

SCHOOL DISTRICT 83
NORTH OKANAGAN - SHUSWAP



Long Range Facilities Plan
2020 - 2029



Len Wood Middle School - Armstrong, BC

A Report by Cascade Facilities Management Consultants Ltd

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Schedules To Be Attached

- A. Overall School District Map
- B. Inventory of District Facilities
- C. School by School Enrolment Projection
- D. Base Case Summary
- E. Recommendations
- F. Design Aid Sheets in Support of Space Projects
- G. Consultation Undertaken

1. INTRODUCTION

- 1.1 **Ministry of Education Requirements.** The Ministry of Education 2020/21 Capital Plan Instructions issued April 2019 require Boards of Education to develop and maintain a comprehensive School District Long Range Facilities Plan (LRFP). In the instructions, this requirement is defined as follows.
- 1.2 The Ministry of Education capital plan instructions on Page 7 state:

1.5 Long-Range Facilities Plan

A comprehensive Long-Range Facilities Plan (LRFP) should guide all board of education decisions regarding capital asset management and capital plan submissions, both in terms of facility operations and educational programming. The content of each LRFP developed by boards is fully expected to vary, as they will be dependent on the unique circumstances of individual school districts currently and in the future.

The LRFP for a school district would most commonly use at least a ten-year planning horizon. However, a longer period may be considered where local government is actively pursuing extended land use planning and lengthier residential development growth strategies, which may directly influence the growth of student enrolment in different areas of the school district. Conversely, the potential contraction of communities and changing demographics in neighbourhoods, leading to subsequent decline in student enrolment, may also need to be considered under the LRFP.

As all capital project requests should be supported by a current LRFP, the Ministry may request school districts to provide appropriate sections of the LRFP to inform its review of individual requested projects. Of primary consideration is that any school for which a capital project is being proposed has been identified in the LRFP as being necessary for the board's continuous provision of education programming for students in the school district.

- 1.3 **Nature of the Plan.** Note that the LRFP is a *Facilities Plan*, not an educational study of the appropriate grade structure of schools, the appropriate placement of district programs, nor the viability/desirability of neighbourhood schools. The plan is a framework to guide the district in rationalizing its long-term facilities usage and to support future capital plan submissions to the Ministry of Education. The plan belongs to the school district, not the Ministry, and is a dynamic document – as circumstances and programs change over time, the plan can be amended.
- 1.4 **The Assignment.** In March 2019 School District 83 North Okanagan - Shuswap (SD 83) engaged Cascade Facilities Management Consultants Ltd (www.cascade-cslts.com) to prepare this School District Long Range Facilities Plan (LRFP) starting in July.

2. DISTRICT VISION, MISSION, AND GOALS

2.1 SD 83 has a long tradition of providing effective educational programming to students in the municipalities of Salmon Arm, Sicamous, Armstrong, Enderby, Spallumcheen, and smaller communities in the north Okanagan and Shuswap regions in south central British Columbia.

2.2 District Mission Statement

“Our mission is to engage all students in meaningful and relevant learning experiences that develop their knowledge, skills, attitudes, creativity and the pursuit of personal success” approved 23 January 2019. (This may be updated in Fall 2019).

2.3 District Goals

The District Goals are found in the Strategic Plan as follows:

- a. Students First – student success is our top priority every day;
- b. Organizational Efficiency – Decisions and actions are clear, purposeful, and responsible;
- c. Culture of Health and Wellness – Students and staff are healthy, and connected to the learning community

2.4 District Strategic Plan

The District Goals are achieved by following the District Strategic Plan. This Plan elaborates on the outcomes expected from each goal and measurements toward reaching the outcomes. More importantly, strategies to achieve the identified outcomes are identified.

2.5 Strategic Plan Relevance to Long Range Facilities Plan

Some of the strategies in the District Strategic Plan can provide guidance in the creation of a Long Range Facilities Plan (LRFP). Certainly the strategies identified below can influence the recommendations and design guidelines for new schools, additions, or renovations:

- a. The **Students First** goal includes the following relevant strategies:
 - Develop meaningful, varied, inclusive, and differential learning experiences ... :
 - Increase project-based and inquiry learning opportunities...
 - Expand opportunities for students to have input and choice of learning experiences;
 - Provide diverse learning opportunities inclusive of responsible technology-supported environment;

- b. The **Organizational Efficiency** goal includes the following relevant strategies:
 - Optimize facilities to ensure they are quality learning environments;
 - Establish relationships and regular collaboration with formal and informal representatives from the Indigenous communities.
- c. The **Culture of Health and Wellness** goal includes the following relevant strategy:
 - Provide and support learning/working environments with strategies to support mental, emotional development/wellness.

3. LRFP PRINCIPLES AND OBJECTIVES

3.1 Purpose

The purpose of the Long Range Facilities Plan (LRFP) is to guide facilities development decisions by School District 83 and the Ministry of Education over the coming ten year period. The annual Capital Plan submission should address specific needs already justified at the macro level by the LRFP.

3.2 Principles

- The 2020-2029 LRFP must take into account changes in school enrolment, anticipated future growth or decline in school-age population, building condition, school catchment boundaries, and district philosophy on grade structure organization;
- The LRFP must identify and support the facility needs of the grade structure that the district has established;
- The LRFP must recognize the importance of small rural schools as the heart of the community in isolated parts of the district;
- The LRFP must allow for Ministry of Education initiatives such as on-site Day Cares, Strong Start programs, and Neighbourhoods of Learning; and
- The School District LRFP must support the unique First Nations cultural and educational development needs.

3.3 Objectives

- Provide viable educational facilities capable of accommodating the catchment population;
- Provide school facilities capable of providing a successful educational environment for the assigned grade structure;

- Provide healthy and safe physical facilities at schools; and
- Provide accessible community spaces in support of the local population's educational and cultural needs, recognizing the importance of the school building as a resource to the community.

4. EXISTING INFRASTRUCTURE AND PROGRAMS

4.1 The North Okanagan – Shuswap Board of Education serves the communities in three regional districts in south central British Columbia. They are the southwest portion of the Columbia-Shuswap Regional District (CSRD); the northwest portion of the North Okanagan Regional District (NORD); and a small part of the Thompson-Nicola Regional District (TNRD).

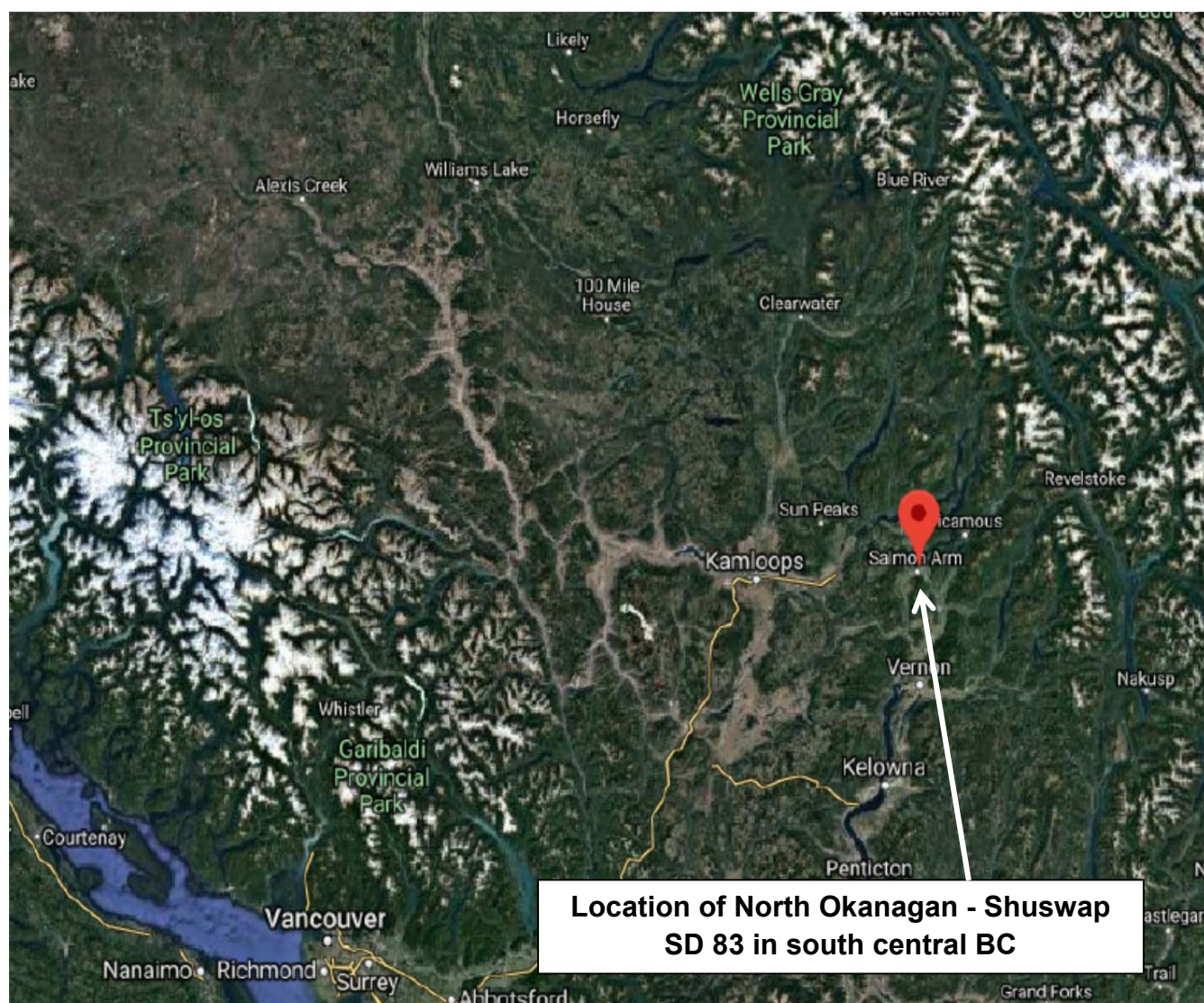


Figure 4.1a – SD location in south central BC

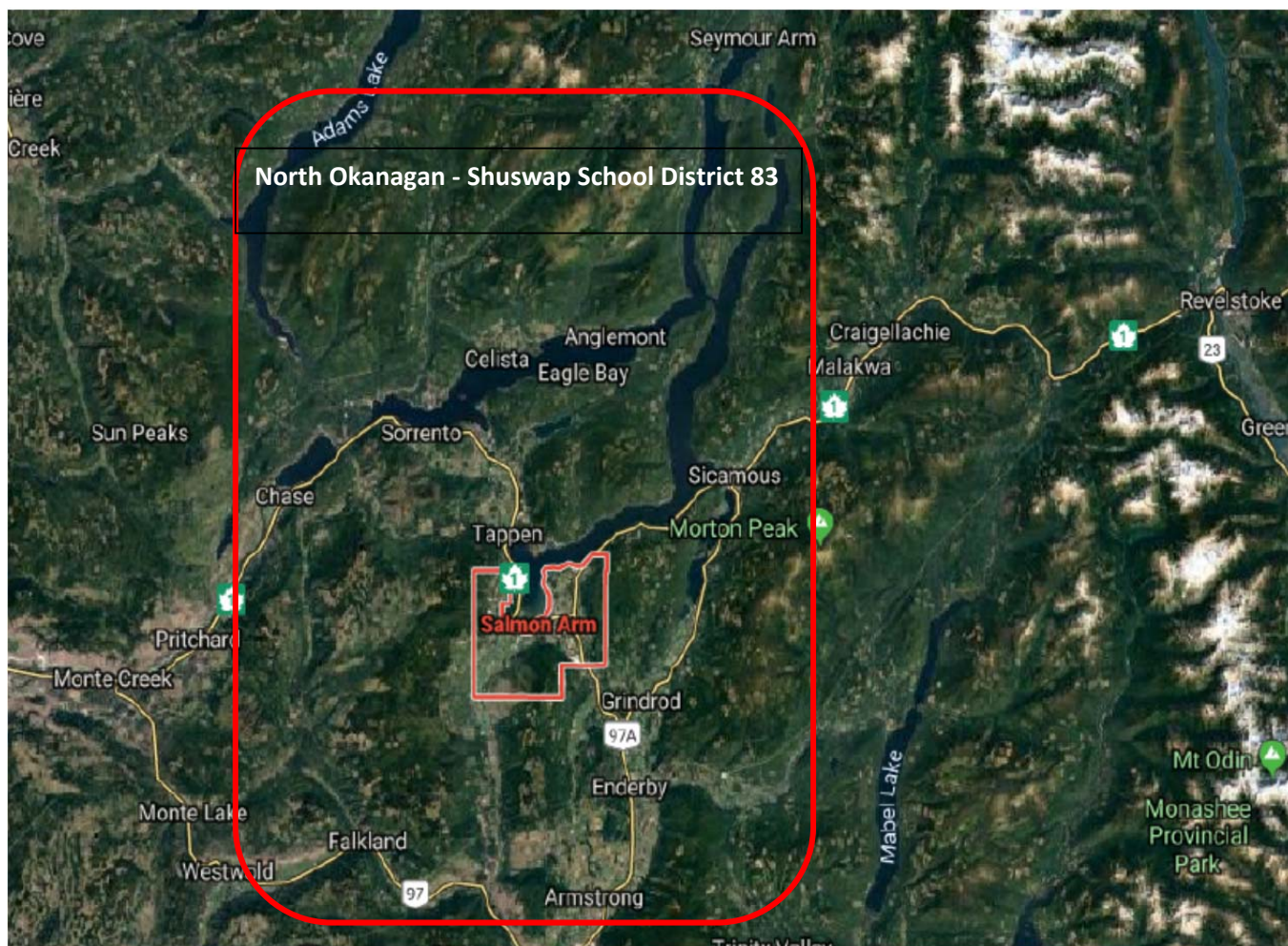


Figure 4.1b – School District 83 approximate Geographic Location

The communities are mainly connected by the Highway 1 running east-west, Highway 97A and 97B running north-south, and lesser paved roads. The area population includes a significant First Nations population. In some of the smaller communities, the school serves as the main social centre.

The main urban centres are the municipalities of Salmon Arm, Sicamous, Armstrong, Enderby, and Spallumcheen, with Salmon Arm being the main economic and administrative centre of the region.

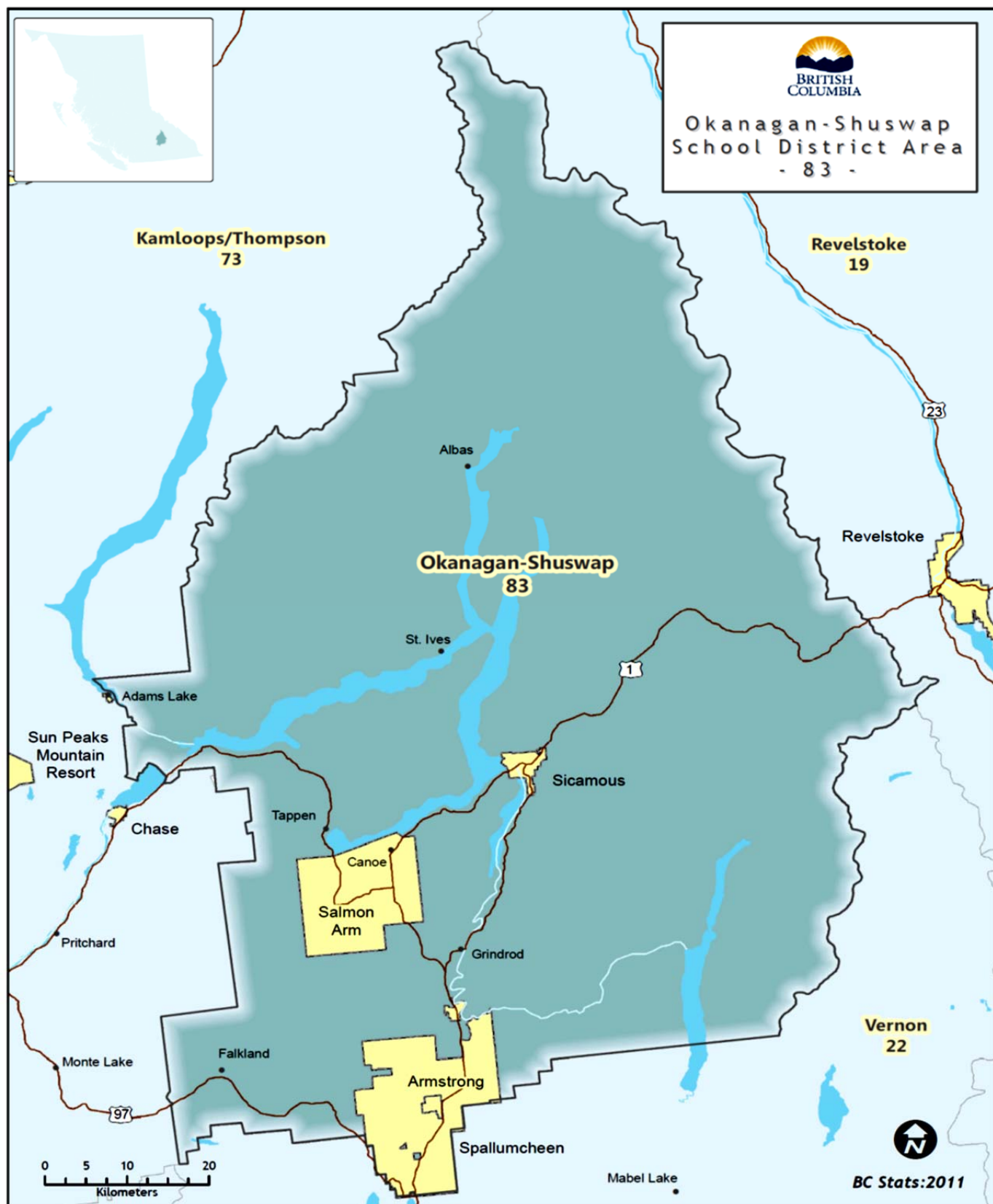


Figure 4.1c –North Okanagan – Shuswap SD 83 and surrounding school districts

4.2 **Four Zones**. For the purposes of planning, it is recommended that the school district be organized into five zones: **Salmon Arm, Sorrento, Armstrong, Enderby, and Sicamous**. This may or may not vary from the geographic representation within the board of school trustees, but is the most logical when considering facilities management.

4.3 **School District 83 Facilities**

In 2019 North Okanagan - Shuswap School District 83 was operating and maintaining the following schools and other facilities:

- **ELEMENTARY SCHOOLS –**

- o **Salmon Arm Urban Zone:**

- Bastion Elementary (K-5), (dual track);
 - Hillcrest Elementary (K-5);
 - Salmon Arm West Elementary (K-5);
 - South Broadview Elementary (K-5); (Strong Start program);
 - Strong Start Program (Pre-K) at DESC;

- o **Salmon Arm Rural Zone:**

- North Canoe Elementary (K-5);
 - South Canoe Elementary (K-7);

- o **Northwest Zone:**

- Sorrento Elementary (K-5), (Strong Start program);

- o **Armstrong Zone:**

- Armstrong Elementary (K-5);
 - Highland Park Elementary (K-5); (Strong Start program);

- o **Enderby Zone:**

- Grindrod Elementary (K-7);
 - MV Beatty Elementary (K-6); (Strong Start program);

- o **Sicamous Zone:**

- Parkview Elementary (K-6); (Strong Start program);

- **ELEMENTARY – MIDDLE SCHOOLS --**

- o **Salmon Arm Rural Zone:**

- Silver Creek Elementary-Middle (K-8);
 - Rancho Elementary-Middle (K-8);

- **Northwest Zone:**

- Carlin Elementary-Middle (K-8); (Strong Start program);
- North Shuswap Elementary-Middle (K-8), (Strong Start Program);

- **Armstrong Zone:**

- Falkland Elementary-Middle (K-8), (Strong Start program);

- **MIDDLE SCHOOLS--**

- **Salmon Arm Urban Zone:**

- Shuswap Middle (6-8), (dual track);

- **Armstrong Zone:**

- Len Wood Middle (6-8);

- **SECONDARY SCHOOLS –**

- **Salmon Arm Urban Zone:**

- Salmon Arm Secondary Sullivan Campus (11-12), (dual track);
- Jackson Campus (9-10), (dual track)

- **Armstrong Zone:**

- Pleasant Valley Secondary (9-12);

- **Enderby Zone:**

- AL Fortune Secondary (7-12);

- **Sicamous Zone:**

- Eagle River Secondary (9-12);

- **ALTERNATE SCHOOLS –**

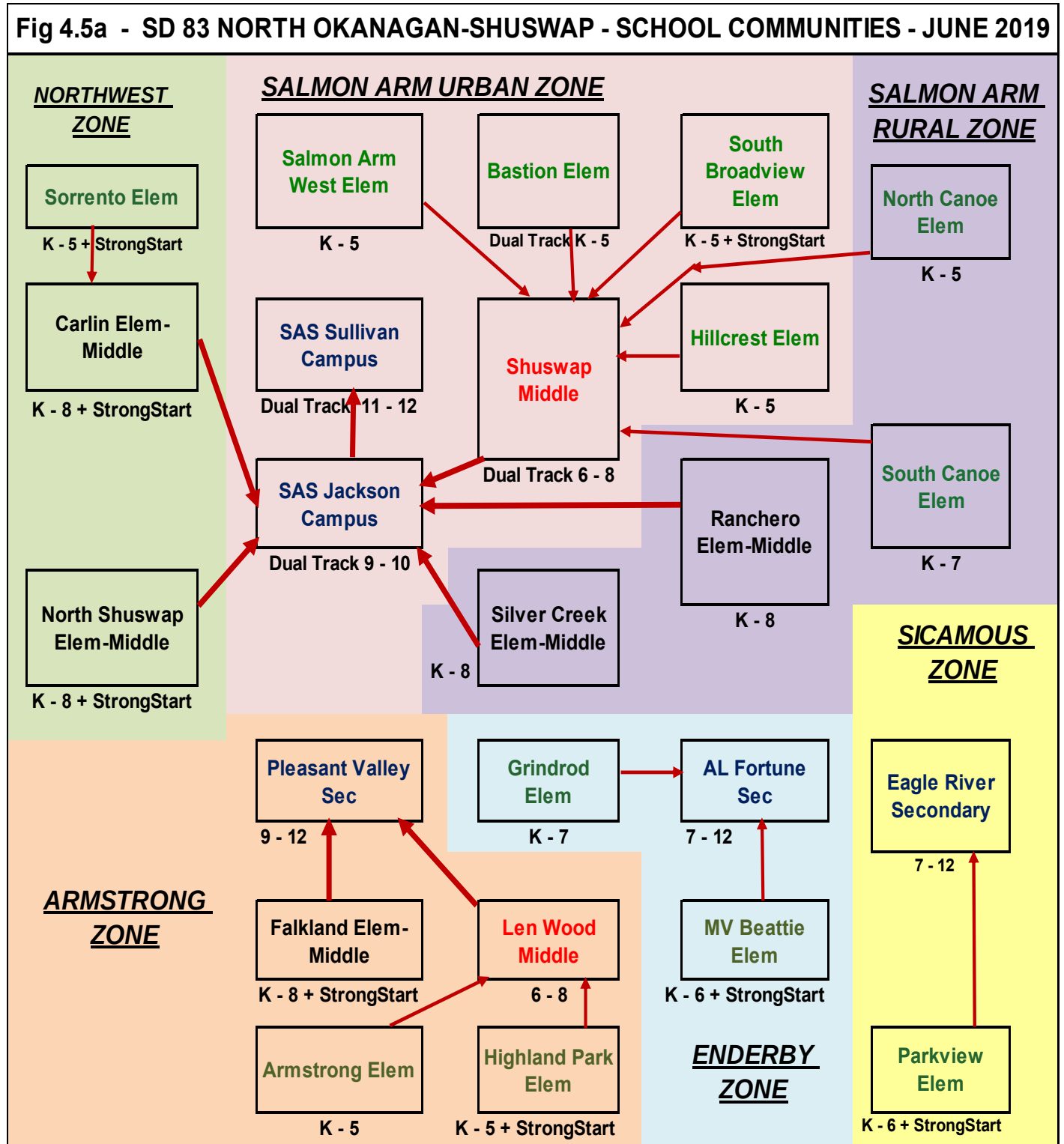
- Salmon Arm Storefront (10-12);
- Education Outreach Program (9-12);
- Salmon Arm Teen House.

- **OTHER FACILITIES –**

- District Education Support Centre (DESC);
- School District Maintenance Department (2 buildings);
- Gateway Building (Armstrong) (vacant), refer to Section 4.8;
- Malakwa Elementary (closed, leased), refer to Section 4.8;
- Silver Creek Elementary (closed), refer to Section 4.8.

4.4 Photos and descriptions of the schools – refer to **Schedule B**.

4.5a **School Organization.** The 2018-19 school organization and the flow of students from elementary to middle and secondary is shown in the following Chart (Figure 4.5a).



4.5b **School Locations.** The following two maps show the location of the schools:

- Figure 4.5b – Outlying Schools;
- Figure 4.5c – Urban Schools in Salmon Arm.

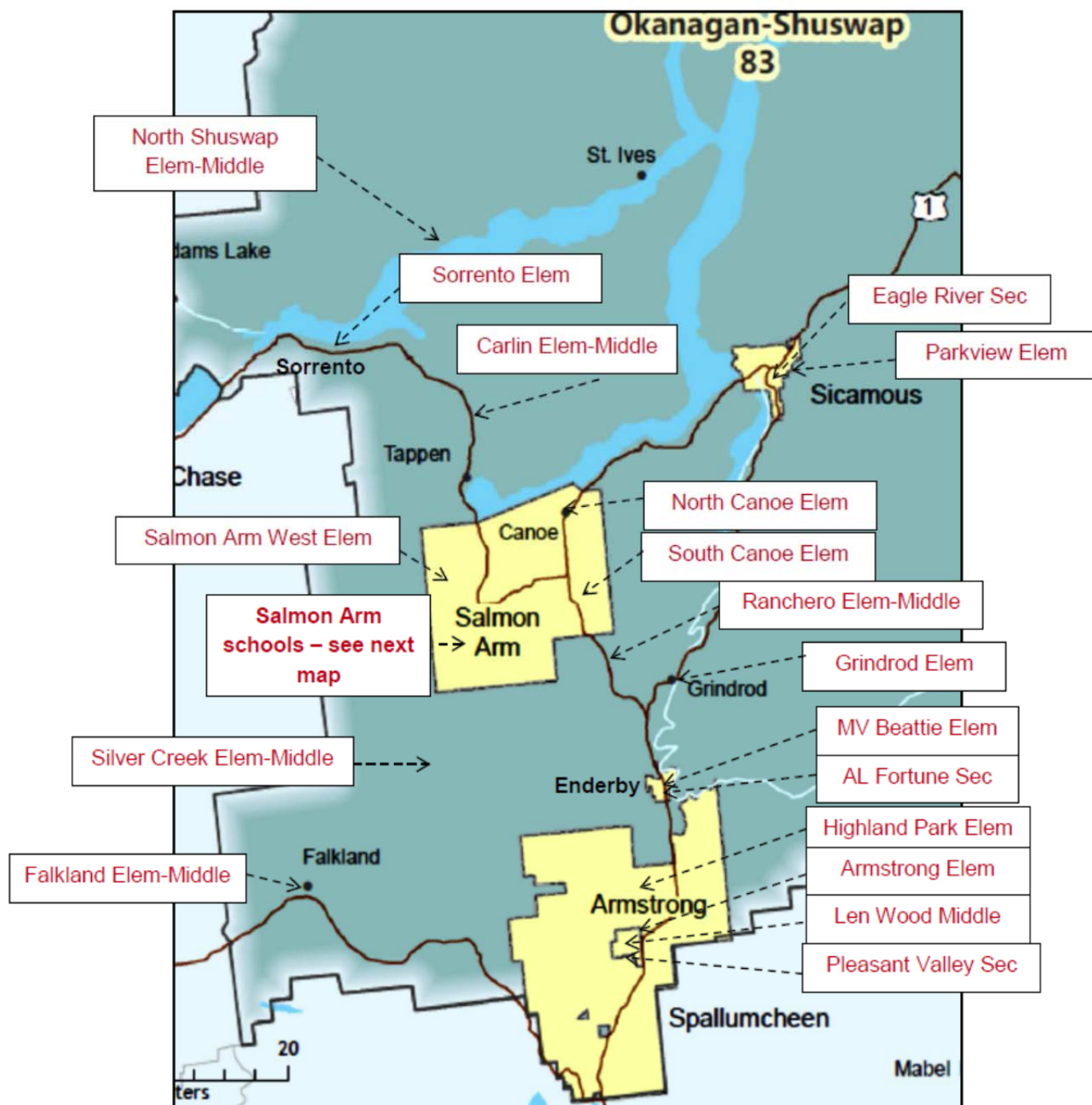


Fig. 4.5b - Outlying School Locations

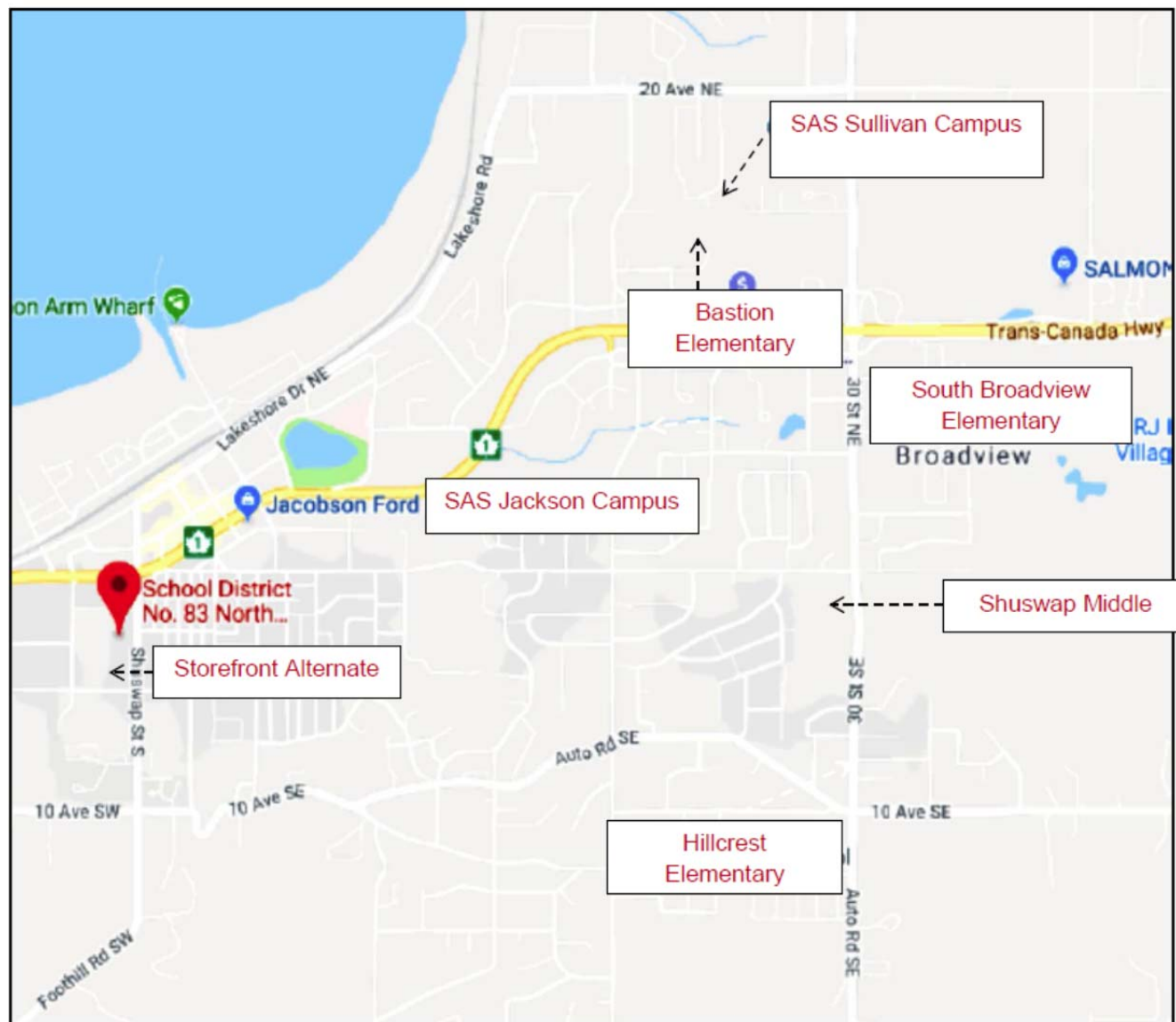


Fig. 4.5c - Salmon Arm urban schools

4.6 Facility Condition.

4.6a Facility Condition Assessments. In 2009 the Ministry of Education contracted VFA Inc, a Boston based facility capital planning and asset management company, to complete a facility condition assessment of all schools in the province. All SD 83 schools were originally inspected in 2010 by a team of engineers and facility experts. This assessment was updated by VFA in the fall of 2018. The broad building systems reviewed were:

- Exterior building envelope;
- Interior construction and conveyance;
- Electrical systems;
- Heating, ventilation, and air conditioning systems;
- Plumbing systems; and
- Structure.

The results of the building inspections culminated in a detailed report on the condition of each school with the key metric being the Facility Condition Index (FCI) which quickly reflects the condition on a scale of 0 to 1.00. It is based on the following formula:

$$\text{Facility Condition Index} = \frac{\text{Cost to remedy maintenance deficiencies}}{\text{Replacement Value of Facility}}$$

The relative measure of the condition of the facilities is usually categorized into a five-tiered condition scale ranging from Excellent to Very Poor, as follows:

Rating	Condition	Remarks
under 0.05	Excellent	Near new; meets present & foreseeable future requirements.
0.05 to 0.15	Good	Meets all present requirements.
0.15 to 0.30	Average	Has significant deficiencies, but meets minimum requirements; some significant building system components nearing end of normal life-cycle.
0.30 to 0.60	Poor	Does not meet requirements. Immediate attention required to significant building systems. Some significant building systems at end of life-cycle. Parts no longer in stock, or very difficult to obtain. High risk of failure of some systems.
over 0.60	Very Poor	Does not meet requirements. Immediate attention required to most significant building systems. Most significant building systems at end of their life-cycle. Parts no longer in stock, or very difficult to obtain. High risk of failure of most systems.

