44 years of age) is declining within North Cowichan (from 30% to 22%). In 1996, this percentage was about 5% below the provincial average; and in 2006, it was about 7% below. In short: as a District, we are getting older at a much faster rate than expected in 2002.

In the south of the District, the consultants' prognosis is very similar. They note:

At the same time, the proportion of regional population for all age groups under the age of 55 will decline or remain constant. Consequently, the age distribution within the CVRD's population as a whole is expected to change. In 2006, 20.8% of residents fell into the 0-17 age group and only 17.1% in the 65+ cohort. However, by 2016, there is expected to be a smaller proportion of children (17.7%) and a larger proportion of seniors (20.1%).

Cobble Hill – Shawnigan Lake Community Profile: Shared past, Common future
 South Cowichan OCP Background Study – December 2007

Appendix A – Zone Fact Sheets and Frequently Asked Questions (FAQs)

It is anticipated that one or more meetings will be held to discuss with the public and interested staff the results of this demographic assessment.

Of particular interest will be the implications for school enrolments in each zone.

In these fact sheets, the likely future allocation of enrolment between schools to 2023 is laid out. It must be stressed however that the actual enrolment at any school is the result not just of demographics, but also, and perhaps primarily, the decisions that will be taken by the School Board as it considers this report and its other options, both in the immediate and longer term future.

Also included in these fact sheets are a set of questions that anyone looking at the charts and tables might ask.

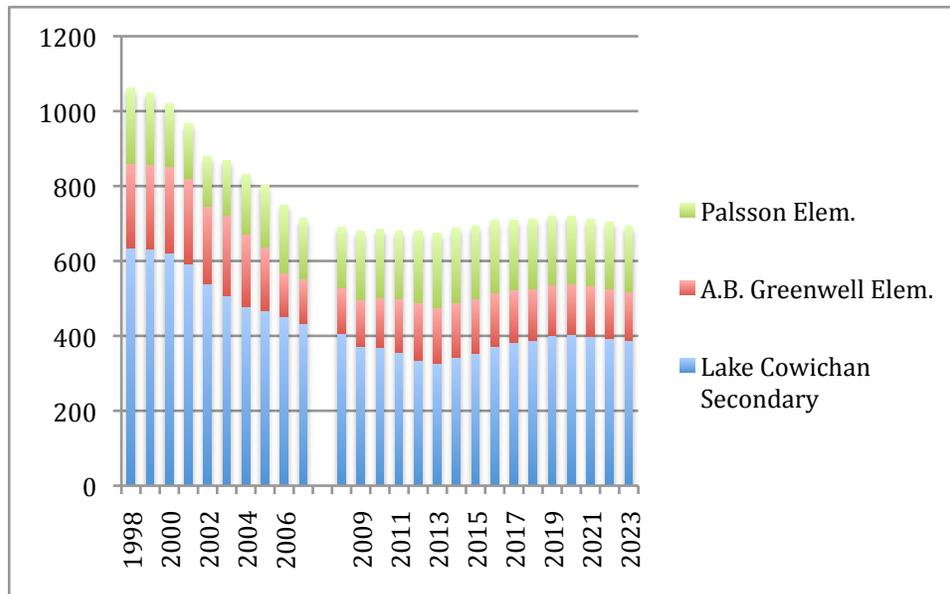
We anticipate that there will be many more questions that come from those public information meetings when they are held.

Lake Zone

The distribution of this zone’s enrolments over the 2008/2023 period is projected to be as follows:

	Lake Cowichan Secondary	A.B. Greenwell Elem.	Palsson Elem.
1998	635	225	203
1999	632	226	191
2000	621	231	168
2001	592	229	145
2002	538	209	132
2003	506	216	146
2004	478	194	159
2005	468	168	167
2006	451	117	181
2007	434	118	161
2008	406	122	164
2009	371	126	183
2010	370	131	184
2011	356	143	182
2012	335	154	189
2013	327	149	200
2014	342	148	198
2015	352	146	196
2016	372	144	193
2017	383	139	187
2018	389	138	185
2019	401	137	184
2020	403	135	182
2021	399	134	180
2022	394	132	177
2023	387	130	175

Lake Cowichan Secondary enrolment includes Stanley Gordon enrolment from 1998 to 2002.
 Greenwell includes Yount from 1998 to closure.
 Palsson includes Honeymoon Bay from 1998 to closure.



Why have elementary enrolments declined?

Kindergarten enrolments have dropped significantly – from 75 in the Zone in 1998, to a low of 31 in 2006. The rest of the grades have just followed suit. This decline in kindergarten enrolments is the greatest of any of the District's four zones.

