
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.

4.7 Review Area PE06 – Quinte School Group (City of Belleville east of Moira River and north of CNR line, west of the Moira River, north of Moira Street, portion of Township of Tyendinaga north of CNR line, former Township of Thurlow east of Hwy 37 and north of the CNR line)

Overview:

This planning area comprises the north easterly portion of the City of Belleville (east and west of the Moira River and north of CNR line/Moira Street), a portion of the Township of Tyendinaga north of CNR line and a portion of the former Township of Thurlow east of Hwy 37 and north of the CNR line. This area is served by five (5) elementary schools.

Three of the five schools serving this area, Park Dale School (JK-8), Prince of Wales PS (JK-8), and Hillcrest School (JK-6), are located within the City of Belleville. Harmony PS (JK-8) is located north of Belleville in Corbyville (former Thurlow Township) and Tyendinaga PS (JK-8) is located in Shannonville in the Township of Tyendinaga.

There are approximately 630 new residential dwelling units anticipated to be constructed in this review area between 2007/08 and 2020/21

Existing School Facility Inventory:

The age of the elementary schools in this review are, on average, six years younger than the average age of all the elementary schools in the Hastings Prince Edward DSB jurisdiction. For the forty-seven currently-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 12.0 to 37.0 acres. The average site size in PE06 is 8.0 acres. The urban site sizes all fall within the urban school site range.

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
City of Belleville, North of CNR line and North of Moira Street						
Park Dale School (JK-8) 73 Poplar Street, Belleville	1757	1962	7.0	2,710	351.0	2
Prince of Wales PS (JK-8) 37 Prince of Wales Drive, Belleville	1872	1983	4.6	3,882	360.0	0
Hillcrest School (JK-6) 88 West Street, Belleville	1083	1942	7.0	1,962	162.0	0
Portion of former Thurlow Township and Tyendinaga Township						
Harmony PS (JK-8) R.R. #1, Corbyville	1015	1960	13.2	2,790	325.0	4
Tyendinaga PS (JK-8) R.R. #1, Shannonville	2341	1966	8.0	2,780	285.0	3
Review Area Totals or Average		44 years	39.8	14,124	1,483.0	9
Board (Elementary) Totals or Average		50 years	379.7	121,605	12,766.0	36

Demographic and Enrolment Perspectives:

The table on the following page compares the pre-school and school age population data 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 73 persons between 1996 and 2001 and increased by 59 persons between 2001 and 2006. The elementary school age population (ages 4-13) has also decreased by 66 persons or 4.9% from 1996 to 2001. More recently, the number of 4-13 year olds has decreased by 7.3% or 86 persons. The secondary school age population (ages 14-17) has increased by 37 and 45 persons in the Census periods 1996 through 2006.

Actual Population – PE06

Review Area	Census Period			1996 - 2001 Change		2001 - 2006 Change	
	1996	2001	2006	Absolute Change	% Change	Absolute Change	% Change
Pre-school Age (0-3)	429	356	415	-73	-16.9%	59	16.6%
Elementary Age (4-13)	1,335	1,269	1,183	-66	-4.9%	-86	-6.8%
Secondary Age (14-17)	493	530	575	37	7.5%	45	8.4%
Total	2,257	2,155	2,173	-102	-4.5%	18	0.8%

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 – PE06

Number of Occupied Households			1996 - 2001 Change		2001 - 2006 Change	
1996	2001	2006	Absolute Change	% Change	Absolute Change	% Change
2,780	2,996	3,245	216	7.8%	250	8.3%

Population per Household (Population/Number of Occupied Households) – PE06

Review Area	Census Period			1996 - 2001 Change		2001 - 2006 Change	
	1996	2001	2006	Absolute Change	% Change	Absolute Change	% Change
Pre-school Age (0-3)	0.154	0.119	0.128	-0.035	-22.9%	0.009	7.6%
Elementary Age (4-13)	0.480	0.424	0.365	-0.057	-11.8%	-0.059	-13.9%
Secondary Age (14-17)	0.177	0.177	0.177	0.000	-0.2%	0.000	0.1%
Total	0.812	0.719	0.669	-0.092	-11.4%	-0.050	-6.9%

