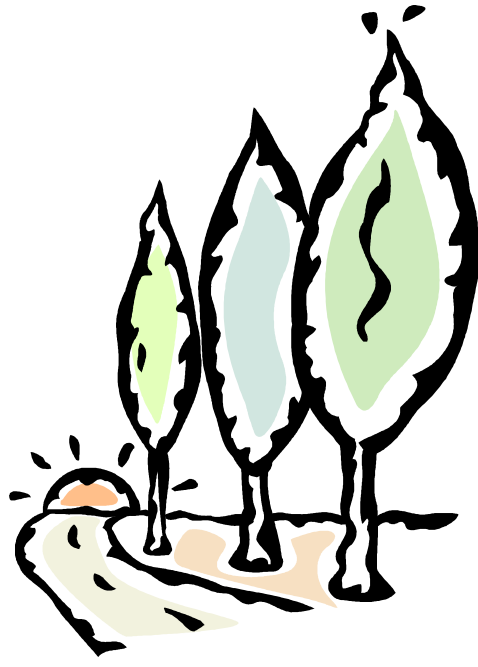


THE CREEGAN DRIVE CONNECTION - LET'S REVIEW THE DATA

August 18, 2009



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Preamble

In recent weeks there has been a significant degree of angst and concern on the part of residents of Creegan Drive as the District of North Cowichan (DNC) is pushing rapidly forward to upgrade infrastructure in the area pending completing a connection of Creegan Drive to the TransCanada Highway (TCH) based on proposals prepared by Delcan Engineering.

On August 5, 2009 a delegation of residents made a presentation to council to express their concerns which, as a resident of Creegan Drive, I share.

Unfortunately the best efforts of many of us, prior to purchasing our homes (mid January 2007 for us and earlier for others), to determine the future for Creegan Drive did not reveal the planning group's activities. The explanations given us at that time were that the road size was intended to handle the traffic from Echo Heights and the next phases of Creegan Estates. There is now evidence that the planning group was probably working on this connector project as early as mid December 2006.

The impact of this project will not be limited to residents of Creegan Drive.

Its impact will extend to all residents of the DNC in the surrounding area bound by Douglas St. to the north, Chemainus Rd. to the east, Chapman Rd to the south and all points to the west of Chemainus Rd. in this area as well as residents on Victoria Rd. north of Douglas St. to the town line.

The problem is that there is no reliable, verifiable data coming out of the planning department that sets out a sound justification for this project in which residents can have confidence.

The Director of Planning in his update to council of July 24, 2009 offers as justification anecdotal evidence, at best a straw poll of 59 residents which indicated only 22% of respondents were in agreement with a connector project being under taken and the OCP of the CVRD in respect to access for Saltair residents to the TCH. **The opinions of 12 people and the objectives of the CVRD** are hardly grounds for suggesting that the District of North Cowichan (DNC) should spend in excess of \$4 million on a connector project.

Communications with residents have had contradictory content.

Engineering allegedly suggested that this project will proceed in 2011-2012. They started infrastructure upgrades on Victoria Rd. in 2008 which are continuing in 2009. It is anticipated that will continue up to at least Cook St. in the future so as to be completed by 2011 but there is no official confirmation of this.

In the absence of a data driven analysis being available I have undertaken some research and field work in an attempt to understand the reality of the situation. This study utilized documentation available on the DNC website, documents that have been sent to me by others over the past weeks and Goggle Earth.

Methodology

This study examines this issue from the following perspectives:

- Traffic patterns and growth projections to 2028 using the DNC's data as presented by the Boulevard Transportation Group (BTG) and so called congestion on Chemainus Rd.
- Population and Housing growth projections using the DNC's data.
- Time savings achieved by this project for travelers by going north on the TCH vs. Chemainus Rd.
- Costs based on Delcan's report to the DNC planning group and other factors.
- Access to Saltair while by-passing Chemainus.

- Community Living

In addition, some alternative routing suggestions will be offered including costs estimates based on Delcan's construction costs as well as an indication of the related land requirements.

Executive Summary

There are a number of significant findings in this study.