Why have kindergarten enrolments declined?

Presumably very few families with younger children are moving into the Lake Zone. Its existing housing stock is occupied by older people and the new housing developments are oriented to retirees or pre-retirees, and to second home owners.

Behind these trends is the loss of employment in the zone, primarily loss of forestry and related processing jobs.

Why have secondary enrolments declined?

There would seem to be two reasons for this:

As with kindergarten and elementary enrolments, there is a net outflow of families from the zone who are not being replaced by younger families with children.

The small size of Lake Cowichan Secondary, while attracting some students, cannot offer the course load in the higher grades that students need to graduate; therefore they move to high schools which do offer these options.

There is lots of new housing being built, but few children; why is that?

Firstly the new housing is not very affordable. With lot prices of upward of \$200,000 (view lots), a house cannot be built for a price that is affordable by most families, especially those with younger children.

Secondly, the big demand everywhere on Vancouver Island is from retiring baby boomers or families looking for a second home on the Lake. There are likely more kids around on the weekends and in the summer, than during the week in school time.

What can be done about it?

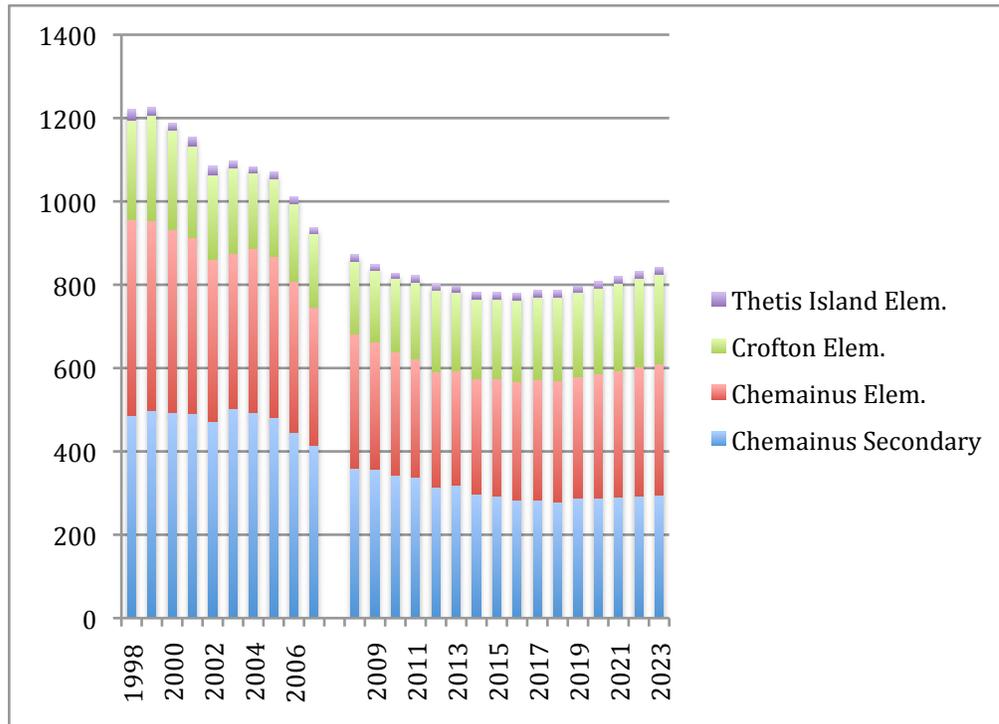
This is a demographic assessment report. Future policy is not in our mandate. Hopefully this report will help the School District, and the Regional District and municipalities, to define appropriate public policies.

North Zone

The distribution of this zone’s enrolments over the 2008/2023 period is projected to be as follows:

	Chemainus Secondary	Chemainus Elem.	Crofton Elem.	Thetis Island Elem.
1998	487	469	240	25
1999	497	456	254	18
2000	493	440	238	17
2001	490	423	221	21
2002	471	390	203	20
2003	503	373	204	16
2004	493	393	182	15
2005	481	388	184	18
2006	445	364	185	17
2007	415	332	175	15
2008	360	321	174	17
2009	358	304	172	14
2010	342	297	176	14
2011	337	285	184	16
2012	314	278	194	16
2013	318	275	189	15
2014	298	278	191	16
2015	293	280	192	16
2016	284	284	196	16
2017	284	288	198	16
2018	278	291	200	16
2019	288	292	201	16
2020	288	298	205	17
2021	291	304	209	17
2022	294	309	212	17
2023	296	314	216	17

Mt. Brenton Elem. -
 Enrolment added to
 Chemainus Elem.
 From 1998 to
 closure.



