
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.

4.8 Review Area PE07 – Centre Hastings School Group (Municipality of Centre Hastings, Madoc Township, Municipality of Marmora and Lake, Municipality of Tweed, former Tudor portion of Township of Tudor and Cashel)

Overview:

This planning area comprises the central portion of Hastings County. The main population centres are Marmora, Madoc and Tweed. This area is served by six (6) elementary schools. Earl Prentice PS (JK-4) and Marmora Senior PS (4-8) serve the Marmora community. Madoc is served by Madoc Township PS (JK-6) and Madoc PS (JK-8). S.H. Connor School (JK-3) and Tweed-Hungerford Sr PS (4-8) serve the Tweed area.

There are approximately 1,150 new residential dwelling units anticipated to be constructed in this review area between 2007/08 and 2020/21.

Existing School Facility Inventory:

The elementary schools within this review area are, on average, one year older than the average age of all the elementary schools in the Board's jurisdiction. All are "rural" designated schools for funding purposes. For the forty-seven Board-owned properties that are current operating elementary schools, the average site size is 7.93 acres, which is a combination of urban serviced sites generally in the range of 4.0 to 7.0 acres, and a number of rural serviced sites (i.e. municipal water only or full communal services) in the range of 12 to 37 acres. The average site size in Review Area E07 is 5.51 acre. The average On-the-Ground (OTG) capacity of the elementary schools in the review area is 233 pupil places; whereas the Provincial average OTG for elementary schools with a "rural" designation is 266.

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
S.H. Connor School (JK-3) 165 Pomeroy Street	2076	1957	2.8	1,607	178.0	2
Tweed-Hungerford Senior PS (4-8) 52 McLennan Street, Tweed	2335	1950	9.0	2,415	274.0	2
Madoc Township PS (JK-6) R.R. #1, Madoc	374	1961	7.5	1,570	184.0	2
Madoc PS (JK-8) 32 Baldwin Street, Madoc	1419	1958	3.3	3,316	371.0	3
Earl Prentice PS (JK-4) Box 418, Marmora	671	1959	5.0	2,046	222.0	0
Marmora Senior PS (5-8) Box 310, Marmora	1471	1950	5.5	1,714	170.0	1
Review Area Totals or Average		51 years	33.1	12,668	1,399.0	10
Board Jurisdiction (Elementary) Totals or Average		50 years	379.7	121,605	12,766.0	36

Demographic and Enrolment Perspectives:

The following tables compare the pre-school and school age population data and occupied household 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 123 persons between 1996 and 2001 and by 128 persons between 2001 and 2006. The elementary school age population (ages 4-13) has also decreased by 183 persons or 7.9% from 1996 to 2001. More recently, the number of 4-13 year olds had decreased by 10.3% or 220 persons. The secondary school age population (ages 14-17) has increased by 25 persons in the Census periods 1996 through 2006.

Actual Population – PE07

Review Area	Census Period			1996 - 2001 Change		2001 - 2006 Change	
	1996	2001	2006	Absolute Change	% Change	Absolute Change	% Change
Pre-school Age (0-3)	805	683	555	-123	-15.2%	-128	-18.7%
Elementary Age (4-13)	2,313	2,130	1,910	-183	-7.9%	-220	-10.3%
Secondary Age (14-17)	883	950	908	68	7.6%	-43	-4.5%
Total	4,000	3,763	3,373	-238	-5.9%	-390	-10.4%

Source: Statistics Canada 1991, 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 – PE07

Number of Occupied Households			1996 - 2001 Change		2001 - 2006 Change	
1996	2001	2006	Absolute Change	% Change	Absolute Change	% Change
6,110	6,325	6,496	215	3.5%	171	2.7%

Population per Household (Population/Number of Occupied Households) – PE07

Review Area	Census Period			1996 - 2001 Change		2001 - 2006 Change	
	1996	2001	2006	Absolute Change	% Change	Absolute Change	% Change
Pre-school Age (0-3)	0.132	0.108	0.085	-0.024	-18.1%	-0.022	-20.8%
Elementary Age (4-13)	0.378	0.337	0.294	-0.042	-11.0%	-0.043	-12.7%
Secondary Age (14-17)	0.144	0.150	0.140	0.006	4.0%	-0.010	-7.0%
Total	0.655	0.595	0.519	-0.060	-9.1%	-0.076	-12.7%

The above table calculated the school age population per household. Analysis of the school age population by household indicates that during the 1996 to 2001 Census Period, the preschool age population per household within the Centre Hastings School Group Review Area exhibited a 18.1% decline. The elementary population per household experienced a 12.7% decline and there was a 7% decline 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 growing and is clearly a lead indicator of future enrolment trends for the education service providers in this Review Area. Approximately 385 new dwelling units were added to the number of occupied households between 1996 and 2006, whereas the pre-school age population decreased by 251 persons during the same period.