- The costs provided to council for the Creegan Drive connector of \$1.6 to \$2.3 million are only the cost of construction of the road options. They **do not** include land acquisition costs, infrastructure upgrade costs, consultant costs etc. The real cost of this project is estimated to exceed \$4 million.
- The Transportation Plan update provided by Boulevard Transportation Group (BTG) utilizes traffic growth patterns that are **50% greater than the growth projections** of the Population and Housing Forecasts of the DNC staff thus distorting the picture.
- Only 16.3% of traffic entering and leaving Chemainus does so utilizing Chemainus Rd north of Cook St. **83.7% of the traffic flow into and out of Chemainus does so via southerly routes.** Some of this 16.3% must be considered local traffic from the Dogwood Rd section of town. This translates to 3 vehicles per minute (VPM) in 2028.
- Growth in local traffic as a result of population increases in Chemainus over the next 20 years will only impact overall traffic growth by 2.7%.
- The concept of saving transit time from Chemainus to Ladysmith is unsustainable. Time savings, not including delays getting through the residential areas to the connector and onto the highway, are **less than 2 minutes** vs. going up Chemainus Rd to the Davis Rd – TCH intersection.
- The idea that somehow Chemainus suffers road congestion does not stand up to the reality test.

The section of Chemainus Rd servicing the core of town is just **360m** (0.36 km) in length and takes **less than one (1) minute** to transit at legal speeds. Delays are minimal and are usually a function of pedestrians using cross walks, tour vehicles, vehicles making turns and typically are less than 30 seconds. Infrequently, DNC or a utility company will shut a lane or a section of road but even in these cases delays are limited to a few minutes.

- This project, if undertaken, will see the District of North Cowichan spend tax dollars that will do more to satisfy the OCP of the Cowichan Valley Regional District in respect to its residents and by-laws than it will benefit residents of the DNC. The residents of Chemainus gain very little while it negatively impacts those living in the affected area. **It is not the responsibility of the DNC and its taxpayers to address CVRD issues to the detriment of the citizens of the DNC.**
- There is no consideration being given to the fact that the exit from Creegan Drive at Victoria Rd has a steep pitch and is **less than 40 m from the playground and facilities of Chemainus Elementary School** which will put the health and safety of community children at risk.
- The standards of construction built into Creegan Drive are not being applied to the reconstruction of Victoria Road. It is narrower.
- If there is a closure of the River Rd median as a result of this project or a complete closure of the River Rd interchange as Delcan has suggested, there will be a significant impact on current users of River Rd

as only 22% of the traffic on River Rd actually connects with Chemainus Rd. Full closure will drive this traffic onto Chemainus Rd. and Henry Rd.

- The three key points made by residents of the DNC to the researchers at Ipsos-Reid as to why they love to live here are **the rural life style, restricting development to urban areas to retain the peace and quiet of the rural life style and development of alternative means of transportation to the automobile which are of a more environmentally friendly nature** (see page 18). It would seem this project flies in the face of those findings.

Detailed Findings

Traffic Patterns and Growth

The DNC Transportation Plan Update provided to the DNC planning group by Boulevard Traffic Group (BTG) dated January 6, 2009 is summarized in Appendix A. The data base for this study was supplied to BTG by the DNC. The data is taken from the count plots on pages 5 and 10 of the update (see pages 15 & 16).

- BTG has applied a traffic growth rate through 2028 of 2% per year for a compounded rate of 49%. This is significant in another context.
- There is no data in the BTG data that differentiates north vs. south or east vs. west in the traffic counts. Therefore it must be assumed that there equal numbers of trips in each direction. While not precise it is an indicator of the trends and patterns when looking at the data.
- The study clearly indicates that the traffic entering and leaving the core of Chemainus is made up of traffic counted on Chemainus Rd between Henry Road and River Rd., the traffic which crosses the railway tracks on River Rd., the traffic coming off Victoria at Chapman Rd. and the traffic on Chemainus Rd north of Cook Street. (see page 15 & 16)
- Delcan is suggesting that the River Rd median could be closed if this project proceeds. The data indicates that at present 5924 vehicles per day enter or leave the TCH at River Rd. Only 1292 or 22% of these vehicles either reach or come from Chemainus Rd. Stated in another way, 78% of the trips generated on River Rd are generated in the Mill Creek area and the town house complexes off River Rd and do not impact the core of Chemainus or Chemainus Rd.
- The data indicates the total vehicle per minute load (i.e. all vehicles in both directions) within the core of Chemainus is just under 12 and projected to grow to just under 18 by 2028. No doubt there are peaks and valleys in the count but observed evidence suggests that this does not result in an impediment to traffic flow nor is there any suggestion that this leads to significant numbers of personal injury incidents or property damage collisions even during tourist season.
- Only 16.3% of all traffic entering and leaving the core of Chemainus does so by Chemainus Rd. to the north of Cook. This does not change in 2028. The traffic on Victoria Rd must be seen as local traffic coming and going from the north end of town and the CVRD along Victoria Rd. and hence is not treated as leaving town north of Cook St. Similarly, a portion of this traffic from north of Cook St. must be considered as being local traffic serving the Dogwood Rd area and does not proceed on to points north. Stated in another way, **83.7% of all the traffic entering the core of Chemainus leaves town by a southerly route.**
- The projected traffic counts north of Cook St in 2028 are 4156 per day or just 3 vehicles per minute.