How does the North Zone compare to the other zones?

The declines in the North Zone have not been as steep as seen in the Lake Zone, but are similar to the Central Zone. The South Zone has different characteristics.

Does the different grade configuration in the North mask any differences?

Yes; because the elementary schools are K/7, their decline has another few years to run. They are not projected to bottom out until 2013 whereas with the grade K/5 configurations, 2007 was hopefully the lowest enrolment year.

Why have kindergarten and elementary enrolments declined?

Firstly straight demographic decline which is seen across all BC and wider: fewer women of child bearing age and slight declines in birth rate have yielded few births.

Secondly, loss of employment, high land prices, lack of affordable housing and few new immigrants (who tend to have larger families).

What is happening with secondary enrolments?

For most of the last ten years, Chemainus Secondary has had an enrolment of around 480 to 500 students. This may have posed challenges for a full secondary school, especially in grades 11 and 12. However in the last couple of years enrolment has slipped to the low 400s and is projected to decline further to around 280. This is going to make it very challenging to run a full secondary program.

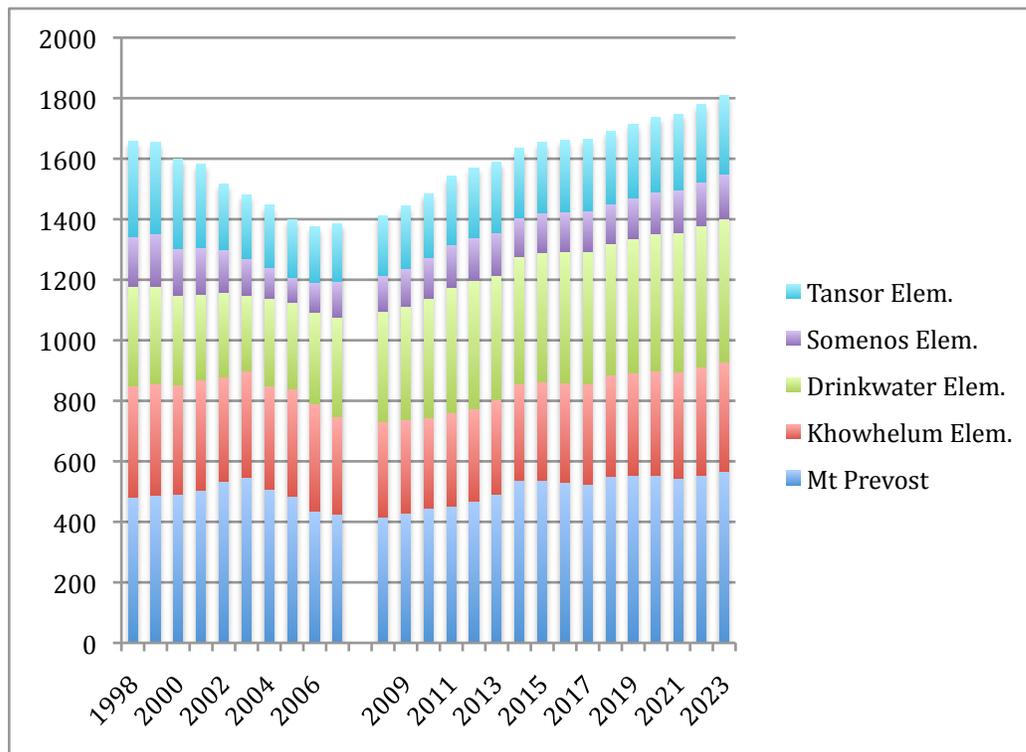
What can be done about it?

