



Whitehorse school replacement ranking update

April 14, 2022

Overview

In order to prioritize Whitehorse schools for replacement or major capital upgrades, the Departments of Education and Highways and Public Works looked at a wide range of factors to create a balanced ranking.

The work was finished in 2020 and used a weighted scoring matrix split equally between qualitative and quantitative factors.

With a number of schools electing to join the Yukon First Nations School Board, more work will be required to update long term capital planning in collaboration with the board. Enrollment and school utilization factors may also be impacted.

In addition, building condition assessments for Whitehorse schools were 4-5 years old at the time. These assessments were updated in 2021 and this information has been used to update the scoring matrix. All other factor scores are unchanged from the original report. Schools outside of Whitehorse will be updated in coming years.

For these reasons, an updated ranking focused only on Whitehorse schools has been used to select the next school for replacement. Further long term capital planning will take place to update the Yukon-wide strategy for upgrading and replacement.

Among Whitehorse schools, Whitehorse Elementary School continues to rank highest for both qualitative and quantitative factors and is the overall top-ranked choice for replacement.

Originally built in 1950, Whitehorse Elementary is the oldest school in the portfolio. It is in poor condition overall and has accessibility, lighting and acoustic issues which do not support an adaptive, modern and integrated learning environment. The school also has a high utilization rate and is above its intended capacity.

Due to its overall age, condition and significant seismic upgrading requirements, upgrading this school is not an economical option. Over the building life, a replacement school will be more cost effective and energy efficient.

Explanation of Ranking Factors

Qualitative factors were mainly assessed through interviews with key personnel within Education and Highways and Public Works. Quantitative factors were based on existing data held by the two departments.

Qualitative	Quantitative
Integrated Technology	Utilization
Innovative Programming	Building Condition Assessment
Daylighting / Lighting Controls	Seismic Condition
Adaptable Learning Environment	Energy Usage
Innovative and Accessible	Greenhouse Gas Emissions
Acoustics	

Qualitative

Integrated Technology is important to supporting the 21st Century Learning Environment. Technology should be integrated into the learning spaces and flexible to support a variety of programs and activities.

Innovative Programming enables student learning with a greater focus on the integrated learning model which combines multiple areas of study (i.e. STEAM), group sizes and learning activities. Schools need to be able to support this programming and have access to technology and spaces for collaboration. In the Yukon curriculum there is also a focus on First Nations Ways of Knowing and Doing which includes cultural programming and activities that are supported by local community members.

Daylighting and Lighting Controls improve the learning environment and makes it feel less institutional and more welcoming to the school community. In Yukon, access to daylight as well as appropriate lighting controls is an important quality to mitigating the drastic seasonal lighting changes as well providing appropriate lighting for a variety of learning activities.

An **Adaptable Learning Environment** requires flexible, adaptable spaces which can be used for different programs and activities. These spaces can be easily reconfigured and offer a variety of seating options to support the 21st Century Learning Environment as well as First Nations Ways of Knowing and Doing curriculum.

Inclusive and Accessible schools are welcoming to community members of all ages and should promote inclusivity and accessibility for students. This may include but

should not be limited to gender neutral washrooms, universal design and barrier free accessibility. It should be respectful of various cultures including the fourteen First Nations communities that are represented in Yukon.

Acoustics of space are an important consideration as schools evolve to be more open with flexible learning spaces and curriculums focus on an integrated learning model. Spaces that do not have adequate acoustic treatments can be loud and disruptive which is not conducive to the learning environment.

Quantitative

Utilization for a school facility is ideally approximately 80%. At this utilization, the school facility is being used efficiently for its intended needs. The building has some capacity to successfully manage fluctuations in the student population without large areas being used inefficiently. A school facility with a utilization of less than 60% would be considered “under-utilized” and facilities that are over 80% would be “at capacity”. A school facility with a utilization of 100% would be considered full.

Building Condition Assessments were completed for Whitehorse schools between 2014—2016 and updated in 2021. These reports review the overall building condition including the building envelope and interior spaces as well as the building systems such as mechanical, electrical and structural systems.

The **Seismic Condition** of Whitehorse schools is based on reports completed in 2010 and 2014. The rankings are categorized based on their overall level of risk.

Energy usage data is collected on a monthly basis for all government facilities across Yukon. The individual school usage averages were compared in relation to the territory average and a priority score assigned based on the variance above the average value.

Greenhouse Gas Emissions data is collected on a monthly basis for all government facilities across Yukon and is measured in tonnes. The individual school usage averages were compared in relation to the territory average and a priority score assigned based on the variance above the average value.