This data suggests that should this project proceed millions of dollars will be spent to address partial diversion of a very small portion of the traffic in the core of Chemainus as the bulk of traffic enters and leaves

from the south. Furthermore there is no guarantee the presence of this connector will divert any significant volumes of traffic as getting to it and through it is not a straight forward proposition.

Housing and Population Growth

- The DNC conducted a review of population growth in the period 2006 to 2021 in the Population and Housing Forecasts report dated May 2008.
- This report forecasts a growth rate of 1.09%/an or 405 persons per year on average across the whole district or 6100 people in the study window which ends in 2021. To bring this in line with BTGs traffic study growth period ending in 2028 we should add 2835 people to the study numbers for a total of approximately 9000 people bringing the total population of the whole of the DNC to 36,550 or 32.6% compounded growth over 2006.

This growth rate in population is only 67% of the growth rate figures used by BTG (49%) to forecast traffic patterns (see in Appendix A). Stated the other way around, BTG's growth rate is 50% higher than DNC's population growth rate forecast.

- The rate of growth of population will be across the district and not focused on Chemainus. In all likelihood, Chemainus possibly might see 15% of that growth. This suggests that up to 1350 new inhabitants may come to Chemainus in the next 20 years. The growth will be in the cohort 65+ which represents 56% of the growth. The residents of Creegan Drive with 2 exceptions are in this group as are many in the affected area.
- Assuming that there are 2-3 inhabitants in each of the new required housing units, this growth will result in 450-675 new households. Assuming each household represents one additional vehicle on the streets of Chemainus this will add a maximum of 675 vehicles over the next 20 years. This is just 2.7% of what BTG is projecting in overall growth of traffic in Chemainus.
- No doubt the BIA of Chemainus would like to increase traffic to enhance their businesses but it is highly unlikely that this would close the gap in traffic growth between the BTG projections and the projections of the Population and Housing study derived figures.

It should also be noted that in a recent presentation to council, **the BIA was not in favour of additional access points to the TCH**. Their interest is in additional signage and one can assume additional parking downtown.

Based on these findings the question is why would we be investing millions in this project to divert a very small volume of traffic? When the rates of growth in traffic volumes in the BTG report are so inconsistent with the rates of growth in other studies conducted by the DNC why the rush to include it in the OCP when the conclusions could be based on flawed data?

Congestion

- Congestion is defined as "slower speeds, longer trip times, and increased queuing".
- Having been a casual, frequent observer of traffic through Chemainus from 2001 until the fall of 2007 and regularly observer since, it is hard to see just how anyone could consider that this road suffers from congestion.

In Victoria, Douglas St. is congested any time after 3 pm until early evening week days. McKenzie Avenue is congested any afternoon as people line up to get on to the TCH north bound.

The Lougheed Highway in Coquitlam is congested all day as a rule.

Even Duncan can be slow at noon and at 3:00 pm. but passage through Duncan on the TCH in peak traffic periods takes no more than 5-10 minutes over normal times.

Chemainus experiences none of this.

With no intended disrespect to our fellow citizens, there has to be some regular experience of real congestion to really judge what congestion is. Minor delays are not congestion!

The worst Chemainus suffers is minor delays from erratic tourists, the carriage tours, traffic movement and typically are of seconds in duration. The worst delays come from work being done by the DNC or utility companies which result in lane closures or detours and these are rarely more than 5 minutes and very infrequent.

At legal speeds and absent pedestrians or other momentary stoppages to the flow of traffic, transit time from Victoria St. to Cypress St. is typically less than one (1) minute.

As noted earlier, the absence of personal injury incidents and property damage accidents that one would anticipate would occur in congested traffic patterns is just not happening.

Congested is not an adjective one can properly apply to Chemainus

- Traffic patterns in the 360m (0.36km) corridor of Chemainus Rd within the town core between Cypress St. and Victoria St. can be inherently natural traffic calming. Speed limits of 40 kph must be observed and the tourists add an element of alertness that is a good thing. It should also be noted that there are no less than 4 Cross walks across Chemainus Rd between Victoria St and Cypress St. including 2 on either side of Mill St. which adds to traffic calming.

Once again the question must be asked. Why would we spend millions to do something about a condition that simply does not exist in reality?

Travel Time Savings/Saltair Access

- The CVRD, according to the Director of Planning's report to council, included a connector to the TCH in their OCP some years ago (1999).
- It is assumed that the Creegan Connector will ultimately put vehicles coming off the TCH on to Chemainus Rd. at Cook Street.