4.6b. SD 83 Facilities Condition. The following Figures 4.6b, c, and d display the Facility Condition Index for each school as determined by the Ministry of Education funded Capital Asset Management System (CAMS) building assessments by VFA.

FCI Ratings in 2018 (Building, excluding Site)		
<i>sorted alphabetically by school</i>		
<u>Facility Name</u>	<u>FCI</u>	<u>Rating</u>
Armstrong Elementary	0.23	Average
Bastion Elementary	0.32	Poor
Carlin Elementary-Middle	0.32	Poor
Falkland Elementary	0.52	Poor
Grindrod Elementary	0.50	Poor
Highland Park Elementary	0.41	Poor
Hillcrest Elementary	0.18	Average
MV Beatty Elementary	0.20	Average
North Canoe Elementary	0.37	Poor
North Shuswap Elementary	0.23	Average
Parkview Elementary	0.60	Poor
Ranchero Elementary	0.41	Poor
Salmon Arm West Elementary	0.38	Poor
Silver Creek Elementary	0.55	Poor
South Canoe Elementary	0.55	Poor
Sorrento Elementary	0.46	Poor
South Broadview Elementary	0.44	Poor
Len Wood Middle	0.54	Poor
Shuswap Middle	0.17	Average
AL Fortune Secondary	0.36	Poor
Eagle River Secondary	0.42	Poor
Pleasant Valley Secondary	0.47	Poor
Salmon Arm Secondary Sullivan	0.29	Average
Salmon Arm Secondary Jackson	0.22	Average
Salmon Arm Teen House	0.32	Poor
District Board Office	0.00	Excellent
District Maintenance Warehouse	0.14	Good
District Works Complex	0.34	Poor
Gateway Building, Armstrong	0.36	Poor
Malakwa Elementary (closed)	0.52	Poor

Figure 4.6b – Current Facilities alphabetically

FCI Ratings in 2018 (Building, excluding Site)		
<i>sorted from worst to best</i>		
<u>Facility Name</u>	<u>FCI</u>	<u>Rating</u>
Parkview Elementary	0.60	Poor
Silver Creek Elementary	0.55	Poor
South Canoe Elementary	0.55	Poor
Len Wood Middle	0.54	Poor
Falkland Elementary	0.52	Poor
Malakwa Elementary (closed)	0.52	Poor
Grindrod Elementary	0.50	Poor
Pleasant Valley Secondary	0.47	Poor
Sorrento Elementary	0.46	Poor
South Broadview Elementary	0.44	Poor
Eagle River Secondary	0.42	Poor
Highland Park Elementary	0.41	Poor
Ranchero Elementary	0.41	Poor
Salmon Arm West Elementary	0.38	Poor
North Canoe Elementary	0.37	Poor
AL Fortune Secondary	0.36	Poor
Gateway Building, Armstrong	0.36	Poor
District Works Complex	0.34	Poor
Bastion Elementary	0.32	Poor
Carlin Elementary-Middle	0.32	Poor
Salmon Arm Teen House	0.32	Poor
Salmon Arm Secondary Sullivan	0.29	Average
Armstrong Elementary	0.23	Average
North Shuswap Elementary	0.23	Average
Salmon Arm Secondary Jackson	0.22	Average
MV Beatty Elementary	0.20	Average
Hillcrest Elementary	0.18	Average
Shuswap Middle	0.17	Average
District Maintenance Warehouse	0.14	Good
District Board Office	0.00	Excellent

Figure 4.6c – Current Facilities sorted from worst to best

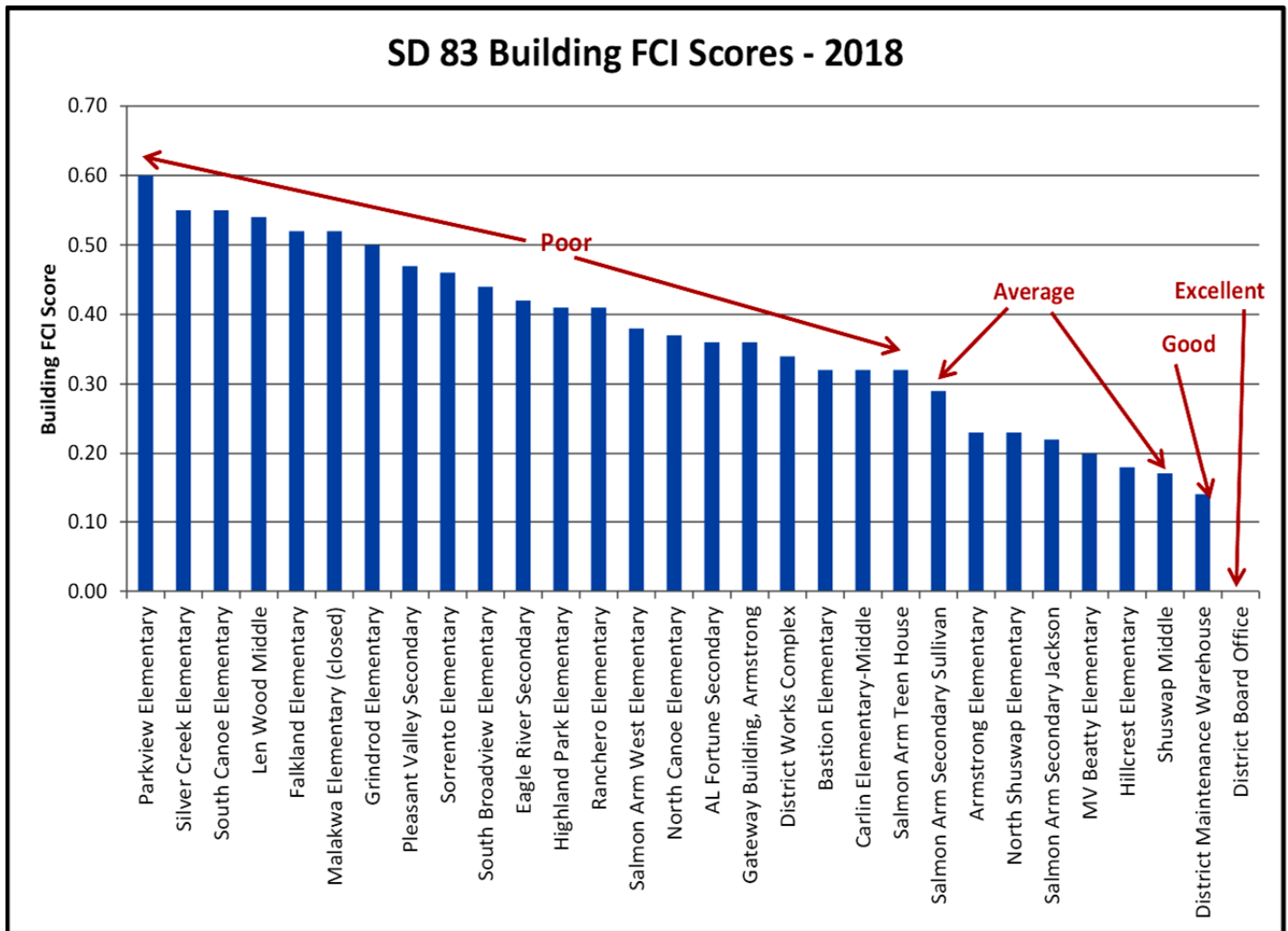


Figure 4.6d – Current Facilities displayed in graph form

It is quickly apparent that many facilities in SD 83 are in need of upgrading or replacement (according to the VFA assessment system). This data is readily available to the Ministry of Education and is used in support of capital requests for renovations and replacements.

4.7 Capital Plan Submissions.

As can be seen by the facility condition scores above, many of the school facilities are in need of improvement. A combination of capital projects and Annual Facilities Grant projects has been identified to the Ministry. Figure 4.7 lists the capital projects submitted to the Ministry of Education via the annual 2020/21 Capital Plan Submission in June 2019:

Ministry of Education

Capital Plan 2020/21 Request Summary

School District Number	83
School District Name	North Okanagan-Shuswap
Long Range Facility Plan Last Updated:	Please enter date

SD #	83
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Program	Total or Estimated Project Cost
Addition	\$2,200,000
New School	\$31,000,000
SEP	\$4,431,631
CNCP	\$798,000
Grand Total	\$38,429,631

**PEP and BUS not included*

Program Name	Project Priority	Facility or Project Name	Project Description	Total/Estimated Project Cost
Addition	1	Lenwood Middle School	New gym - middle school sized	\$2,200,000.00
New School	1	Salmon Arm Elementary	New 540 capacity K-5 school in Salmon Arm	\$31,000,000.00
SEP	1	A.L.Fortune	Bring Dust Collectorsystem up to current standards	\$432,081.00
SEP	2	Eagle River High School	Bring Dust Collector system up to current standards	\$475,550.00
SEP	3	Sullivan High School	Boiler Replacement	\$790,000.00
SEP	4	Eagle River High School	Replace HVAC system and energy savings	\$1,429,000.00
SEP	5	A.L.Fortune	Replace HVAC system and energy savings	\$1,305,000.00
CNCP	1	J.L. Jackson High School	Boiler Replacement	\$553,000.00
CNCP	2	Falkland Elementary	Better building control	\$115,000.00
CNCP	3	South Canoe Elementary	Better building control	\$130,000.00
PEP	1	South Canoe Elementary	Universally Accessible Playground Equipment	
PEP	2	Armstrong Elementary School	Universally Accessible Playground Equipment	
PEP	3	Highland Park Elementary	Universally Accessible Playground Equipment	
Total				\$38,429,631.00

Figure 4.7

4.8 Surplus or Vacant Property. As of July 2019, the school district owns the following surplus sites and buildings. See Figure 4.8a.

Figure 4.8a - SD 83 SURPLUS BUILDINGS AND PROPERTIES (as of July 2019)									
Fac #	Status	Current Use	Original Designation	Location	Zone	Orig Const Date	Land Area (ha)	Bldg Area (sq m)	Note
89003	Closed school	Leased at cost recovery only	Malakwa Elementary	3994 Malakwa Road, Malakwa	Sicamous	1911	0.86	1429.0	also on site: 89 sq m modular, leased out
89519	Undeveloped site	Vacant	White Lake Road Site	2500 block, White Lake Road, Tappen	Sorrento	acquired 1930	0.64	n/a	School closed 1950, demolished 1959. Site used as community park.
89012	Undeveloped site	Vacant	Old JL Jackson Secondary	Lot 2 at 451 Shuswap St SW, Salmon Arm	Salmon Arm	1917	1.2	n/a	School closed 2003, demolished 2004. Site subdivided; Lots 1 & 3 sold, this Lot 2 reserved.
89513	Undeveloped site	Vacant	Old JL Jackson Sec Annex/Hut	Lot 4 at 150 1st Ave SW, Salmon Arm	Salmon Arm	acquired 1950	1.73	n/a	School closed 2003, Annex demolished 2012. Site subdivided; this Lot 4 reserved.
83000	Closed Maint Ctr	Vacant	Gateway Learning Centre	3015 Wood Ave, Armstrong	Armstrong	1975	0.2	670.0	Originally Maint Ctr for former Armstrong SD. Used for district storage.
89004	Closed school	Leased at market value	Silver Creek Elem Annex	921 Silver Creek Rd, Salmon Arm	Salmon Arm	1930	part of 3.48	280.6	On site of Silver Creek Elem-Middle (in service).
21005	Closed school	Leased at market value	Highland Park Elem Annex	3130 Wood Ave, Armstrong	Armstrong	1983	part of 7.01	313.0	On site of Highland Park Elem (in service).

The undeveloped site known as Lot 4 at 150 1st Avenue SW, Salmon Arm, is reserved in the Capital Plan for a future Salmon Arm Elementary School. The subdivision plan in Figure 4.8b shows this site legal boundaries and the photo in Figure 4.8c depicts the vacant site.

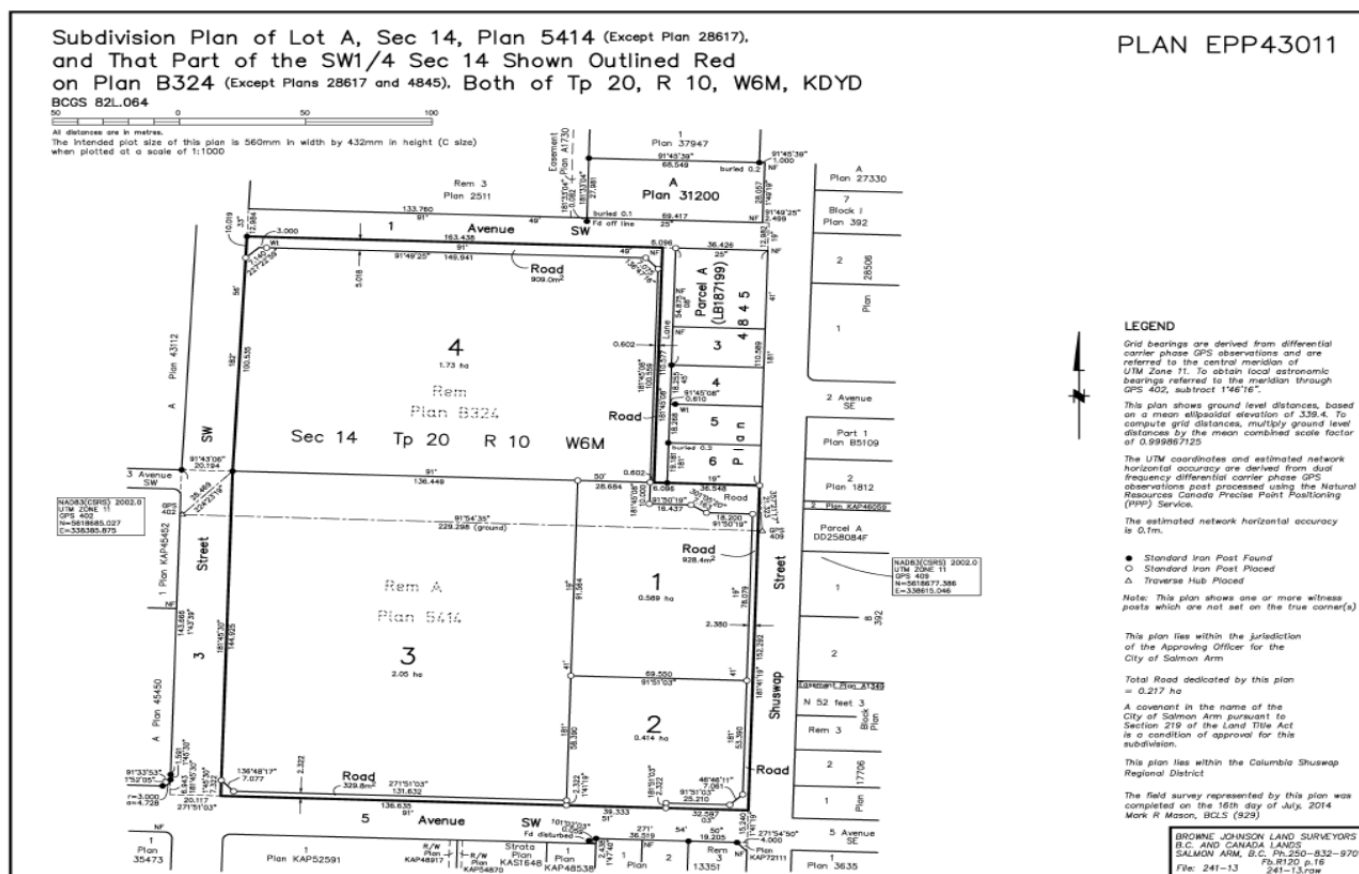


Fig. 4.8b – Subdivision Plan of Vacant Site Lot 4 for future Salmon Arm Elementary



Fig. 4.8c – Photo of Vacant Site Lot 4 for future Salmon Arm Elementary

White Lake Site. As shown in Figure 4.8a, the SD 83 owns a vacant undeveloped site at White Lake. Research has revealed that this site was obtained by a Crown grant, therefore if it is surplus to school district needs it would revert to the Crown. No monetary advantage would be gained by SD 83 releasing it.

4.9 Portables. As of July 2019, the school district has 6 portable classrooms located at the sites shown in Figure 4.9.

Fig 4.9 - SD 83 PORTABLE CLASSROOMS (as of July 2019)								
No.	School Site	Ownership	Current Use	Description	Bldg Area (sq m)	Age	Status	Notes
1	Bastion Elementary	SD 83	Gen Instruction	3 modular complex	478.0	5	active	permanent foundation, separated modules
2	Shuswap Middle	SD 83	Gen Instruction	stand-alone portable classroom	89.0	21 - 25	active	
3	Shuswap Middle	SD 83	Gen Instruction	stand-alone portable classroom	89.0	21 - 25	active	
4	Carlin Elem-Middle	SD 83	Multi Purpose	stand-alone portable classroom	89.0	21 - 25	active	
5	MV Beattie Elementary	SD 83	Gen Instruction	stand-alone portable classroom	89.0	21 - 25	active	
6	Pleasant Valley Secondary	SD 83	Storage	stand-alone portable classroom	89.0	21 - 25	active	

5. COMMUNITY DEMOGRAPHICS

5.1 Introduction

The North Okanagan-Shuswap School District 83 encompasses portions of three adjacent regional districts:

- The southwest portion of the Columbia-Shuswap Regional District (CSRD);
- The northwest portion of the North Okanagan Regional District (NORD); and
- Slivers of the Thompson-Nicola Regional District (TNRD).

The Canada Census considers each regional district as a Census Division, which in turn, is divided into a series of statistical sub-areas referred to as Census Subdivisions.

BC Stats, the arm of the Province responsible for statistical and economic research, information and analysis, was contacted with respect to the data sources to use for the demographic analysis undertaken by Cascade. It was confirmed that School Districts do not coincide perfectly with Canada Census boundaries. Furthermore, there are a few slivers of SD 83 that are technically in the Thompson-Nicola Regional District, but they are so small that the impact on population should be minimal. Therefore, Cascade is using the Census Subdivision areas within the CSRD and NORD that best match the boundary of the North Okanagan-Shuswap School District 83 and is not including the TNRD slivers. Cascade is confident that the combined data provides a solid basis for the analysis and conclusions being reached in this report.

The Census Subdivisions data being used is categorized by the Canada and BC statistical agencies as follows:

- **Electoral Areas (EA)** –are the unincorporated area, usually rural in nature, within regional districts;
- **Municipalities** – are the communities incorporated by the Province and may be are classified as Districts, Townships, Cities or Villages; and
- **Indian Reserves (IR)** – are First Nation communities identified under Federal legislation.

In some cases, Cascade will identify Settlements, which are place-name communities within Electoral Areas, but are not incorporated as municipalities. Usually, the populations of the Settlements are included in the EA data.

It is also recognised that the subject area is mainly in the traditional lands of the Secwepemc First Nation.

5.2 Boundaries

The administrative boundary of the North Okanagan-Shuswap School District 83 is shown earlier in **Figure 4.1c**. As noted above, the boundary of School District 83 is made up of a portion of the Columbia-Shuswap Regional District and a portion of the North Okanagan Regional District as shown in **Figure 5.2a**.

The Census Subdivision area that Cascade has accessed and combined to represent the data set for North Okanagan-Shuswap School District 83 is shown in **Figure 5.2b**. Another administrative area Cascade utilised for some statistical information is that of the Health Districts. There are three Local Health Districts of Salmon Arm, Armstrong-Spallumcheen and Enderby which, when combined, have the same administrative boundaries as SD 83. A single map showing these three areas was not available from BC Stats.

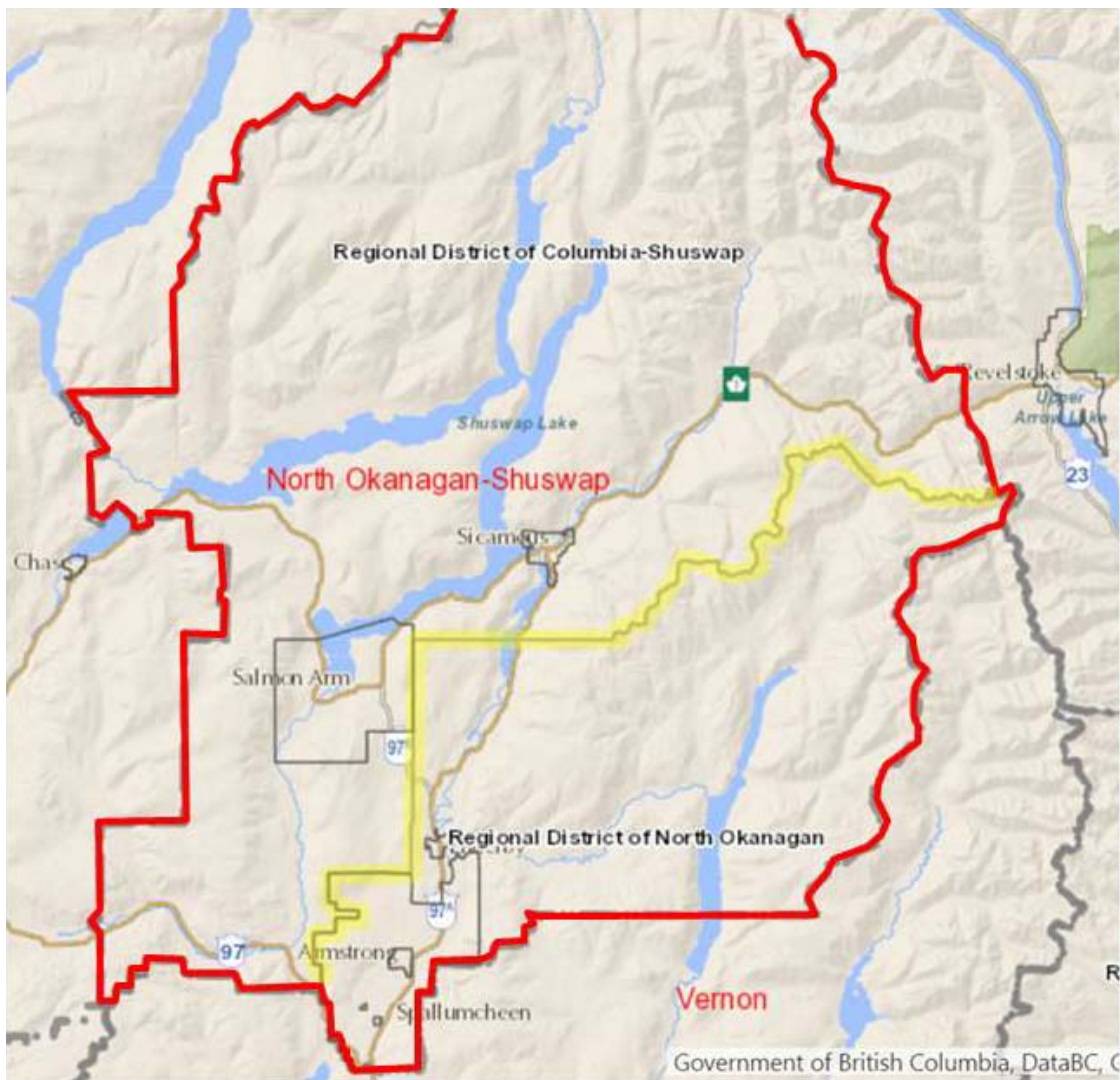


Figure 5.2a Map showing portions of the Columbia-Shuswap Regional District; and the North Okanagan Regional District (Yellow line) making up the SD 83 (Red line).

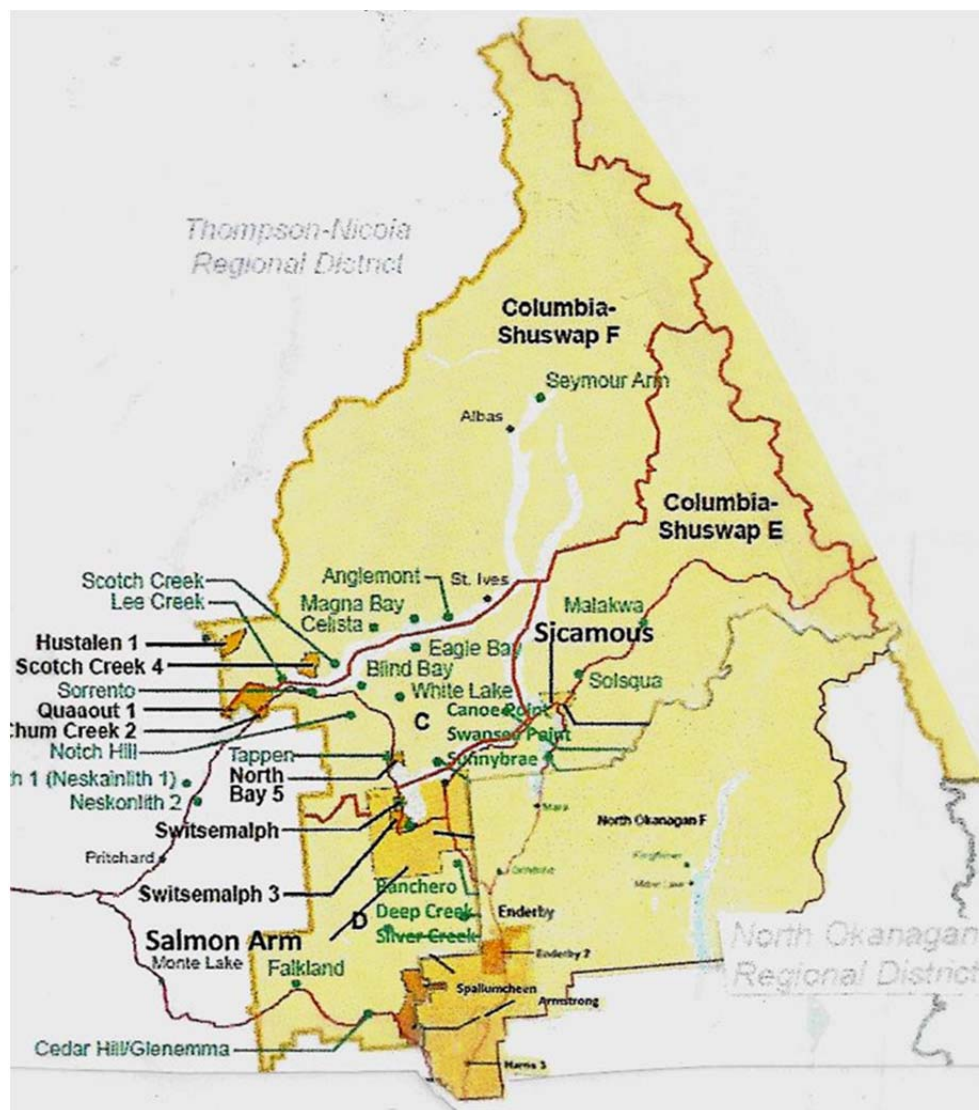


Figure 5.2b Map showing the Census Subdivisions of the Columbia-Shuswap Regional District; and the North Okanagan Regional District that make up the North Okanagan-Shuswap School District 83 area.

5.3 Settlement Patterns

The population of the area is generally concentrated in the valley areas in the BC's interior plateau, around a chain of lakes and rivers in the lower reaches of a forested mountainous area. There are also rural or semi-rural areas extending past the urbanised areas.

Historically, First Nations people have established their communities in the valley area in the same fashion. The Columbia-Shuswap Regional District is mainly situated in the territorial lands of the Secwepemc First Nation as shown in Figure 5.3.1 below:

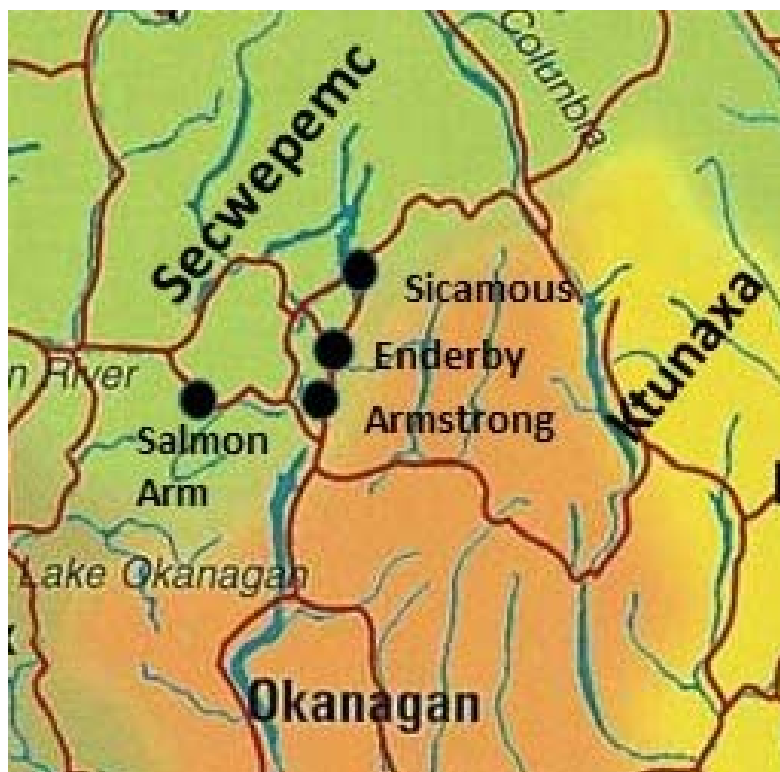


Figure 5.3.1 First Nations Territories located in the Interior Health Unit

The Canada Census reports on population and other demographic information such as population by age groups are available for the following:

- **First Nations Communities:** The Census identified 11 First Nations communities, categorised as “Indian reserve / Réserve Indienne” or abbreviated as IRI. The map below shows their locations with the School District’s area. Some of the communities are small, and therefore, for privacy, the data is either suppressed or rounded.
- **Municipalities:** The Census identified the three Cities of Armstrong, Enderby and Salmon Arm (abbreviated as C), and the two District Municipalities (DM) of Sicamous and Spallumcheen.
- **Unincorporated or Electoral Areas:** These are the broad semi-rural, rural or sparsely inhabited surrounding areas. There are five such areas, some of which have settlements, but these are included in the statistics of the whole respective Electoral Area.

5.4 Population History: First Nations Communities

Historical Settlement: Demographic data for First Nations communities is collected as part of the Canada Census. The map in Figure 5.4.1 shows the locations of the First Nation communities within the North Okanagan-Shuswap School District 83 (NOSD).

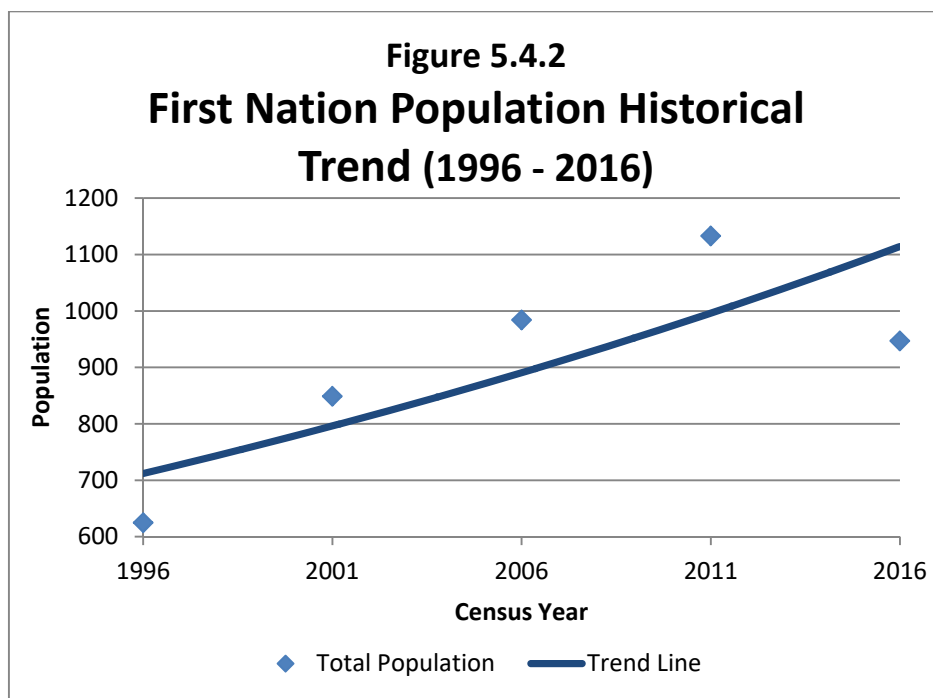


Figure 5.4.1 Map showing the eleven First Nation communities in the North Okanagan-Shuswap School District 83.

Population Change: Figure 5.4.2 summarizes the population statistics for First Nations communities from 1996 to 2016. Data is not available or has been suppressed for privacy reasons (due to small numbers of people) for some of the census years. The analysis that follows has combined the data for the Switsemaliph and the Switsemaliph 3 First Nations Communities for simplicity.

Figure 5.4.2 Populations of First Nations Communities (1996 – 2016)					
First Nations Community	1996	2001	2006	2011	2016
Enderby 2	N/A	238	353	390	316
Quaaout 1	209	230	186	234	171
Switsemalph	N/A	N/A	N/A	129	127
Okanagan (Part) 1	67	95	92	69	75
Switsemalph 3	57	63	63	90	71
North Bay 5	105	51	66	75	51
Chum Creek 2	72	83	78	51	41
Salmon River 1	62	34	53	45	39
Hustalen 1	53	26	73	26	31
Scotch Creek 4	N/A	N/A	15	19	20
Harris 3	N/A	0	5	5	5
Total	625	849	984	1,133	947

The population growth trend line for the total population of the First Nations Communities is shown in Figure 5.4.2:



The growth trend of the First Nation Communities is difficult to assess. The population increased up to 2011, but declined back to 2006 levels in 2016. Even with the drop, the historical trend has been a population growing over the years at a slightly more rapid rate as exemplified by the trend line curving upwards. It will be necessary to see the 2021 census statistics to determine if the 2016 data is the start of some reduced growth rate or a leveling off in the First Nation population. In the meantime, it can be concluded that the First Nations population growth in their traditional communities will continue at a rate of about 2.6 percent.