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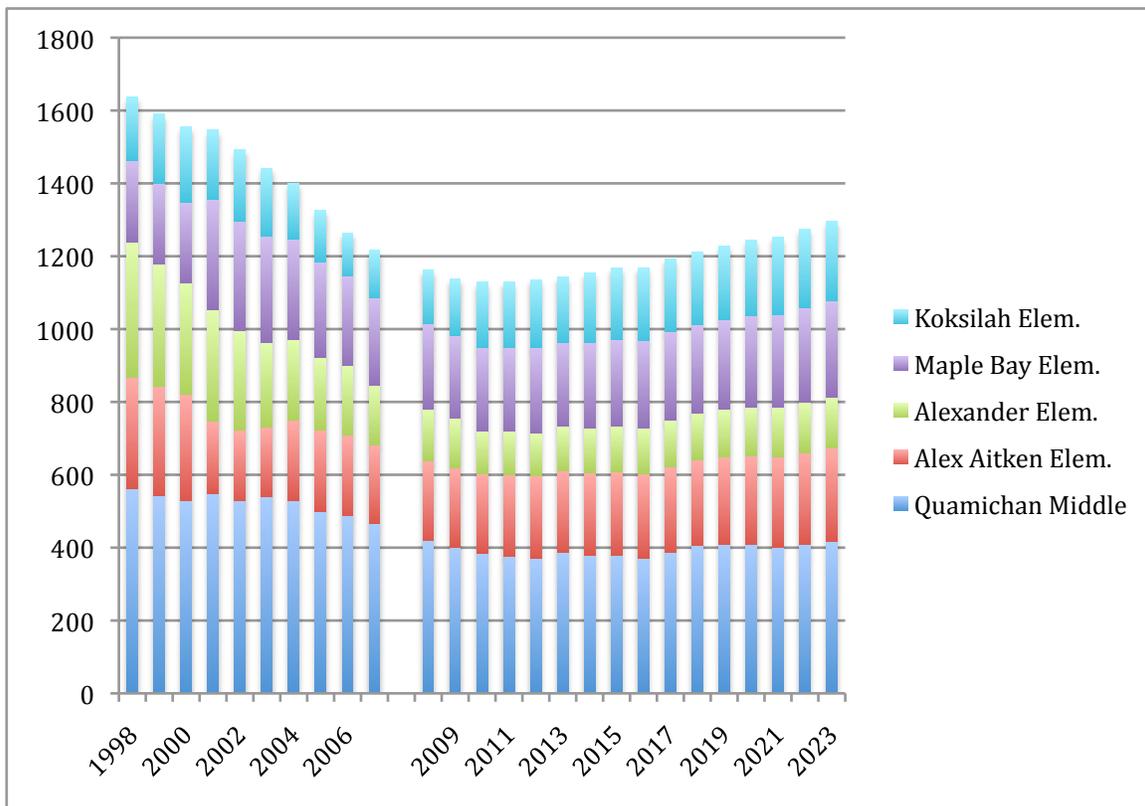
Central Zone

The distribution of this zone’s enrolments over the 2008/2023 period is projected to be as follows:

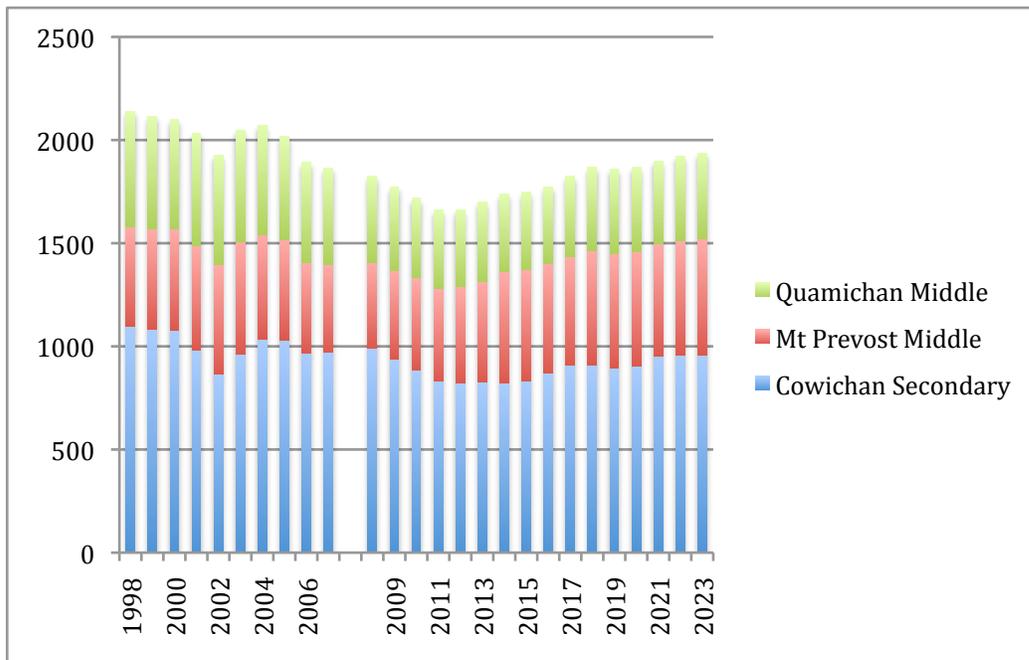
	Mt Prevost	Khowhelum Elem.	Drinkwater Elem.	Somenos Elem.	Tansor Elem.
1998	482	368	327	165	317
1999	489	368	321	175	301
2000	491	362	297	153	295
2001	506	364	282	153	278
2002	534	345	279	142	218
2003	548	350	252	121	209
2004	507	344	287	102	206
2005	486	353	288	82	190
2006	437	353	303	98	183
2007	426	321	329	117	193
2008	416	315	364	118	199
2009	429	309	373	127	206
2010	445	300	395	134	210
2011	452	308	416	141	224
2012	467	308	422	141	231
2013	490	313	413	141	234
2014	537	320	418	129	229
2015	539	325	426	131	233
2016	531	329	432	132	236
2017	525	332	437	134	238
2018	552	332	435	133	238
2019	555	338	443	136	243
2020	555	345	451	138	247
2021	544	351	460	141	252
2022	554	357	467	143	256
2023	565	363	475	146	260