The distance one must travel from this point to the junction of the TCH and Chemainus Rd at North Davis Rd via Chemainus Rd is 7.8km measured. At legal speeds this is an 8 minute trip through picturesque sea view country.

- Going north from using Delcan's option 1 (a more or less direct connection of Creegan Drive to the TCH) makes the distance from Cook St and Chemainus Rd via the proposed Creegan Connector 7.1 km to the same intersection in Ladysmith. Excluding stop signs, traffic calming and waiting for oncoming northbound traffic to clear in order to enter the TCH, travel time at legal speeds is just under 6 minutes (5.98 minutes). **Time saved is only 2 minutes.**
- Residents at the south end of Saltair (South Oyster School Road area) would gain essentially nothing using the connector as they would still have to come off the TCH and find their way through Creegan Estates. They will have to deal with numerous stop signs, waiting for traffic and trains, deal with presumably lower speed limits and traffic calming devices, and make numerous turns onto Victoria Rd. to Cook St. or take Garner Rd to Cook in order to get to Chemainus Rd. with the resultant erosion of any time saved by not going straight through town.

Is spending millions by the District of North Cowichan to provide Saltair inhabitants with **travel time savings of 2 minutes** or less what DNC tax payers are willing to do?

Should not the CVRD be the government addressing the concerns of Saltair residents using CVRD tax money and going through CVRD lands? **All the perceived benefits accrue to residents of the CVRD at the financial and life style expense of citizens of the DNC.**

Costs

- Delcan projects new construction costs range from \$1.6 to \$2.3 million depending on option selected (see Appendix B).

This translates to an average cost of \$1.703 million per kilometer of road and is specific only to the connector construction.

- Costs to acquire land, to conduct environmental studies, to process applications to the ALC, to secure permits from the MOT, to conduct Environmental Impact studies and acquire permits from the MOE as well as other related costs are not included.
- It is certain that unless the DNC is prepared to expropriate land for this project, land owners will be looking for high prices for their land and will look to sell additional lands to developers at high prices with the loss of agricultural lands.
- Addition infrastructure costs are not included in these costs.
- The DNC has already invested in reconstruction of Victoria Rd between Chapman Rd and Robertson St. It is anticipated that work started in 2008 and continuing in 2009 will continue until Victoria Rd is rebuilt to just beyond Cook St.
- In order to facilitate connection to Chemainus Rd. Cook and Garner St will have to be rebuilt as well.
- The reconstruction of Victoria does not match the construction standards imposed on the developer when he constructed Creegan Drive. How can it be expected that these road upgrades are capable of handling the traffic contemplated on Creegan Drive?
- Reconstruction of Victoria Rd at the E&NR crossing has not yet been started and a similar crossing will be required at Cook St. The Chapman Rd. intersection immediately adjacent to the rail crossing is problematic. Holding of traffic on the east side of the crossing awaiting trains to pass is also problematic. The same issues exist at Cook St.
- The total reconstruction of roads in the area is in the order of 1-1.5 km. Assuming reconstruction costs to be 50% of new construction and using Delcan's costs of new construction, infrastructure upgrades excluding rail crossings will be at least \$1 million.
- It is conceivable that the real cost of this project will be \$ 4-5 million.

Once again the questions must be asked.

- Will voters in all of the District of North Cowichan be happy spending \$4 million plus on a road extension that will only impact a portion of **less than 16%** of all the traffic travelling in and out of Chemainus while negatively impacting the local community?
- Will voters support a multimillion dollar project that addresses a phantom perception of congestion through Chemainus and does nothing to substantially reduce travel time to the intersection of Chemainus Rd and the TCH in Ladysmith?

- Will voters support a project that does nothing of substance for the residents of Saltair and specifically a project being justified by the planning department based on anecdotal opinions and limited, incomplete and admittedly questionable poll data?
- Will voters accept a multimillion dollar project justification which is based on limited conflictory studies and traffic projections that appear to be overly aggressive?
- Will voters be willing to pay for a road that puts children at risk by dumping traffic on top of Chemainus Elementary School?
- With the DNC facing tax revolts from Catalyst and potentially others which will result in the extension of the recent transfer of industrial taxes to residential taxes, will tax payers and voters accept a multimillion dollar project that will impact all tax payers in the wallet and provides no benefits to the majority of residents of North Cowichan?
- Will taxpayers in the District of North Cowichan support a project **that rightfully should be addressed by the CVRD as it is their OCP that calls for this project?**

The answer to these questions is that when presented with the real facts the majority of voters in North Cowichan would probably unequivocally say NO!