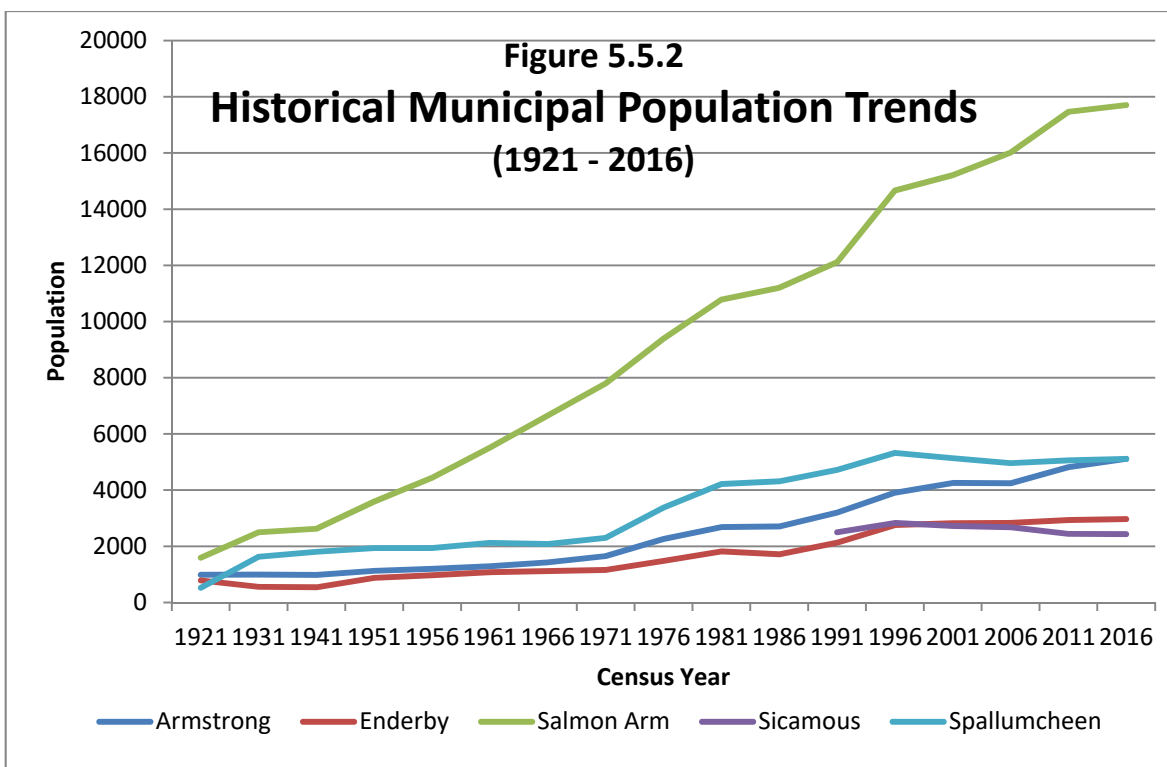
First Nations Communities: Historically, the most populated First Nations Communities have been Enderby with a population of 316 in 2016, followed by Quaaout (171) and Switsemalph (127). A fourth community consisting of that portion of the Okanagan First Nations community lying within School District 83 has a population of 75. The remaining eight communities each have a 2016 population of 51 or fewer people.

5.5 Population History: Municipalities

Population data is available for incorporated municipalities, classified as previously described. This data is available from BC Stats from the date each municipality was granted Letters Patent by the Province. Consequently, the municipal data often stretches further back in time than statistics for First Nations communities.

The following Figures depict the municipal populations and their population trends:

Figure 5.5.1 Historic Population for Municipalities (1951 – 2016)												
Census Year	Armstrong	Percent Change	Enderby	Percent Change	Salmon Arm	Percent Change	Sicamous	Percent Change	Spallumcheen	Percent Change	TOTAL	Percent Change
1921	983		783		1,594				523		3,883	
1931	989	0.6%	555	-29.1%	2,501	56.9%			1,629	211.5%	5,674	46.1%
1941	977	-1.2%	538	-3.1%	2,622	4.8%			1,805	10.8%	5,942	4.7%
1951	1,126	15.3%	877	63.0%	3,590	36.9%			1,936	7.3%	7,529	26.7%
1956	1,197	6.3%	965	10.0%	4,444	23.8%			1,937	0.1%	8,543	13.5%
1961	1,288	7.6%	1,075	11.4%	5,513	24.1%			2,123	9.6%	9,999	17.0%
1966	1,426	10.7%	1,114	3.6%	6,655	20.7%			2,076	-2.2%	11,271	12.7%
1971	1,648	15.6%	1,158	3.9%	7,793	17.1%			2,302	10.9%	12,901	14.5%
1976	2,260	37.1%	1,482	28.0%	9,391	20.5%			3,378	46.7%	16,511	28.0%
1981	2,683	18.7%	1,816	22.5%	10,780	14.8%			4,213	24.7%	19,492	18.1%
1986	2,706	0.9%	1,714	-5.6%	11,199	3.9%			4,310	2.3%	19,929	2.2%
1991	3,200	18.3%	2,128	24.2%	12,115	8.2%	2,501		4,719	9.5%	24,663	23.8%
1996	3,906	22.1%	2,754	29.4%	14,664	21.0%	2,827	13.0%	5,322	12.8%	29,473	19.5%
2001	4,256	9.0%	2,818	2.3%	15,210	3.7%	2,720	-3.8%	5,134	-3.5%	30,138	2.3%
2006	4,241	-0.4%	2,828	0.4%	16,012	5.3%	2,676	-1.6%	4,960	-3.4%	30,717	1.9%
2011	4,815	13.5%	2,932	3.7%	17,464	9.1%	2,441	-8.8%	5,055	1.9%	32,707	6.5%
2016	5,114	6.2%	2,964	1.1%	17,706	1.4%	2,429	-0.5%	5,106	1.0%	33,319	1.9%



Historical information about the establishment, economy and population growth of these municipalities is summarised as follows:

Armstrong began to be settled alongside the Shuswap\Okanagan Railway completed in 1892. It was named after William Charles Heaton-Armstrong who started a private bank in 1885 tied to the financing of the railway company. Agriculture, logging, and ranching are the area's historical economic base, with tourism becoming important in more recent years.

Except for minor fluctuations, Armstrong has experienced steady growth over the years.

Enderby was the name chosen in 1887 after being referred to by a series of earlier names, including Fortune's Landing, Steamboat Landing, Lambly's Landing, and Belvidere. There are a number of nearby rural communities including: Ashton Creek, Grandview Bench, Grindrod, Kingfisher, Mara, Springbend, and Trinity Valley. The historic grain farms and saw mill industries have declined in favour of service industries and tourism.

Apart from declines in the 1920's, 1930's and 1980's, Enderby has experienced steady growth over the years.

Salmon Arm is made up of two separate municipalities that were amalgamated in September 1970. The statistics in the above Figure 5.5.1 have combined the populations of the two communities for the years prior to amalgamation to provide historically comparable trend data.

Salmon Arm is a historical growth centre and has the largest the urban population centre in the School District. It has grown by expanding and infilling. The population roughly doubled from 1,595 to 4,000 in the 30 years between 1921 and 1951, again doubling to 8,000 in another 25 years up to 1976, and doubling yet again in the 40 years to 2016.

Sicamous was incorporated as a district municipality in 1989. Its name comes from a Secwepemc First Nations word meaning "in the middle." Permanent settlers arrived from Finland in 1885, associated with completing construction and driving the final spike on the Canadian Pacific Railway (CPR). Sicamous was a supply centre for railway construction, but the economy grew to encompass residential development and recreational tourism.

After initially increasing from 1991 to 1996, Sicamous has since been experiencing a slightly declining population, possibly stabilizing between 2011 and 2016.

Spallumcheen was incorporated as a District Municipality in 1892, and takes its name from the Shuswap language word "Spalmtsin" meaning "flat area along edge." A group of some 150 settlers, known as the Overlanders and led by brothers Thomas and Robert McMicking travelled from Ontario to settle areas in the BC interior, including the future community of Spallumcheen. Agriculture was the mainstay of the historical local economy, boosted by exporting grains to market with the coming of the CPR line through the area.

Except for minor fluctuations, Spallumcheen has experienced steady growth over the years

Summary: The following is a general summary about the historical population growth of the municipalities in the School District:

- Salmon Arm is the population and growth centre of the area, doubling roughly every two to 3 decades. It is the fastest growing area in the School District;
- Armstrong, Enderby and Spallumcheen are generally growing, but at a more modest pace; and;
- Sicamous is declining slightly or is possibly leveling out in population.

5.6 Population History: Electoral Areas

Figure 5.6.1 shows the boundaries of the Electoral Areas, the Municipalities and First Nations communities in SD 83 which are located within the Columbia-Shuswap Regional District and the North Okanagan Regional District.

Figure 5.6.1 Electoral Areas within the Columbia-Shuswap and North Okanagan Regional Districts forming part of the North Okanagan-Shuswap School District 83



Electoral Areas C, D, E and F in Columbia-Shuswap Regional District



Electoral Area F in North Okanagan Regional District

The Electoral Areas are the Census Subdivision areas that comprise larger unincorporated areas, outside the municipalities. Portions may be mountainous, with settlements in the vicinity of existing municipalities or along the lakeshores, and sparsely settled.

There are six Electoral Districts within the North Okanagan-Shuswap School District 83. One of the Electoral Areas is located in North Okanagan Regional District and four are located in the Columbia-Shuswap Regional District. Canada Census gives these areas sequential alphabetical letters and the Regional Districts have assigned some of them with their own names or have identified the names of the Settlements with the Electoral Areas. The following describes the Electoral Areas:

The Electoral Areas in the North Okanagan Regional District are described by the Regional District on their web site as follows:

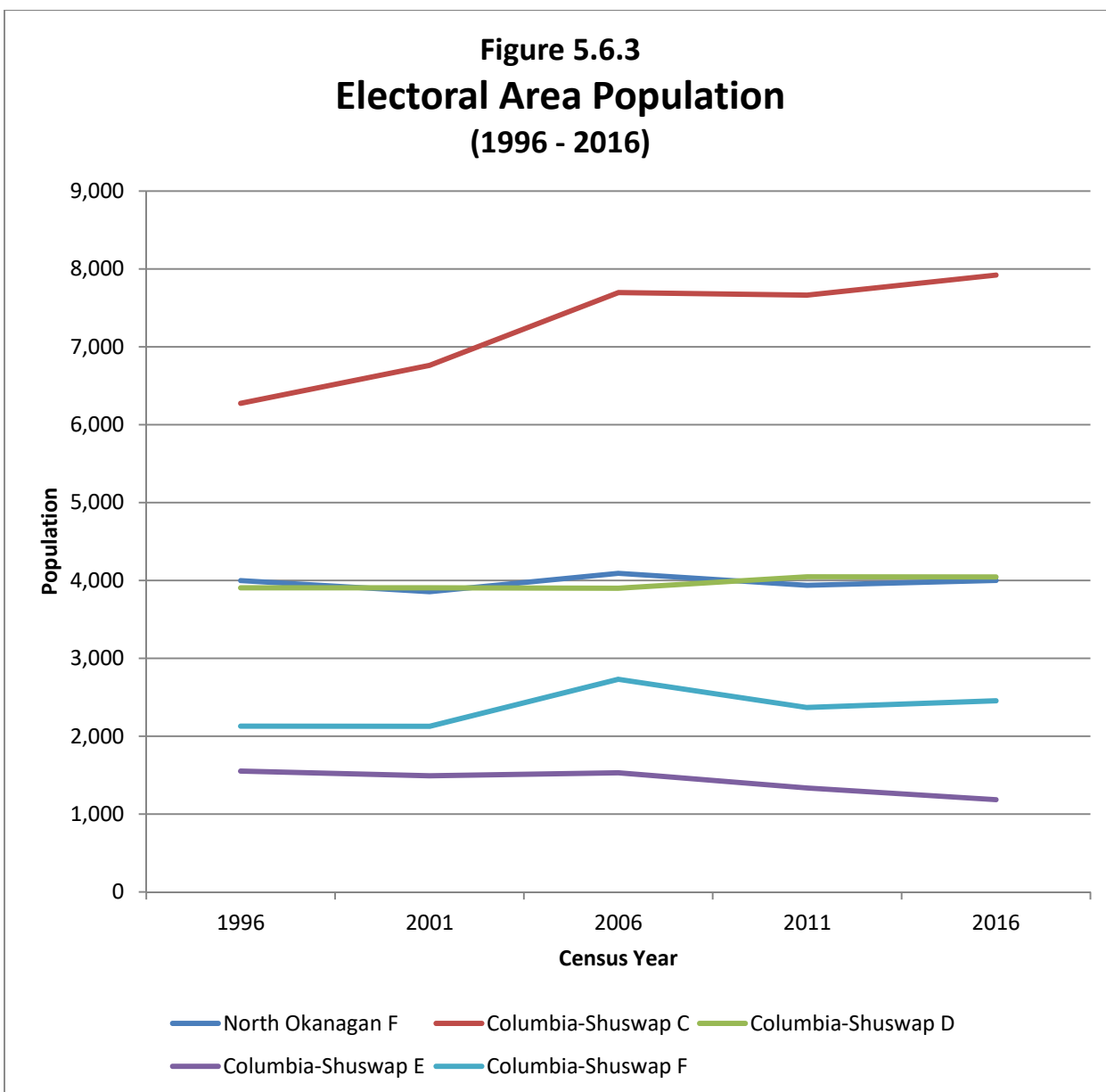
- **Electoral Area F** is located in the northern part of the Regional District. It includes the following communities: Grindrod, Grandview Bench, Ashton Creek, Kingfisher / Mabel Lake and Mara.

The following information is from the Columbia-Shuswap Regional District web site concerning the four Electoral Areas that are within the School District:

- **Electoral Area C** is known as the South Shuswap and includes unincorporated communities of Sunnybrae, Tappen, White Lake, Blind Bay, Sorrento, Eagle Bay and Notch Hill.
- **Electoral Area D** is the area that contains the small communities of Falkland, Deep Creek, Ranchero, Salmon Valley, Silver Creek, and Gardom Lake.
- **Electoral Area E** is the rural area surrounding the District of Sicamous and includes the unincorporated areas of Swansea Point in the south and Malakwa to the east.
- **Electoral Area F** is known as the North Shuswap and is located on the north side of Shuswap Lake. It includes unincorporated communities of Lee Creek, Scotch Creek, Celista, Magna Bay, Anglemont, St. Ives, and Seymour Arm.

Figure 5.6.2 shows the population history data and Figure 5.6.3 depicts graphically the population change for each Electoral Area.

Figure 5.6.2 Electoral Areas Population History (1996 – 2016)					
Electoral Area	1996	2001	2006	2011	2016
North Okanagan F	3,997	3,855	4,091	3,938	4,000
Columbia-Shuswap C	6,274	6,762	7,695	7,662	7,921
Columbia-Shuswap D	3,904	3,904	3,899	4,047	4,044
Columbia-Shuswap E	1,551	1,491	1,528	1,335	1,185
Columbia-Shuswap F	2,128	2,126	2,731	2,368	2,454
TOTAL	19,850	20,139	21,950	21,361	21,620



The historical trends observed from the graph include:

- **Electoral Area Columbia-Shuswap C** has the largest population of all the Electoral Area and is moderately growing;
- **Electoral Area Columbia-Shuswap F** is gradually growing, but not as fast as Columbia-Shuswap C;
- **Electoral Area North Okanagan F** and **Columbia Shuswap D** are relatively stable with a population of about 4,000 each;
- **Electoral Area Columbia-Shuswap E** is gradually declining in population.

5.7 Settlements in Electoral Areas

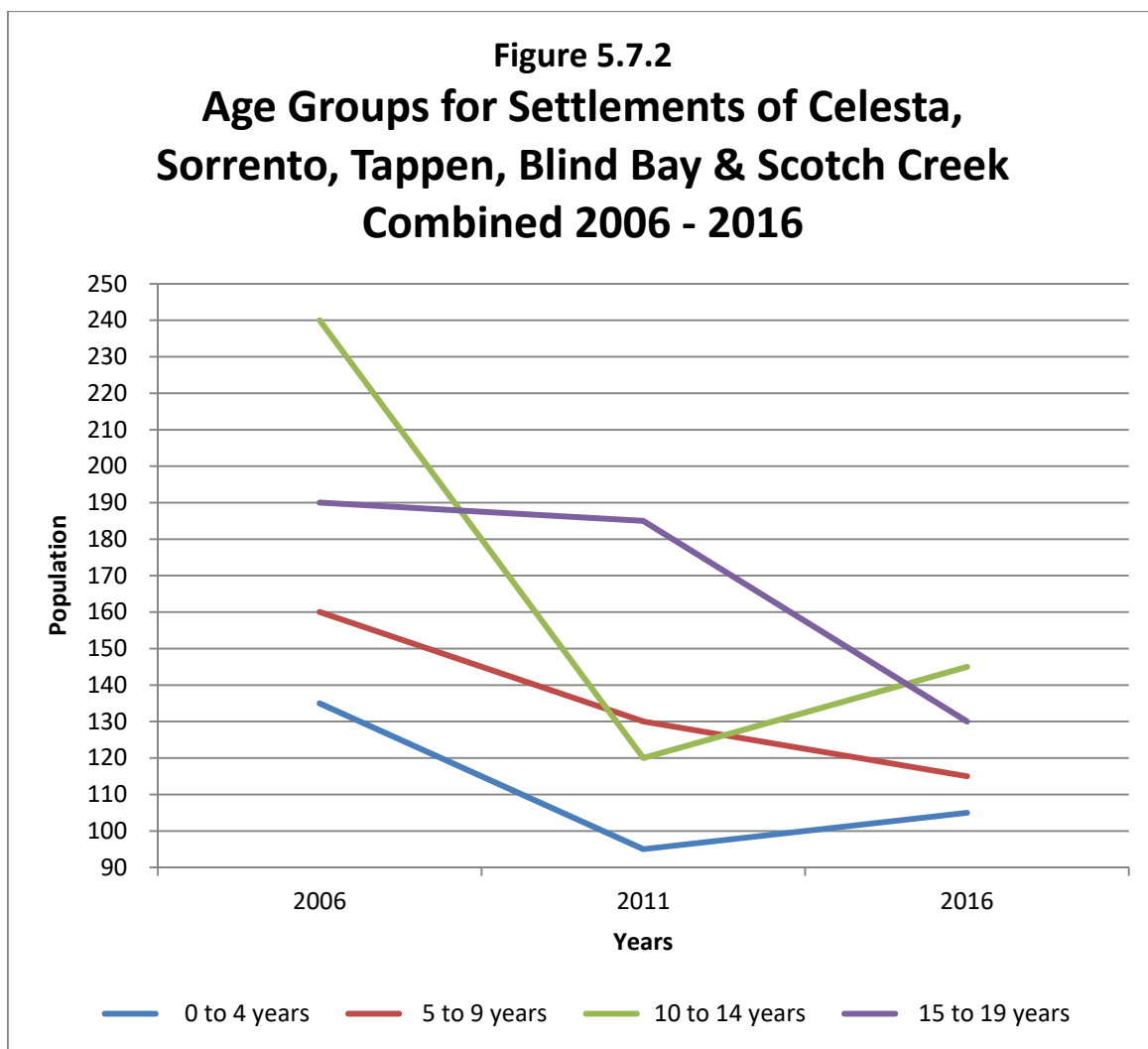
Census Canada has also produced selected statistics for Designated Places, some of which correspond to Settlements within the electoral area. Some of these settlements are large enough that privacy and rounding constraints do not apply and some age group breakdowns are available. Figure 5.2.3 showed the locations of these Settlements.

To gain some understanding of which communities might need some specific attention as to potential student generation, the Settlements with the highest growth between 2011 and 2016 with a population over 700 were reviewed. These Settlements include the following:

Figure 5.7.1 Settlements (Census Designated Places) within Electoral Areas Over a Population of 700 Exhibiting Growth between 2011 to 2016			
Settlement (Designated Place)	2011	2016	% Change 2011-2016
Grindrod	1,453	1,470	1.2
Blind Bay	1,234	1,315	6.6
Sorrento	1,255	1,285	2.4
Falkland	805	878	9.1
Tappen	826	853	3.3
Scotch Creek	669	711	6.3

Apart from Grindrod and Falkland, the Settlements are on the shore lines of the two arms of Shuswap Lake north of the city of Salmon Arm. This area is generally called North Shuswap or North Shore. It has traditionally been an area with strong tourist attraction for its natural character, outdoor recreational opportunities, houseboating, and similar seasonal activities, which swells the area's population in the summertime. There has been and continues to be a trend converting these seasonal dwellings or constructing new dwellings for year round use.

Combining the information that is available for Celesta (where North Shuswap Elementary is located, Sorrento (where Sorrento Elementary is located), Tappen, Blind Bay and Scotch Creek, provides some insight for the period of 2006 to 2016 as shown in the figure below:



With limited data and for three census periods, this table may not be reflective of more recent trends. The above indicates a general decline in all of the age groupings; however, both the 0 - 4 and 10 – 14 age groupings have risen between 2011 and 2016. Similarly, the rate of decline for the 5 - 9 age group has declined at a slightly lesser rate between 2011 and 2016, than between 2006 and 2011. Only the 15 – 19 age group is showing a clear decline, increasing over time, which may be indicative of older teens leaving the community for higher education or jobs.

Although the data suggests the potential of a leveling out or potential reversal of declines in some age groups for the Settlements considered in this North Shuswap Area, Cascade cannot make this conclusion until the future 2021 Census data is available to provide a better determination on actual trends.

5.8 Combined and Comparative Populations

Historically, there are two growth characteristics that are very apparent. First, considering the growth in population between 2001 and 2016, the more urban areas of Enderby, Spallumcheen, Salmon Arm and Sicamous have absorbed 68.5% (3,181 people) while the Electoral areas only absorbed 31.5% (1,466 people). Secondly, considering those municipalities that have grown between 2001 and 2016, the vast majority of growth has been Salmon Arm (71.3%), followed by Armstrong (24.5%), and Enderby (4.2%). Therefore, it can be concluded that growth between 2001 and 2016 in this School District area is:

- a municipally-centred phenomenon, with Salmon Arm being the municipality that captures the most of this growth (71.3%) among the municipalities; and
- a single city-centred phenomenon, with better than half of the population growth (53.7%) being captured by Salmon Arm.

Another general observation about the population data is that the SD 83 population has been gradually increasing, by about 0.6% annually, between 1996 and 2016. The Municipalities have been growing continuously at a rate of between 1.9 and 6.5 percent between census years. The Electoral Areas have grown between each census year except between 2006 and 2011, when they declined by 2.7%. Between 2011 and 2016, this loss of 2.7% was partially reversed, increasing by 1.2%. The First Nations Communities have grown between 1996 and 2001, but declined significantly by 16.4% between 2011 and 2016, more than erasing the population gained in the previous ten years.

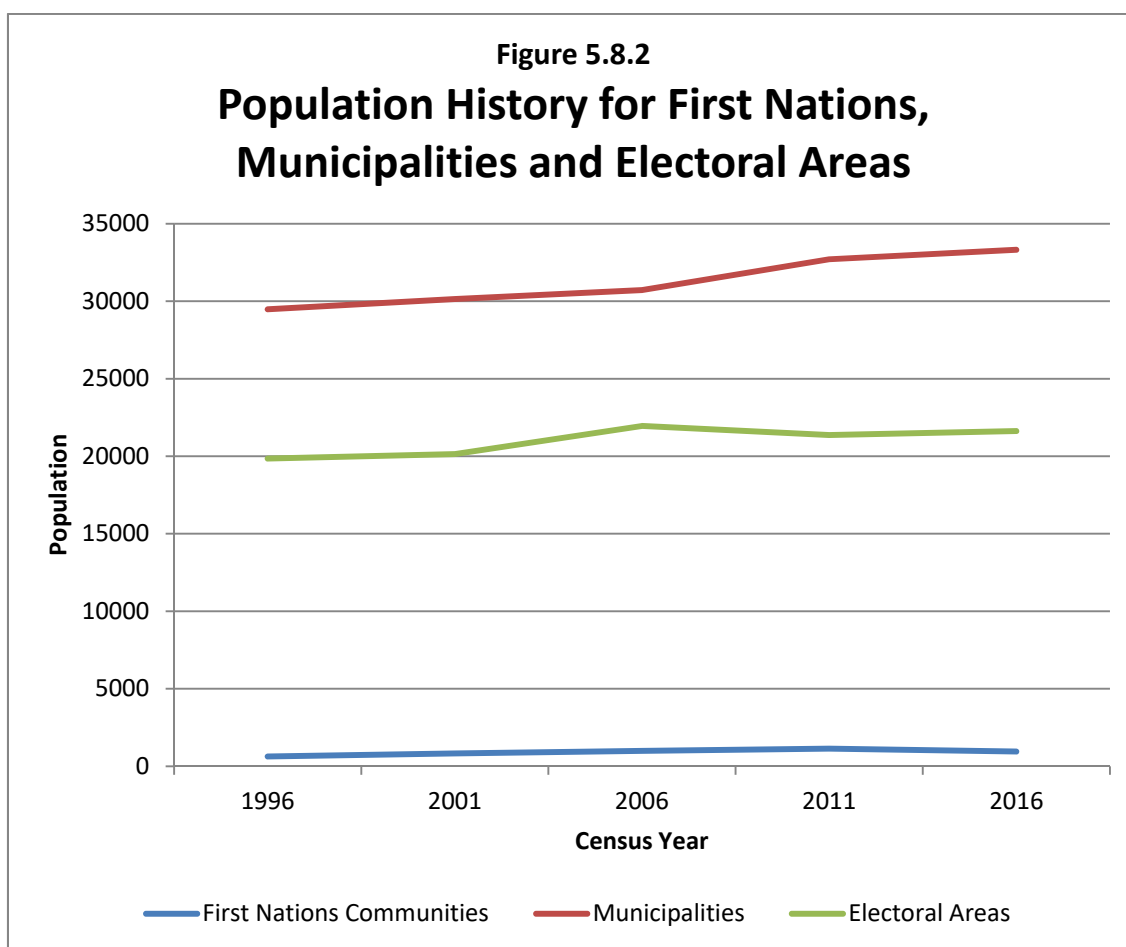
The volatile nature of the First Nations Communities population changes makes it a greater challenge to understand the dynamics of growth and make accurate population projections. It may require the 2021 Census data to better understand and project this growth and the future aboriginal student population.

The data is summarised in the table of Figure 5.8.1 and the graph in Figure 5.8.2 which show the historic population change pattern for First Nations Communities, Municipalities, and Electoral Areas.

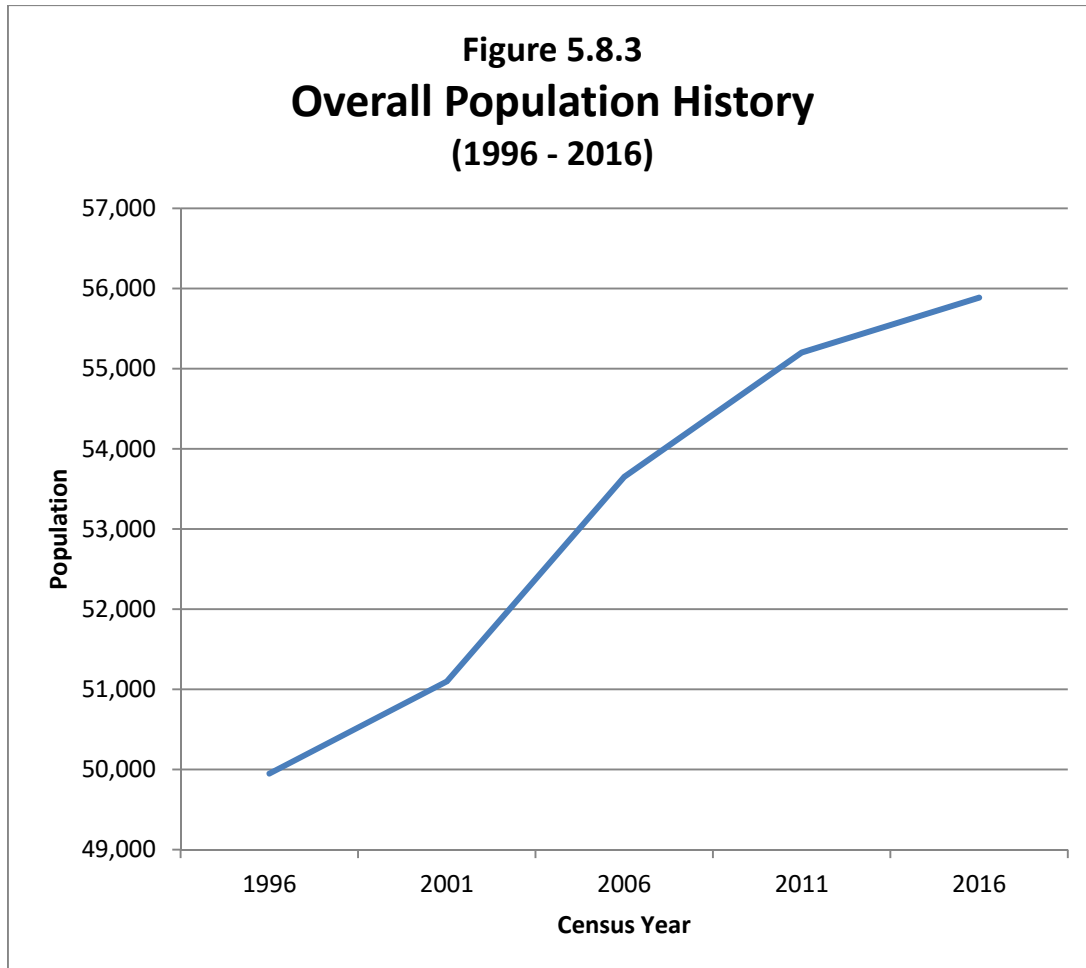
Figure 5.8.1
Combined Population History (1996 – 2016)

Census Year	First Nations Communities	Percent Change	Total Municipal	Percent Change	Electoral Areas	Percent Change	Total	Percent Change
1996	625		29,473		19,850		49,948	
2001	820	31.2%	30,138	2.3%	20,139	1.5%	51,097	2.3%
2006	984	20.0%	30,717	1.9%	21,950	9.0%	53,651	5.0%
2011	1,133	15.1%	32,707	6.5%	21,361	-2.7%	55,201	2.9%
2016	947	-16.4%	33,319	1.9%	21,620	1.2%	55,886	1.2%

Figure 5.8.2
Population History for First Nations, Municipalities and Electoral Areas



With respect to the pattern for the total population shown in Figure 5.8.3, between 1996 and 2016, growth has been continuous. As a percentage, the growth was the fastest between 2001 and 2006, and growing at lesser rates since then.



5.9 Aboriginal Identity from Ministry of Education Data

The Ministry of Education November 2018 report “Aboriginal Report 2013/14 - 2017/18 - How Are We Doing?” provides some further insight about students who self-identify as Aboriginal Students.

For the Province as a whole, the percentage of the Aboriginal students in the overall student population was 9.9% in the 2008/09 school year and 11.2% in the 2017/18 school year. From a statistical perspective, this represents a relatively stable percentage.

The North Okanagan-Shuswap School District 83 Aboriginal population has been fluctuating, with an upward trend between the 2008/8 and 2012/13 school years, when 892 students self-identified as aboriginal increasing to historically high levels of 1,145 during the 2017/18 school year.

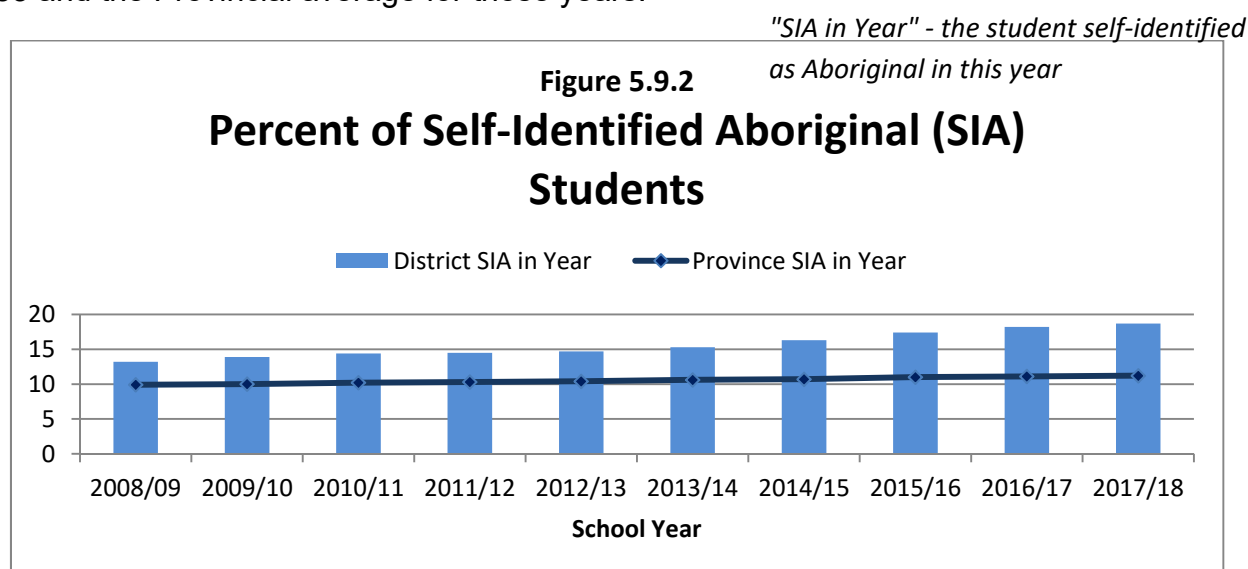
As a percentage of the overall school population, the number of students who self-identified as aboriginal has increased from 13.2% to 18.8% of the overall school population between

the 2008/09 and 2017/18 school years. Though the numbers fluctuated, the statistics are clear that there is a trend showing that the number of students who self-identify as aboriginal will continue to grow, with all other influencing factors being equal.