	Quamichan Middle	Alex Aitken Elem.	Alexander Elem.	Maple Bay Elem.	Koksilah Elem.
1998	561	306	373	223	175
1999	543	299	336	222	190
2000	528	292	307	221	206
2001	547	201	306	301	191
2002	528	194	275	300	196
2003	540	192	232	292	185
2004	530	219	223	276	151
2005	500	224	198	262	141
2006	487	223	189	246	118
2007	467	215	165	238	131
2008	419	219	142	233	148
2009	402	218	134	227	156
2010	385	217	118	229	179
2011	376	224	121	227	182
2012	371	226	116	236	187
2013	386	224	124	230	179
2014	380	227	123	233	193
2015	379	231	124	236	197
2016	369	234	126	239	199
2017	387	236	127	242	201
2018	406	236	128	242	200
2019	409	240	130	247	203
2020	409	245	133	251	207
2021	401	249	135	256	211
2022	408	253	137	260	215
2023	416	257	139	264	218



	Cowichan Secondary	Mt Prevost Middle	Quamichan Middle
1998	1097	482	561
1999	1083	489	543
2000	1079	491	528
2001	981	506	547
2002	864	534	528
2003	961	548	540
2004	1035	507	530
2005	1032	486	500
2006	967	437	487
2007	972	426	467
2008	990	416	419
2009	940	429	402
2010	886	445	385
2011	830	452	376
2012	824	467	371
2013	826	490	386
2014	824	537	380
2015	831	539	379
2016	871	531	369
2017	911	525	387
2018	911	552	406
2019	894	555	409
2020	906	555	409
2021	952	544	401
2022	959	554	408
2023	956	565	416



What are the key demographic issues in the Central Zone?

Enrolments in the Central Zone are holding up better than all the other zones.

Higher family formation rates and family sizes among the First Nations groups have limited the declines prevalent all across BC in elementary enrolments over the last ten years.

The Mt Prevost area has also held up better than on the Quamichan side of the zone. This is likely a result of the higher priced housing and development toward Maple Bay which has not yielded as many students as might have been expected, given the number of new homes built. The housing in the Mt Prevost area is generally more affordably priced.

Have enrolments at any of the elementary schools started increasing after their long decline?

Yes. Drinkwater's enrolment bottomed out in 2003; Somenos in 2005; Tansor and Koksilah in 2006. For all the other schools, 2007 was the lowest enrolment year, and we await the Sept 30th 2008 figures to see if those schools have started the reversal of their enrolment fortunes.

