
4. ASSESSMENT OF LONG TERM CAPITAL NEEDS BY AREA

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4.1 Overview

The following chapter describes, for each elementary and secondary review area, the Board's existing capital asset inventory of operating schools (year opened, facility size, site size, on-the-ground capacity, number of portables, etc.), projected enrolment (based on average daily enrolment) for each school and how facility renewal needs are expected to change over the 2007/08 to 2020/21 time period.

For each review area, information is provided in respect of:

- Age of facilities compared to Board-wide averages, site sizes for each facility and comparison to panel totals, facility size for each school and comparison to panel totals, permanent and temporary capacity of each school and comparison to panel totals;
- Demographic and enrolment perspectives for each review area, indicating change in Census population 1996, 2001 and 2006; the change in the pre-school and school-age population per household (i.e. the number of households may be increasing, but the number of school-age children per household may be decreasing);
- The change in the number of students entering the school system at the elementary level, versus the number of students graduating from elementary school (i.e. the Grade Structure Ratio);
- The share of English language enrolment between the HPEDSB and the ALCDSB (i.e. apportionment), shown on a historical basis in order to provide perspectives on how the population cohorts are moving through the system and how this is likely to affect future enrolment;
- Projected enrolment from 2007/08 to 2020/21;

- Facility utilization – that is, student enrolment versus the number of bricks and mortar (i.e. permanent) spaces, both in 2007/08 and 2020/21;
- The condition of each school facility today (known as the “deferred backlog” – that is, facility renewal needs that have not been addressed due to lack of funding) and how this is expected to change (based on the RECAPP assessment data and updated by Board staff) by 2016/17 and by 2021/22. As well, a facility renewal condition index (i.e. total cumulative facility renewal costs divided into the facility replacement costs (where the replacement standards are consistent with the original construction standards) is calculated for each school facility in 2016/17 and 2021/22;
- Facility renewal index (i.e. needs) on a per pupil basis (i.e. based on projected enrolment), or FRIPP. This information indicates how quickly the gap between renewal expenditure needs and projected enrolment is growing for each school facility

Finally, program and facility recommendations are summarized for each school at the end of each subsection.

4.10 Secondary Panel – (Hastings and Prince Edward District School Board)

Overview:

The secondary panel comprises five (5) planning areas within the Counties of Hastings and Prince Edward. This area is served by eight (8) secondary schools.

The review area PS01 serves the City of Quinte West and the Township of Stirling-Rawdon. Bayside SS (9-12 Regular and French Immersion programs) and Trenton HS (9-12) provide secondary education services in this Review Area. Prince County Edward is PS02 and Prince Edward CI (9-12) serves the entire County. Centennial SS (9-12), Moira SS (9-12) and Quinte SS (9-12) serve secondary students in the City of Belleville, Township of Tyendinaga and the Town of Deseronto (i.e. PS03). PS04 comprises the Municipality of Centre Hastings, Madoc Township, Municipality of Marmora and Lake, Municipality of Tweed, and the Tudor portion of the Township of Tudor and Cashel. Centre Hastings SS (9-12) serves this area. The last Review Area PS05 comprises the northern part of Hastings County (Town of Bancroft, Township of Carlow/Mayo, Township of Faraday, Municipality of Hastings Highlands, Township of Limerick, and the Cashel portion of the Township of Tudor and Cashel. North Hastings HS (9-12) serves this area.

Existing School Facility Inventory:

The following sets out key facility attributes consistent with information filed by the Board, and with the Ministry of Education.

School Name/Program	SFIS #	Year Constructed	Site Size (acres)	Facility Size (sq m)	2007-08 OTG	# of Portables
PS01						
Trenton HS 15 Fourth Avenue, Trenton	5711	1955	14.5	12,884	1,047.0	0
Bayside SS P.O. Box 6500, Belleville	5225	1970	25.5	14,214	828.0	0
PS02						
Prince Edward CI PO Box 1700 Picton	5599	1953	4.9	16,936	1,239.0	0
PS03						
Centennial SS 160 Palmer Rd, Belleville	5268	1966	22.2	16,258	975.0	0
Moirs SS 275 Farley Ave, Belleville	6353	1959	9.9	13,882	933.0	0
Quinte SS 45 College St W Belleville	5604	1954	15.8	11,239	1,113.0	0
PS04						
Centre Hastings SS 129 Elgin Street Madoc	5276	1934	11.0	14,954	1,026.0	1
PS05						
North Hastings HS 14 Monck Street Madoc	5547	1947	6.8	11,204	903.0	0
Totals or Average		52 years	110.6	111,571	8,064.0	1

Demographic Perspectives:

The following tables compare the pre-school and school age population data and occupied households from Statistics Canada between 1996-2001 and 2001-2006 Census periods, illustrating the changing trends which will impact future enrolment growth for this Review Area. The pre-school age population (ages 0-3) declined by 1,298 persons between 1996 and 2001 and by 208 persons between 2001 and 2006. The elementary school age population (ages 4-13) has also decreased by 1,317 persons or 6.6% from 1996 to 2001. More recently, the number of 4-13 year olds has decreased by 10.7% or 1,999 persons. The secondary school age population (ages 14-17) has increased by 311 persons or 4.0% between 1996 and 2001

and between 2001 and 2006 Census period the secondary school age population increased 4.5% or 362 persons. The decrease in elementary school age population over the last to census period will most likely translate into a decrease in the secondary school age population in the years to come.

Actual Population – The Counties of Hastings and Prince Edward

Review Area	Census Period			1996 - 2001 Change		2001 - 2006 Change	
	1996	2001	2006	Absolute Change	% Change	Absolute Change	% Change
Pre-school Age (0-3)	7,102	5,804	5,596	-1,298	-18.3%	-208	-3.6%
Elementary Age (4-13)	20,061	18,744	16,746	-1,317	-6.6%	-1,999	-10.7%
Secondary Age (14-17)	7,783	8,094	8,456	311	4.0%	362	4.5%
Total	34,945	32,642	30,797	-2,304	-6.6%	-1,845	-5.7%

Source: Statistics Canada 1996, 2001, 2006 Census Profile Data & Single Year of Age Population Data

Note: 2006 population figures do not include Census undercount

Number of Occupied Households – The Counties of Hastings and Prince Edward

Number of Occupied Households			1996 - 2001 Change		2001 - 2006 Change	
1996	2001	2006	Absolute Change	% Change	Absolute Change	% Change
55,675	57,620	60,232	1,946	3.5%	2,612	4.5%

Source: Statistics Canada 1996, 2001, 2006 Census Profile Data & Single Year of Age Population Data

Note: 2006 population figures do not include Census undercount

Population per Household (Population/Number of Occupied Households) – The Counties of Hastings and Prince Edward

Review Area	Census Period			1996 - 2001 Change		2001 - 2006 Change	
	1996	2001	2006	Absolute Change	% Change	Absolute Change	% Change
Pre-school Age (0-3)	0.128	0.101	0.093	-0.027	-21.0%	-0.008	-7.8%
Elementary Age (4-13)	0.360	0.325	0.278	-0.035	-9.7%	-0.047	-14.5%
Secondary Age (14-17)	0.140	0.140	0.140	0.001	0.5%	0.000	-0.1%
Total	0.628	0.566	0.511	-0.061	-9.7%	-0.055	-9.7%

Source: Statistics Canada 1996, 2001, 2006 Census Profile Data & Single Year of Age Population Data

Note: 2006 population figures do not include Census undercount

The above table calculates the school age population per household. Analysis of the school age population by household indicates that during the 1996 to 2001 Census period, the pre-school age population per household exhibited a 21.0% decline. The elementary population per household experienced a 9.7% decline and there was a 0.5% increase in the number of 14-17 year olds per household during 2001 to 2006. The decline in the number of pre-school age children is clearly a lead indicator of future enrolment trends for the education service providers in this jurisdiction. Approximately 4,557 new dwelling units were added to the number of occupied households between 1996 and 2006, wherein the secondary school age population increased by 673 persons during the same period.

Historical Enrolment Perspectives:

The following table summarizes secondary enrolment by grade, between 2001/02 and 2006/07 for HPEDSB. It also indicates the change in enrolment by grade, both in absolute numbers and in terms of percentage change. For the secondary panel HPEDSB has shown a decrease of 151 pupils from 2001/02 to 2006/07. Grade 12 pupils have shown the greatest decline of 154 pupils over this time period, whereas Grade 10 and Grade 11 pupils have show an increase of 33 and 25 pupils respectively, consistent with the peak of the age cohort.

	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	Change	Change %
9	1,530	1,517	1,402	1,565	1,410	1,504	-26	-1.7%
10	1,432	1,499	1,514	1,412	1,585	1,465	33	2.3%
11	1,555	1,425	1,496	1,504	1,407	1,580	25	1.6%
12	2,060	1,448	1,870	1,930	1,968	1,906	-154	-7.5%
SE	256	267	309	300	402	230	-27	-10.3%
OTH	8	6	3	1	4	5	-3	-36.5%
Total	6,841	6,161	6,594	6,710	6,776	6,690	-151	-2.2%

Apportionment (HPEDSB AND ALCDSB):

The apportionment (i.e. the share of enrolment that each board receives) of historical secondary enrolment (expressed as average daily enrolment) between the HPEDSB and the co-terminous English language board ALCDSB, is shown below.