The following table Figure 5.9.1 summarizes this Provincial data:

Figure 5.9.1 Population History – Aboriginal Identity (2008/09 to 2017/18)						
School Year	Province			North Okanagan-Shuswap School District 83		
	Total Students	Aboriginal Students	Aboriginal Students in Percent	Total Students	Aboriginal Students	Aboriginal Students in Percent
2008/09	579,485	57,257	9.9	7,191	952	13.2
2009/10	580,480	58,017	10.0	7,053	982	13.9
2010/11	579,110	58,834	10.2	6,969	1,009	14.4
2011/12	569,734	58,531	10.3	6,746	975	14.5
2012/13	564,529	58,717	10.4	6,072	892	14.7
2013/14	558,983	59,502	10.6	5,957	921	15.3
2014/15	552,786	59,382	10.7	5,818	949	16.3
2015/16	553,376	60,706	11.0	5,866	1,020	17.4
2016/17	557,626	61,799	11.1	5,992	1,091	18.2
2017/18	563,245	63,182	11.2	6,112	1,145	18.7

The same Ministry of Education publication contains the following chart comparing the percentage of Aboriginal Students in the school years of 2008/9 – 2017/18, in School District 83 and the Provincial average for those years:



5.10 Age Composition

A breakdown for population by age groups is provided in this section. The main focus is to understand the trend in school age population to assist in determining school age population projections.

The following figures show how the population age groups have changed between 2001 and 2016:

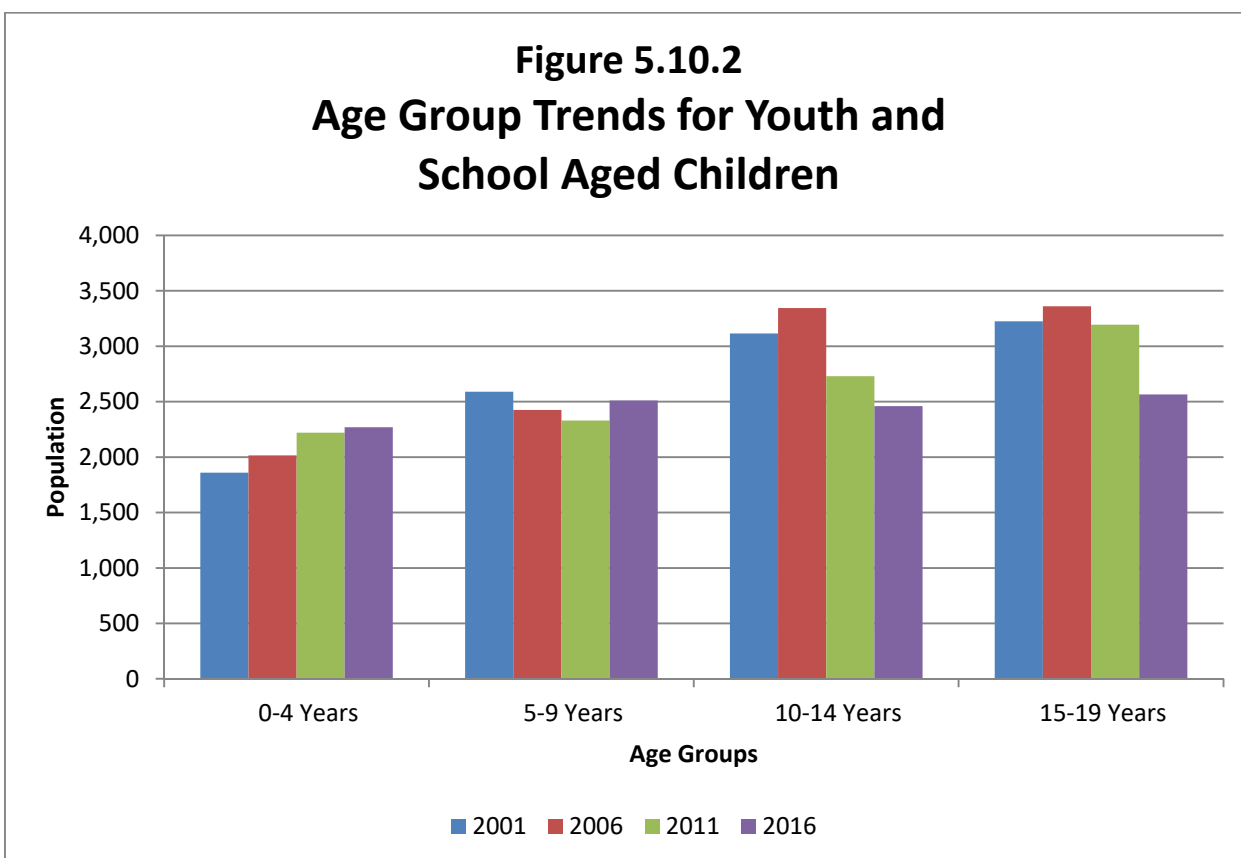
Figure 5.10.1 Population Age Group History (1996 – 2016)							
Age Group	2001	2006	Percent change	2011	Percent change	2016	Percent change
0-4	1,860	2,015	8.3%	2,220	10.2%	2,270	2.3%
5-9	2,590	2,425	-6.4%	2,330	-3.9%	2,510	7.7%
10-14	3,115	3,345	7.4%	2,730	-18.4%	2,460	-9.9%
15-19	3,225	3,360	4.2%	3,195	-4.9%	2,565	-19.7%
20-44	11,810	12,125	2.7%	11,640	-0.04	11,540	-0.9%
45-64	11,390	16,860	48.0%	17,955	6.5%	17,355	-3.3%
65+	7,495	10,530	40.5%	12,005	14.0%	14,225	18.5%

The figures in the table reveal:

- Each of the school age groups (highlighted in grey) presents a different growth characteristics:
 - The 5 to 9 age group has declined, but by lesser rates between 2001 and 2006 (being -6.4% between 2001 and 2006 and -3.9% between 2006 and 2011), but has reversed to increase between 2011 and 2016 by 7.7%;
 - The 10 to 14 age group has increased between 2001 and 2006, and since 2006, has been experiencing a decline, but at lessening rates - being -18.4% between 2006 and 2011 and -9.9% between 2011 and 2016; and
 - The 15 to 19 year age group increased by 4.2% between 2001 and 2006, but has been declining by an increasing rate over the period of 2006 and 2016, being -4.9% between 2006 and 2011 and -19.7% between 2011 and 2016.
- The child-bearing age group of 20 to 44 years experienced an increase by 2.7% between 2001 and 2006, but has declined by under 1% in each of the two subsequent census periods of 2006 and 2011 and 2011 and 2016;

- The age group of 45 to 64 years has experienced a large shift in its growth rates, with an increase of 48% between 2001 and 2006 and 5.5% between 2006 and 2011, with a decline of -3.3% between 2011 and 2016; and
- The senior population of 65+ years is growing by 40.5% between 2001 and 2006 moderating to 14% between 2006 and 2011 and 18.5% between 2011 and 2016.

The following chart shows the youth and the school age trends more graphically.



The above statistics included Aboriginal students. To gain some understanding of the age characteristics and changes specifically for the First Nations communities, Cascade accessed the available age profile data available from the Canada Census between 2001 and 2016. The 2011 data is partially from the 2011 National Household Survey (NHS).

The same rigour of analysis is not possible for the First Nations communities as for the overall population. Some data has been suppressed for some age categories for some of the communities. The reason is due to the population levels being below certain thresholds set by Statistic Canada to protect privacy.

As a result, only four First Nations areas of Enderby 2 IRI, Okanagan (Part) 1 IRI, Quaaout 1 IRI and Switsemalph 3 IRI have data available to compare 2001 through 2016 Census populations. The data set does not include the entire First Nations populations, but a portion

of the total (77.4% in 2001 to a low of 62.8% in 2016), thus is not considered as a robust analysis by Cascade. However, patterns emerge as shown in Figure 5.10.3 that are indicative of the population characteristics of overall First Nations Community:

Figure 5.10.3 Combined Age Characteristic of the Enderby 2 IRI, Okanagan (Part) 1 IRI, Qaaout 1 IRI and Switsemalph 3 IRI First Nations Communities							
Age group	2001	2006	Percent change	2011	Percent change	2016	Percent change
0 to 4 years	45	40	-11.1%	65	62.5%	40	-38.5%
5 to 9 years	45	55	22.2%	50	-9.1%	40	-20.0%
10 to 14 years	65	60	-7.7%	80	33.3%	20	-75.0%
15 to 19 years	60	70	16.7%	55	-21.4%	40	-27.3%
20 to 44 years	195	210	7.7%	225	7.1%	165	-26.7%
45-64 Years	155	185	19.4%	230	24.3%	185	-19.6%
65 Years +	70	75	7.1%	85	13.3%	105	23.5%
<i>The above figures may be out by ± 5 from the aggregate population used elsewhere in this report due to rounding done by Statistics Canada for privacy purposes.</i>							

The available data reveals that:

- The First Nations communities are aging communities;
- Apart from increases between 2001 and 2006 for the 5 to 9 (+22.2%) and the 15 to 19 (+17.7%) age groups and between 2006 and 2011 for the 10 to 14 age group (+33.3%), all student age categories (shaded in table) are declining;
- The 20 to 44 and the 45 to 64 year age groups has been increasing up to 2011, but has declined between 2011 and 2016 by 26.7% and 19.6% respectively; and
- The 65 and up age group is not only growing over the period of 2001 to 2016, but at a rapidly increasing rate: 7.1% between 2001 and 2006, 13.3% between 2006 and 2011 and 23.5% between 2011 and 2016.

5.11 Factors Influencing Population

This section relies on data made available by BC Vital Statistics and the Regional and Local Health Authorities. As is the case for other data, it is segmented between administrative areas whose boundaries do not match those of the School District. Therefore, Cascade has

attempted to combine data or use selected data to the extent possible to obtain a general indication of the factors influencing population changes related to health indicators. The Interior Health Authority's administrative boundary map is shown below. Available data sets for the Salmon Arm, Enderby, and Armstrong-Spallumcheen Local Health Units are utilised in this section.



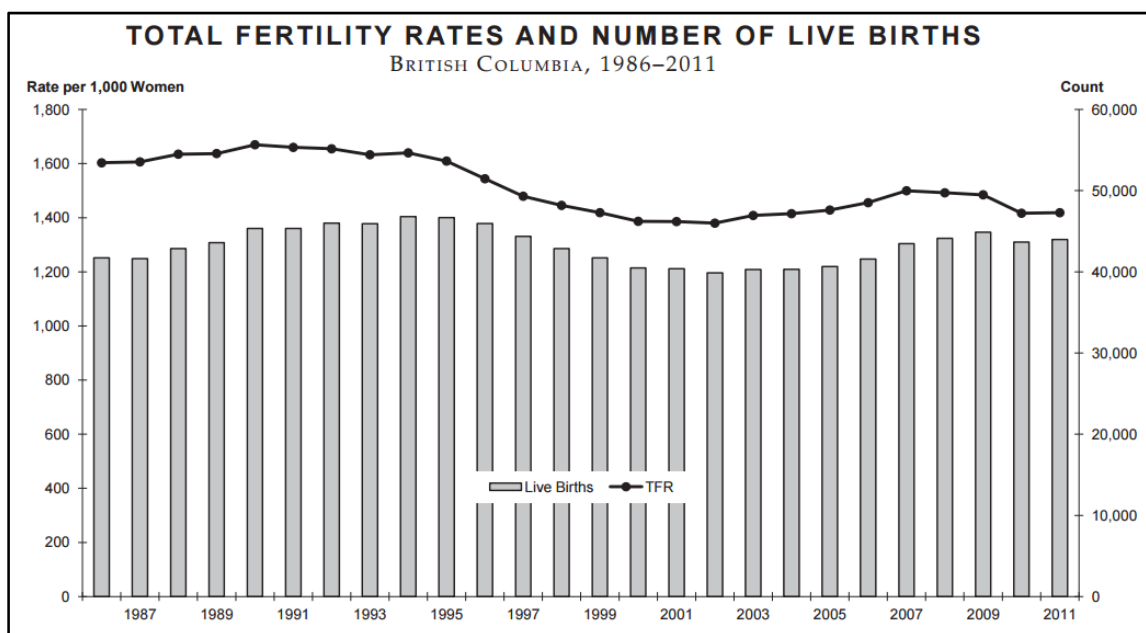
Figure 5.11.1 – Health District map

There are a number of factors influencing population growth.

- **Fertility rates:** Fertility rates in BC have changed over the years, becoming relatively level in recent years. The chart shown below concerning fertility is from latest BC Vital Event Annual Report (2011). Historically, fertility rates increased after World War II through the decades of 1950 and 1960. There is a pronounced decline until the late 1970s. This declining trend slowed with some variations, until 2007 after which fertility rates have leveled off.

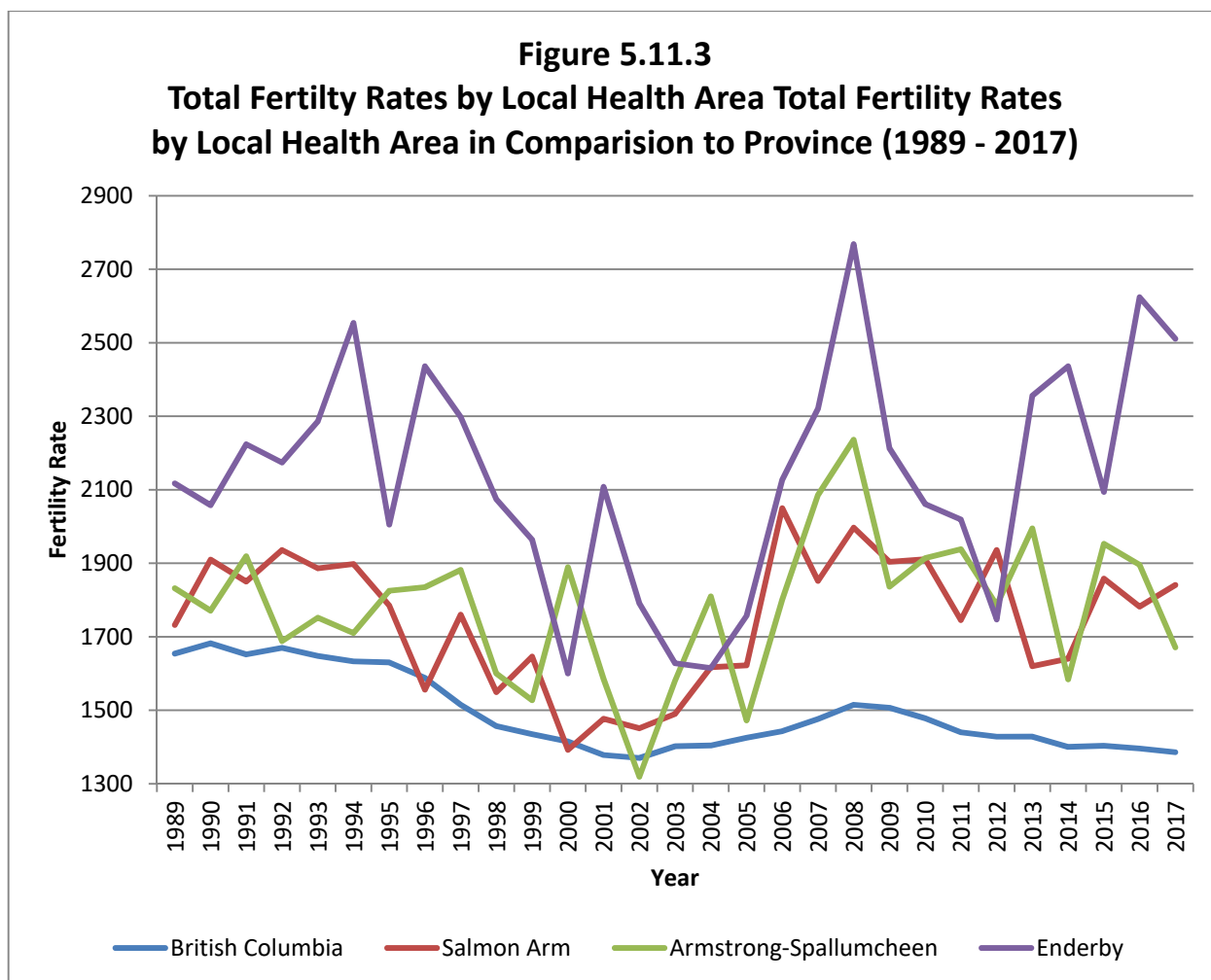
Source: Trends in Vital Events - Vital Statistics Agency Annual Report 2011

Figure 5.11.2



- **Birth rates:** Based on the raw data from BC Vital Statistics concerning Local Health Area, Cascade has generated the following graph depicting the trends in the Fertility Rates for the three Local Health Areas within the School District. These were compared to the trend in the same period for the province as a whole. The following is noted:
 - The Fertility Rates are highly variable over time for each of the Local Health Areas; however, they follow the general Provincial trends, falling between 1989 and about 2002/2003, the rising to about 2007/2009;
 - Each of the Local Health Areas has Fertility Rates higher than the province as a whole. The rates in Salmon Arm and Armstrong- Spallumcheen are similar; however, the rate for Enderby is distinctly higher, and may be opposite to the trend experienced in Salmon Arm, Armstrong- Spallumcheen and the Province by actually increasing rather than declining.

Therefore, it can be concluded that with a higher Fertility Rate than that of the Province, and the potential trend in Enderby, school age population will continue to grow faster than average for elsewhere in BC and this growth may be more pronounced in the Enderby area.



In a report “*Our Babies, Our Future: Aboriginal Birth Outcomes in British Columbia*”, the authors observed that the younger population structure of Aboriginal population in BC is linked to a higher fertility rate for Aboriginal women compared to the non-Aboriginal women. According to the 2005 report by V. O’Donnell, “*Aboriginal Women in Canada*”, in the period between 1996 and 2001, the fertility rate of Aboriginal women was 2.6 children compared with 1.5 children among all Canadian women.

Therefore, this is a further reason to suggest that the data in Figure 5.10.3 is not conclusive in understanding the growth dynamics for First Nations school age population projections.

- **Median Age:** The median age is defined as the exact age where half the population is older and half is younger. This is a good indicator of the youthfulness of a population. The following tables summarise available median age data:

First Nations Communities Median Age (in Years)				
Census Year	Enderby 2 IRI	Okanagan (Part) 1 IRI	Quaaout 1 IRI	Switsemalph 3 IRI
2006	33.1	39.0	40.5	26.5
2011	36.0	49.2	41.2	26.7
2016	39.3	51.1	49.5	35.2

Municipalities Median Age (in Years)					
Census Year	Armstrong	Enderby	Spallumcheen	Sicamous	Salmon Arm
2006	48.7	53.3	49.1	56.0	50.7
2011	46.2	50.0	47.3	52.4	48.3
2016	44.5	48.1	44.6	49.7	46.2

Electoral Areas Median Age (in Years)					
Census Year	North Okanagan F	Columbia-Shuswap C	Columbia-Shuswap D	Columbia-Shuswap E	Columbia-Shuswap F
2006	45.6	55.6	47.1	50.6	57.4
2011	49.0	55.6	47.1	50.6	57.4
2016	51.1	57.9	49.6	54.0	60.3

The following is observed:

- o The median age for First Nations Communities and the Electoral Areas is increasing over the period between 2006 and 2016, which means that their population profile is matching the general trend of the aging population in British Columbia and Canada;
- o The population in the Electoral Areas has the highest median age population, reflecting that there are fewer families with children in these remote areas;
- o The median age in the Municipalities is dropping over the period between 2006 and 2016, which means that the municipal population profile is becoming more youthful; and
- o It is reasonable to conclude that the school age population will be focused in the Municipalities and the First Nations communities (most of which are situated in proximity to the Municipalities), but less in the Electoral Areas.

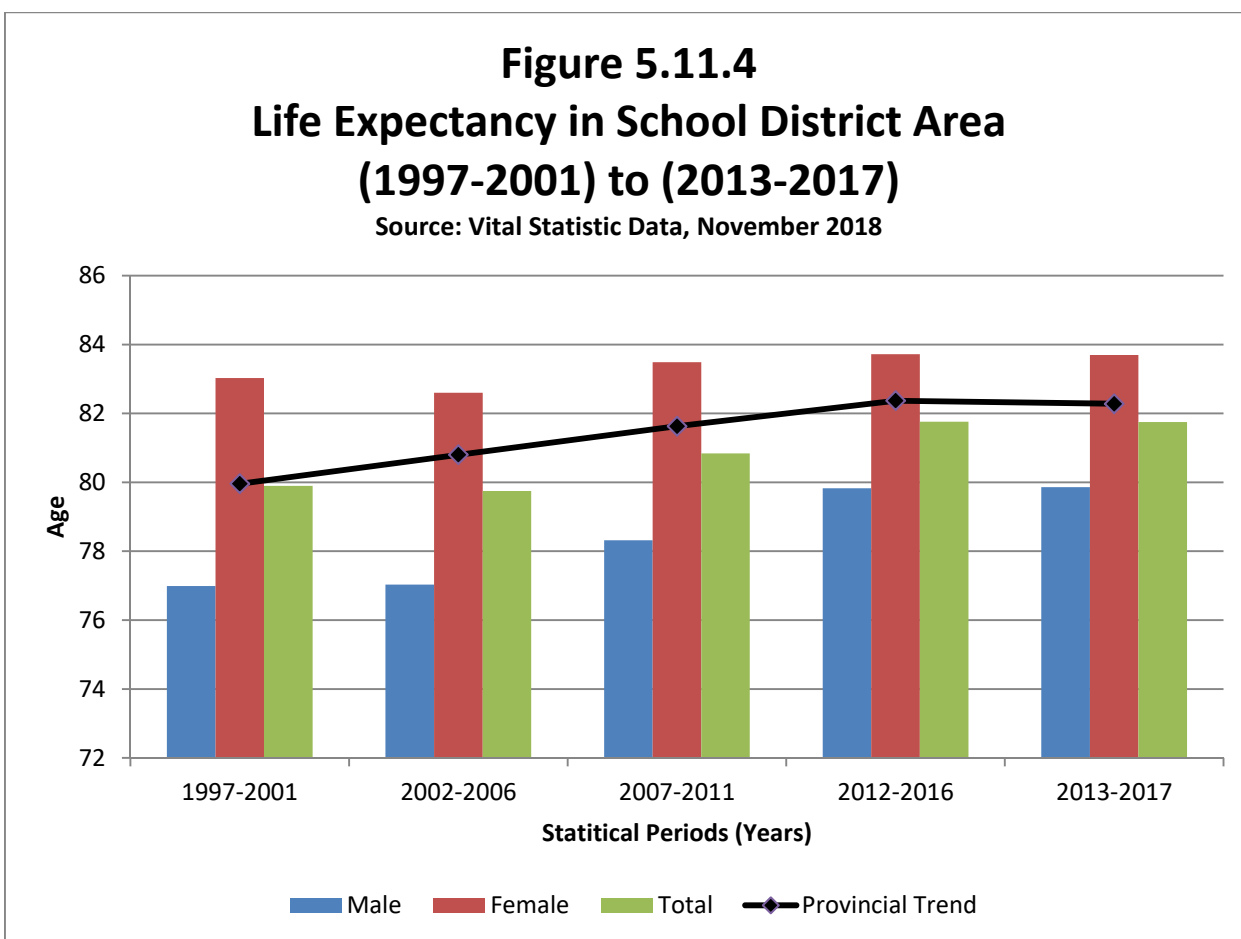
Comparing the 2016 median age figures with the figures for the Province:

- o The median age of Armstrong and Spallumcheen is very similar to the Provincial average of 43 years, thus sharing a similar proportion of youth to adults as elsewhere in the

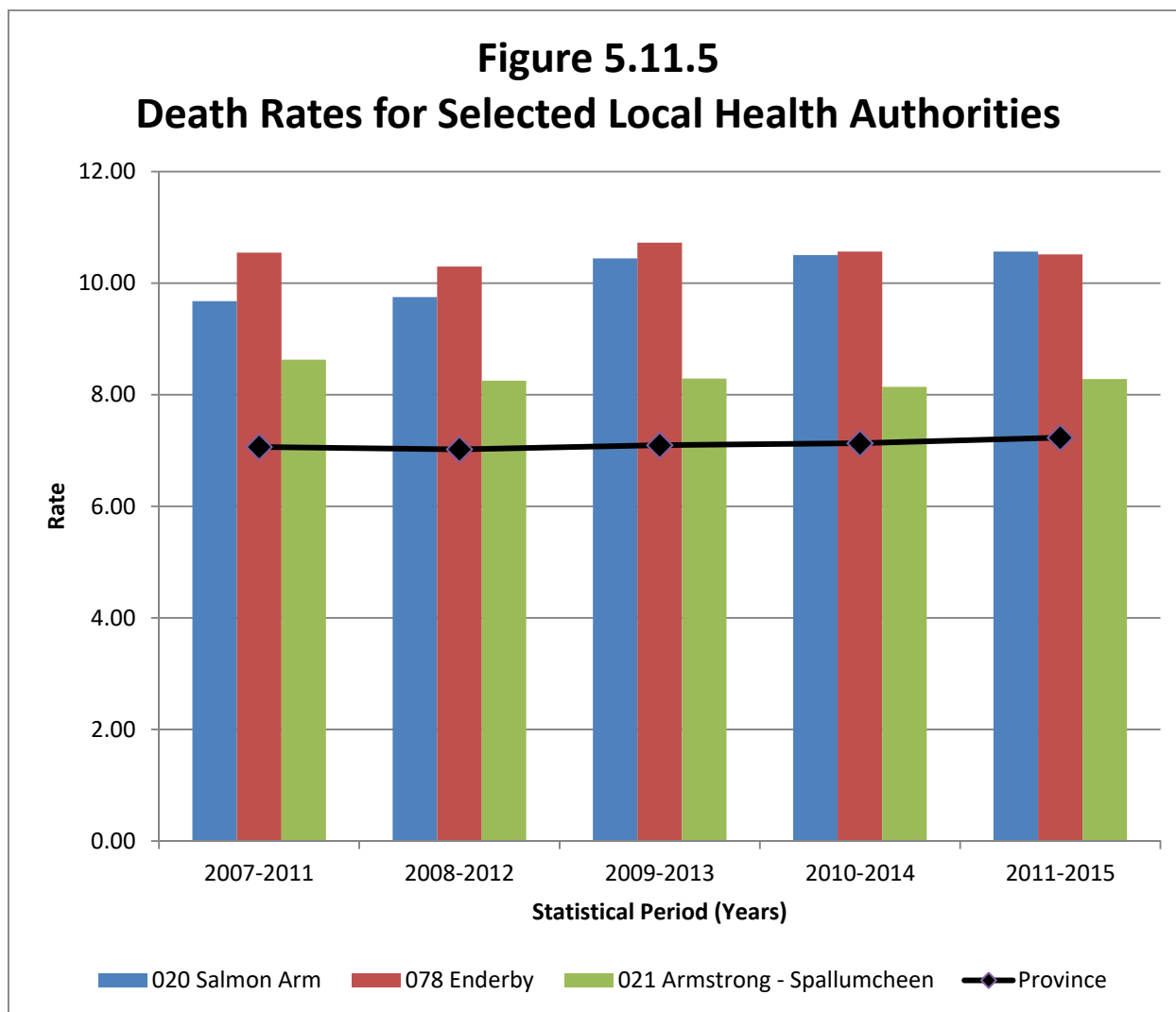
Province. The median age in the remaining communities is slightly higher, ranging from 46.2 to 49.7 years, but still not significantly different from that elsewhere in the Province;

- o The Enderby and Switsemalph First Nations Communities have a median population age significantly less than that of the Province and less than that of the Municipalities; therefore, has a more youthful character than both of these in SD 83.
- **Life Expectancy:** According to data from Statistics Canada, BC had the highest life expectancy in the country. The average life expectancy at birth for the total population in the 2014 to 2016 period was 82.5 years, compared to that of Canada as a whole at 82.0 years.

For the population corresponding to the School District Area, life expectancy has been rising from 79.9 years to 82.28 years between 1997-2001 and 2013-2017. In comparison, the local life expectancy age is the same or slightly lower than the Provincial figures. As is the case generally, female life expectancy is higher than male life expectancy.



- Mortality Rates:** Based on data from annual reports, the death rates within the Local Health Authorities of Armstrong – Spallumcheen, Salmon Arm and Enderby are indicated in Figure 5.1.5 below for the period of 2007/2011 to 2011/2015. The local rates are higher than the Provincial average, but generally mirror the Provincial pattern. The rate for Armstrong – Spallumcheen Health Authority is lower and closer to the Provincial average than for the Salmon Arm and Enderby Health Authorities.



- Migration:** Migration can be the source of growth or decline; therefore, circumstances that can influence someone to move into or out of region are often referred to as “Push-Pull Factors”. Regions that have their economic base related to the resource industries tend to be more sensitive to these factors than regions with a more diverse economy.

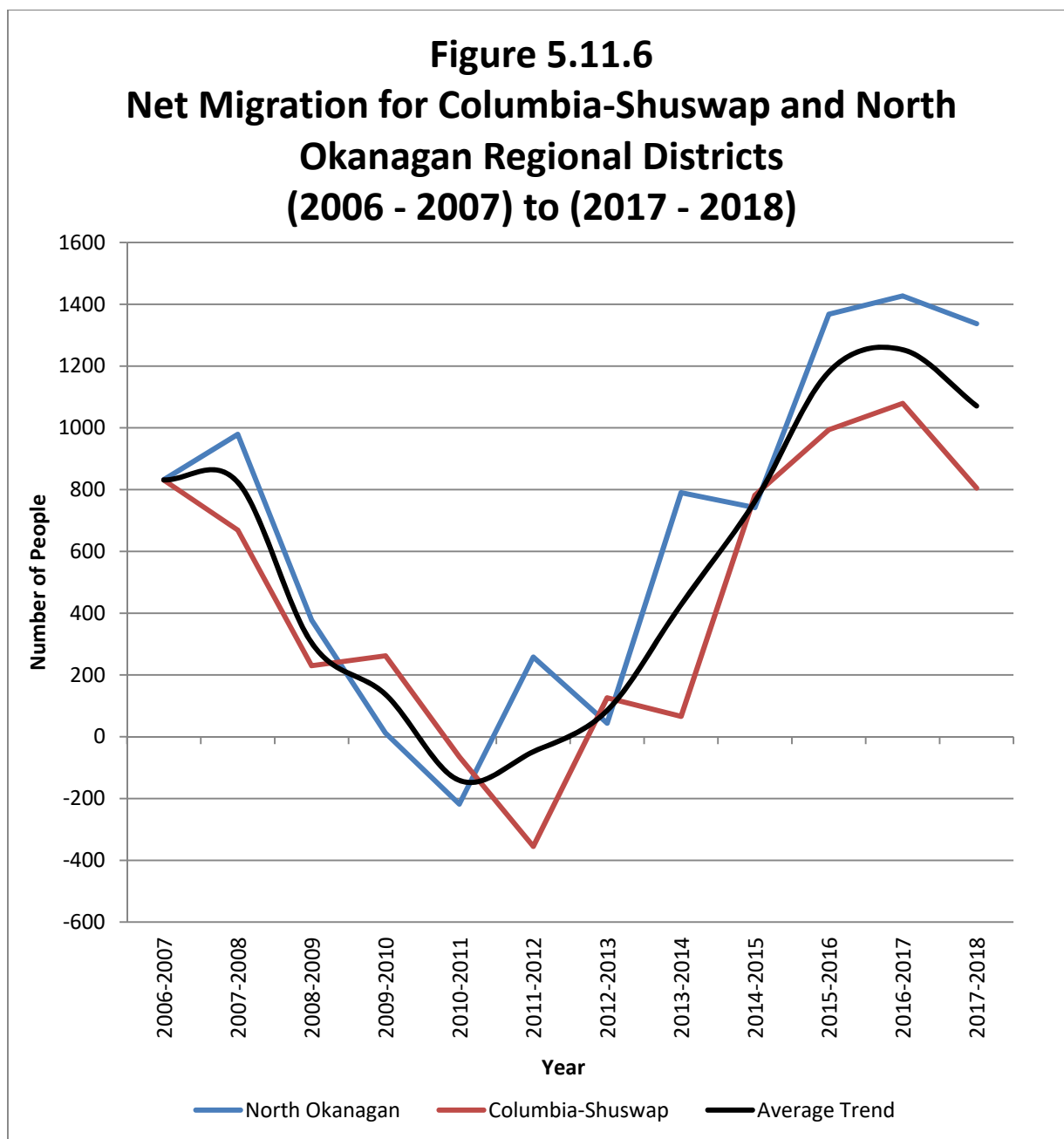
Some of the common influences that are “Push-Pull factors include:

- o **Jobs:** People move into areas where there are jobs and move away if jobs are not available. There are few companies or employers within the School District area that would attract significant in-migration for employment purposes. Therefore, barring the establishment of new major employers, growth due to new job opportunities is not anticipated by Cascade.
- o **Affordable Housing:** Housing affordability is a serious problem in various locations in the province. Lower priced housing can attract both young families if there are also job opportunities, and empty-nesters or retirees moving after selling houses in higher priced markets. The effect of this “Pull” may be contributing to the growing 65+ age category.
- o **Lifestyle:** This can be a “push” for those looking to live a community with more services, activities and opportunities. It can be a “Pull” for those looking for a simpler life and a small community atmosphere. Residents are moving from other places within the province because the Okanagan and Shuswap area is recognized as a popular retirement destination.
- o **Natural Environment:** This is another “Pull Factor” in terms of what the area has to offer: recreational pursuits, fishing, hunting, and wilderness areas. Initially, this can be a “seasonal Pull factor” like spending summers at the cottage, on a house boat, or at a ranch. However, this may lead to permanent relocation to allow more of the outdoor activities to become part of an individual’s regular pursuits.
- o **Culture and History:** This “Pull Factor” may be one of the factors that doesn’t generate as many visits as other attractions, thereby having less influence in generating permanent relocation to the area.

The data sources do not specifically identify the municipalities or allow for the data to be grouped matching the School District area. Instead, a trend line has been generated based on the net-migration data available for the Columbia-Shuswap and the North Okanagan Regional Districts. This provides some indication of the historical migration patterns in the wider region, although Cascade advises caution as other larger centres such as Vernon in the North Okanagan Regional District may be skewing the trends.