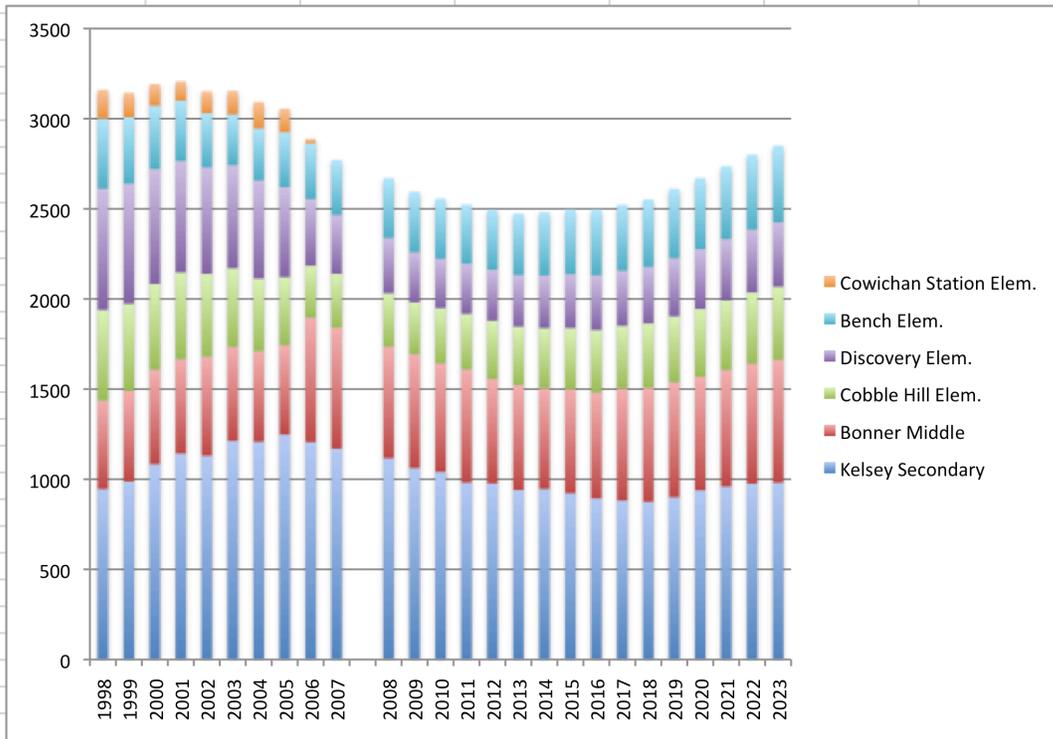
What can be done about it?

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South Zone

The distribution of this zone’s enrolments over the 2008/2023 period is projected to be as follows:

	Kelsey Secondary	Bonner Middle	Cobble Hill Elem.	Discovery Elem.	Bench Elem.	Cowichan Station Elem.
1998	946	491	503	672	390	158
1999	988	502	484	666	369	134
2000	1084	524	476	637	352	119
2001	1143	524	481	618	335	106
2002	1131	549	460	590	301	121
2003	1213	522	436	572	282	130
2004	1208	503	403	544	289	145
2005	1248	496	378	499	305	129
2006	1206	691	288	369	310	23
2007	1170	672	298	326	305	0
2008	1117	620	296	306	332	
2009	1062	631	289	277	335	
2010	1041	602	307	273	333	
2011	981	628	308	278	328	
2012	977	580	323	282	332	
2013	941	583	325	286	341	
2014	946	560	333	292	350	
2015	923	577	340	298	358	
2016	894	588	346	304	364	
2017	882	623	347	306	365	
2018	875	634	356	314	374	
2019	900	638	366	322	385	
2020	939	631	376	331	395	
2021	960	648	386	340	405	
2022	976	666	395	348	415	
2023	981	682	405	357	426	



What are the main demographic themes in the South Zone?

Over the past 10 years, the kindergarten and elementary enrolments have declined in line with district and provincial trends, with kindergarten enrolments perhaps declining faster than might be expected.

But middle school and especially secondary enrolments have held up well, increasing while the average for the District has been for a slight decline.

Why is this?

The key variable is the price of housing. In the South Zone it is generally priced in a range to be accessible to families who are more established: older workers, higher pay levels. These families also likely have a house to sell elsewhere – they are not first time buyers. These families on average also tend to have older children of secondary school age rather than elementary.

What are the key demographic issues for the future?

The key variables are kindergarten enrolments and house prices/overall lifestyle affordability.

If kindergarten enrolments pick up well over the next five years (as we project), then all school enrolments will eventually feel the swell of this rising tide. However lack of affordable housing and recent rises in house prices places a significant question mark over this assumption.

By 'house prices/overall lifestyle affordability' we are referring to the interaction of rising house prices and rising fuel costs to commute to work in Victoria. Both these cost elements have recently increased significantly and the previous status quo that cheaper house prices north of the Malahat allowed for longer but more expensive commuting, may be a thing of the past. Not a lot can be done if a family is already established in Mill Bay or Shawnigan Lake, but new house buyers are going to assess the situation differently than those in the past. We will have to wait and see how this plays out over the next few years.