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 within the Quinte School Group Review Area exhibited a 22.9% decline. The elementary population per household experienced a 13.9% decline and there was a 0.1% increase in the number of 14-17 year olds per household during 2001 to 2006. Approximately 466 new dwelling units were added to the number of occupied households between 1996 and 2006, wherein the pre-school age population decreased by 14 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 PE06. Further, the table indicates the change in enrolment by grade, both in absolute numbers and in terms of percentage change. During this time period the Quinte School Group enrolment has declined from 1,751 in 2001/02 to 1,536 in 2006/07 or a decrease in of 215 pupil places.

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. In PE06 the GSR rose in 2003/04 to 2.01 from 1.84 in 2001/02 and then decreases in 2006/07 almost back to 2001/02 levels at 1.85.

	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	Change	% Change
JK	68	78	67	64	71	69	1	1.5%
SK	83	74	81	79	77	80	-3	-3.6%
1	192	187	160	167	183	154	-38	-19.8%
2	179	189	176	152	161	175	-4	-2.2%
3	209	187	186	181	164	159	-50	-23.9%
4	214	202	180	177	175	168	-46	-21.4%
5	177	218	209	180	187	174	-3	-1.7%
6	218	179	223	204	188	185	-33	-15.1%
7	202	229	174	228	202	176	-26	-12.9%
8	211	204	224	187	237	199	-12	-5.7%
SE	0	0	0	0	0	0	n/a	n/a
Total	1,751	1,744	1,678	1,617	1,643	1,536	-215	-12.3%
GSR	1.84	1.81	2.01	1.99	1.90	1.85	0.01	0.5%

Apportionment (HPEDSB AND ALCDSB):

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 ALCDSB, and in Review Area PE06, 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 decreased by 1.2% since 2001/02, though it still accounts for over 75% of the enrolment in this area. Changes in apportionment can have significant impacts on Board enrolment.

	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007
HPEDSB Share	76.7%	75.9%	75.3%	74.8%	76.3%	75.5%
ALCDSB Share	23.3%	24.1%	24.7%	25.2%	23.7%	24.5%

Note: May not add precisely due to rounding.

Projected Enrolment:

Overall enrolment in this review area is expected to increase by 74 pupil places from 1,476 in 2007/08 to 1,550 in 2020/21.

Harmony PS is expected to experience an increase of 93 pupil places by 2020/21. This is due to the significant residential development taking place north of Hwy. 401. Most other schools that service this area are projected to experience declining enrolment.

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 utilization for this review area is expected to be 101.3% in 2007/08, by 2020/21 the utilization is expected to increase to 106.4% by 2020/21. Increased utilization is being driven by substantive growth outside of the City of Belleville, however.

School Name/Program	2007/08 OTG	2007/08 ADE	% Utilization	2020/21 OTG	2020/21 ADE	% Utilization
City of Belleville, North of CNR line and North of Moira Street						
Park Dale School (JK-8)	351.0	336	95.7%	351.0	324	92.3%
Prince of Wales PS (JK-8)	360.0	323	87.0%	360.0	295	81.9%
Hillcrest School (JK-6)	162.0	126	67.5%	162.0	167	103.1%
Portion of former Thurlow Township and Tyendinaga Township						
Harmony PS (JK-8)	325.0	394	121.4%	325.0	487	149.8%
Tyendinaga PS (JK-8)	285.0	324	113.6%	285.0	305	107.1%
Review Area Totals	1,483.0	1,503	101.3%	1,483.0	1,578	106.4%
Board (Elementary) Totals	12,766.0	10,208	79.9%	12,766.0	9,858	77.2%

All schools in this review area, except Prince of Wales PS, are expected to have utilization at or above the 80% threshold for top-up funding (i.e. top-up operations and facility renewal funding) purposes.

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.