Cascade has concluded that there is insufficient information to determine if migration will become a factor related to growth and whether the regional trends are applicable to the School District area.

Figure 5.11.6 below depicts the historical trends:



- Workforce Practices:** The strategic location of this region relative to resource and oil/gas industries may influence population changes in a similar way, but to a lesser extent, as in resource communities. In such communities, the resource-based industries have employment practices that involve shift work and work cycles with longer daily work periods, and work cycles that do not follow the weekday / weekend pattern. This is necessary for the day-and-night operations of some resource industries required for technological or business model reasons. Depending on the proportion of employers that

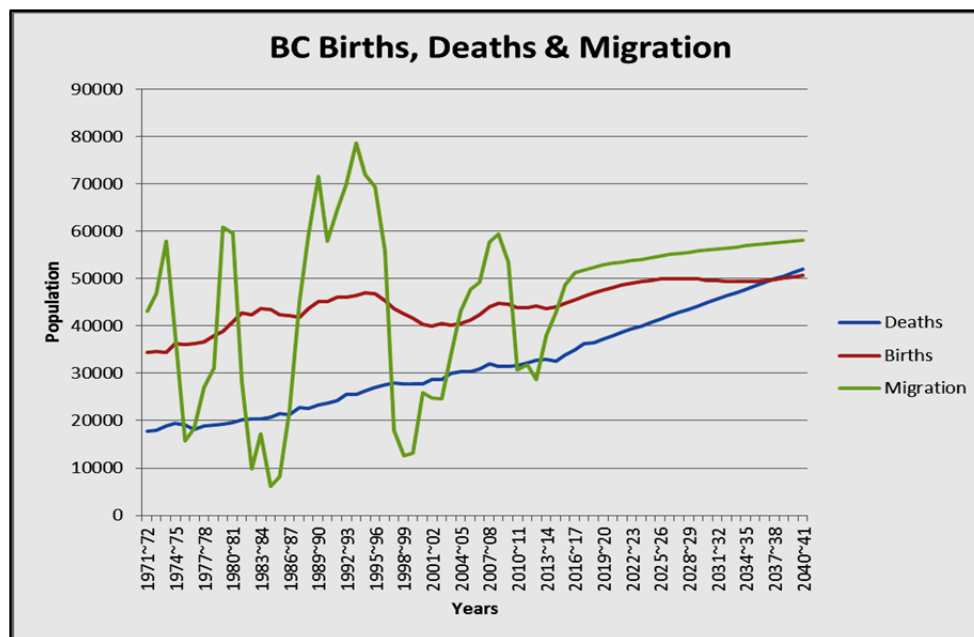
utilize shift work cycle, the age distributions of communities may be affected by in-migration of families with children. The impact on the work force can be:

- o A disproportionately larger permanent population of young single adults;
- o A transitory population that commutes from other locations. Employees leave families with children to reside in communities with a fuller range of services, including schools. This commuter workforce is referred to in the literature as "FIFO" or "DIDO" work. FIFO refers to "fly-in/fly-out" rotational shift work, while DIDO refers to "drive-in/drive-out" rotational shift work.
- o As the industries transition from a shift work to a weekday on / weekend off work cycle, those that were DIDO or FIFO workers, will relocate with their families, resulting in an increase in the school age population.

For the North Okanagan-Shuswap School District 83 area, there are two potential resource-based effects:

- o The outcome of the current discussions concerning oil/gas exploration and the oil pipelines in Northern BC may be a factor influencing population change. The region may attract families establishing residence in the area to permit a family labourer to commute to work in the north; and
 - o Economic changes and natural disasters in western Canada have influenced population change. Fort McMurray is an example where wildfires and decline in resource-based employment made the North Okanagan-Shuswap School District 83 area attractive to migration from Alberta. Although this is a qualitative observation, 2015/2016 statistics for interprovincial migration ranked BC as the top destination - 40.7% of all out-migrants from Alberta came to BC. Of course, the reverse may occur if the Alberta oil economy improves.
- **Cumulative Effect of Births, Deaths and Migration Factors:** Considering natural growth and migration, deaths will begin to exceed births with the population generally aging. In-migration, although highly variable, will become the main source for growth once natural growth becomes negative. Provincial data from BC Stats about BC births, deaths and in migration was used to generate the graph below. Because there was an apparent jog between the historic and projection periods, Cascade smoothed the initial projection data to reflect the most recent historic death statistics. For both projections, the number of deaths will become greater than the number of births in the 2030's and any growth will be from migration into the province.

Figure 5.11.7



5.12 Planning, Growth and Economic Development

Labour statistics used in this section have been drawn from data sets for the census subdivisions that best approximate the boundaries of the School District. We also relied heavily on local contacts to gain some understanding of the economic dynamics of the area. The region has strong economic centres that affect data at the regional district level. For example, Vernon is a significant centre in North Okanagan Regional District, but is outside SD 83. Notwithstanding this, we have been able to establish the following:

Employment Sectors: Using 2016 Canada Census data, the following information is available about the area's labour force and employment. The top twelve employment categories employ 86.6% of the labour force.

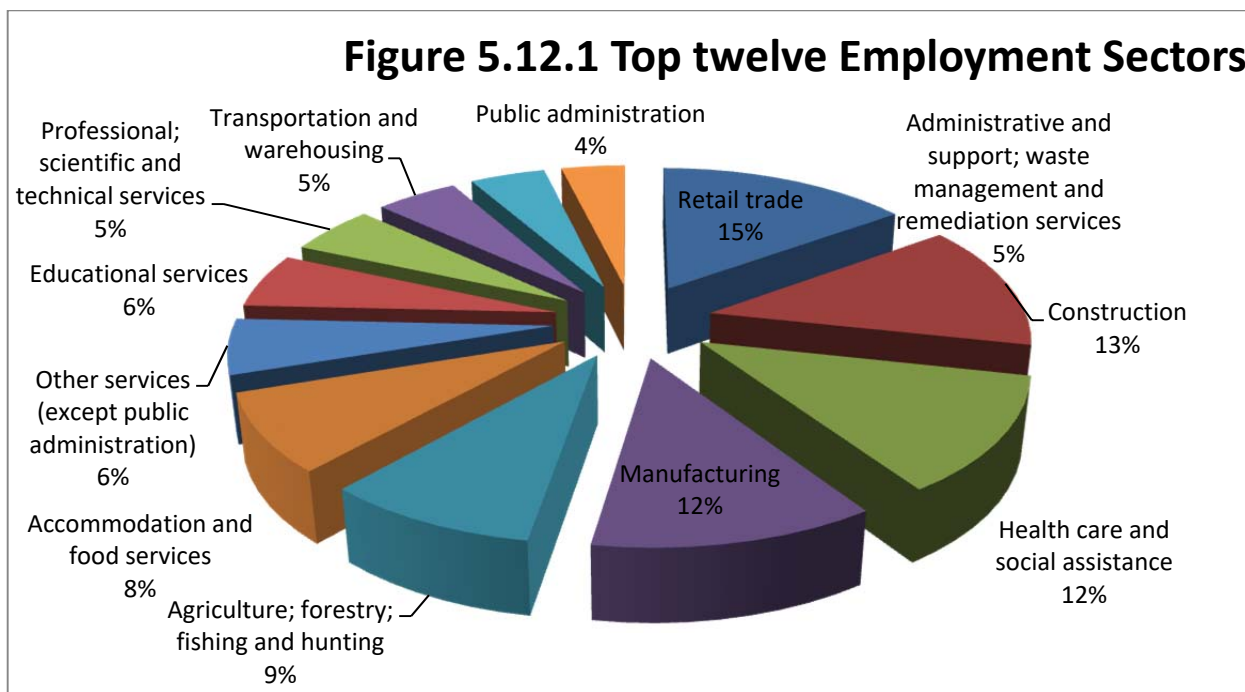
These sectors and the numbers employed are as follows:

Sector	Labour Force
Retail trade	3205
Construction	2835
Health care and social assistance	2595
Manufacturing	2550
Agriculture; forestry; fishing and hunting	1935
Accommodation and food services	1750
Other services (except public administration)	1245
Educational services	1235

Professional; scientific and technical services	1110
Transportation and warehousing	1045
Administrative & support; waste management and remediation services	960
Public administration	810

There is a high level of job diversity in the community. This is common for areas of growth, where trades, retail, and support services are needed for the major industries and to serve residents. For example, Salmon Arm has a significant amount of retail commercial floor space relative to its population, and in Sicamous, boat-building has flourished because of the recreational boating activities. Health care, including the regional hospital, is another example of a sector serving the larger area and creating significant employment.

Figure 5.12.1 pie diagram below more graphically represents the main employment sectors in the area.



The following information was provided about the local economy and its significance in influencing population trends and future growth:

- General Background:** Growth is centred in the urbanised areas. This according to School District officials has resulted in higher than expected enrollment in communities such as Salmon Arm, Enderby and Armstrong. Historically, in-migration has been mainly from Northern BC and Alberta, but increasingly, in-migration is from the Lower Mainland to take advantage of more affordable housing in the School District area.

Additional Factors:

The presence of productive agricultural land makes farming a major contributor to the area's economy. Tourism is also significant to the local economy. Forestry has been described as either being stable or somewhat depressed in comparison to previous years; however, there is an emerging technology industry, drawing on the historical strength and expertise of the agricultural and forest sectors in the region, and exporting their services beyond the region.

The presence of a strong economy in the larger cities of Vernon and Kelowna, makes the southern reaches of the School District into bedroom communities for those commuting to work further south. It is reasonable to assume that Armstrong, for instance, is economically influenced more by Vernon and Kelowna to the south than Salmon Arm to the north. It was also pointed out that this southern draw also influences residential land uses, with new housing growth gravitating to the southern part of Armstrong and spilling over into the adjacent portion of Spallumcheen in an effort to minimize commuting time. Therefore, population growth in the School District is partially influenced by the North Okanagan Regional District economy south of SD 83.

Another factor noted is that the North Okanagan Shuswap (SD 83) and Vernon (SD 22) School Districts share a boundary on the north-south Highway 97 urban corridor. For a variety of reasons, there are students attending SD 83 from Vernon School District. Therefore, estimating this influx may have some impact on determining the student numbers in the southern part of North Okanagan Shuswap SD 83.

- **Salmon Arm:** The main growth factor in the community is in-migration from all over the Province, and the largest portion from the Lower Mainland. Migration has changed from the pattern in 2007-08 which was mainly from Northern BC, Alberta, and Saskatchewan. High housing starts suggest the growth rate will also be increasing. This community is generally youthful and there are concerns about enough school capacity.

The Official Community Plan (OCP) provides sufficient land to accommodate housing and workplace growth. Land has been approved to be removed from the Agricultural Land Reserve to accommodate industrial growth.

The community's economic relationship with the closest big city of Kelowna was described as similar to that of Chilliwack to Vancouver. Salmon Arm has a high per capita floor area of commercial floor area, but the major chains or big box-type retail stores are outside of this region, and located in Kamloops, Vernon, or Kelowna.

Light industries and an emerging technology sector are most significant to the local economy. Some are spin-offs of the forestry industry, such as forestry consultation

services, with a lesser number of firms branching into supporting the oil and gas industry. Resource industries are steady employers including one large sawmill in the region.

Salmon Arm does not have large public sector employment. However it does accommodate some provincial offices (MOTH, BC Ambulance Service, and Social Services Division), the school district offices, and a large and growing regional hospital.

- **Enderby:**

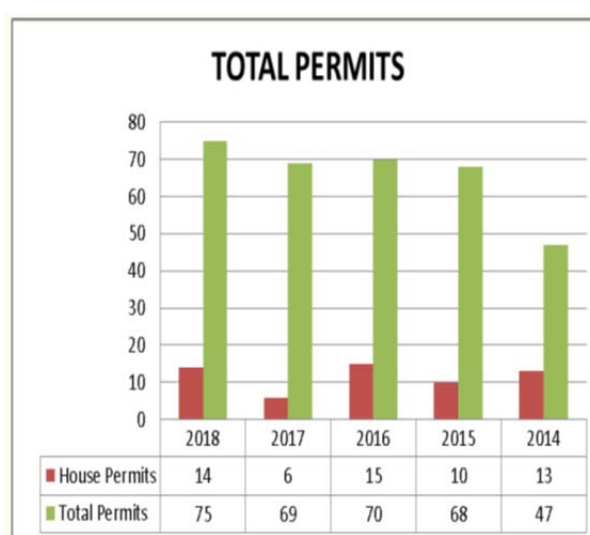
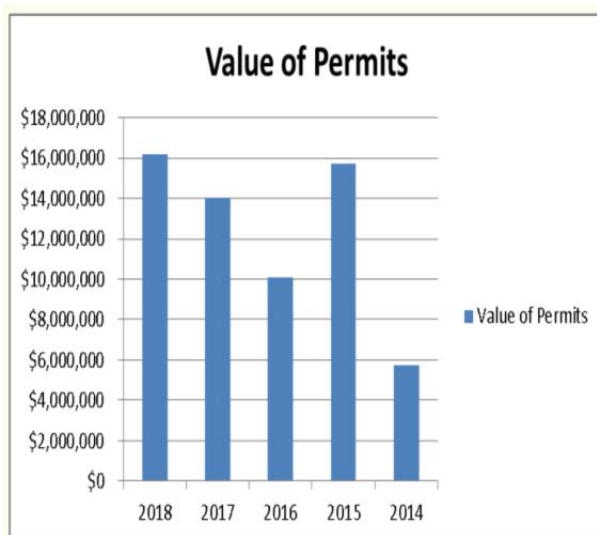
Population growth in this community is anticipated to continue at a rate of 1.5% per year. This is fueled in part by: the relative affordability of its housing in comparison to other centres in the region, (such as Vernon and Kelowna); business-friendly regulations such as perpetual business licencing; and attractiveness to developers by not collecting development cost charges or requiring development permits before issuance of building permits. Improvements of Highway 97A are being investigated and this could result in commercial growth due to improved accessibility.

- **Armstrong and Spallumcheen:**

General planning and development services for both communities are provided through the Regional District of North Okanagan.

In Spallumcheen, further economic development is anticipated as a result of installation of Telus fiber-optic cable, as well as the proposed extension of services to support job creation in the South Spallumcheen Industrial/Commercial Area.

Both the value and the total numbers for building permits have been increasing as shown this graph from the 2018 Township of Spallumcheen Annual report



5.13 Population Projections

- a. **The Projection Model:** BC Stats projections of future population, specifically those at the School District level, are the primary source for youth population estimates for school enrollment. Sub-Provincial Population Projections, referred to as P.E.O.P.L.E. software (Population Extrapolation for Organizational Planning with Less Error), is a provincial model that generates population figures based on the types of trends and assumptions described in the previous section.

BC Stats does generate population projections on a School District level. Discussion with their staff confirmed that their data is similarly generated from the census subdivision data for the two regional districts that best approximates the School District boundaries.

- b. **Assessment of the Model:** Cascade compared the starting point of the BC Stats projection with the 2016 Census data from Statistics Canada. It was found that there is some variance; however, this may be due to a combination of rounding and/or the grouping to generate the School District area.

The analysis reveals the following differences:

Age Group:	0 to 4	5 to 9	10 to 14	15 to 19	20 to 44	45 to 64	65+
BC Stats	2,393	2,732	2,632	2,996	10,324	17,336	13,931
Census	2,270	2,510	2,460	2,565	11,540	17,355	14,225
Difference	-5.1%	-8.1%	-6.5%	-14.4%	11.8%	0.1%	2.1%

Resulting Adjustment of the Projections: It appears that the age groups 19 years and younger are each over-estimated and the age groups 20 years and more are underestimated by BC Stats. Since the birth and fertility rate for the communities in this report are higher than that of the provincial averages, and the observation of some SD staff that growth is showing signs of accelerating, Cascade has concluded that there is some merit in using the higher figures generated by BC Stats for the 0 to 4, 5 to 9, and 10 to 14 age group projections.

However, the gap in the two Birth Rate trend lines appears to be narrowing (see Section 5.11 Factors Influencing Population). Therefore, we have concluded that there does not need to be any adjustment to the under 4 year age categories (BC Stats generates 2 categories: under 1 year and 1 – 4 years); however given the affordability

of housing which affects in-migration of families, it is reasonable to conclude that the higher figures used by BC Stats for the 5 to 9 and 10 to 14 age groups are appropriate to be used.

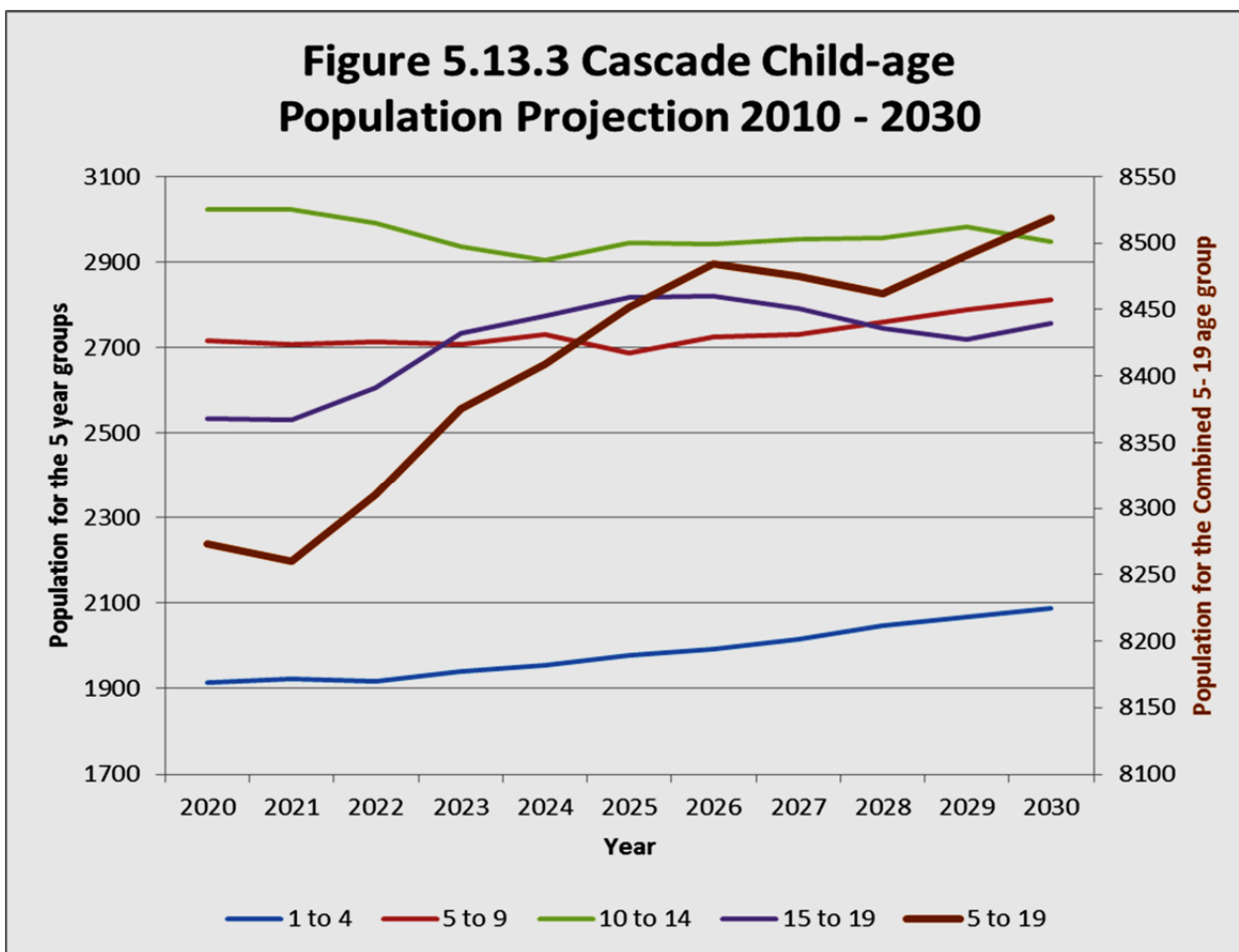
With respect to the 15 to 19 age group, this type of analysis of the population differences between the BC Stats and Canada Census done by Cascade in other School Districts has not resulted in a difference as large as 14.4%. It is reasonable to assume a population flowthrough into the 15 to 19 year age group should reflect that of the lower age cohorts. Therefore, Cascade will adjust the 15 to 19 year age group to a 7.2% level, or 2,757.

The following two tables show the BC Stats projection data and then the Cascade projection data incorporating the above adjustment analysis:

Figure 5.13.1 Population projections generated by BC Stats PEOPLE Model (2020 – 2029)					
year	<1	age 1 to 4	age 5 to 9	age 10 to 14	ages 15-19
2020	455	1,938	2,732	2,632	2,996
2021	465	1,961	2,781	2,796	2,874
2022	438	1,961	2,716	2,929	2,815
2023	447	1,964	2,678	2,974	2,767
2024	449	1,913	2,717	3,024	2,752
2025	456	1,922	2,707	3,022	2,750
2026	458	1,917	2,713	2,990	2,833
2027	461	1,939	2,707	2,935	2,970
2028	467	1,956	2,731	2,904	3,014
2029	472	1,977	2,688	2,946	3,062
2030	481	1,991	2,724	2,941	3,064

Figure 5.13.2 Population projections generated by Cascade (2020 – 2029)					
year	<1	ages 1 to 4	ages 5 to 9	ages 10 to 14	ages 15-19
2020	449	1913	2717	3024	2532
2021	456	1922	2707	3022	2531
2022	458	1917	2713	2990	2607
2023	461	1939	2707	2935	2733
2024	467	1956	2731	2904	2774
2025	472	1977	2688	2946	2818
2026	481	1991	2724	2941	2820
2027	485	2016	2730	2955	2790
2028	493	2046	2761	2957	2744
2029	494	2069	2788	2984	2719
2030	481	1,991	2,724	2,941	2758

The following **Figure 5.13.3** graphically depicts the Cascade projections for the child-aged population. This reflects all children, some of whom do not attend school in SD 83. They may attend First Nations schools, private schools, other adjacent school districts, or be home-schooled but unregistered. In Section 6, we will generate the resulting enrolment projections for the school district.



Observations: Among the observations are the following:

- The 1 to 4 age group is level and then rises from 2022 through to 2030;
- The 5 to 9 age group is relatively stable, but increases through to 2030, after a slight dip in 2025;
- The 10 to 14 age group declines until 2024, and increases through to 2029 and declines between 2029 and 2030; and
- The 15-20 age group rises and levels out in 2025 – 2026, declines to 2029 and rises between 2029 and 2030.
- The heavy brown line provides the sum for school age 5-19, with the values on the far right axis, showing steady growth over the next decade (if 2021 and 2028 are ignored).

Note. This population demographic projection includes all school age children in the region. The forecast student enrolment for School District 83 will be generated in Section 6.

6. ENROLMENT PROJECTIONS AND CAPACITY UTILIZATION

6.1 Current 2018-19 Enrolment

Figure 6.1 provides the current school enrolments by grade for 2018-19, as of 30 June 2019:

Figure 6.1 - SD 83 NORTH OKANAGAN - SHUSWAP - ENROLMENTS															
2018-2019 ENROLMENTS by School and Grade															
School and Zone	Kgn	Elementary						Secondary						Pre- and Ungraded	TOTAL
		1	2	3	4	5	6	7	8	9	10	11	12		
Salmon Arm Zone															
Bastion Elementary	49	67	70	57	69	61	0	0	0	0	0	0	0	0	373
Hillcrest Elementary	46	49	54	65	54	53	0	0	0	0	0	0	0	0	321
North Canoe Elementary	12	11	11	15	14	10	0	0	0	0	0	0	0	0	73
Salmon Arm West Elementary	13	19	14	21	22	16	0	0	0	0	0	0	0	0	105
South Broadview Elementary	26	34	39	36	41	51	0	0	0	0	0	0	0	0	227
South Canoe Elementary	20	16	7	15	15	14	6	0	0	0	0	0	0	1	94
Silver Creek Elem-Middle	17	9	13	10	6	4	6	7	8	0	0	0	0	0	80
Ranchero Elem-Middle	12	19	15	13	16	14	12	10	9	0	0	0	0	0	120
Shuswap Middle	0	0	0	0	0	0	227	216	213	0	0	0	0	1	657
SAS Jackson Campus	0	0	0	0	0	0	0	0	1	288	256	0	0	0	545
SAS Sullivan Campus	0	0	0	0	0	0	0	0	0	1	5	250	310	0	566
Total for Salmon Arm Zone	195	224	223	232	237	223	251	233	231	289	261	250	310	2	3161
Sorrento Zone															
Sorrento Elementary	29	35	25	37	28	34	0	0	0	0	0	0	0	0	188
Carlin Elem-Middle	15	21	22	17	21	21	41	46	56	0	0	0	0	0	260
North Shuswap Elem-Middle	13	8	14	11	11	13	13	12	13	0	0	0	0	0	108
Total for Sorrento Zone	57	64	61	65	60	68	54	58	69	0	0	0	0	0	556
Armstrong Zone															
Armstrong Elementary	33	40	47	54	50	44	0	0	0	0	0	0	0	2	270
Highland Park Elementary	67	63	43	56	69	56	0	0	0	0	0	0	0	0	354
Falkland Elem-Middle	11	10	14	11	9	13	10	9	12	0	0	0	0	0	99
Len Wood Middle	0	0	0	0	0	0	108	98	108	0	0	0	0	0	314
Pleasant Valley Secondary	0	0	0	0	0	0	0	0	0	87	104	106	108	0	405
Total for Armstrong Zone	111	113	104	121	128	113	118	107	120	87	104	106	108	2	1442
Enderby Zone															
Grindrod Elementary	19	14	20	11	17	17	18	9	0	0	0	0	0	0	125
MV Beattie Elementary	43	34	37	46	41	44	40	0	0	0	0	0	0	0	285
A.L. Fortune Secondary	0	0	0	0	0	0	0	41	62	38	41	36	56	0	274
Total for Enderby Zone	62	48	57	57	58	61	58	50	62	38	41	36	56	0	684
Sicamous Zone															
Parkview Elementary	26	21	26	36	23	25	26	0	0	0	0	0	0	0	183
Eagle River Secondary	0	0	0	0	0	0	0	28	17	21	29	24	25	0	144
Total for Sicamous Zone	26	21	26	36	23	25	26	28	17	21	29	24	25	0	327
Alternate Programs															
Salmon Arm Storefront	0	0	0	0	0	0	0	0	0	0	7	10	31	0	48
Alternate Outreach	0	0	0	0	0	0	0	0	1	7	63	41	52	0	164
Strong Start Program	0	0	0	0	0	0	0	0	0	0	0	0	0	589	589
TOTAL ALL SCHOOLS	451	470	471	511	506	490	507	476	500	442	505	467	582	593	6971
Sources:												Monthly enrolment summary as of 6/30/19		K - 7 Elementary Total: 3882	
														8 - 12 Secondary Total: 2500	
														Strong Start: 589	
														6971	

Figure 6.1 – 2018-2019 Enrolment by School and Grade

6.2 Enrolment Projections

6.2.1 Enrolment Projection Sources.

Three different enrolment projections are available to contribute to development of the new LRFP Enrolment Projection. The wide variations between them indicate that projecting population growth, especially for the smaller towns outside the Lower Mainland, is more of an art than a science. All of them show varied rates of increases in school age population during the ten year forecast period. The percent change each year will be discussed in Section 6.2.2.

The three sources are the following:

- a. **Census Data** analyzed in Section 5 of the LRFP. Child Age Population projections from census data using BC Stats P.E.O.P.L.E. software resulted in the data displayed in Figure 5.13.1. Our demographic analysis resulted in the revised Figure 5.13.2. Below in **Figure 6.2.1a**, the same data is tabulated and the age groups revised to reflect elementary, middle, and secondary student ages. This School District has a mixture of grade structures, especially in the rural schools. However this is not critical when looking at population group trends at this macro level.

Figure 6.2.1a - Projection based on demographic analysis of Census Data & PEOPLE Software

Demographic Analysis of Census Data							Conversion to School Ages			
Refer to earlier Figure 5.13.2							K to Gr 5	Gr 6 to 8	Gr 9 - 12	K to Gr 12
Year	under 1	1 to 4	5 to 9	10 to 14	15 to 19	5 to 19	Age 5-11	Age 12-14	Age 15-18	Age 5-18
2020	449	1913	2717	3024	2532	8273	3927	1814	2026	7767
2021	456	1922	2707	3022	2531	8260	3916	1813	2024	7753
2022	458	1917	2713	2990	2607	8310	3909	1794	2086	7789
2023	461	1939	2707	2935	2733	8375	3881	1761	2186	7828
2024	467	1956	2731	2904	2774	8409	3893	1742	2219	7854
2025	472	1977	2688	2946	2818	8452	3866	1768	2254	7888
2026	481	1991	2724	2941	2820	8485	3900	1765	2256	7921
2027	485	2016	2730	2955	2790	8475	3912	1773	2232	7917
2028	493	2046	2761	2957	2744	8462	3944	1774	2195	7913
2029	494	2069	2788	2984	2719	8491	3982	1790	2175	7947
2030	504	2089	2812	2949	2758	8519	3992	1769	2206	7967

- b. **Projection provided by Baragar** was updated in December 2018 as shown in **Figure 6.2.1b**. This projection is also considered in developing the new projection.

Fig 6.2.1b - Projection by Baragar as of December 2018

School	Capacity	Enrolment Projections												
		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
AES	267	272	266	258	239	231	229	231	233	229	228	229	230	231
BAS	398	366	358	351	344	330	326	331	333	329	334	334	334	334
CAR-E	308	124	128	132	137	135	135	138	137	136	135	135	134	133
FAL	135	95	93	95	96	96	98	99	98	95	95	94	90	89
GRI	158	124	130	136	137	141	150	144	146	140	141	140	139	136
HPE	400	339	353	356	356	366	351	337	337	335	338	339	339	339
HIL	366	313	324	337	330	317	321	321	319	316	315	319	319	320
NCA	134	71	74	75	71	72	74	78	78	76	74	76	76	75
NSH	181	188	200	196	184	190	196	204	211	206	201	208	212	205
PAR	344	193	199	213	221	218	214	214	213	210	197	190	181	178
RAN	181	128	132	132	131	136	135	133	137	138	145	142	144	144
SAW	111	100	107	102	97	98	92	90	86	83	85	84	83	83
SCR	154	80	89	93	98	106	108	108	106	106	96	92	92	92
SOR	275	183	189	204	207	226	226	228	228	231	231	229	226	224
SBR	337	224	223	229	227	222	220	227	228	224	227	225	225	225
SC	180	95	125	155	179	192	208	219	237	250	259	259	259	259
Store	50	41	36	41	42	42	42	42	42	42	42	42	42	42
LWM	425	313	307	334	347	352	350	348	348	340	327	330	325	326
CAR-M	308	147	141	140	146	142	154	159	172	171	173	170	173	175
SMS	650	660	664	671	660	685	683	658	632	630	641	637	623	628
ALF	437	278	279	305	323	348	345	355	362	368	369	370	370	379
ERS	375	147	156	164	164	178	192	185	184	183	188	183	184	185
PVS	775	414	418	424	444	462	474	494	488	508	502	488	496	479
JLJ	630	574	618	640	656	654	659	671	678	688	675	686	717	698
SUL	700	580	547	580	621	642	656	654	654	664	671	680	670	680
District Total		6049	6156	6363	6457	6581	6638	6668	6687	6698	6689	6681	6683	6659
Percent Change:			1.8%	3.4%	1.5%	1.9%	0.9%	0.5%	0.3%	0.2%	-0.1%	-0.1%	0.0%	-0.4%

- c. **Ministry of Education Enrolment Projection** is generally based on current enrolment cohorts modified by provincial trends. It lacks local economic factors which affect family mobility into or out of the district. **Figure 6.2.1c** is the Ministry of Education Enrolment Projection for SD 83.