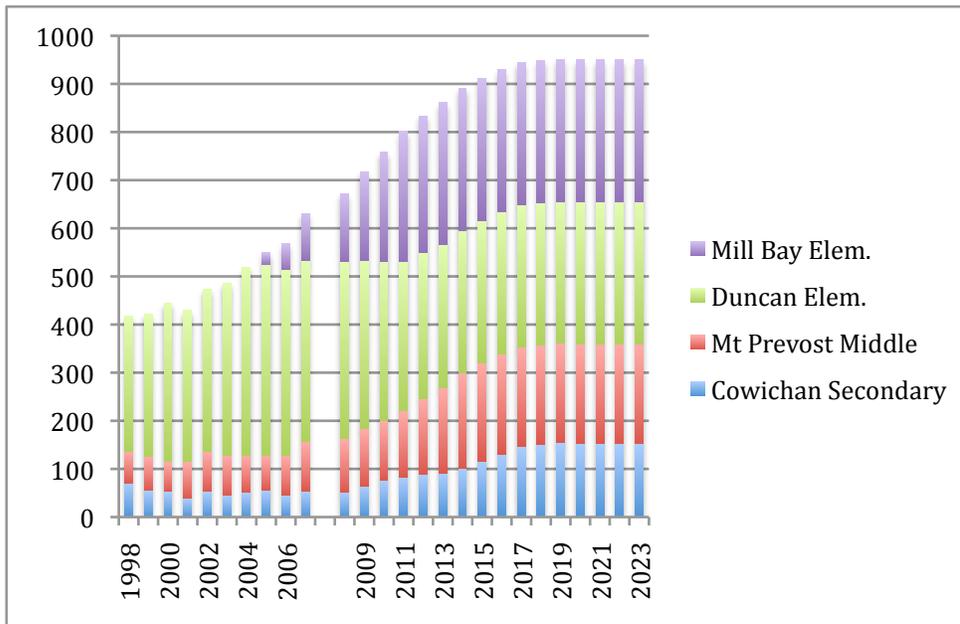
What can be done about it?

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French Immersion

The distribution of French Immersion students over the 2008/2023 period is projected to be as follows:

	Cowichan Secondary	Mt Prevost Middle	Duncan Elem.	Mill Bay Elem.
1998	71	66	281	0
1999	55	71	296	0
2000	53	62	329	0
2001	39	77	313	0
2002	53	83	337	0
2003	45	83	357	0
2004	51	78	390	0
2005	56	72	396	26
2006	46	83	385	54
2007	54	103	376	98
2008	52	111	368	141
2009	65	119	350	184
2010	76	124	331	228
2011	83	138	310	271
2012	88	158	302	285
2013	92	177	297	295
2014	102	198	295	295
2015	117	204	295	295
2016	130	208	295	295
2017	147	206	295	295
2018	151	206	295	295
2019	154	206	295	295
2020	153	206	295	295
2021	153	206	295	295
2022	153	206	295	295
2023	153	206	295	295



Why are French Immersion enrolments the only ones in the District that have grown over the 1998 to 2007 period?

This program has proved popular with parents and they have been prepared to transport their children to the few schools where it is provided. Most of the students have come from the Central Zone since that is where all the schools providing this program are located. This was ameliorated to some extent in 2005 when Mill Bay Elementary (year 1 in Elsie Miles) was opened as a French Immersion school.

If these programs did not exist, would these students all be added back into the other zones?

Yes, but not all. Many of these parents are, for various reasons, seeking an alternative to the regular school programming, and therefore may opt for private schools or for home schooling.

How reasonable are these enrolment projections?

While there are some demographic variables that could be noted about children who attend French Immersion schools and their families, the provision of space for this program is entirely a Board policy decision. In 2005 for instance, the Board decided to open Mill Bay Elementary for French Immersion. The Board has other policy decisions to make in the future regarding all these schools. The actual enrolments will result from these policy decisions, not from 'demographics'.

Having said that, our enrolment projections for these schools is based on 'growing up' the existing enrolments, not on adding any additional kindergarten students. It shows the results of past Board decisions not the implications of decisions yet to be made.

Appendix B – Projecting Early Childhood Learning Enrolments

In the 2008 Throne Speech, the B.C. government made a commitment to “assess the feasibility and costs of full school day kindergarten for five-year-olds.” It also promised to “undertake a feasibility study of providing parents with the choice of day-long kindergarten for four-year-olds by 2010, and for three-year-olds by 2012.”

We have been asked by the District to comment on the demographics of 3 and 4 year olds so that the District can plan knowledgeably in support of the eventual initiatives of the provincial government.

Our projections of kindergarten students is based on the number of births five years previously, and the distribution of these students across the District’s four zones (plus French Immersion).

Projecting the number of children aged three and four years would be done on the same basis.

Our estimates of the number of children in each year long cohort, by zone, who will be attending kindergarten in the zone are as follows:

- Lake Zone – there are likely about 40 children in each of these age cohorts, and this is projected to decline slightly over the next 15 years.
- North Zone – there are currently about 55 children in each cohort, increasing slowly to around 65 by 2023.
- Central – there are currently about 200 children in each cohort, increasing to 240 by 2023.
- South - there are currently about 120 children in each cohort, increasing to 170 by 2023.