Within the Chemainus community at large, there will no doubt be people in favour of this project for any number of reasons. However, I have confidence that given all the facts and a clear understanding of the alternatives and costs, the majority of them would say no as well.

Community Life

The Ipsos Reid polling done for council in 2008 made three key points about the DNC.

First, people living here enjoy the quality of life and the rural feel of the area which is described as being “a quiet and peaceful setting.’ Growth is seen by a large cohort as being detrimental to their ability to enjoy living here as it impinges on these qualities.

Second, transportation expectations of the DNC should not be focused on roads and projects that will allow more cars on the roads. Focus should be on alternative forms of transportation and better environmentally friendly means of travel.

Third, the research indicates that citizens are more likely to support growth strategies that focus on urban areas than they are to support strategies targeted towards rural communities which Chemainus to all intents and purposes is.

I submit that this project is in conflict with these findings.

Alternatives

Having presented a case that the Creegan Drive Connector is not needed in Chemainus over the next 2 decades – a project that in my view is not justified in terms of benefit to voters in North Cowichan – other alternatives should be considered if the CVRD is keen to fulfill the intent of its OCP.

It is not the responsibility of the DNC and its taxpayers to address CVRD issues to the detriment of its citizens.

Accordingly, what options exist for the CVRD to accept responsibility for giving its taxpayers and voters what the CVRD claims they want?

Appendix B offers up 8 options for a connection to the TCH within the CVRD. There are, no doubt, many more options that the CVRD could exercise.

The Delcan Creegan Drive Connector figures are included for comparison purposes.

The table shows costs that are based on an average of the costs shown in the Delcan report on the Creegan Drive Connector options i.e. \$1.703 million per km of road and are exclusive of land and other costs.

It shows savings relative to the Delcan proposals as well as land requirements based on a 50m wide road allowance.

The distances involved were calculated using tools in Google Earth. While the level of zoom influences the accuracy of the measurement of distance in this program, to the extent possible the zoom levels were held relatively constant and therefore the distances are relatively accurate and definitely sufficient for discussion purposes as it is the order of magnitude that counts here.

No doubt there will be issues of construction in some of these options similar to the Delcan proposals for the Creegan connector such as grade separation infilling. In other cases the path is straight forward and definitely less challenging than either of Delcan's proposals for Creegan Drive and brings significant cost savings to the CVRD.

Clearly the North Watts Rd option is highly cost effective, uses the least land, the land likely is not in the ALR and it has no apparent environmental issues. The raw cost estimate suggests that this could be done for \$100,000 which is probably low but still significantly less than any other option.

There are other, less challenging, but more costly options but even in these cases the opportunity for savings is significant over the Delcan proposals.

Conclusions

It is clear that this project is at the very least premature to be included in the OCP at this time due to the fact that the data of the DNC and its consultants is conflicted and does not demonstrate that there is a need for a project of this type and magnitude in Chemainus and the DNC.

Furthermore, it is highly doubtful that this project will be required any time in the next two decades.

Again It is not the responsibility of the DNC to undertake projects that are the responsibility of the CVRD that have a perceived benefit to the citizens of the CVRD, particularly when they will negatively impact the lives, well being and quality of life for not only the residents on Creegan Drive but residents on Cook St., Garner St., Ash Rd., Victoria Rd. and of course the students, parents and staff of Chemainus Elementary School.

The DNC should not be undertaking projects that will increase the number and types of vehicles being dropped on top of the principal primary school in Chemainus. This is a recipe for disaster. It will not be a question of if but a question of when a child will be seriously injured or worse.

As a neighbour recently pointed out, we have people living on Creegan Drive and the affected area who use electric scooters and walkers to get around. This project can put their safety at risk.

There is no consensus within the community as to the need for this project. Until such time as a full community discussion, proper and complete planning studies and perhaps a referendum within Chemainus are completed, it would appear that inclusion of this project in the OCP and any long term capital planning is at the very least premature and in the longer view unwarranted.

This project is inconsistent with the quality of life residents of North Cowichan are seeking.

This project will not give taxpayers value for money spent.

Thank you for taking the time to consider the contents of this discussion paper.

If you have any questions or require clarification I can be reached at the numbers on the cover page.