Fig. 6.2.1c - SD 83 NORTH OKANAGAN - SHUSWAP - Projection by Ministry of Education - January 2019

Year	Kinder-garten	Elementary Grades								Middle Grades				Secondary Grades				All Grades		Home School	Grand Total
		1	2	3	4	5	Sum 1-5	K - 5		6	7	8	Sum 6-8	9	10	11	12	Sum 9-12	Subtotal		
2018	446	460	478	506	499	485	2,428	2,874		498	486	503	1,487	448	446	440	542	1,876	6,237	3	6,240
2019	421	481	477	462	537	482	2,439	2,860		484	530	545	1,559	447	459	439	504	1,849	6,268	3	6,271
2020	472	455	500	462	493	519	2,429	2,901		481	516	595	1,592	486	458	450	498	1,892	6,385	3	6,388
2021	470	507	472	483	493	477	2,432	2,902		516	513	580	1,609	528	496	451	511	1,986	6,497	3	6,500
2022	444	507	526	457	515	478	2,483	2,927		476	550	577	1,603	516	540	486	512	2,054	6,584	3	6,587
2023	455	479	527	509	488	498	2,501	2,956		477	507	619	1,603	515	529	530	550	2,124	6,683	3	6,686
2024	484	492	499	509	541	472	2,513	2,997		496	508	572	1,576	550	528	520	598	2,196	6,769	3	6,772
2025	487	523	511	484	542	523	2,583	3,070		471	529	572	1,572	509	563	518	592	2,182	6,824	3	6,827
2026	487	525	543	495	516	524	2,603	3,090		520	502	595	1,617	510	523	552	589	2,174	6,881	3	6,884
2027	490	527	546	525	527	499	2,624	3,114		523	555	565	1,643	529	523	515	624	2,191	6,948	3	6,951
2028	490	530	548	527	559	512	2,676	3,166		499	558	623	1,680	504	542	513	587	2,146	6,992	3	6,995

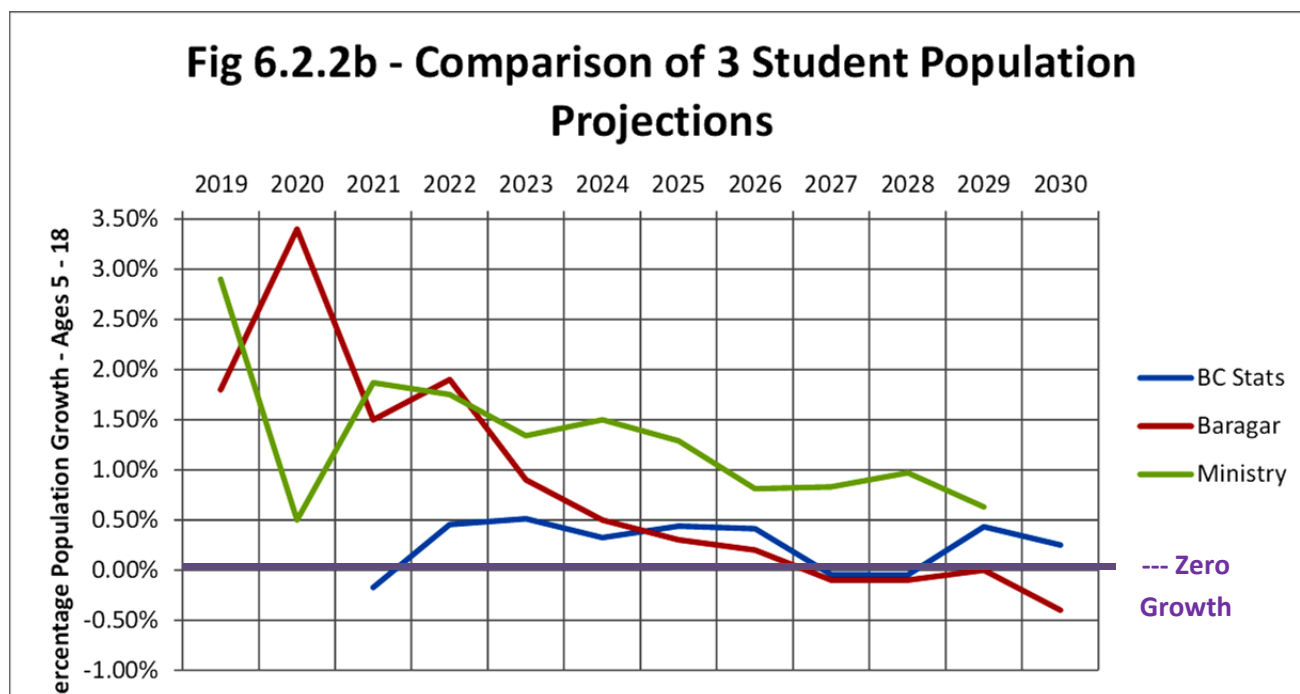
Source: <https://catalogue.data.gov.bc.ca/dataset/projection-of-public-school-aged-headcount-enrolments>

6.2.2 Comparison of 3 Projections.

These three different enrolment projections offer very varied percent growth in the student populations over the next ten years. Figures below depict the projected percent change for the total School Age population from three sources:

Figure 6.2.2a – Data Table - School Age Population % Change provided by 3 sources:

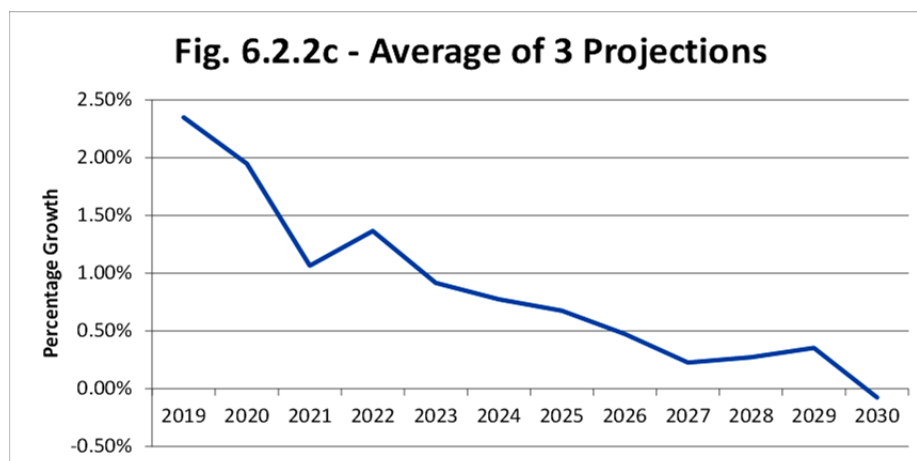
Fig 6.2.2a - Three Different Projections			
	% Growth	% Growth	% Growth
YEAR	BC Stats	Baragar	Ministry
2019		1.80%	2.90%
2020		3.40%	0.50%
2021	-0.17%	1.50%	1.87%
2022	0.45%	1.90%	1.75%
2023	0.51%	0.90%	1.34%
2024	0.32%	0.50%	1.50%
2025	0.44%	0.30%	1.29%
2026	0.41%	0.20%	0.81%
2027	-0.04%	-0.10%	0.83%
2028	-0.05%	-0.10%	0.97%
2029	0.43%	0.00%	0.63%
2030	0.25%	-0.40%	

Figure 6.2.2b – Graph of School Age Population % Change provided by 3 sources

It is notable that all three projections indicate a higher growth rate in the immediate future followed by a period of lower growth. There seems to be agreement among the three sources that a mini-boom is taking place over the next couple of years, but it may fall back to a lower growth rate later in the study period.

It must also be pointed out that the annual predicted percent change varies greatly between the sources. For example, for 2021 the Ministry predicts 1.8% increase, Baragar predicts 1.5% increase, while BC Stats predicts 0.75% decrease. There is little consistency.

The average percent change for the three projections shows that all three agree on a declining growth rate (but still growth) over the next ten years. See **Figure 6.2.2c**.



6.2.3 Development of the LRFP Enrolment Projection.

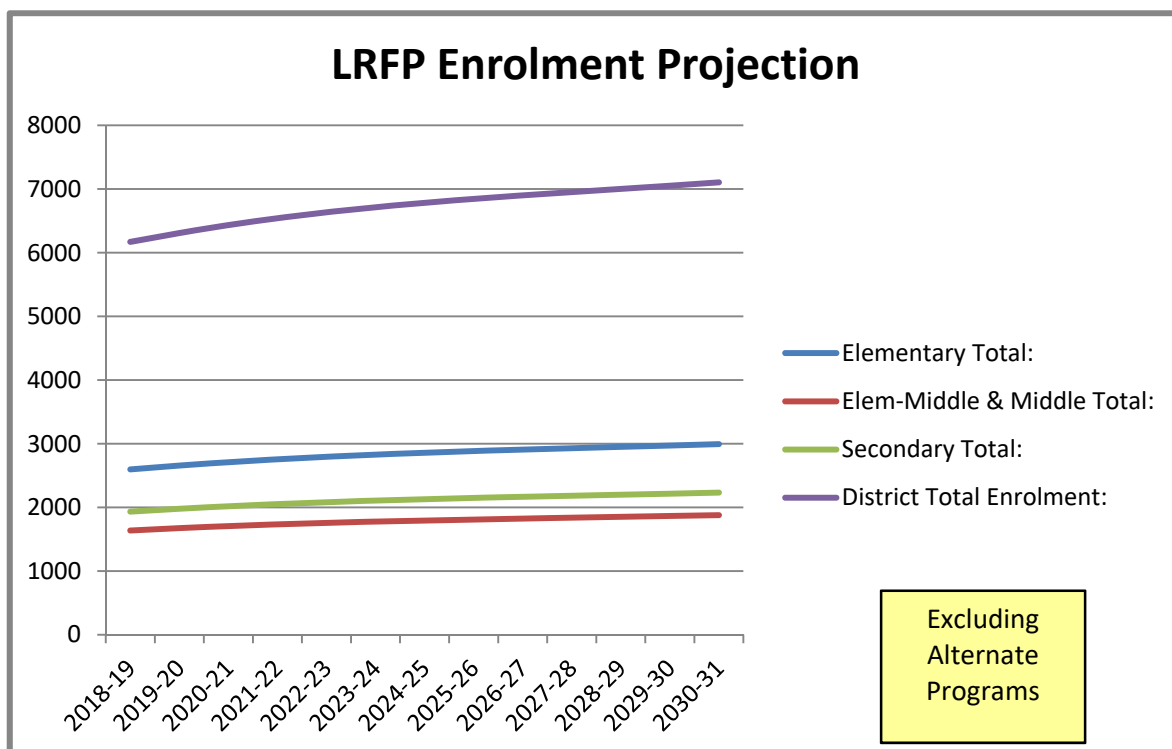
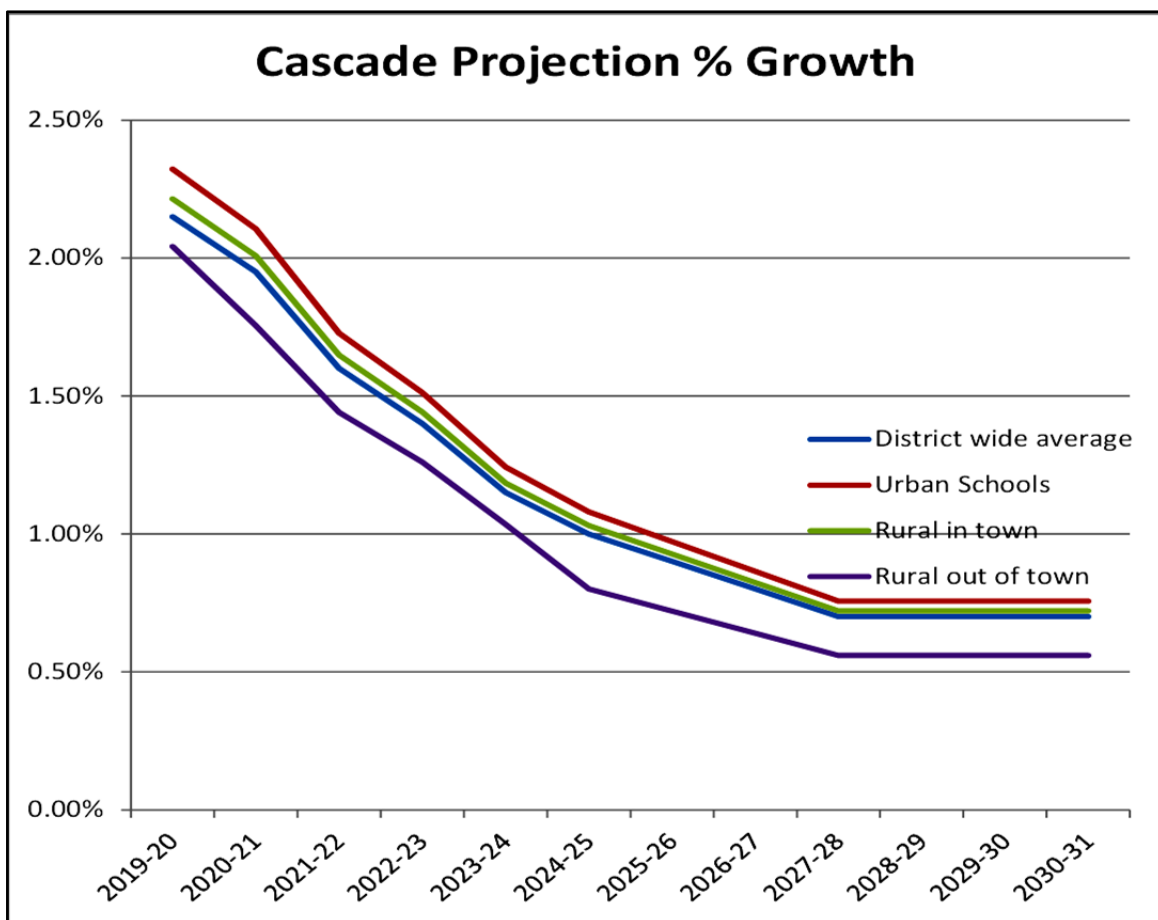
It is apparent from the above enrolment projections that wild variations in the first few years will not be helpful in determining facilities needs. Any projection adopted for the Long Range Facilities Plan must take into account current economic realities and whether job opportunities will attract family in-migration. Population growth mainly from empty-nest retirees will not provide enrolment growth. It is known that the region also attracts workers who work elsewhere, but choose to establish their families in the beautiful Shuswap area.

Therefore a cautious approach is recommended for the LRFP Enrolment Projection. If new employment opportunities occur which result in greater family in-migration, this LRFP Enrolment Projection should be revised to reflect this new information.

There are no indications that family population growth should diminish to an actual decrease by the end of the decade. Therefore Cascade rejects the significant drop in the growth rate shown in Figure 6.2.2c.

We also believe there will be slightly higher growth rates at urban schools than rural schools because of the increasing availability of family-oriented housing and employment in Salmon Arm. The proposed percentage growth rate, differentiated by “Urban”, “Rural in town”, and “Rural outside town” categories of schools is shown in **Figure 6.2.3a**.

Fig 6.2.3a - LRFP ENROLMENT PROJECTION % IN SEPTEMBER 2019				
YEAR	BASE	URBAN	RURAL in town	RURAL out of town
	District wide percent growth - base figure	Elementaries: Bastion, Hillcrest, South Broadview; Middles: Shuswap Middle; Secondaries: SAS Jackson, SAS Sullivan	Elementaries: North Canoe, South Canoe, Salmon Arm West, Sorrento, Armstrong, Highland Park, MV Beattie, Parkview; Middles: Len Wood; Secondaries: Pleasant Valley, AL Fortune, Eagle River	Elementaries: Grindrod; Elem-Middle: Silver Creek, Rancho, Carlin, North Shuswap, Falkland; Secondaries: none
2019-20	2.15%	2.32%	2.21%	2.04%
2020-21	1.95%	2.11%	2.01%	1.76%
2021-22	1.60%	1.73%	1.65%	1.44%
2022-23	1.40%	1.51%	1.44%	1.26%
2023-24	1.15%	1.24%	1.18%	1.04%
2024-25	1.00%	1.08%	1.03%	0.80%
2025-26	0.90%	0.97%	0.93%	0.72%
2026-27	0.80%	0.86%	0.82%	0.64%
2027-28	0.70%	0.76%	0.72%	0.56%
2028-29	0.70%	0.76%	0.72%	0.56%
2029-30	0.70%	0.76%	0.72%	0.56%
2030-31	0.70%	0.76%	0.72%	0.56%
Notes				
1. Growth rates are different for urban, rural in town, and rural out of town.				



The resulting enrolment projection is shown in the following **Figure 6.2.3b**.

Fig. 6.2.3b - LRFP ENROLMENT PROJECTION FOR SCHOOL YEARS by School and Zone 2019 - 2030 (revised Sept 2019)															
School	Zone	Actual 2018-19	Projection for School Year Enrolment on September 30 of Year indicated												
			2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Urban - Elementaries															
Bastion Elementary	Salmon Arm	373	382	390	396	402	407	412	416	419	423	426	429	432	
Hillcrest Elementary	Salmon Arm	321	328	335	341	346	351	354	358	361	364	366	369	372	
Salmon Arm West Elementary	Salmon Arm	105	107	109	111	113	114	115	116	117	118	119	120	121	
South Broadview Elementary	Salmon Arm	227	232	237	241	245	248	251	253	255	257	259	261	263	
Total for Urban Elementaries		1026	1050	1072	1090	1107	1120	1132	1143	1153	1162	1170	1179	1188	
Urban - Elem-Middle & Middle															
Shuswap Middle	Salmon Arm	657	672	686	698	709	718	725	732	739	744	750	756	761	
Total for Urban Middles		657	672	686	698	709	718	725	732	739	744	750	756	761	
Urban - Secondaries															
SAS - Jackson Campus	Salmon Arm	545	558	569	579	588	595	602	608	613	617	622	627	632	
SAS- Sullivan Campus	Salmon Arm	566	579	591	602	611	618	625	631	636	641	646	651	656	
Total for Urban Secondaries		1111	1137	1161	1181	1199	1214	1227	1239	1249	1259	1268	1278	1287	
Rural - Elementaries															
North Canoe Elementary	Salmon Arm	73	75	76	77	78	79	80	81	82	82	83	83	84	
South Canoe Elementary	Salmon Arm	94	96	98	100	101	102	103	104	105	106	107	107	108	
Sorrento Elementary	Northwest	188	192	196	199	202	205	207	209	210	212	213	215	216	
Armstrong Elementary	Armstrong	270	276	282	286	290	294	297	300	302	304	306	309	311	
Highland Park Elementary	Armstrong	354	362	369	375	381	385	389	393	396	399	402	405	407	
Grindrod Elementary	Enderby	125	128	130	132	133	135	136	137	138	139	140	141	142	
MV Beattie Elementary	Enderby	285	291	297	302	306	310	313	316	319	321	322	324	326	
Parkview Elementary	Sicamous	183	187	191	194	197	199	201	203	205	206	208	209	211	
Total for Rural Elementaries		1572	1607	1639	1665	1689	1709	1726	1742	1756	1768	1780	1793	1805	
Rural - Elem-Middle & Middles															
Silver Creek Elem-Middle	Salmon Arm	80	82	83	84	85	86	87	88	88	89	89	90	91	
Ranchero Elem-Middle	Salmon Arm	120	122	125	126	128	129	130	131	132	133	134	135	136	
Carlin Elem-Middle	Northwest	260	265	270	274	277	280	282	284	286	288	290	293	295	
North Shuswap Elem-Middle	Northwest	108	110	112	114	115	116	117	118	119	120	121	122	122	
Falkland Elem-Middle	Armstrong	99	101	103	104	106	107	108	108	109	110	111	111	112	
Len Wood Middle	Armstrong	314	321	327	333	338	342	345	348	351	354	356	359	361	
Total for Rural Elem-Middle & Middles		981	1002	1020	1035	1049	1060	1070	1078	1086	1093	1101	1109	1117	
Rural - Secondaries															
Pleasant Valley Secondary	Armstrong	405	414	422	429	435	441	445	449	453	456	460	463	466	
A.L. Fortune Secondary	Enderby	274	280	286	290	295	298	301	304	306	309	311	313	315	
Eagle River Secondary	Sicamous	144	147	149	151	153	155	156	158	159	160	161	162	163	
Total for Rural Secondaries		823	841	857	871	883	894	903	911	918	925	931	938	945	
TOTAL ALL SCHOOLS excl Alt Progs & Strong Start		6170	6308	6435	6541	6635	6714	6783	6845	6901	6951	7002	7053	7104	
Notes															
1. 2018-19 enrolment figures are the June 2019 headcount by school.															
2. Enrolments do not include Strong Start nor Alternate Programs or Distance Learning.															
3. Different enrolment growth factors are applied for each category: Urban, Rural in town, and Rural outside town.															
4. Salmon Arm West Elementary growth uses Rural in town factor instead of Urban factor.															

6.3 Capacity Utilization

- 6.3.1 The Ministry of Education manages the province-wide school infrastructure needs by examining Capacity Utilization, the percentage of occupancy compared to building capacity.

Nominal versus Operating Capacity. Historically the Ministry established a school “**Nominal Capacity**” based on 25 students per classroom for Grades 1 – 12 and did not include Kindergarten. It was excluded because at that time it was a half-day program. This has changed with full day kindergarten which has resulted in more blended classes such as K-1 across the province. Nominal capacity now includes the Kindergarten classrooms at 20 per classroom.

The nominal capacity will remain fixed, subject only to changes being made in physical space that would affect the nominal capacity and adjustments in the space standards.

The **Operating Capacity** is the effective capacity of the school recognizing mandated maximum class sizes of 25 students for Grades 4 – 12, only 21 students for Grades 1 – 3, and 19 students for Kindergarten. To determine **Capacity Utilization**, the Nominal Capacity of a school is used. The Ministry record of Nominal Capacity of a school can be amended by submission of a Design Aid Sheet for the school, showing the feasible usage of all spaces.

The lower the capacity utilization, the less efficiently a district is using its facilities. It is maintaining, heating, and cleaning “unoccupied” space. The Ministry calculates this for every school as well as the total district.

Based upon actual enrolment figures and future projections the nominal capacity and the corresponding operating capacity must be agreed to by the Ministry.

Note that capacity does not include any portable classrooms which may be at the school site, as these are not considered permanent spaces.

- 6.3.2 The Ministry clarified its target capacity utilization factors in the Capital Plan Instructions issued in June 2016. For School District 83 the target average across the district is 85% capacity utilization. The Ministry instructions state: “for most areas, a forecast of 10 years is the standard for anticipating growth and should be included when assessing utilization.”

On 27 September 2016 the Ministry issued a letter to school districts removing the District Average Capacity Utilization Guideline Table from the Capital Plan Instructions, and stated that districts still have to optimize available space to alleviate capital investment needs. Therefore it is important to report capacity utilization, especially in neighbouring schools, when seeking approval for a space related project.

- 6.3.3 It is advantageous to look at the Capacity Utilization in the rural area separately from that in the urban area (Salmon Arm). The reason for this is that the Ministry recognizes the difficulty

in managing schools to improve Capacity Utilization in isolated low-population communities. Therefore SD 83 should prioritize improving Capacity Utilization in the urban area of Salmon Arm. This will help support future capital projects needed by the district.

6.3.4 **Current Capacity Utilization**. Capacity Utilization factors in North Okanagan - Shuswap district schools in 2018/2019 are shown in **Figure 6.3.4**.

Figure 6.3.4 - CAPACITY UTILIZATION - URBAN & RURAL IN 2018/19**CAPACITY UTILIZATION - URBAN SCHOOLS**

SCHOOL	ZONE	GRADES	NOM CAP	OPER CAP	2018-2019 ENROL	2018-19 CAP UTIL
Bastion Elementary	Salmon Arm	K - 5	400	372	373	93.3%
Hillcrest Elementary	Salmon Arm	K - 5	360	343	321	89.2%
Salmon Arm West Elem	Salmon Arm	K - 5	145	138	105	72.4%
South Broadview Elementary	Salmon Arm	K - 5	360	343	227	63.1%
ELEM TOTAL			1265	1196	1026	81.1%
Shuswap Middle	Salmon Arm	6 - 8	700	700	657	93.9%
ELEM-MD and MIDDLE TOTAL			700	700	657	93.9%
SAS - Jackson Campus	Salmon Arm	9 - 10	600	600	545	90.8%
SAS - Sullivan Campus	Salmon Arm	11 - 12	700	700	566	80.9%
SECONDARY TOTAL			1300	1300	1111	85.5%
TOTAL URBAN			3265	3196	2794	85.6%

CAPACITY UTILIZATION - RURAL SCHOOLS

SCHOOL	ZONE	GRADES	NOM CAP	OPER CAP	2018-2019 ENROL	2018-19 CAP UTIL
North Canoe Elementary	Salmon Arm	K - 5	145	138	73	50.3%
South Canoe Elementary	Salmon Arm	K - 7	170	152	94	55.3%
Sorrento Elementary	Northwest	K - 5	310	295	188	60.6%
Armstrong Elementary	Armstrong	K - 5	260	247	270	103.8%
Highland Park Elementary	Armstrong	K - 5	385	366	354	91.9%
Grindrod Elem	Enderby	K - 7	145	140	125	86.2%
MV Beattie Elementary	Enderby	K - 6	315	303	285	90.5%
Parkview Elementary	Sicamous	K - 6	365	351	183	50.1%
ELEM TOTAL			2095	1992	1572	75.0%
Silver Creek Elem-Middle	Salmon Arm	K - 8	120	115	80	66.7%
Ranchero Elem-Middle	Salmon Arm	K - 8	195	188	120	61.5%
Carlin Elem-Middle	Northwest	K - 8	395	351	260	65.8%
North Shuswap Elem-Middle	Northwest	K - 8	165	159	108	65.5%
Falkland Elem-Middle	Armstrong	K - 8	165	159	99	60.0%
Len Wood Middle	Armstrong	6 - 8	500	500	314	62.8%
ELEM-MD and MIDDLE TOTAL			1540	1472	981	63.7%
Pleasant Valley Secondary	Armstrong	9 - 12	750	750	405	54.0%
A.L. Fortune Secondary	Enderby	7 - 12	550	550	274	49.8%
Eagle River Secondary	Sicamous	7 - 12	400	400	144	36.0%
SECONDARY TOTAL			1700	1700	823	48.4%
TOTAL RURAL			5335	5164	3376	63.3%
Alternate Programs	Salmon Arm	8 - 12	N/A	N/A	212	N/A
TOTAL DISTRICT (excl Strong Start)			8600	8360	6382	74.2%

6.3.5 **Capacity Utilization Target.**

The impact of the Ministry capacity utilization factor is that priority for capital projects from an under-capacity district could be reduced when the Ministry assesses competing district submissions. To have capital projects accepted into the funding approval flow, it is very desirable to achieve the Ministry utilization of 85%.

Notwithstanding the 2016 relaxation of the requirements for achieving the target utilization levels, Ministry staff indicate that justification for space-related capital projects will still be assessed against the capacity availability in other nearby schools in the district.

6.3.6 **Separating Urban and Rural**

It is recognized by the Ministry of Education that in isolated rural communities, it is very difficult to improve capacity utilization. The school is a vital part of the community infrastructure and supports more than just the K – 12 education services. The 2016/2017 Capital Plan Instructions stated:

“While utilization guidelines are intended to be applied as an average across the school district, they may also be applied at a “sub-district” level due to unique geographic features ... or at a “family of schools” level where there are extremes in enrolment variances across the school district.”

It is appropriate to separate the urban and rural areas in SD 83 when considering Capacity Utilization. Many of the rural schools will likely never reach their capacity, but nevertheless this concern can be ignored as they are essential components of their community.

In the urban zone, only Salmon Arm West is below the 85% target. The total urban zone is at 85.6% capacity utilization which exceeds the target.

The rural zones do not have to meet the 85% target.

6.3.7 **Enrolment versus Operating and Effective Capacity as Enrolment Grows**

Although the Ministry only recognizes Nominal and Operating Capacities of schools, some districts find that their teacher employment contracts require creation of additional classes. This results in a capacity different from the Operating Capacity which we refer to as **Effective Capacity**.

In SD 83, contract language results in smaller class sizes than the Ministry Operating Capacity which is based on 19 in Kindergarten, 21 in Primary, and 25 in Grades 4 – 12. SD 83 has calculated the Effective Capacity of each school so that current and future enrolment can be compared to both Operating and Effective Capacity.

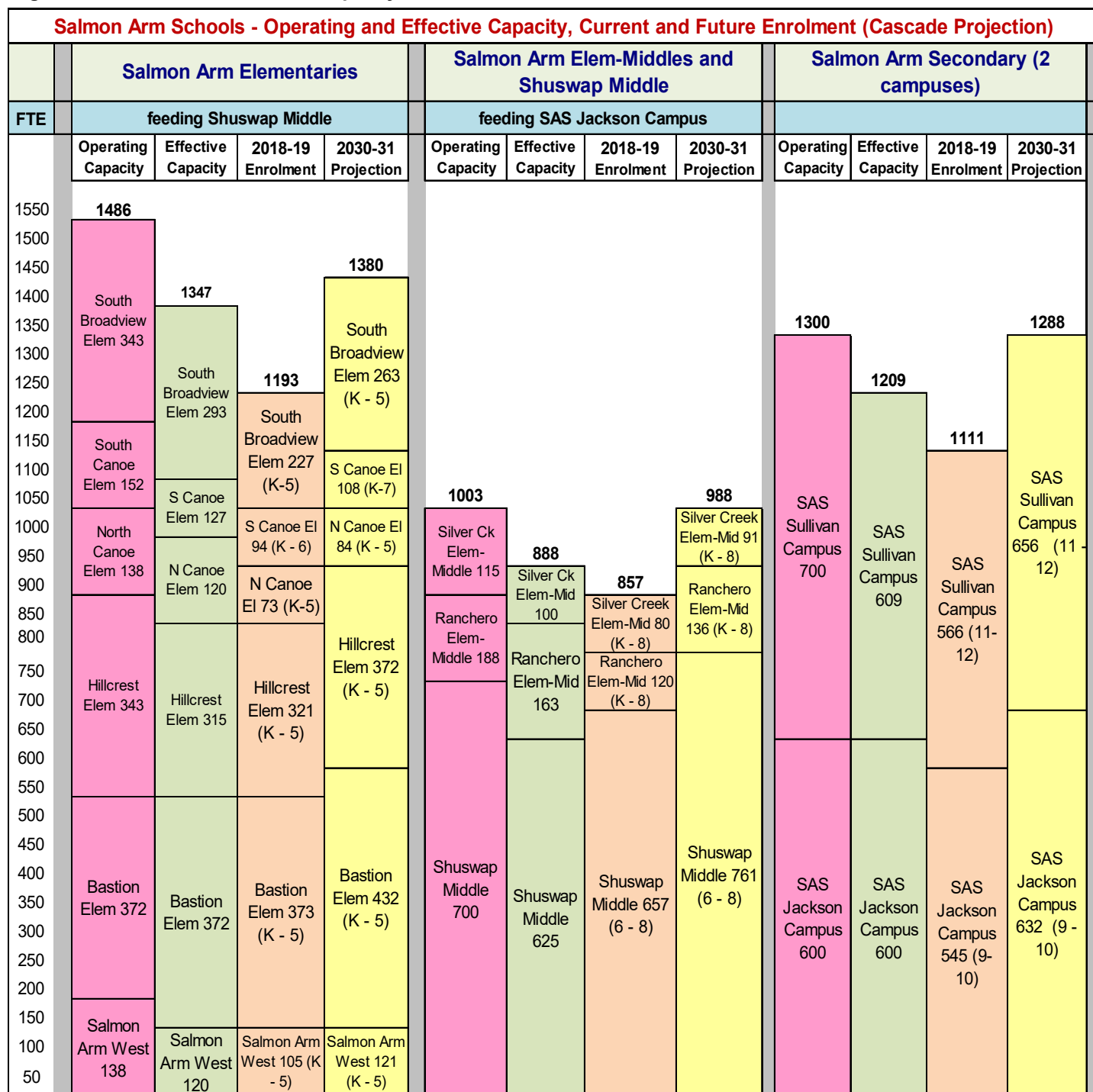
The Effective Capacity is usually lower than the Ministry's Operating Capacity resulting in higher space requirements.

Facilities space shortfalls can be quickly observed by depicting school Operating and Effective Capacities against projected enrolments in each zone. The following Figures 6.3.7a to 6.3.7e provide this visual representation of current and future school enrolment compared to school operating and effective capacity.

This is based on the current district organization and grade structure.

A. SALMON ARM ZONE – URBAN AND RURAL

Figure 6.3.7a - Enrolment versus Capacity in Salmon Arm Urban and Rural Zones



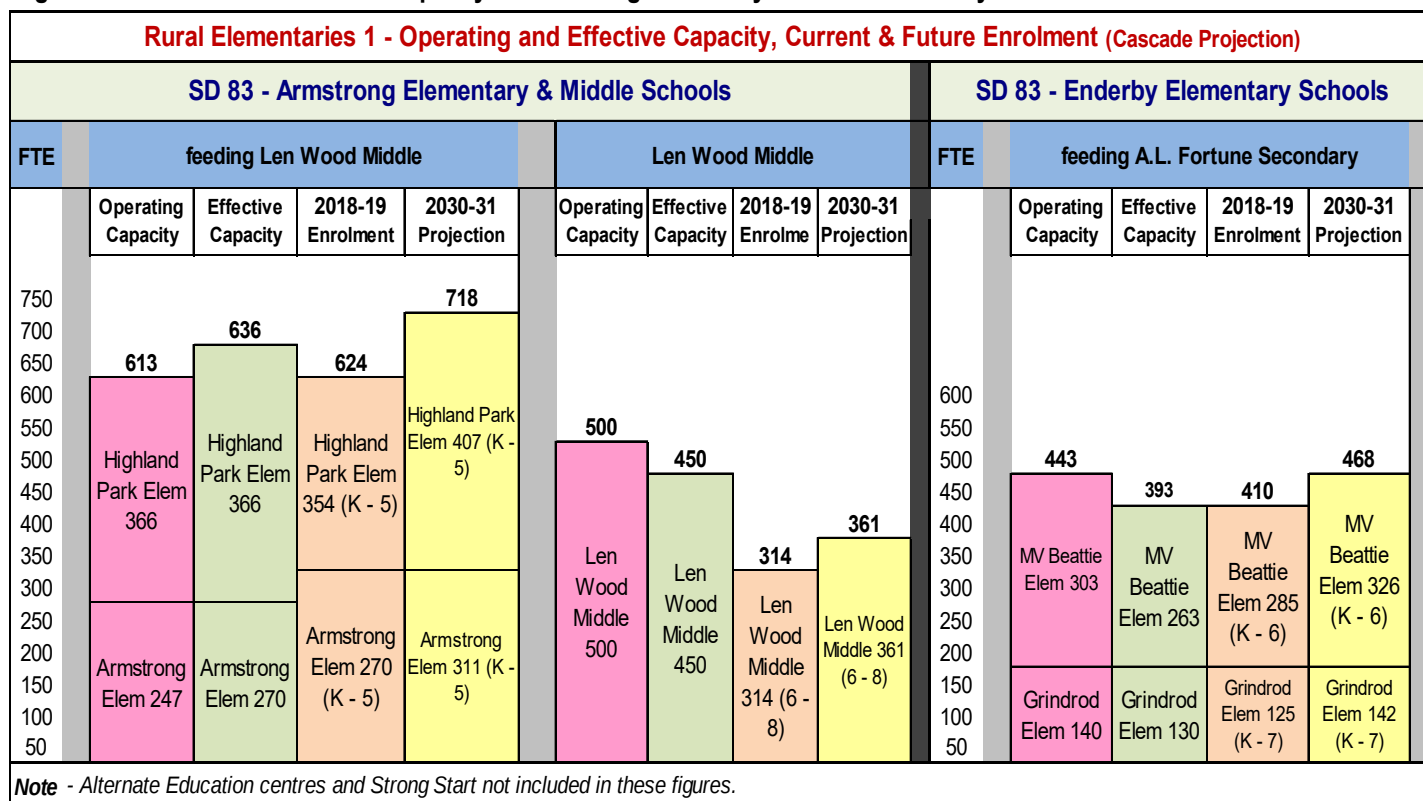
Note - Some Secondary students attend unlisted Alternate Programs or Distance Education instead.