There are also about 85 children who are not included in these figures but who are in these cohorts. Of those, about 70% currently live in the Central Zone and have historically attended Duncan Elementary for kindergarten, with the other 30% living mainly in the South Zone. Where these children go for their education in kindergarten is less the issue than where they live, since we would anticipate that most parents will wish for their early childhood program to be located close to their homes.

Thus our estimation of the distribution of these cohorts for planning purposes would be as follows:

- Lake – around 40 children.
- North – around 55 children.
- Central – around 260 children.
- South – around 225 children.

Appendix C - Sources

Figure 1 - Provincial Enrolment - 1998 to 2017

Figure 2 - Provincial Kindergarten Enrolments - 1998 to 2017

Figure 3 - Comparing Ministry Projections 2003 and 2007

Figure 4 - Tracking Provincial Retention Rates - Elementary

Figure 5 - Tracking Provincial Retention Rates - Secondary

- Every year, the Ministry of Education publishes a number of reports on enrolments. This data is taken from the 1558B reports which can be downloaded from the Ministry's Capital Planning Division website. The current (2007) report is dated February 2008.

Figure 6 - CVSD Elementary Enrolment - 1998 to 2007

Figure 7 - CVSD Secondary Enrolment - 1998 to 2007

- Historic data for CVSD is taken from the reports published by Baragar Enterprises Inc. who are on contract to the District to provide a variety of student based data. This data was then entered into a projection model developed by Yates, Thorn & Associates from which, with other data, is used to project enrolments.

Figure 8 - CVSD - Converting Births to Kindergarten Enrolment

Figure 9 - CVSD - Births 1986 to 2035

- Birth data comes from the PEOPLE Population Projection model that is run by BC Stats and which provides data on past and projected future populations of Regional Districts, School Districts and Local Health Areas. This data is published annually and the current data is #32 and was published in 2008. This data is purchased from the BC Stats website.

Figure 10 - CVSD - Kindergarten Enrolment Percentage Growth

Figure 117 - CVSD - Ministry Kindergarten Projections to 2017

Figure 12 - CVSD - Ministry Enrolment Projections - Elementary

Figure 13 - CVSD - Ministry Enrolment Projections - Secondary

- Source: 1558B reports of Ministry of Education.

Figure 14 - CVSD - Enrolment Projections to 2023

Figure 15 - Kindergarten Enrolments by Zone - 1998 to 2007

Figure 16 - Projected Kindergarten Enrolment by Zone - 2008 to 2023

Figure 17 - Lake Zone - Projected Enrolments to 2023

Figure 18 - North Zone Enrolment Projections to 2023

Figure 19 - Central Zone Enrolment Projections to 2023

Figure 20 - South Zone Enrolment Projections to 2023

Figure 21 - French Immersion Enrolment Projections to 2023

- Source: YTA Projection Model

Figure 22 - Families with Children at Home - 2006

Figure 23 - Distribution of Persons of Aboriginal Origin - 2006

Figure 24 - Immigrants by Period of Immigration - 2006

Figure 25 - Mobility - 2006

- This data is from the 2006 Census. The Community Profiles for each jurisdiction were downloaded from the Stats Can website and then massaged to produce these charts and tables.

Figure 26 - Housing Sales and Prices - 2000 to 2008

Figure 27 - Relative House Prices - 2001 to 2008

Figure 28 - Comparing House Prices to Income - 1996, 2001, 2006

- Housing cost data is from the MLS system, and the income data is from the various censuses.

Figure 29 - Travel to Work by Car, etc - 2006

- Source: 2006 Census

Figure 30 - Rising Gas Prices - Victoria

Figure 31 - Rising Gas Prices - Canada

- This data is abstracted from Stats Canada's Household Expenditure Surveys and other Stats Can publications, such as 'The Daily'.

Figure 32 - Percent of Workers Working from Home - 2006

- Source: 2006 Census

Figure 33 - CVRD - New Housing Starts - 1980 to 2007

- This data is abstracted from the CVRD Development Services Department, 2007 Year End Report, table 3.7.

Figure 34 - Age of Dwellings - 1981/5 to 2001/5

- Source: 2006 Census

Figure 35 - North Cowichan Municipal Population Projections to 2016

- This data is abstracted from the District of North Cowichan's Population and Housing Forecasts report, App 4, May 2007