Appendix A

Boulevard Transportation Data

N.B Data supplied to Boulevard Transportation Group by the DNC

	<u>2008</u>	<u>VPM</u>	<u>2028</u>	<u>VPM</u>	<u>% Change</u>	
Chemainus Rd North of Cook	2797	1.9	4156	2.9	48.6	
Cook St West of Victoria Rd.	261	0.2	388	0.3	48.7	
Ash Rd	390	0.3	580	0.4	48.7	
Channel Blvd	704	0.5	1046	0.7	48.6	
Victoria Rd at Chapman Rd	2305	1.6	3425	2.4	48.6	
Oak St	1681	1.2	2486	1.7	48.9	
River Rd at the TCH	5924	4.1	8803	6.1	48.6	
River Rd at the E&NR tracks	1292	0.9	1920	1.3	48.6	
Henry Rd	6307	4.4	9372	6.5	48.6	
Fuller Lake Rd	791	0.5	1175	0.8	48.5	
Chemainus Rd North of Henry	10720	7.4	15929	11.1	48.6	
Chemainus Rd South of Henry	3502	2.4	5204	3.6	48.6	
Traffic entering the core of Chemainus from all points lines 9,12,15, 18	17114	11.9	25430		17.7	Chemainus Rd. North of Cook (9), Victoria at Chapman (12), River Rd at the E&NR tracks (15), Chemainus Rd between Henry and River Rds. (18)
Traffic entering or leaving the core of Chemainus North of Cook Street	2797		4156			16.3% of all traffic into and out of the core including local traffic from the Dogwood Rd. area.

Appendix B

ALTERNATE ROAD SUGGESTIONS TO CREEGAN DRIVE AND RELATED COSTS

All distances are as measured by Google Earth avoiding obvious structures and taking advantage of existing roads, low populations and where available straight through land areas free of homes and if possible free of agricultural lands. Measurements in Google Earth are variable depending on the level of zoom and therefore are not necessarily precise but are relative to each other since ZOOM levels are relatively constant.

Land requirements are based on 50m wide allowances.

Delcan Average Cost /Km \$1.703 million

<u>OPTION</u>	<u>DISTANCE TO TCH (KM)</u>	<u>COST ESTIMATE per KM</u>	<u>COST ESTIMATE (Millions)</u>	<u>DIFFERENCE TO DELCAN CREEGAN 1</u>	<u>DIFFERENCE TO DELCAN Option 2</u>	<u>Land Required Hectares</u>	<u>COMMENTS</u>
Direct Connection from West Stub on Creegan to TCH	0.94	1,702,128	1,600,000		-700,000	4.7	Delcan Option 1
West Stub westerly and turn to connect at Panorama Ridge Road	1.35	1,703,704	2,300,000	700,000		6.8	Delcan Option 2
<u>N.B. Other Options Costed on the basis of the average of the two Delcan Option costs</u>							
Connect Existing Radford Rd off the TCH to Jackman Rd in the CVRD.	0.55	1,703,000	936,650	-563,350	-1,363,350	2.8	Both Roads are existing and only 2 home owners affected
Connect TCH to Southin Rd	0.18	1,703,000	306,540	-1,193,460	-1,993,460	0.9	Exiting Road skirts south of Porters buildings 6 residents of which one is a farmer.
Connect Thicke Rd/Westbourne Rd Intersection which has lights direct to Chemainus Rd	0.72	1,703,000	1,226,160	-273,840	-1,073,840	3.6	Straight run through bush lands. 1 farm. Traffic Lights installed MOT likely to support.

Connect TCH to Chemainus Rd just north of the Junction of Old Victoria Rd (north end) and Chemainus Rd.	0.75	1,703,000	1,277,250	-222,750	-1,022,750	3.8	Straight run across open fields
Connect TCH to Saltair Rd	0.27	1,703,000	459,810	-1,040,190	-1,840,190	1.4	Goes through bush- affects 6 residents
Connect Edgelow Rd to Saltair	0.48	1,703,000	817,440	-682,560	-1,482,560	2.4	Goes through bush- affects 6 residents
Connect TCH to North Watts Rd	0.06	1,703,000	102,180	-1,397,820	-2,197,820	0.3	Avoids twisty bits at Boulder Point Bridge, avoids Large Home with pool on east side of TCH and affects one home well set back from road. Also there would be ample room to hold traffic coming off the TCH at the RR crossing.
Connect TCH to Chemainus Rd at the South Davis/Farrel Rd/Baker Rd Intersection	0.12	1,703,000	204,360	-1,295,640	-2,095,640	0.6	Traffic Lights installed, nobody disturbed, right into middle of Saltair at Chemainus Rd
Shortest distance	0.06						North Watts Option
Lowest Cost			102,180				North Watts Option
Greatest Saving over Delcan 1				-1,397,820			North Watts Option
Greatest Saving over Delcan 2					-2,197,820		North Watts Option
Least Land Required						0.3	North Watts Option