This information is based on where pupils attend school, rather than where they reside, but it does indicate that the Board's share of secondary enrolment has decreased since 2001/02, from 78.9% in 2001/02 to 76.8% in 2006/07. Changes in apportionment can have significant impacts on Board enrolment. For example, an increase of the apportionment by a board can offset a potential decline in enrolment resulting from a decline in school age population.

Two secondary schools, namely Prince Edward CI and Centre Hastings SS, are designated "rural" schools for funding purposes.

	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007
HPEDSB Share	78.9%	76.8%	78.4%	77.8%	78.0%	76.8%
ALCDSB Share	21.1%	23.2%	21.6%	22.2%	22.0%	23.2%

Note: May not add precisely due to rounding.

Projected Enrolment:

Overall enrolment is expected to drop from 6,985 in 2007/08 to 5,528 in 2020/21. That represents a 21% drop in enrolment or a decline of 1,457.

Prince Edward County, PS02 is projected to have the greatest decline of over 40% in secondary enrolment. PS03 is expected to show the least decline of 9.3% by 2020/21.

Facility Utilization:

Facility utilization represents the number of pupils (i.e. expressed as average daily enrolment (ADE)) over the number of permanent bricks and mortar spaces available to accommodate students, and expressed as the On-the-Ground capacity (i.e. OTG capacity). The following table provides information on current facility utilization and anticipated facility utilization, given projected student enrolments.

Overall, the secondary schools in serving HPEDSB are expected to be at 86.6% utilization as of 2007/08, with the further expectation that facility utilization will decline to a level of 68.6% by the year 2020/21.

School Name/Program	2007-08 OTG	2007-08 ADE	% Utilization	2020-21 OTG	2020-21 ADE	% Utilization
PS01						
Trenton HS	828.0	865	104.5%	828.0	541	65.3%
Bayside SS	1,047.0	900	86.0%	1,047.0	754	72.0%
PS02						
Prince Edward CI	1,239.0	798	64.4%	1,239.0	471	38.0%
PS03						
Centennial SS	975.0	1,169	119.9%	975.0	1,113	114.2%
Moira SS	933.0	738	79.1%	933.0	655	70.2%
Quinte SS	1,113.0	1,043	93.7%	1,113.0	909	81.7%
PS04						
Centre Hastings SS	1,026.0	823	80.2%	1,026.0	667	65.0%
PS05						
North Hastings HS	903.0	649	71.9%	903.0	418	46.3%
Jurisdiction Totals:	8,064.0	6,985	86.6%	8,064.0	5,528	68.6%

Over the next fourteen years it is expected that three of the six secondary schools for which top-up funding is available will fall below the 80% utilization threshold. This will impact on the Board's ability to match grant funding sources to facility operations and renewal expenditure needs.

Facility Condition Assessment:

The following provides a summary of facility renewal needs based on a Province-wide facility condition assessment undertaken in 2000 and more recent data provided by Board staff in respect of capital investments under the Province's Stage I and Stage II facility renewal funding. Facility replacement value is based on the cost to rebuild the school, given the current Provincial funding benchmarks, and the lesser of the value based on facility size in square metres or the number of permanent pupil places (i.e. On-the-Ground capacity, or OTG).

The determination of existing and future facility condition is based on the assessment of facility renewal needs (e.g. roofs, windows, boilers, HVAC, plumbing, millwork, site amenities, etc.) divided into the deemed replacement value of the building.

Four of the eight secondary schools in HPEDSB are expected to exceed 75% of the facility replacement value within the next fourteen years.

Name of School	Facility Replacement Value (lesser of sq m or OTG)	Facility Renewal Needs to 2006/07	Facility Renewal Index 2006/07	Facility Renewal Needs to 2016/17	Facility Renewal Index 2016/17	Facility Renewal Needs to 2021/22	Facility Renewal Index 2021/22
PS01							
Trenton HS	\$22.89	\$11.00	48.1%	\$17.08	74.7%	\$20.58	89.9%
Bayside SS	\$18.10	\$2.84	15.7%	\$9.64	53.2%	\$11.48	63.4%
PS02							
Prince Edward CI	\$27.08	\$5.71	21.1%	\$11.44	42.3%	\$14.15	52.2%
PS03							
Centennial SS	\$21.31	\$6.33	29.7%	\$16.90	79.3%	\$21.85	102.5%
Moira SS	\$20.39	\$8.06	39.5%	\$14.89	72.9%	\$17.78	87.1%
Quinte SS	\$20.35	\$5.28	26.0%	\$7.94	38.3%	\$10.06	49.4%
PS04							
Centre Hastings SS	\$22.43	\$6.33	28.2%	\$16.90	75.3%	\$21.85	97.4%
PS05							
North Hastings HS	\$19.74	\$4.60	23.3%	\$8.34	42.3%	\$12.56	63.6%
Jurisdiction Totals:	\$172.29	\$50.17	29.1%	\$102.96	59.8%	\$130.29	75.6%