Historical Enrolment and Grade Structure (GSR):

The following table summarizes elementary enrolment by grade, between 2001/02 and 2006/07, and for Review Area PE07. Further, the table indicates the change in enrolment by grade, both in absolute numbers and in terms of percentage change.

The change in Grade Structure Ratio (GSR) is shown for each year between 2001/02 and 2006/07. GSR measures the number of pupils entering the elementary system (JK-1) versus the number leaving the elementary system (Grades 6-8). A ratio of 1.5 is indicative of an equal number of pupils entering the system as those leaving the system (i.e. when the information is expressed as average daily enrolment). Further, a ratio of 1.5 in each year is an indicator of stable enrolment, whereas a value greater than 1.5 is indicative of increasing decline in enrolment. The Centre Hastings School Group shows the GSR is increasing by 8.2% between 2001/02 and 2006/07 which indicated the number of pupils in Grade 6-8 who are leaving the elementary school system are increasing at a faster rate than the number of JK-1 pupils who are entering the system.

	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	Change	% Change
JK	70	68	68	59	61	60	-10	-14.3%
SK	77	77	69	71	63	64	-13	-16.9%
1	168	155	152	136	141	140	-28	-16.7%
2	172	166	150	150	137	137	-35	-20.3%
3	166	165	164	155	158	134	-32	-19.3%
4	176	180	169	158	158	150	-26	-14.8%
5	173	180	171	170	161	153	-20	-11.6%
6	201	176	172	181	168	167	-34	-16.9%
7	176	207	182	173	184	172	-4	-2.3%
8	202	184	197	184	180	186	-16	-7.9%
SE	-	-	-	-	-	-	n/a	n/a
Total	1,579	1,555	1,492	1,435	1,408	1,360	-219	-13.9%
GSR	1.84	1.89	1.91	2.02	2.01	1.99	0.15	8.2%

The loss in the number of JK-1 pupil places is 51 over the period shown, while the loss in the number of Grade 6-8 is 54.

Apportionment (HPEDSB AND ALCDSEB):

The apportionment (i.e. the share of enrolment that each board receives) of historical elementary enrolment (expressed as average daily enrolment) between the HPEDSB and the co-terminous English language board ALCDSEB, and in Review Area PE07, is shown below. The information is based on where pupils attend school, rather than where they reside, but it does indicate that the Board's share of elementary enrolment has fluctuated only slightly since 2001/02, and has accounted for approximately 83% of the total enrolment. Changes in apportionment can have significant impacts on Board enrolment; however, for this area, apportionment is fairly stable.

	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007
HPEDSB Share	83.4%	83.8%	83.7%	83.1%	83.9%	83.7%
ALCDSB Share	16.6%	16.2%	16.3%	16.9%	16.1%	16.3%

Note: May not add precisely due to rounding.

Projected Enrolment:

Overall enrolment in this review area is expected to increase from 1,285 pupil places in 2007/08 to 1,306 pupil places by 2020/21. For schools that service Tweed and its surrounding area, enrolments are expected to be relatively stable with an expected increase of 36 pupil places between 2007/08 and 2020/21. Madoc Township PS and Madoc PS schools are projected to decrease slightly at 16 pupils combined. Schools in the Marmora area are expected to remain stable.

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 schools serving this review area are expected to be at 91.9% utilization as of 2007/08 with the further expectation that facility utilization will increase to a level of 93.4% by the year 2020/21.

School Name/Program	2007-08 OTG	2007-08 ADE	% Utilization	2020-21 OTG	2020-21 ADE	% Utilization
S.H. Connor School (JK-3)	178.0	171	95.8%	178.0	189	106.2%
Tweed-Hungerford Senior PS (4-8)	274.0	250	91.1%	274.0	268	97.8%
Madoc Township PS (JK-6)	184.0	143	77.9%	184.0	138	75.0%
Madoc PS (JK-8)	371.0	413	111.2%	371.0	402	108.3%
Earl Prentice PS (JK-4)	222.0	159	71.5%	222.0	158	71.2%
Marmora Senior PS (4-8)	170.0	149	87.5%	170.0	151	88.8%
Review Area Totals:	1,399.0	1,285	91.9%	1,399.0	1,306	93.4%
Board-wide (Elementary) Totals:	12,766.0	10,208	79.9%	12,766.0	9,858	77.2%

Each of the elementary schools in this review area is designated “rural” for funding purposes. This designation translates into full top-up funding for school operations and renewal. However, this additional funding support would not provide the Board with sufficient funds to deal with facility renewal 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 replace 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.

None of the six elementary schools in this review area are expected to exceed 75% of the replacement value within the next ten years. However, two school buildings will exceed 75% of the replacement value by 2021/22.