Note - South Canoe Elementary changes from K - 6 in 2018-19 to K - 7 in 2019-20.

Note - Alternate Education centres and Strong Start not included in these figures.

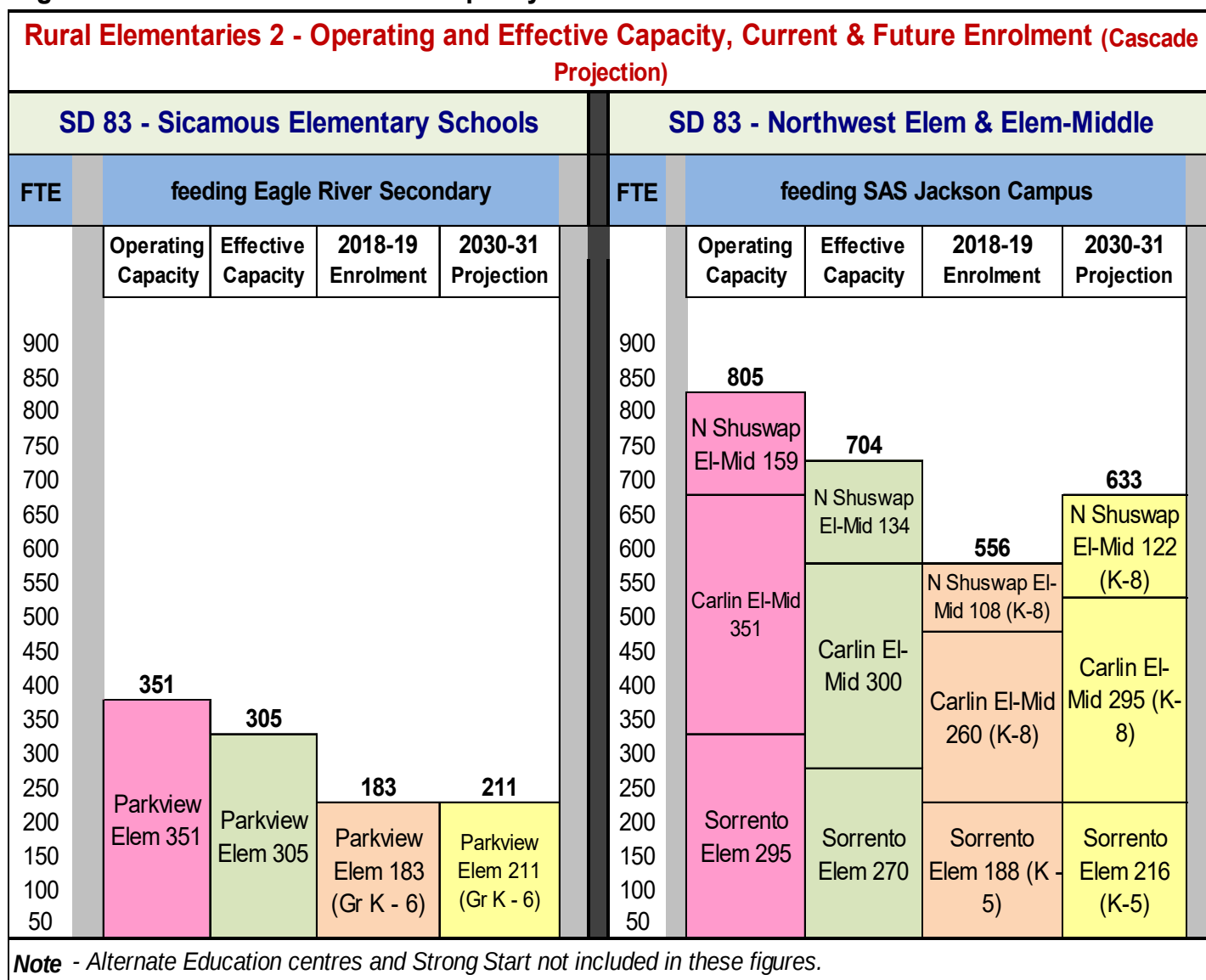
Observations on Fig 6.3.7a - Salmon Arm Zone schools:

- All of the projected growth within Salmon Arm zone can be accommodated in the existing Operating Capacity of urban and rural Salmon Arm schools except as noted below;
- Salmon Arm Elementary Schools. There is spare capacity in the outlying Salmon Arm schools such as Salmon Arm West, North Canoe, and South Canoe to accommodate excess enrolment at Bastion and Hillcrest. This would require catchment boundary adjustments or other incentives such as magnet programs and possibly additional busing;
- Salmon Arm Middle and Secondary Schools. Shuswap Middle will soon exceed its capacity while Ranchero and Silver Creek have excess space. It is not practical to adjust boundaries or feeders to use that space, therefore more portables at Shuswap Middle may be necessary. The Operating Capacity of the two secondaries can accommodate their projected enrolment growth, while the Effective Capacity indicates a future requirement for an addition or portables;
- Focusing on the Urban Schools – In Part E and Fig 6.3.7e, this capacity versus enrolment analysis is also done for just the urban schools in Salmon Arm.

B. ARMSTRONG & ENDERBY ZONES**Figure 6.3.7b - Enrolment versus Capacity in Armstrong & Enderby Zones - Elementary & Middle**

Observations on Fig 6.3.7b – Armstrong & Enderby Elementaries & Middles:

- Armstrong Elementaries. The elementary schools in Armstrong are already at capacity when combined. Elementary capacity will be exceeded in Armstrong requiring additional space;
- Armstrong Middle: Len Wood Middle has the capacity to accommodate projected growth;
- Enderby Elementaries. MV Beattie Elementary will be over-capacity during the coming decade and Grindrod will not be able to accommodate the overflow.

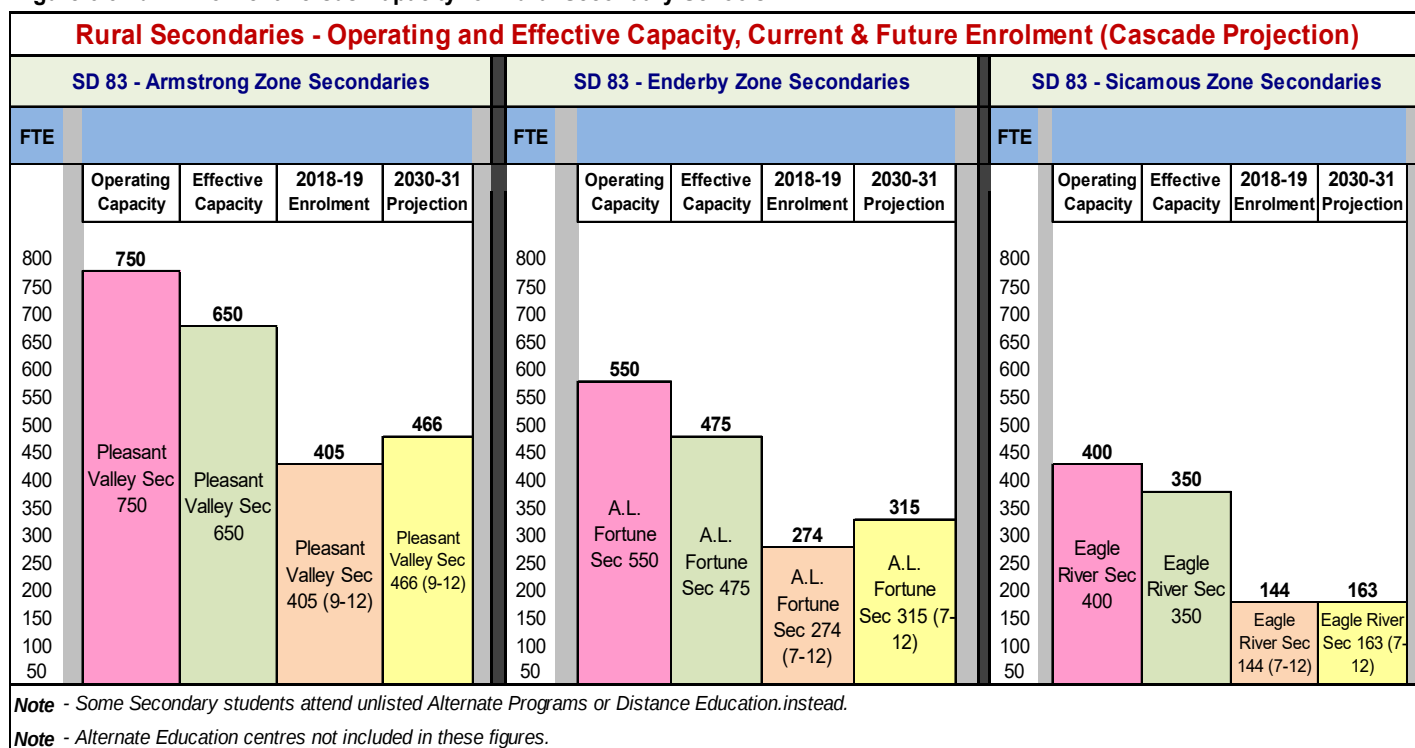
C. SICAMOUS & NORTHWEST ZONES**Figure 6.3.7c - Enrolment versus Capacity in Sicamous & Northwest Zones**

Observations on Fig 6.3.7c – Sicamous & Northwest Zones Elementaries & Elem-Middles:

- Sicamous and Northwest Elementaries. The elementary and elementary-middle schools in both Sicamous and the Northwest Zone can accommodate the projected enrolments.

D. RURAL SECONDARY SCHOOLS**6.3.7d – Rural Secondary Schools**

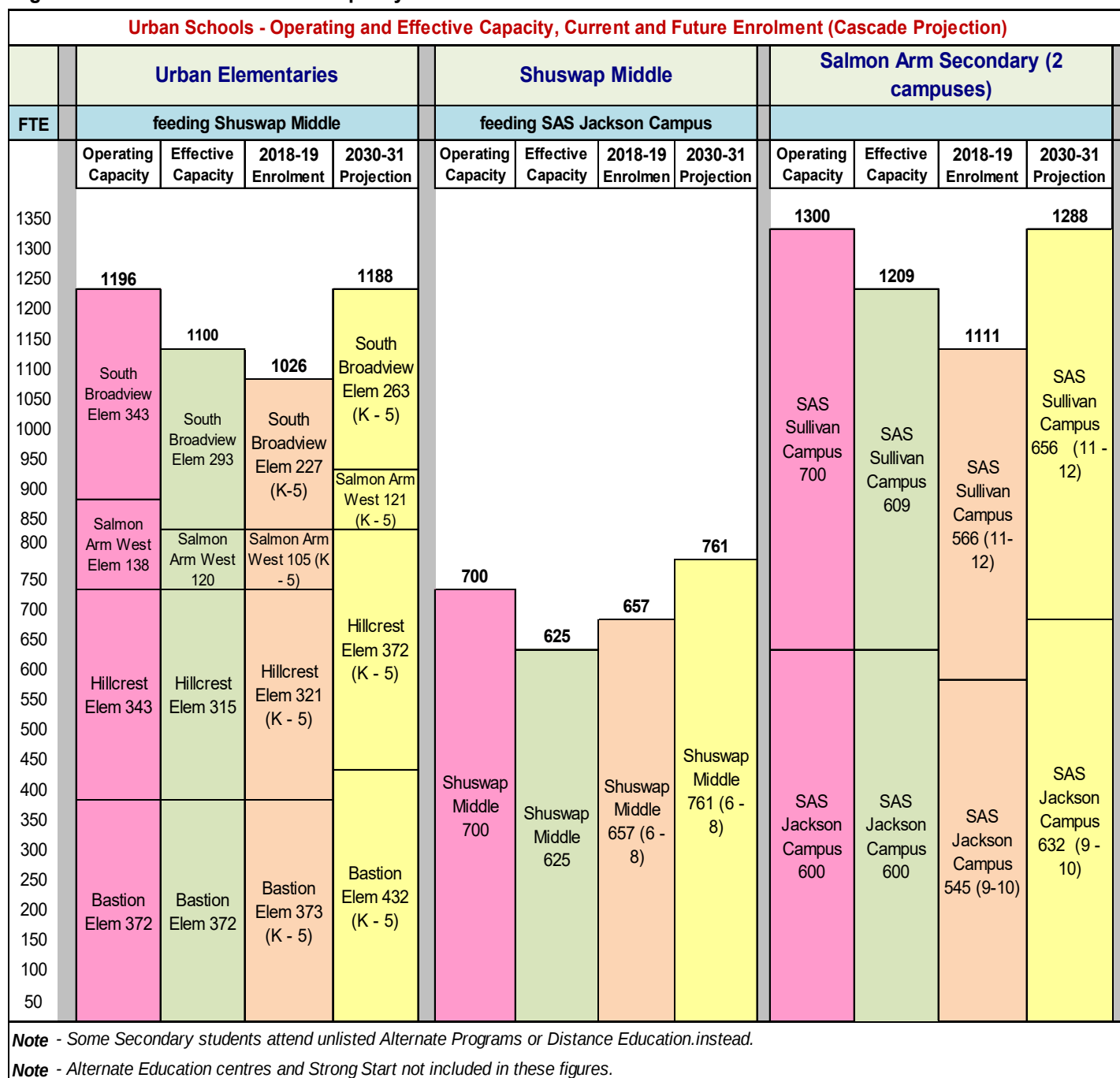
Figure 6.3.7d - Enrolment versus Capacity for Rural Secondary Schools

**Observations on Fig 6.3.7d – Rural Secondary Schools:**

- Rural Secondaries. The rural secondary schools in Armstrong, Enderby, and Sicamous are well below capacity and can easily accommodate the projected enrolment.

E. SALMON ARM ZONE – URBAN SCHOOLS

Figure 6.3.7e - Enrolment versus Capacity in Salmon Arm Urban Schools



Observations on Fig 6.3.7e – Salmon Arm Urban Zone Schools:

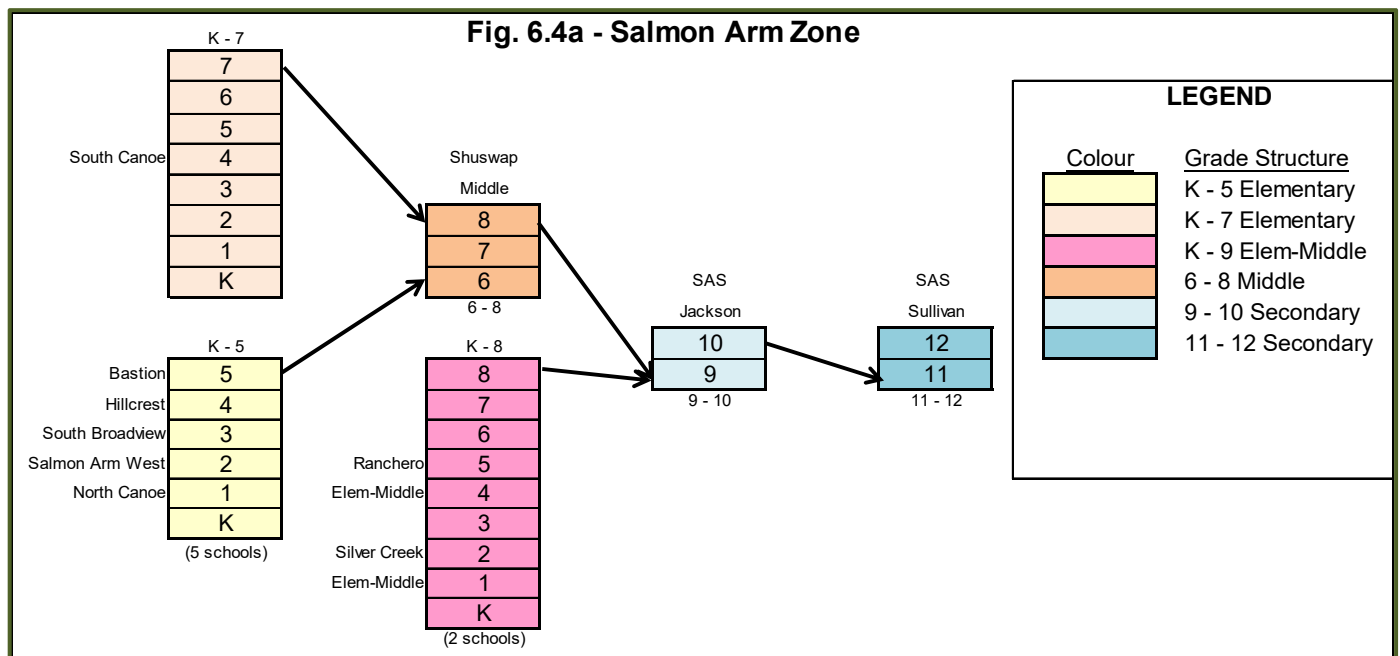
- Urban Elementary Schools. Both Bastion and Hillcrest will exceed capacity, but at first there would be space at the other urban elementaries. As growth continues, this would initially require catchment boundary adjustments or other incentives such as magnet programs, and possibly busing. Later in the decade, more urban elementary space will be required, especially given the lower Effective Capacity of the urban schools;
- Urban Middle and Secondary Schools. Shuswap Middle is already over its Effective Capacity and will soon exceed its Operating Capacity. With the current feeder schools and grade structure, more portables at Shuswap Middle will likely be necessary. The Operating Capacity of the two secondaries can accommodate their projected enrolment growth, while the Effective Capacity indicates a future requirement for an addition or portables.

6.4 District Grade Structure

6.4.1 In June 2019, SD 83 has a mixture of grade structures throughout the district with

- elementaries varying from K – 5, to K – 6, and K – 7;
- five elementary-middle schools at K – 8;
- two middle schools at Gr 6 – 8; and
- secondary schools varying from Gr 7 – 12, to 9 – 12, 9 – 10, and 11 – 12.

Figures 6.4a to 6.4e depict the varied grade structure in the five zones.



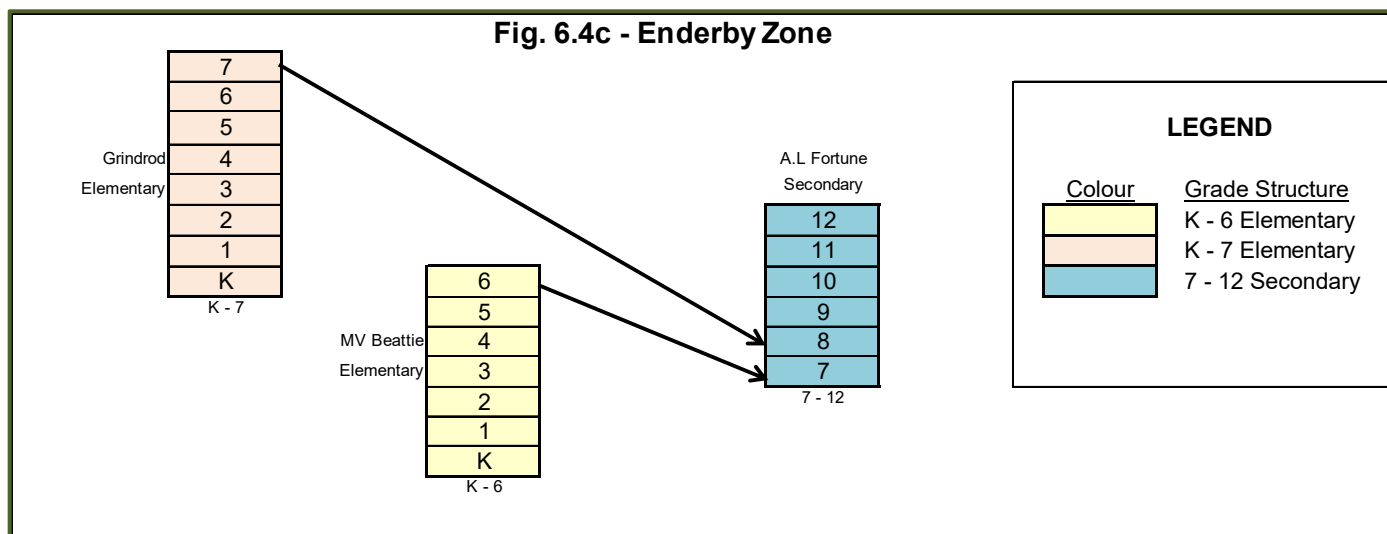
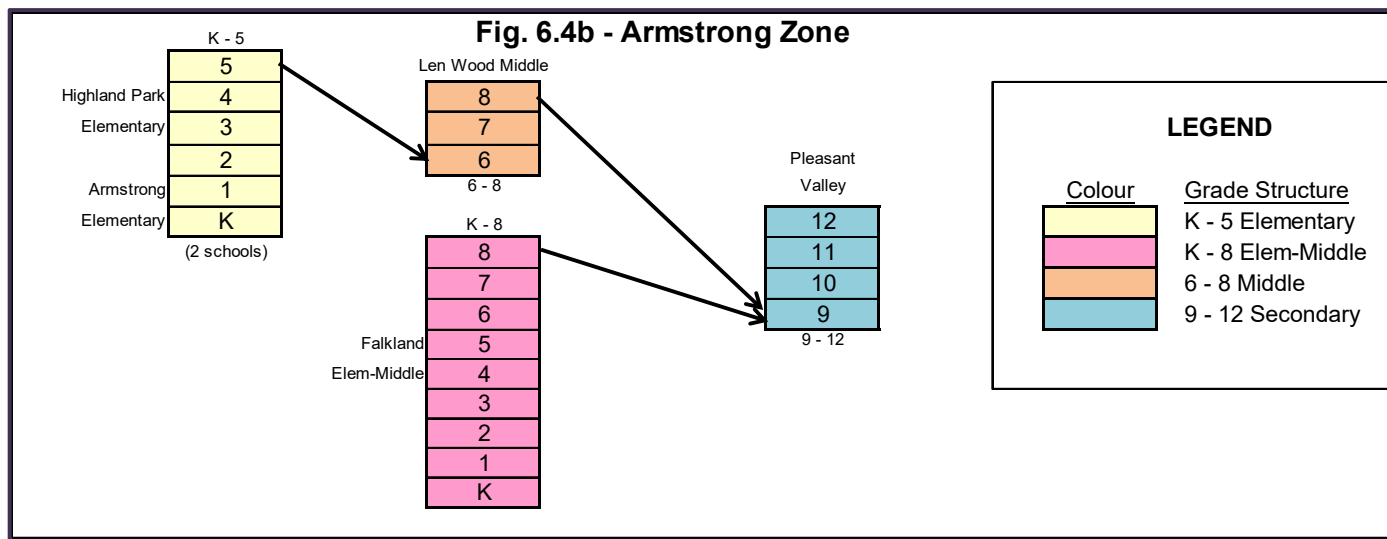
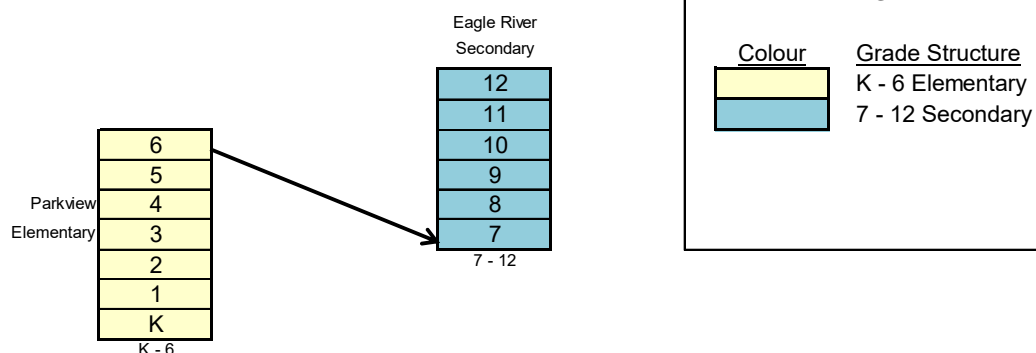
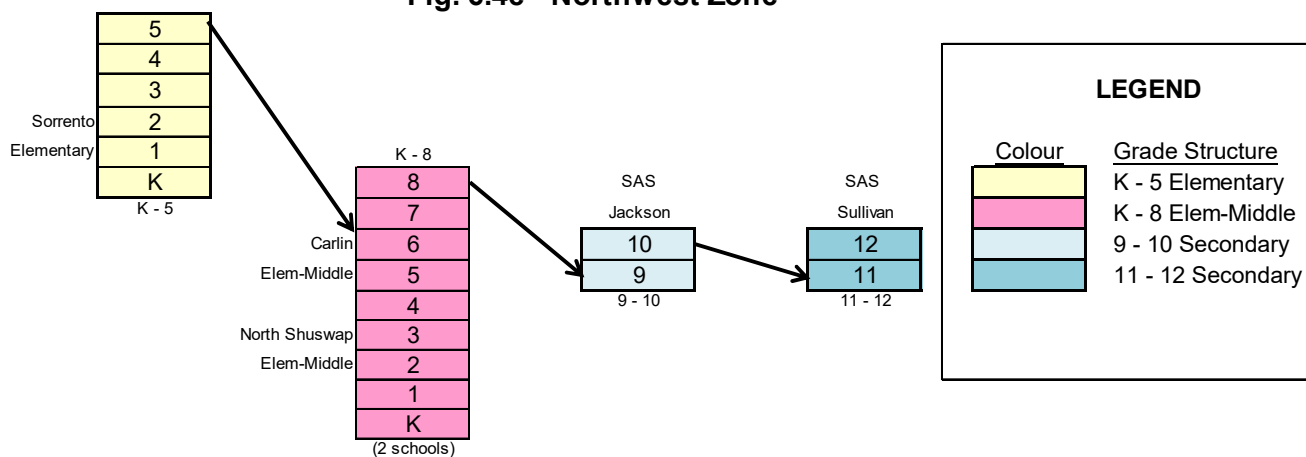


Fig 6.4d - Sicamous Zone

Fig. 6.4e - Northwest Zone


6.4.2 Impact of 2019 Grade Structure Change at South Canoe Elementary

In 2018-19 South Canoe Elementary was K – 6, but the Board approved changing it to K – 7 for the 2019 – 20 school year. The June 2019 enrolment in Grade 6 at South Canoe was only 6 students, therefore next year's Grade 7 enrolment is predicted to be only 5 to 8 students.

For this reason, we have not applied a correction to neither South Canoe nor the losing school, Shuswap Middle.

The effect of the change of these few students at South Canoe Elementary and Shuswap Middle is not reflected in the stacked bar graph in Figure 6.3.7a.

6.4.3 Comments on the Two Campus organization for Salmon Arm Secondary

One of the negative effects of the current secondary organization in Salmon Arm is that students spend only two years at Jackson and two years at Sullivan, thereby limiting the opportunity for teaching staff to really get to know the students and to assist and mentor them in their progression through high school. Most secondary schools in the province are a minimum of 3 grades. Multi-grade programs such as music, drama, and athletics (team sports) would benefit from secondary schools of Grades 9 – 12 or more.

7. ANALYSIS OF EDUCATIONAL NEED

- 7.1 North Okanagan - Shuswap School District serves a large geographic area, with communities ranging from the urban centre of Salmon Arm to the smaller more isolated outlying communities. The economy is fairly diverse and stable, providing somewhat steady growth and in-migration. SD 83 had enrolment decline in the recent past but further declines are not anticipated during the next ten years. Demographic analysis in Section 5 determined that some level of positive enrolment growth is projected throughout the next decade.
- 7.2 **Three Themes in the Facilities Plan.** Three themes have arisen in the analysis of SD 83 educational facilities needs. These will be elaborated upon in the next three sections. Briefly they are:
- a. **Managing Enrolment Growth** – on average the school district enrolment will grow approximately 1% every year, with fluctuations depending on the local economy and housing. The growth by school is projected in Section 6.2. Accordingly, there is a continuing need to ensure there are student spaces to accommodate this growth. See Section 7.3 below;
 - b. **Rationalizing the Varied Grade Structure** – the school district has a wide variety of grade structures throughout the district as described in Section 6.4. This complicates student matriculation from elementary to middle to secondary, hinders provision of district-wide programs, and reduces the effectiveness of staffing the schools. See Section 7.4 below;
 - c. **Addressing Facilities in Poor Condition or Having Deficiencies** – As shown in Section 4.6, this school district has quite a few poor condition facilities, but has so far been able to keep these in service. Limited minor capital funding via the Ministry of Education SEP and CNCP Programs can continue to allow the district to address urgent facilities issues. See Section 7.5 below.
- 7.3 **Managing Enrolment Growth.**
- 7.3.1 The urban schools in Salmon Arm are organized on the middle school model with Shuswap Middle for Grades 6 – 8. The outlying rural schools have a variety of organizations to meet the needs of smaller communities. They vary widely in grade structure as pointed out in Section 6.4.
- 7.3.2 As was shown in Figure 6.2.3a, the urban enrolments are growing slightly more quickly than the rural in town and rural out of town enrolments. The existing urban schools do not have the effective capacity to accommodate the projected growth in Salmon Arm, with the current grade structure. Even Shuswap Middle will exceed capacity during the next decade, requiring more portables (or changes to feeder schools or grade structure).

7.3.3 The other two zones where enrolment will exceed capacity are Armstrong and Enderby, as shown in Figure 6.3.7b.

- a. Armstrong. The two elementary schools combined in Armstrong are already over the Operating Capacity. During the coming decade, this zone will be more than 100 students over capacity in elementary. Both schools are K – 5 and feed to Len Wood Middle School. This middle school can handle the future growth in Grades 6 – 8, remaining well under capacity. Similarly the Armstrong Zone secondary, Pleasant Valley, will also remain well under capacity.
- b. In Section 8, preliminary options will be presented to address the accommodation shortfall in the Armstrong elementary grades.
- c. Enderby. The two elementary schools combined in Enderby are not yet over the Operating Capacity but do exceed the Effective Capacity. Enrolment is projected to continue to increase and will exceed the Operating Capacity during the next decade. Both schools feed to A.L. Fortune Secondary School which will remain well under capacity.
- d. There is already one portable classroom at MV Beattie Elementary, which is not included in the official school capacity but would theoretically add 25 to the capacity. With the portable, the current combined enrolment at the two schools is accommodated.
- e. In Section 8, preliminary options will be presented to address the future accommodation shortfall in the Enderby elementary grades.

7.3.4 These enrolment versus capacity comments above are based on continuing with the current grade structure.

7.4 **Rationalizing the Varied Grade Structure.**

7.4.1 As shown in Section 6.4, the district has a wide variety of school grade structures. This is considered to be a negative factor for student progression, program delivery, and teacher staffing. Therefore, if the facility needs identified in this LRFP also provide an opportunity to improve the grade structure, such options should be given serious consideration.

7.4.2 In Salmon Arm, the two grade secondary campuses of Jackson and Sullivan are not conducive to development of school cohesion and spirit. Only two years in a school does not

promote staff familiarity with the students as they mature in these critical teen years, and also hinders multi-year programs, clubs, and sports teams.

7.4.3 Where standardizing the grade structure also improves capacity utilization and reduces the potential need for portables or school additions, it should be considered. Such opportunities will be considered in Section 8.

7.5 **Addressing Facilities in Poor Condition or Having Deficiencies.**

7.5.1 As shown in Figure 4.6c, in this school district, 21 of the school facilities are rated by the Ministry's facility condition assessment process to be in Poor Condition (FCI > 0.3). The following schools with FCI scores higher than 0.5 would get a higher priority for replacement, although they would have to compete with similar needs across the province:

- Parkview Elementary 0.60,
- Silver Creek Elementary-Middle 0.55,
- South Canoe Elementary 0.55,
- Len Wood Middle 0.54,
- Falkland Elementary 0.52,
- Grindrod Elementary 0.50,

Replacement decisions do depend upon the condition index, the district organization, and the capacity utilization of the school in question and other nearby schools.

7.5.2 The most recent Capital Plan Submission is shown in Section 4.7. SD 83 is at a disadvantage for accessing Ministry capital funds, being unqualified for funding from the Seismic Upgrade program and the Building Envelope program. Because of this, it could be argued that funding requests in the other Ministry programs such as the School Enhancement Program (SEP) and Carbon Neutral Program (CNCP) should receive preference.

7.5.3 Minor Capital Improvements. In the Capital Plan Submission, the funding requests for a variety of SEP and CNCP projects are supported by both this LRFP and facility condition assessments by VFA. The current number of requests is quite limited given the size of the district and the condition of schools, therefore a rigorous review of facility upgrade needs should be undertaken and additional project requests prepared.

7.5.4 Major Capital Requests. The Capital Plan Submission in Section 4.7 included two major capital requests:

- Addition to Len Wood Middle School – provide larger gym;
- New K – 5 elementary school in Salmon Arm.

Both of these requests need to be reviewed as part of the LRFP review process.

It is agreed that Len Wood Middle needs a middle school sized gymnasium, but given the FCI of 0.54 for the entire school building, discussions should take place with the Ministry planning officer regarding school replacement or major upgrade, which would include the larger gym. The school would only be entitled to a larger gym if it remains as a middle school. This will be considered in the Options in Section 8 of the LRFP.

With the current grade structure in Salmon Arm, the enrolment projection does support the need for a additional elementary space during the LRFP period in order to relieve over-capacity at Bastion and Hillcrest Elementaries. Some of the preliminary options in Section 8 also result in an elementary capacity shortfall in the urban area. If any of these options are selected, additional elementary space in Salmon Arm will be required. The district owns a vacant site in the city which could serve this proposed school. Therefore this vacant site should be retained for the time being.

7.6 **Summary of Educational Facility Needs Priorities.**

In summary, the educational needs can be addressed as follows:

- a. Address the projected need for additional elementary space in Armstrong and Enderby;
- b. Consider options which reduce the variety of grade structures throughout the district. Standardization in all zones is probably not feasible but anomalies can be eliminated. For example, return South Canoe Elementary to K - 5;
- c. Identify additional upgrade or replacement projects for schools in Poor condition;
- d. Consider a major upgrade or replacement of Len Wood Middle along with the need for a larger gym;
- e. Depending on the grade configuration option selected for the urban area of Salmon Arm, additions to existing elementary schools or the proposed new elementary school on existing vacant property may be required. The capacity of the additions or the new elementary school will be determined from the option selected; and
- f. Consider modifying the organization of SAS from its current junior and senior campuses so as to provide one or more secondary schools with three or more grades.