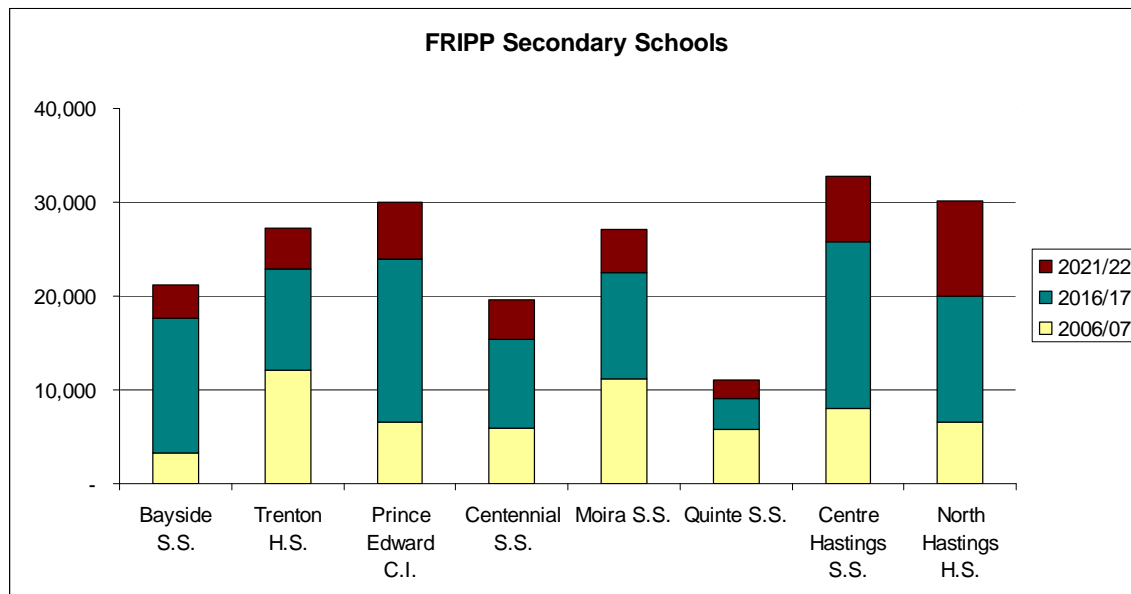
Note: All figures in millions of dollars. Total may not add up due to rounding.

Total facility renewal is expected to be in the order of \$102.96 million, or 59.8% of facility replacement value by 2016/17 and \$130.29 million, or 75.6% of facility replacement value by 2021/22.

The following chart examines facility renewal needs per pupil place; that is, future renewal expenditure needs over projected enrolment (which is a key driver in a per pupil based funding environment). While FCI, or Facility Condition Index, is an indicator of the backlog of unfunded

facility renewal needs, longer term capital strategies pay more attention to how quickly a school facility reaches its facility replacement value. The following chart adds one additional element and addresses the extent to which the gap between school enrolment and its facility renewal needs are growing over time. This is known as the Facility Renewal Index per Pupil Place (FRIPP).

Centre Hastings SS exhibits the highest increase in secondary facility renewal needs in a declining enrolment situation. The second highest increase in facility renewal needs measured against projected enrolment is North Hastings HS, followed by Prince Edward CI, Trenton HS, Moira SS, Bayside SS, Centennial SS and Quinte SS, where Quinte SS is the lowest renewal cost per pupil place for secondary schools in HPEDSB.



Program and Facility Recommendations:

- Convert Bayside SS, Trenton HS, Centennial SS, Moira SS, Quinte SS, Centre Hastings to Grade 7-12 facility. This option would improve facility utilization (between 95% and 100%) and provide opportunities to enhance the student learning environment. Retaining these secondary schools as a Grade 9-12 facility would result in facility utilization falling below 75% and has the potential to negatively impact opportunities for curricular, co-curricular and cross-curricular programs.

- Convert Prince Edward CI and North Hastings to Grade 4-12 facility. The proposed accommodation strategy would improve facility utilization and provide opportunities to enhance the student learning environment. Both Prince Edward CI and North Hastings HS utilization fall below 50% by 2020/21 if they are maintained as Grade 9-12 schools.
- Construct an 8 classroom addition at Bayside SS (PS01) and include a technology plaza.
- Construct a 6 classroom addition at Moira SS in PS03.