Figure 2: Existing Daily Traffic Volumes – North Region

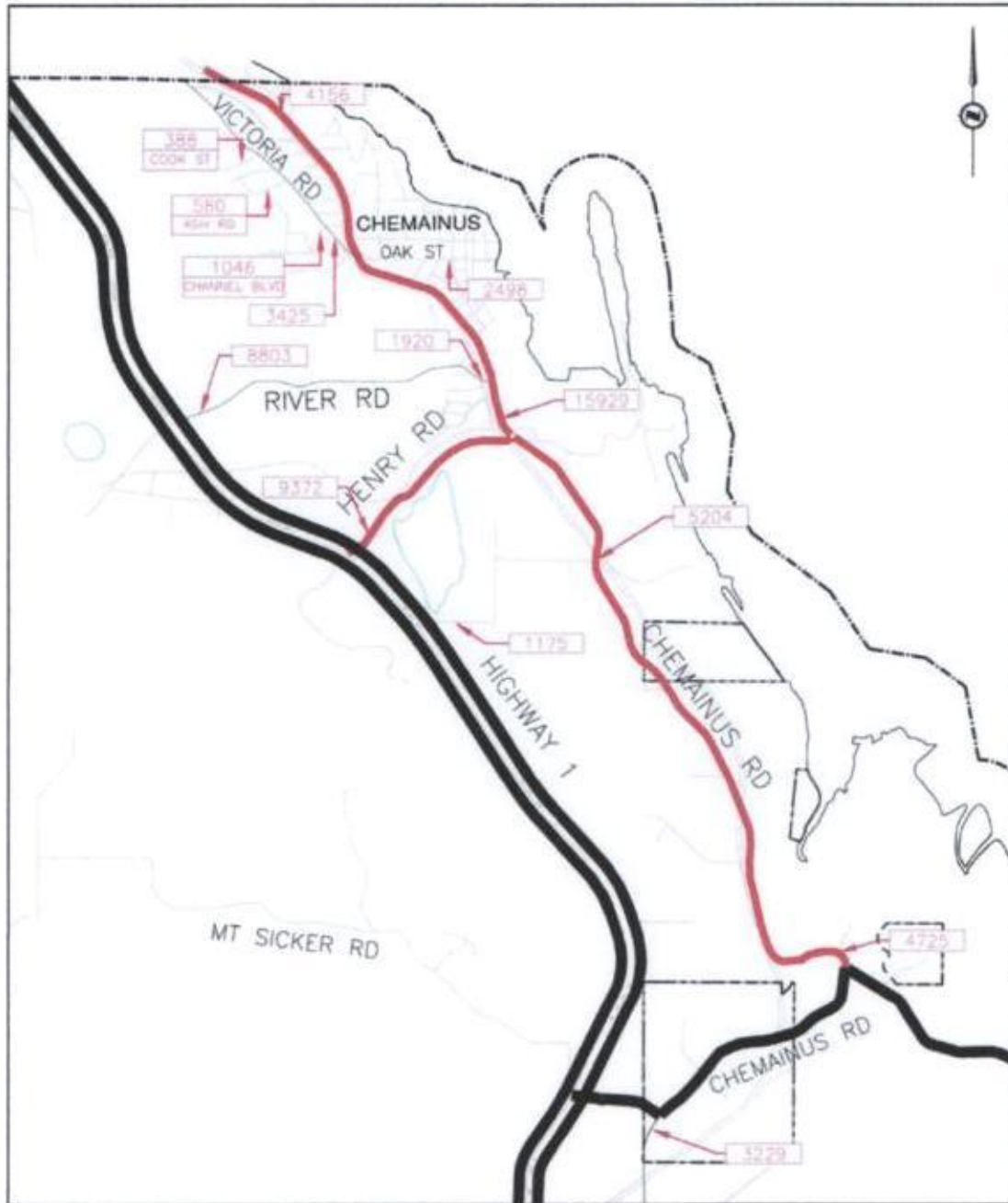
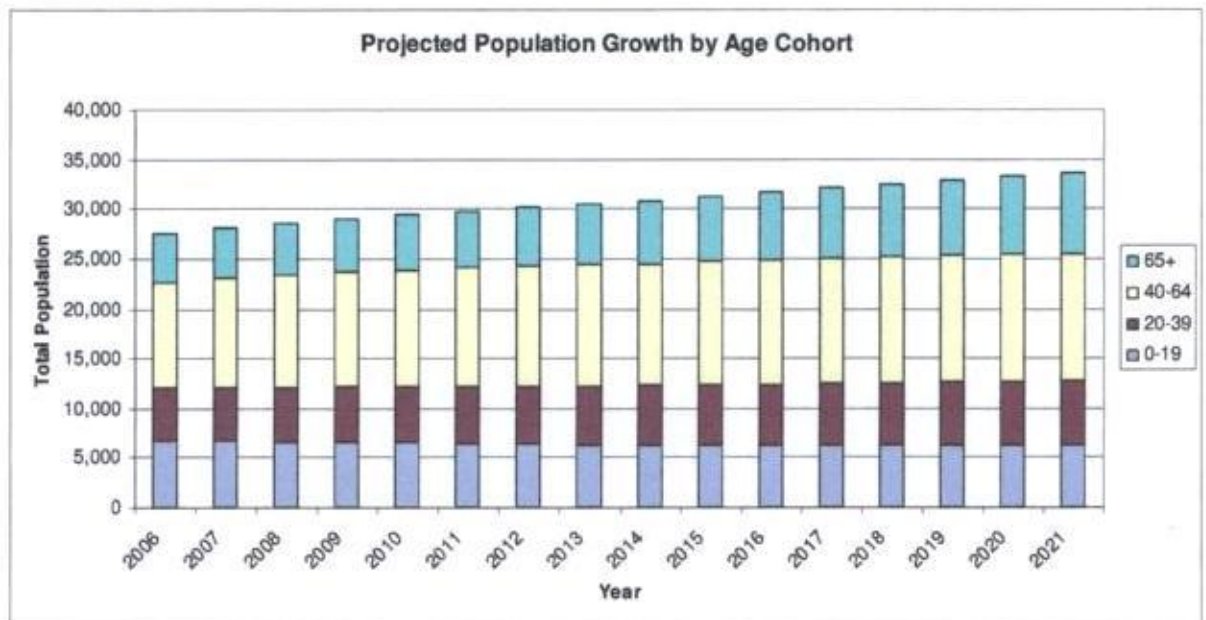