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
S.H. Connor School	\$2.67	\$0.92	34.3%	\$1.17	44.0%	\$1.51	56.8%
Tweed-Hungerford Senior PS	\$4.01	\$2.15	53.6%	\$2.79	69.5%	\$3.61	90.0%
Madoc Township PS	\$2.61	\$0.91	35.1%	\$1.90	72.6%	\$2.02	77.4%
Madoc PS	\$5.50	\$1.81	32.9%	\$3.27	59.3%	\$3.54	64.3%
Earl Prentice PS	\$3.40	\$1.08	31.7%	\$1.47	43.2%	\$1.91	56.2%
Marmora Senior PS	\$2.74	\$0.98	35.7%	\$1.69	61.6%	\$1.87	68.5%
Review Area Totals	\$20.93	\$7.85	37.5%	\$12.29	58.7%	\$14.46	69.1%
Elementary Totals	\$191.08	\$70.42	36.9%	\$129.57	67.8%	\$152.74	79.9%

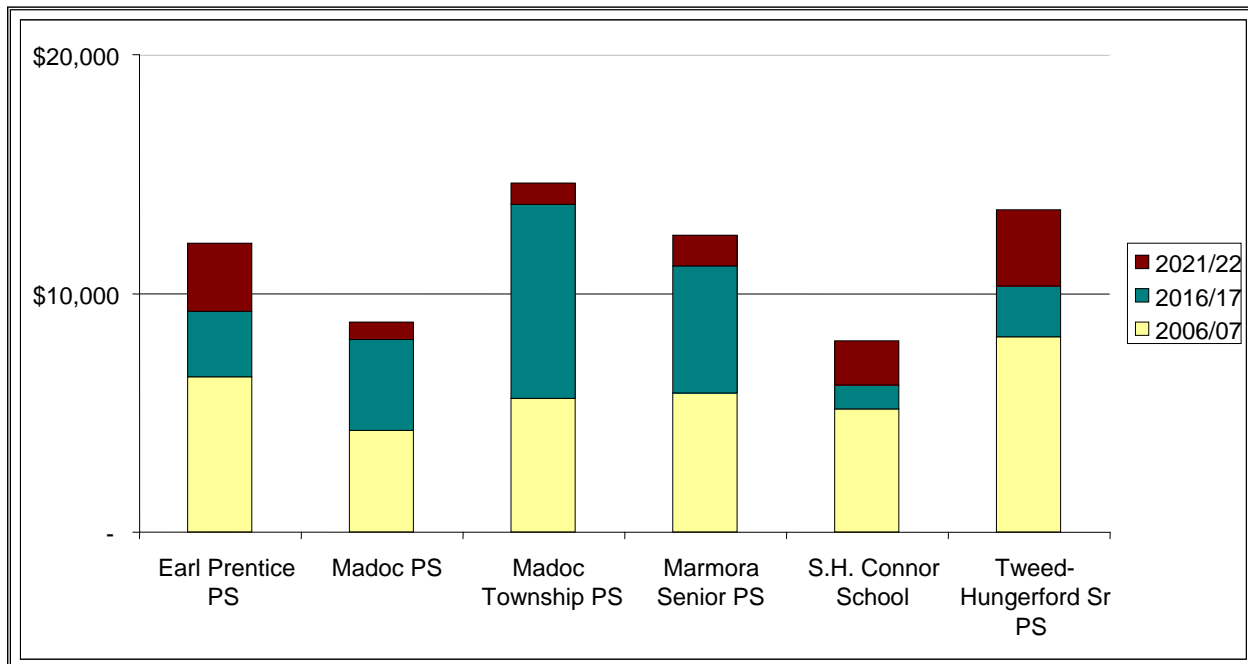
Total facility renewal needs for PE07 are expected to be in the order of \$12.29 million, or 58.7% of facility replacement value by 2016/17 and \$14.46 million, or 69.1% of facility replacement value by 2021/22. Total renewal grant funding for this area amounts to \$212,124 annually based on the existing grant structure and where enrolment is taken into consideration. This figure is expected to fall to \$203,579 annually 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).

Madoc Township PS exhibits the highest increase in facility renewal needs in a declining enrolment situation. Second highest is Tweed-Hungerford Sr PS, followed by Marmora Senior

PS, Earl Prentice PS, Madoc PS. and S.H. Connor School. S.H. Connor School has the lowest cost per pupil place in this review area.

FACILITY RENEWAL NEEDS PER PUPIL PLACE



Program and Facility Recommendations:

- Convert Centre Hastings SS to Grade 7-12 facility and redirect Grades 7 and 8 pupils from Madoc PS, Marmora Senior PS and Tweed-Hungerford Sr. PS to this facility. Retaining Centre Hastings SS as a Grade 9-12 facility would result in the facility utilization falling to 65% and would negatively impact the Board's ability to fund facility renewal and operating costs.
- Redirect SH Connor School JK-3 pupils to Tweed-Hungerford Sr. PS and construct a 350 pupil place replacement facility on the Tweed-Hungerford Sr. PS site.
- Redirect Madoc Township PS JK-6 to Madoc PS. The latter facility is of sufficient size and condition to accommodate both student populations.
- Redirect JK-4 Earl Prentice PS to Marmora Senior PS.