Summary of Whitehorse School Rankings

	Qualitative	Quantitative	Total	Rank
Whitehorse Elementary	37	37	74	1
Selkirk Elementary	33	31	64	2
Takhini Elementary	18	35	53	3
Wood Street Centre	18	34	52	4
Christ the King Elementary	15	37	52	5
Jack Hulland	22	29	51	6
Ecole E. Tremblay	25	23	48	7
Hidden Valley Elementary	14	30	44	8
Golden Horn Elementary	17	25	42	9
Porter Creek Secondary	16	23	39	10
Grey Mountain Elementary	14	24	38	11
Holy Family Catholic	11	25	36	12
Vanier Catholic Secondary	11	23	34	13
Elijah Smith	9	24	33	14
F H Collins	11	11	22	15
Paul Emile Mercier Secondary	7	3	10	16

Appendix A – Whitehorse School Replacement Weighted Scoring Matrix

Qualitative Factors

(S)core x (W)eight

	Integrated Technology		Innovative Programming		Daylight / Lighting Controls		Adaptable Learning Environment		Inclusive & Accessible		Acoustics		Subtotal
	S	W	S	W	S	W	S	W	S	W	S	W	
Whitehorse Elementary	4	1	4	1	5	1	4	2	4	2	4	2	37
Selkirk Elementary	1	1	4	1	4	1	4	2	4	2	4	2	33
Takhini Elementary	1	1	1	1	4	1	1	2	1	2	4	2	18
Wood Street Centre	1	1	1	1	4	1	2	2	1	2	3	2	18
Christ the King Elementary	1	1	2	1	2	1	2	2	1	2	2	2	15
Jack Hulland	2	1	2	1	4	1	2	2	1	2	4	2	22
Ecole E. Tremblay	1	1	4	1	2	1	4	2	1	2	4	2	25
Hidden Valley Elementary	1	1	2	1	1	1	2	2	1	2	2	2	14
Golden Horn Elementary	1	1	2	1	2	1	2	2	1	2	3	2	17
Porter Creek Secondary	1	1	1	1	2	1	2	2	2	2	2	2	16
Grey Mountain Elementary	1	1	1	1	4	1	1	2	1	2	2	2	14
Holy Family Catholic	1	1	1	1	1	1	2	2	1	2	1	2	11
Vanier Catholic Secondary	1	1	1	1	1	1	2	2	1	2	1	2	11
Elijah Smith	1	1	1	1	1	1	1	2	1	2	1	2	9
F H Collins	1	1	1	1	1	1	1	2	1	2	2	2	11
Paul Emile Mercier Secondary	1	1	1	1	1	1	1	2	1	2	0	2	7

Quantitative Factors

(S)core x (W)eight

	Utilization		Building Condition Assessment		Seismic Condition		Energy Usage		Greenhouse Gas Emissions		Subtotal
	Score	Wt.	Score	Wt.	Score	Wt.	Score	Wt.	Score	Wt.	
Whitehorse Elementary	5	1	5	3	5	3	1	1	1	1	37
Selkirk Elementary	5	1	5	3	2	3	3	1	2	1	31
Takhini Elementary	3	1	5	3	5	3	1	1	1	1	35
Wood Street Centre	1	1	5	3	5	3	2	1	1	1	34
Christ the King Elementary	5	1	5	3	5	3	1	1	1	1	37
Jack Hulland	5	1	5	3	2	3	2	1	1	1	29
Ecole E. Tremblay	3	1	5	3	1	3	1	1	1	1	23
Hidden Valley Elementary	5	1	5	3	1	3	3	1	4	1	30
Golden Horn Elementary	5	1	5	3	1	3	1	1	1	1	25
Porter Creek Secondary	3	1	5	3	1	3	1	1	1	1	23
Grey Mountain Elementary	4	1	5	3	1	3	1	1	1	1	24
Holy Family Catholic	5	1	5	3	1	3	1	1	1	1	25
Vanier Catholic Secondary	3	1	5	3	1	3	1	1	1	1	23
Elijah Smith	4	1	5	3	1	3	1	1	1	1	24
F H Collins	2	1	1	3	1	3	2	1	1	1	11
Paul Emile Mercier Secondary	0	1	1	3	0	3	0	1	0	1	3

Appendix B – Whitehorse Schools Facility Condition Index

Building condition assessments were completed for Whitehorse schools between 2014—2016 and updated in 2021. These reports review the overall building condition including the building envelope and interior spaces as well as the building systems such as mechanical, electrical and structural systems.

A Facility Condition Index (FCI) score is a measure of the current building condition compared to the replacement cost of the building. It provides a relative ranking of facilities in order to establish priorities for replacement and re-investment.

	Construction Date	Age	Size (sq.m)	FCI
Whitehorse Elementary School	1950	72	6,732	1.43
Christ the King Elementary School	1960	62	3,934	1.33
Takhini Elementary School	1961	61	3,115	1.29
Selkirk Elementary School	1959	63	4,012	1.25
Grey Mountain Elementary School	1975	47	1,170	1.04
Porter Creek Secondary School	1982	40	9,950	0.97
Elijah Smith School	1992	30	4,560	0.95
Jack Hulland School	1968	54	5,069	0.95
Golden Horn Elementary School	1975	47	2,648	0.93
Hidden Valley Elementary School	1992	30	2,121	0.93
Wood Street Centre	1955	67	1,834	0.89
Ecole E. Tremblay School	1996	26	3,304	0.86
Holy Family Catholic School	1993	29	2,400	0.83
Vanier Catholic Secondary School	1973	49	7,538	0.74
Paul-Emile Mercier	2020	2	3,630	0.35
F.H. Collins	2017	5	8,600	0.34