Figure 6: 2028 Daily Traffic Volumes – North Region

Table 1. North Cowichan Projected Population Growth by Age 2006 to 2021

Age Group	Growth Ratio 2006- 2021	2006 Population (% of total)	2021 Projected Population	Absolute Growth 2006- 2021	Average Annual Growth
Total Population	1.09%	27,550	33,291	6,073	405
		100%	100%	100%	
65+ yrs.	3.64%	4,910	8,287	3,377	225
		18%	25%	56%	
40 - 64 yrs.	1.25%	10,595	12,602	2,007	134
		38%	37%	33%	
20 - 39 yrs.	1.17%	5,405	6,353	948	63
		20%	19%	16%	
0 - 19 yrs.	-0.18%	6,635	6,376	-259	-17
		24%	19%	-4%	





KEY SURVEY FINDINGS

Overall perceptions of quality of life in North Cowichan are favourable. Virtually all residents rate the quality of life in North Cowichan as “very good” or “good”, and there is also a sense that quality of life has “improved” over the past five years. Overall, these findings suggest that the research should be viewed in the context of a generally positive and satisfied community.

Citizens value North Cowichan’s rural character. The importance of North Cowichan’s rural setting is a common theme throughout the survey. For example, when asked what they like best about living in North Cowichan, the two most common responses are “quiet, peaceful setting” and “rural character”. Further, while residents have concerns over growth (discussed in more detail below), the research suggests these may primarily reflect concerns over the impacts of growth in rural areas. The Municipality should try to include strategies for protecting North Cowichan’s rural character in its revised Plan to ensure that future initiatives reflect the values that are important to residents.

Growth tops the public issue agenda. The research suggests that North Cowichan’s growth has divided the community into two camps: those who feel they have benefitted from development and those who feel that development has detracted from their quality of life. Clearly, the community’s growth to-date has had both positive and negative consequences for residents.

Given the disparate effects of growth, it is not surprising that growth is identified as the most important local issue facing North Cowichan today. Concerns about growth may also be exacerbated by the level of growth occurring in the community, which the research shows is seen as leaning towards being “too much”.

Lastly, the perceived impact of development on North Cowichan’s rural character may be contributing to residents’ growth-related concerns. The community’s rural feel is one of the things residents most value about North Cowichan, and so it makes sense that they would be concerned about developments that may potentially detract from this. This suggestion is further supported by research findings showing that residents are more likely to support growth strategies that focus on urban areas than they are to support growth strategies targeted towards rural neighbourhoods.

It will be important for the revised Plan to address the issue of growth. If possible, the Municipality may want to consider limiting growth to urban areas and ensure that future growth is balanced with maintaining the community’s character. Further, the Municipality will want to pay close attention to future growth strategies to ensure the benefits of growth are more evenly distributed among the community and address the gap that growth has created among residents (e.g., those who feel growth has improved their quality of life versus those who feel growth has had a detrimental effect on their quality of life).