Options to achieve these goals are provided in Section 8 which follows.

8. OPTIONS AND RECOMMENDATIONS

8.1 **Identification of Initial Options.** The following Options have been identified:

*LRFP Section 8.1 - The following preliminary options are to generate discussion at SD 83.
Insert for LRFP Draft 9. (This version dated 10 Oct 2019 after Board COTW)*

DISTRICT WIDE - OPTION A

OPTION A - Status Quo - no changes and no new space Capital projects

(Refer to Figures 6.3.7a to e. for enrolment vs capacity)

Note - Ministry of Education instructions for LRFPs requires identification of a Status Quo or "Do Nothing" Option.

- 1 Need for more elementary space in Armstrong and urban area of Salmon Arm;
- 2 With no capital projects, will need portables in Armstrong, at SAS Jackson campus, Shuswap Middle, and later at an urban elementary school in Salmon Arm;
- 3 May need catchment boundary adjustments in Salmon Arm;
- 4 Need to upgrade schools in poor condition using Minor Capital funding.

ARMSTRONG ZONE - OPTIONS B-1 TO B-3

OPTION B-1 - Provide more elementary space in Armstrong Zone

- 1 Armstrong and Highland Park combined are already at capacity, and will be 100 over during the LRFP period. This option provides additional elementary space in Armstrong Zone;
- 2 Phase 1 - Convert Gateway Building to a K - 2 Primary School or an Annex of Highland Park;
- 3 Phase 2 - Purchase site for new small elementary school in Armstrong;
- 4 Phase 3 - Construct new small elementary school in Armstrong.

OPTION B-2 - Change Armstrong Zone to K - 7 and 8 - 12

- 1 Change Len Wood Middle to a K - 7 elementary school;
- 2 Change Armstrong and Highland Park Elementaries to K - 7 from current K - 5;
- 3 Consider changing Falkland Elementary-Middle to K - 7 from K - 8;
- 4 Adjust school catchment boundaries to meet school capacities;
- 5 Increase Pleasant Valley Secondary to Gr 8 - 12 from current 9 - 12.

OPTION B-3 - Change Armstrong Zone to K - 6 and 7 - 12

- 1 Change Len Wood Middle to a K - 6 elementary school;
- 2 Change Armstrong and Highland Park Elementaries to K - 6 from current K - 5;
- 3 Consider changing Falkland Elementary-Middle to K - 6 from K - 8;
- 4 Adjust school catchment boundaries to meet school capacities;
- 5 Increase Pleasant Valley Secondary to Gr 7 - 12 from current 9 - 12.

ENDERBY ZONE - OPTIONS C-1 TO C-2

OPTION C-1 - Change Enderby Zone to Elem-Middle-Secondary model

- 1 Salmon Arm and Armstrong Zones are already Elem-Middle-Secondary, and Enderby could also be converted;
 - 2 Change Grindrod and MV Beattie Elementaries to K - 5;
 - 3 Direct all Enderby Grade 6 to 8 students to Len Wood Middle in Armstrong;
 - 4 Students would return to Enderby's AL Fortune Secondary for Grades 9 - 12.
- This Option has been deleted by the Board.*

OPTION C-2 - Standardize Enderby Zone at K - 6 and 7 - 12

- 1 Grindrod is K - 7 and MV Beattie Elementary is K - 6. The two schools together will be over-capacity during the LRFP period;
- 2 AL Fortune Secondary has spare capacity to take the additional Grade 7's;
- 3 Change Grindrod to K - 6, the same as MV Beattie;

OPTION C-3 - Standardize Enderby Zone at K - 5 and 6 - 12

- 1 Grindrod is K - 7 and MV Beattie Elementary is K - 6. The two schools together will be over-capacity during the LRFP period;
- 2 Change Grindrod and MV Beattie to K - 5 elementary schools;
- 3 Introduce a middle school program (6 - 8) and secondary program (9 - 12) within AL Fortune Secondary which has spare capacity to take the additional students;

SICAMOUS AND NORTHWEST ZONES - OPTION D-1

OPTION D-1 - Make no organizational changes to Sicamous and Northwest Zones

- 1 The current schools and grade structures, although different from the rest of the district, work for those populations;
- 2 In Sicamous, no doubt the secondary school is important to the community and therefore should be retained. Parkview Elementary can accommodate its projected enrolment;
- 3 In Northwest Zone, Sorrento works as a K - 5 feeding Carlin as an Elem-Middle K - 8, and North Shuswap as a K - 8 can accommodate its projected enrolment;
- 4 Therefore no organizational changes are proposed in these two zones unless Options E-2, E-3, or E-4 (which change Salmon Arm Secondary) are selected, in which case the feeder schools' grade structures in these two zones should be reviewed;
- 5 Dispose of surplus property Malakwa closed elementary school.

X Item 5 of Option D-1 has been deleted by the Board.

OPTION D-2 - Change Sorrento Elementary to K - 6 or K - 7

- 1 Sorrento is currently K - 5 and feeds to Carlin Elementary-Middle which is K - 8;
- 2 There is a desire to expand the grade structure at Sorrento Elementary;
- 3 The impact of the loss of these students at Carlin needs to be assessed;
- 4 As with Option D-1, changes at Salmon Arm Secondary would also require a review of the feeder schools' grade structure.

SALMON ARM ZONES - OPTIONS E-1 TO E-4

OPTION E-1 - Keep Salmon Arm schools consistent at K-5, 6-8, 9-10, and 11-12

- 1 All elementaries in Salmon Arm are K - 5 except South Canoe. In 2018-19 there are only six students in Grade 6, but the Board approved expanding to Grade 7 next year (Sep 2019);
- 2 Shuswap Middle can accommodate these few South Canoe grade 6 - 7 students;
- 3 Consider reverting South Canoe Elementary to K - 5, feeding Shuswap Middle;
- 4 No change to Ranchero and Silver Creek Elementary-Middle schools.

OPTION E-2 - Change Salmon Arm Urban to K - 6 and three secondaries

- 1 Change Shuswap Middle to a secondary school 7 - 12;
- 2 Change all Salmon Arm Urban Elementaries plus N and S Canoe to K - 6;
- 3 Change the two campuses of Salmon Arm Secondary, plus Shuswap Middle, into three separate secondary schools, each Grades 7 - 12;
- 4 Determine impact on the four K - 8 elementary-middle feeder schools, and consider any needed grade changes at Carlin, North Shuswap, Ranchero, and Silver Creek;
- 5 Adjust school catchment boundaries to meet capacities.

OPTION E-3 - Change Salmon Arm Urban to K - 7 and two secondaries

- 1 Change Shuswap Middle to an elementary school K - 7;
- 2 Change all Salmon Arm Urban Elementaries plus N and S Canoe to K - 7;
- 3 Change the two campuses of Salmon Arm Secondary to two separate secondary schools, each Grades 8 - 12;
- 4 Determine impact on the four K - 8 elementary-middle feeder schools, and consider any needed grade changes at Carlin, North Shuswap, Ranchero, and Silver Creek;
- 5 Adjust school catchment boundaries to meet capacities.

OPTION E-4 - Change Salmon Arm Urban to K - 6, two middles, one secondary

- 1 Change Shuswap Middle to a senior middle school 7 - 9;
- 2 Change Jackson Campus to a senior middle school 7 - 9;
- 3 Change SAS Sullivan Campus to a 10 - 12 secondary school;
- 4 Change the Salmon Arm Urban Elementaries plus N and S Canoe to K - 6;
- 5 Determine impact on the four K - 8 elementary-middle feeder schools, and consider any needed grade changes at Carlin, North Shuswap, Ranchero, and Silver Creek;
- 6 Adjust school catchment boundaries to meet capacities.

CAPITAL PROJECTS - OPTIONS F-1, F-2, F-3, AND B-1 above

OPTION F-1 - Replace or Upgrade Len Wood Middle

- 1 The most recent Capital Plan submission identified the need for a larger gym, while VFA rated this school as Poor Condition with an FCI of 0.54;
- 2 Major upgrading could include the needed new gymnasium;
- 3 Alternatively, the district could apply for replacement with a slightly smaller middle school with a capacity of 400 (projected enrolment is 355) including the larger gym;
- 4 If Option C-1 was implemented, the capacity should not be reduced.

OPTION F-2 - Provide more elementary space in Salmon Arm

- 1 The most recent Capital Plan submission identified the need for an elementary school in Salmon Arm. With Options E-2 and E-4 the need for more elementary space in the urban area is confirmed;
- 2 An existing site for a new school is available as described in Section 4.8, but alternatives such as an addition to an existing school also need to be considered;
- 3 If Option E-1 or E-3 is selected, more elementary space is not needed.

OPTION F-3 - Relocate Storefront Program, terminate lease of DAC building

- 1 The former Salmon Arm Elementary (now DAC) building is leased by the district for the Storefront Alternate Program at significant operating cost;
- 2 An internal study would determine the best location(s) for alternate program(s). Suggested locations have included Salmon Arm, Armstrong, and/or Enderby.

OPTION F-4 - Upgrade or Replace Schools in Poor Condition

- 1 As pointed out in Section 7.5.1, there are 6 schools rated in Poor Condition by the Ministry's VFA assessment (FCI of 0.50 or more);
- 2 Parkview Elementary is the worst, rated with an FCI of 0.60;
- 3 A Strategic Maintenance Plan should be developed to support Capital Plan requests for replacement or upgrade of these schools as recommended in Section 7.5.3.

8.2 Criteria for Evaluating Options

Some method of choosing the best option is needed. Once criteria for evaluating the options are agreed upon, each option can be assessed against these criteria. The following criteria are offered:

CRITERIA FOR EVALUATING LRFP OPTIONAL COURSES OF ACTION

NO.	CRITERIA	DESCRIPTION
1	Organization improved from existing	Is the proposed organization/grade structure more consistent across the district? Does it facilitate delivery of programs? Do student cohorts move together from school to school?
2	Students and programs accommodated	Can in-catchment students be accommodated in their neighbourhood school? Can district programs be accommodated at appropriate schools?
3	Capacity utilization improved	Are fewer schools either too full (over-capacity) or too empty (under capacity)? Is the number of portable classrooms needed minimized?
4	Family disruption minimized	Is the effect on parents and students daily lives minimized, avoiding issues such as changing schools, longer commutes, bypassing a neighbourhood school enroute to the school of attendance, etc.

8.3 Description and Critique of Options

The table in **Figure 8.3** describes the options and critiques them against the criteria.

This is an initial critique only, subject to a more rigorous discussion within the school district. These options should be evaluated and short-listed to eliminate alternative courses of action and identify the preferred direction within a zone. The short-listed options will lead to the LRFP Recommendations and Section 9 (Implementation Strategy) and Section 10 (Conclusions).

Figure 8.3 - DESCRIPTION & CRITIQUE OF OPTIONS

NO.	OPTIONS	DESCRIPTION	ORGANIZATIONAL CHANGE	RESULTING CAPITAL PROJECTS	CRITIQUE OF OPTION
DISTRICT WIDE					
A	Status Quo	Continue operating with current facilities, program locations, and organization.	Potential minor catchment adjustments to accommodate growth.	1. No major capital projects approved. 2. Facilities minor capital projects as already submitted; 3. Possibly more portables in Armstrong & Salmon Arm	Shortage of elementary space in Armstrong Zone. Poor Condition schools don't get needed upgrading. South Canoe K-7 grade structure continues as anomaly in SA. Jackson Campus and Shuswap Middle will exceed capacity..
ARMSTRONG ZONE					
B-1	Provide More Elementary Space in Armstrong Zone	Phase 1 - Convert Gateway Building to a K-2 Primary school or an Annex to Highland Park. Phase 2 - Purchase site for a new small elementary in Armstrong. Phase 3 - Construct new small elementary.	On completion of Phase 1, adjust catchment boundaries for Armstrong primary students.	1. Renovation of Gateway Bldg. 2. Site Acquisition for new elementary in Armstrong. 3. Approval of construction.	This is feasible since the Gateway Building, owned by the district, can be converted, but the site currently has no playfield or playground.
B-2	Change Armstrong Zone to K-7 and 8-12	Change Len Wood Middle to a K-7 elementary and have three K-7 schools feeding one secondary. Possible change to Falkland Elem-Middle also, to K-7.	Change Len Wood Middle to K-7. Change Armstrong and Highland Park from K-5 to K-7. Add Grade 8 to Pleasant Valley Sec.	None required.	Relieves elementary space pressures in this zone, but eliminates the community's middle school. The schools can accommodate expected growth. Unless changed, Falkland students have one year delay in joining their future classmates at Pleasant Valley (Gr. 9 instead of Gr. 8).
B-3	Change Armstrong Zone to K-6 and 7-12	Change Len Wood Middle to a K-6 elementary and have three K-6 schools feeding one secondary. Possible change to Falkland Elem-Middle also, to K-6.	Change Len Wood Middle to K-6. Change Armstrong and Highland Park from K-5 to K-6. Add Grades 7 and 8 to Pleasant Valley Sec.	None required.	Relieves elementary space pressures in this zone, but eliminates the community's middle school. The schools can accommodate expected growth. Unless changed, Falkland students have two year delay in joining their future classmates at Pleasant Valley (Gr. 9 instead of Gr. 7).
ENDERBY ZONE					
C-1	Change Enderby Zone to Elem-Middle-Secondary model	Similar to Salmon Arm and Armstrong zones. Change Grindrod and MV Beattie Elementaries to K-5. Direct all Enderby Gr 6-8 students to Len Wood Middle. Students would return to Enderby for Gr 9-12.	Significant organizational change for Enderby schools and increased busing. Population reductions occur at AL Fortune Sec and the two elementaries.	None required initially. Later in the decade, portables may be needed at Len Wood Middle.	Improves capacity utilization at Len Wood Middle and introduces middle school model in Enderby Zone. Detrimental to AL Fortune Secondary to lose Gr 7-8 (103 students in June 2019). Grindrod would lose 27 Gr 6-7 students and MV Beattie would lose 40 Gr 6 students. Enderby students may be opposed to attending school in Armstrong.
C-2	Standardize Enderby Zone at K-6 and 7-12	Currently Grindrod Elementary is K-7 while MV Beattie is K-6. The two schools combined will be over-capacity during the LRFP period. Change Grindrod to K-6 with the Gr 7 students going to AL Fortune Secondary.	Minimal organizational change except for loss of Grade 7 at Grindrod Elementary.	None required. The existing portable at MV Beattie will be required later in the decade.	Improves the consistency of grade structure in the Enderby Zone and boosts the population at AL Fortune Secondary.
C-3	Standardize Enderby Zone at K-5 and 6-12	Currently Grindrod Elementary is K-7 while MV Beattie is K-6. The two schools combined will be over-capacity during the LRFP period. Change both to K-5 and expand AL Fortune Secondary to 6-12.	More significant organizational change with loss of Grade 6-7 at Grindrod and Grade 6 from MV Beattie.	None required. The existing portable at MV Beattie could be relocated.	Improves the consistency of grade structure in the Enderby Zone and boosts the population at AL Fortune Secondary. Having an elementary grade (Grade 6) at the secondary may pose programming problems.

Continued on next page

Figure 8.3 - DESCRIPTION & CRITIQUE OF OPTIONS

NO.	OPTIONS	ZONE AND DESCRIPTION	ORGANIZATIONAL CHANGE	RESULTING CAPITAL PROJECTS	CRITIQUE OF OPTION
SICAMOUS AND NORTHWEST ZONES					
D-1	Make no organizational changes in Sicamous and Northwest Zones	Although the grade structures are different from the other zones, this works in these zones.	None required.	 Dispose of Malakwa closed school, to reduce operating costs and liability. <i>This direction has been deleted by the Board.</i>	These structures, with a mixture of elementary grades and some elementary-middle schools work for these smaller communities. It would be difficult and counter-productive to impose a different grade structure model.
D-2	Change Sorrento Elementary to K-6 or K-7	Currently Sorrento is K-5 and feeds to Carlin Elem-Middle which is K-8. Consider expanding Sorrento Elem to K-6 or K-7.	Organizational change at Sorrento and Carlin schools.	None required.	While somewhat positive for the Sorrento community, the loss of these students at Carlin would be significant. With this change, would Sorrento students still transition to Carlin for only one or two years, or into Salmon Arm?
SALMON ARM ZONE					
E-1	Keep Salmon Arm Urban Zone consistent at K-5, 6-8, 9-10, and 11-12	All elementaries in Salmon Arm are K-5 except South Canoe at K-6 and expanding to K-7 in Sept 2019. Shuswap Middle can accommodate these students. Consider reverting South Canoe Elem to K-5 to match the rest of the zone. No change to Ranchero and Silver Creek Elem-Middles.	Minimal organizational change except for reversal of previous expansion of grades at South Canoe.	None required.	Maintains a consistent grade structure in Salmon Arm. With only 6 students currently (June 2018) in Gr 6 at South Canoe, the impact of reverting to K-5 is minimal. However, it is recognized that the Outdoor Education program at South Canoe would benefit from more senior students and could relieve enrolment pressures at other urban schools. The current organization requires students to transition to new schools four times. Jackson will soon be over-capacity.
E-2	Change Salmon Arm Urban schools to K-6 and three secondaries	Shuswap Middle becomes a secondary 7-12. All existing Salmon Arm elementaries including North and South Canoe become K-6. The two secondary campuses, plus Shuswap Middle, become three separate 7-12 secondaries.	Significant organizational change for nine schools. Grade 6 added to elementaries, and Grade 7 - 8 added to three secondaries, including Shuswap Middle.	Additional elementary space will be warranted in Salmon Arm late in the decade, needing additions or a new school.	If done with Option B-2, the middle school model is eliminated from the district. Elementary enrolment will exceed current capacity. This change has significant impact on school enrolments and staffing. May also require grade changes at the four Elementary-Middle feeder schools. Would require public consultation.
E-3	Change Salmon Arm Urban schools to K-7 and two secondaries	Shuswap Middle becomes an elementary K-7. All existing Salmon Arm elementaries including North and South Canoe become K-7. The two secondary campuses become two separate 8-12 secondaries.	Significant organizational change for nine schools. Grades 6 & 7 added to elementaries, and Grade 8 to two secondaries. Re-org the secondaries.	An addition or portables will be required at the secondary schools.	If done with Option B-2, the middle school model is eliminated from the district. Secondary enrolment will exceed current capacity. This change has significant impact on school enrolments and staffing. May also require grade changes at the four Elementary-Middle feeder schools. Would require public consultation.
E-4	Change Salmon Arm Urban schools to K-6, two middles, one secondary	Shuswap Middle becomes 7-9 instead of 6-8, and Jackson Campus becomes a middle school 7-9. All existing Salmon Arm elementaries including North and South Canoe become K-6. Sullivan campus becomes the only Salmon Arm secondary with Gr 10 - 12.	Significant organizational change for nine schools. Grade 6 added to elementaries, and Grade 9 to SMS. Convert the secondary campuses to middle and secondary.	Sullivan would have to accommodate 260 more Gr 10 students. This would exceed capacity, therefore an addition or portables required. Additional elementary space will be warranted in Salmon Arm late in the decade, needing additions or a new school.	Relieves middle school space pressures in this zone, but puts pressure on SAS. Sullivan Campus where capacity would be exceeded, requiring portables. Elementary enrolment will also exceed capacity. May also require grade changes at the four Elementary-Middle feeder schools. Would require public consultation.

Figure 8.3 - DESCRIPTION & CRITIQUE OF OPTIONS

NO.	OPTIONS	ZONE AND DESCRIPTION	ORGANIZATIONAL CHANGE	RESULTING CAPITAL PROJECTS	CRITIQUE OF OPTION
CAPITAL PROJECTS					
F-1	Replace or Upgrade Len Wood Middle	ARMSTRONG ZONE - Replacement of the under-sized gym was requested in the last Capital Plan submission. The school is in Poor Condition according to VFA. Upgrade or replace along with a larger gym.	None required.	1. Upgrade or replace Len Wood Middle. If Option C-1 is approved, capacity should be 550, but if not, capacity should be 400.	The low FCI score and the gym deficiency combine to increase the priority for this project. The current capacity of 500 can be increased or decreased as part of the project, depending upon the decision with Option C-1. A larger gym is not entitled if the school becomes an elementary.
F-2	Provide more elementary space in Salmon Arm Urban Zone	SALMON ARM ZONE - For Status Quo or Options E-2 & E-4, elementary capacity will be exceeded in Salmon Arm Urban Zone. More elementary space is needed by additions or a new school (for which a vacant site is currently held).	Grade configuration depends on option selected among E-2 and E-4. Adjust catchment boundaries for urban elementaries.	Addition to an existing urban elementary, or a new elementary school on the existing urban site. Capacity depends upon option selected.	Relieves projected over-capacity at urban elementaries, and potentially restores a neighbourhood school for inner city families. Additional elementary space not needed for Options E-1 or E-3.
F-3	Relocate Storefront Alternate Program from DAC Building	ANY ZONE - The former school building has been sold but space in it is leased by the district to accommodate the Storefront Alternate Program.	This Alternate Program could be located in other district-owned space, alleviating the operating cost of the lease.	Minor renovations to existing space elsewhere in the district.	Relocation would result in savings in the Operating Budget. An internal study should determine the best location for this alternate program which is serving 36 students as of 10 Sept 2019.
F-4	Upgrade or Replace Schools in Poor Condition	ANY ZONE - There are six schools rated by VFA as Poor Condition. Parkview Elementary is the worst with an FCI of 0.60. Capital Plan submissions are needed to obtain upgrades and/or replacements.	Once approved, temporary classroom accommodation may be needed for on-site construction projects.	Carry out a Strategic Maintenance Plan to identify the scope of work and priorities for Capital Plan requests for upgrades and/or replacements.	Given the poor condition of so many schools and the long lead time for Ministry-funded capital projects, priority has to be given to updating the Capital Plan to reflect the district facility needs.

8.4 Evaluating and Short-listing of Options

The preliminary Options above can be evaluated against the four criteria identified in Section 8.2. There are several ways of doing this, such as:

- By discussion and consensus;
- By arithmetic scoring of each option against each of the four criteria, such as from 0 to 5 meaning from “Doesn’t satisfy the criterion” to “Excellent support of the criterion”; or
- By colour coding showing negative, neutral, or positive support for each criterion.

The table in **Figure 8.4** displays how the Options could be evaluated against the criteria by colour coding. This will provide a quick visual guide for eliminating the worst options.

Figure 8.4 - DESCRIPTION, CRITIQUE, AND EVALUATION OF OPTIONS						EVALUATION			
EFFECTS ON SD 83 - Green = Positive, Black = Neutral, Red = Negative. Option A evaluated as an example. Use these symbols to depict evaluation:						Pos	Neutral	Neg	
NO.	OPTIONS	ZONE AND DESCRIPTION	ORGANIZATIONAL CHANGE	RESULTING CAPITAL PROJECTS	CRITIQUE OF OPTION	ORGANIZATION IMPROVED FROM EXISTING	STUDENTS & PROGRAMS ACCOMMODATED	CAPACITY UTILIZATION IMPROVED	FAMILY DISRUPTION MINIMIZED
DISTRICT WIDE									
A	Status Quo	Continue operating with current facilities, program locations, and organization.	Potential minor catchment adjustments to accommodate growth.	1. No major capital projects approved. 2. Facilities minor capital projects as already submitted; 3. Possibly more portables in Armstrong & Salmon Arm	Shortage of elementary space in Armstrong Zone. Poor Condition schools don't get needed upgrading. South Canoe K-7 grade structure continues as anomaly in SA. Jackson Campus and Shuswap Middle will exceed capacity.	Neg	Example only Neg	Neg	Pos
ARMSTRONG ZONE									
B-1	Provide More Elementary Space in Armstrong Zone	Phase 1 - Convert Gateway Building to a K-2 Primary school or an Annex to Highland Park. Phase 2 - Purchase site for a new small elementary in Armstrong. Phase 3 - Construct new small elementary.	On completion of Phase 1, adjust catchment boundaries for Armstrong primary students.	1. Renovation of Gateway Bldg. 2. Site Acquisition for new elementary in Armstrong. 3. Approval of construction.	This is feasible since the Gateway Building, owned by the district, can be converted, but the site currently has no playfield or playground.				
B-2	Change Armstrong Zone to K-7 and 8-12	Change Len Wood Middle to a K-7 elementary and have three K-7 schools feeding one secondary. Possible change to Falkland Elem-Middle also, to K-7.	Change Len Wood Middle to K-7. Change Armstrong and Highland Park from K-5 to K-7. Add Grade 8 to Pleasant Valley Sec.	None required.	Relieves elementary space pressures in this zone, but eliminates the community's middle school. The schools can accommodate expected growth. Unless changed, Falkland students have one year delay in joining their future classmates at Pleasant Valley (Gr. 9 instead of Gr. 8).				
B-3	Change Armstrong Zone to K-6 and 7-12	Change Len Wood Middle to a K-6 elementary and have three K-6 schools feeding one secondary. Possible change to Falkland Elem-Middle also, to K-6.	Change Len Wood Middle to K-6. Change Armstrong and Highland Park from K-5 to K-6. Add Grades 7 and 8 to Pleasant Valley Sec.	None required.	Relieves elementary space pressures in this zone, but eliminates the community's middle school. The schools can accommodate expected growth. Unless changed, Falkland students have two year delay in joining their future classmates at Pleasant Valley (Gr. 9 instead of Gr. 7).				
ENDERBY ZONE									
C-1	Change Enderby Zone to Elem-Middle-Secondary model	Similar to Salmon Arm and Armstrong zones. Change Grindrod and MV Beattie Elementaries to K-5. Direct all Enderby Gr 6-8 students to Len Wood Middle and AL Fortune Sec. Students would return to Enderby for Gr 9-12.	Significant organizational change for Enderby schools and increased busing. Population of Enderby would be split between AL Fortune Sec. and the two elementaries.	None required initially. Later in the decade, portables may be needed at Len Wood Middle.	Improves capacity utilization at Len Wood Middle and introduces middle school model in Enderby Zone. Detrimental to AL Fortune Secondary to lose Gr 7-8 (103 students in June 2019). Grindrod would lose 27 Gr 6-7 students and MV Beattie would lose 40 Gr 6 students. Enderby students may be opposed to attending school in Armstrong.				
C-2	Standardize Enderby Zone at K-6 and 7-12	Currently Grindrod Elementary is K-7 while MV Beattie is K-6. The two schools combined will be over-capacity during the LRFP period. Change Grindrod to K-6 with the Gr 7 students going to AL Fortune Secondary.	Minimal organizational change except for loss of Grade 7 at Grindrod Elementary.	None required. The existing portable at MV Beattie will be required later in the decade.	Improves the consistency of grade structure in the Enderby Zone and boosts the population at AL Fortune Secondary.				
C-3	Standardize Enderby Zone at K-5 and 6-12	Currently Grindrod Elementary is K-7 while MV Beattie is K-6. The two schools combined will be over-capacity during the LRFP period. Change both to K-5 and expand AL Fortune Secondary to 6-12.	More significant organizational change with loss of Grade 6-7 at Grindrod and Grade 6 from MV Beattie.	None required. The existing portable at MV Beattie could be relocated.	Improves the consistency of grade structure in the Enderby Zone and boosts the population at AL Fortune Secondary. Having an elementary grade (Grade 6) at the secondary may pose programming problems.				
SICAMOUS AND NORTHWEST ZONES									
D-1	Make no organizational changes in Sicamous and Northwest Zones	Although the grade structures are different from the other zones, this works in these zones.	None required.	Close of Malakwa closed school, to reduce operating costs and liability. This direction has been deleted by the Board.	These structures, with a mixture of elementary grades and some elementary-middle schools work for these smaller communities. It would be difficult and counter-productive to impose a different grade structure model.				
D-2	Change Sorrento Elementary to K-6 or K-7	Currently Sorrento is K-5 and feeds to Carlin Elem-Middle which is K-8. Consider expanding Sorrento Elem to K-6 or K-7.	Organizational change at Sorrento and Carlin schools.	None required.	While somewhat positive for the Sorrento community, the loss of these students at Carlin would be significant. With this change, would Sorrento students still transition to Carlin for only one or two years, or into Salmon Arm?				

Figure 8.4 - DESCRIPTION, CRITIQUE, AND EVALUATION OF OPTIONS						EVALUATION			
EFFECTS ON SD 83 - Green = Positive, Black = Neutral, Red = Negative. Option A evaluated as an example. Use these symbols to depict evaluation:						Pos	Neutral	Neg	
NO.	OPTION S	ZONE AND DESCRIPTION	ORGANIZATIONAL CHANGE	RESULTING CAPITAL PROJECTS	CRITIQUE OF OPTION	ORGANIZATION IMPROVED FROM EXISTING	STUDENTS & PROGRAMS ACCOMMODATED	CAPACITY UTILIZATION IMPROVED	FAMILY DISRUPTION MINIMIZED
SALMON ARM ZONE									
E-1	Keep Salmon Arm Urban Zone consistent at K-5, 6-8, 9-10, and 11-12	All elementaries in Salmon Arm are K-5 except South Canoe at K-6 and expanding to K-7 in Sept 2019. Shuswap Middle can accommodate these students. Consider reverting South Canoe Elem to K-5 to match the rest of the zone. No change to Rancho and Silver Creek Elem-Middles.	Minimal organizational change except for reversal of previous expansion of grades at South Canoe.	None required.	Maintains a consistent grade structure in Salmon Arm. With only 6 students currently (June 2018) in Gr 6 at South Canoe, the impact of reverting to K-5 is minimal. However, it is recognized that the Outdoor Education program at South Canoe would benefit from more senior students and could relieve enrolment pressures at other urban schools. The current organization requires students to transition to new schools four times. Jackson will soon be over-capacity.				
E-2	Change Salmon Arm Urban schools to K-6 and three secondaries	Shuswap Middle becomes a secondary 7-12. All existing Salmon Arm elementaries including North and South Canoe become K-6. The two secondary campuses, plus Shuswap Middle, become three separate 7-12 secondaries.	Significant organizational change for nine schools. Grade 6 added to elementaries, and Grade 7 - 8 added to three secondaries, including Shuswap Middle.	Additional elementary space will be warranted in Salmon Arm late in the decade, needing additions or a new school.	If done with Option B-2, the middle school model is eliminated from the district. Elementary enrolment will exceed current capacity. This change has significant impact on school enrolments and staffing. May also require grade changes at the four Elementary-Middle feeder schools. Would require public consultation.				
E-3	Change Salmon Arm Urban schools to K-7 and two secondaries	Shuswap Middle becomes an elementary K-7. All existing Salmon Arm elementaries including North and South Canoe become K-7. The two secondary campuses become two separate 8-12 secondaries.	Significant organizational change for nine schools. Grades 6 & 7 added to elementaries, and Grade 8 to two secondaries. Re-org the secondaries.	An addition or portables will be required at the secondary schools.	If done with Option B-2, the middle school model is eliminated from the district. Secondary enrolment will exceed current capacity. This change has significant impact on school enrolments and staffing. May also require grade changes at the four Elementary-Middle feeder schools. Would require public consultation.				
E-4	Change Salmon Arm Urban schools to K-6, two middles, one secondary	Shuswap Middle becomes 7-9 instead of 6-8, and Jackson Campus becomes a middle school 7-9. All existing Salmon Arm elementaries including North and South Canoe become K-6. Sullivan campus becomes the only Salmon Arm secondary with Gr 10 - 12.	Significant organizational change for nine schools. Grade 6 added to elementaries, and Grade 9 to SMS. Convert the secondary campuses to middle and secondary.	Sullivan would have to accommodate 260 more Gr 10 students. This would exceed capacity, therefore an addition or portables required. Additional elementary space will be warranted in Salmon Arm late in the decade, needing additions or a new school.	Relieves middle school space pressures in this zone, but puts pressure on SAS. Sullivan Campus where capacity would be exceeded, requiring portables. Elementary enrolment will also exceed capacity. May also require grade changes at the four Elementary-Middle feeder schools. Would require public consultation.				
CAPITAL PROJECTS									
F-1	Replace or Upgrade Len Wood Middle	ARMSTRONG ZONE - Replacement of the under-sized gym was requested in the last Capital Plan submission. The school is in Poor Condition according to VFA. Upgrade or replace along with a larger gym.	None required.	1. Upgrade or replace Len Wood Middle. If Option C-1 is approved, capacity should be 550, but if not, capacity should be 400.	The low FCI score and the gym deficiency combine to increase the priority for this project. The current capacity of 500 can be increased or decreased as part of the project, depending upon the decision with Option C-1. A larger gym is not entitled if the school becomes an elementary.				
F-2	Provide more elementary space in Salmon Arm Urban Zone	SALMON ARM ZONE - For Status Quo or Options E-2 & E-4, elementary capacity will be exceeded in Salmon Arm Urban Zone. More elementary space is needed by additions or a new school (for which a vacant site is currently held).	Grade configuration depends on option selected among E-2 and E-4. Adjust catchment boundaries for urban elementaries.	Addition to an existing urban elementary, or a new elementary school on the existing urban site. Capacity depends upon option selected.	Relieves projected over-capacity at urban elementaries, and potentially restores a neighbourhood school for inner city families. Additional elementary space not needed for Options E-1 or E-3.				
F-3	Relocate Storefront Alternate Program from DAC Building	ANY ZONE - The former school building has been sold but space in it is leased by the district to accommodate the Storefront Alternate Program.	This Alternate Program could be located in other district-owned space, alleviating the operating cost of the lease.	Minor renovations to existing space elsewhere in the district.	Relocation would result in savings in the Operating Budget. An internal study should determine the best location for this alternate program which is serving 36 students as of 10 Sept 2019.				
F-4	Upgrade or Replace Schools in Poor Condition	ANY ZONE - There are six schools rated by VFA as Poor Condition. Parkview Elementary is the worst with an FCI of 0.60. Capital Plan submissions are needed to obtain upgrades and/or replacements.	Once approved, temporary classroom accommodation may be needed for on-site construction projects.	Carry out a Strategic Maintenance Plan to identify the scope of work and priorities for Capital Plan requests for upgrades and/or replacements.	Given the poor condition of so many schools and the long lead time for Ministry-funded capital projects, priority has to be given to updating the Capital Plan to reflect the district facility needs.				