The schools in this review area are in relatively good condition in comparison to the rest of the capital asset inventory. Only Tyendinaga PS is expected to 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
City of Belleville, North of CNR line and North of Moira Street							
Park Dale School (JK-8)	\$4.50	\$1.20	26.6%	\$2.13	47.4%	\$2.69	59.8%
Prince of Wales PS (JK-8)	\$5.80	\$1.51	26.0%	\$2.43	41.9%	\$3.34	57.7%
Hillcrest School (JK-6)	\$2.61	\$1.03	39.4%	\$1.51	57.9%	\$1.73	66.2%
Portion of former Thurlow Township and Tyendinaga Township							
Harmony PS (JK-8)	\$4.63	\$0.95	20.5%	\$2.15	46.5%	\$2.38	51.3%
Tyendinaga PS (JK-8)	\$4.59	\$1.72	37.5%	\$3.09	67.4%	\$3.86	84.1%
Review Area Totals	\$22.13	\$6.41	29.0%	\$11.31	51.1%	\$14.00	63.2%
Elementary Totals	\$191.08	\$70.42	36.9%	\$129.57	67.8%	\$152.74	79.9%

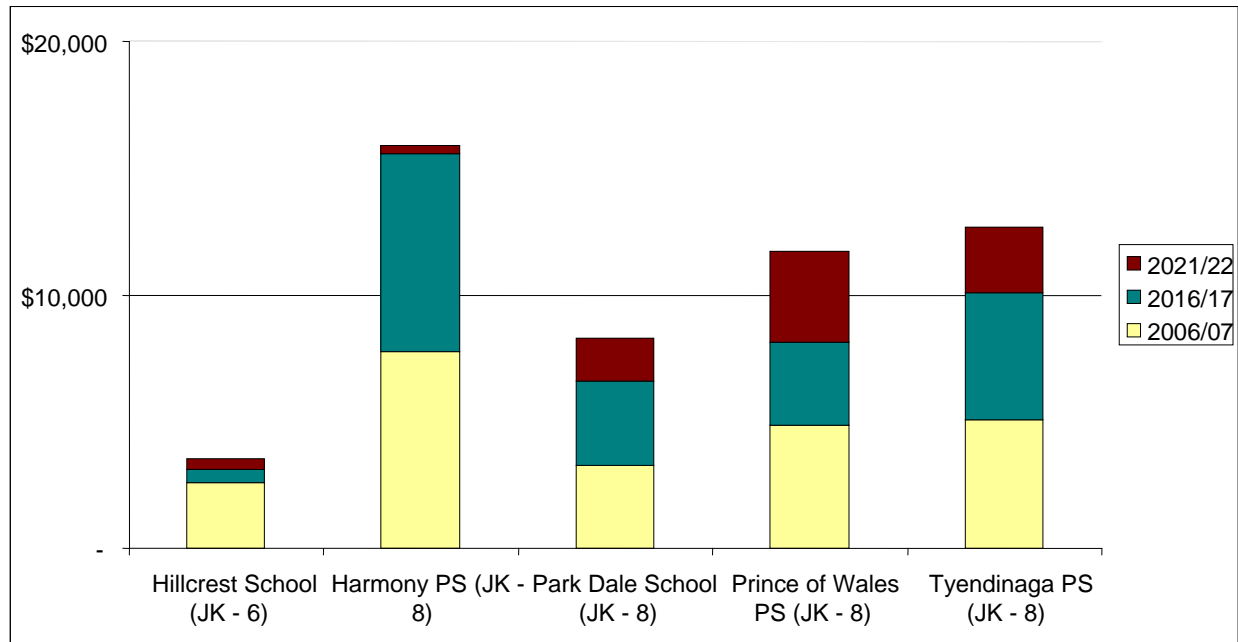
Note: All figures in millions of dollars. Totals may not add precisely due to rounding.

Total facility renewal needs for PE06 are expected to be approximately \$11.31 million, or 51.1% of facility replacement value by 2016/17 and \$14.00 million by 2021/22. Total renewal grant funding for this area amounts to \$239,702 annually based on the existing grant funding structure. This figure is not expected to change much over the next 15 years.

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).

Harmony PS exhibits the highest increase in facility renewal needs. The second highest is Tyendingaga PS, followed by Prince of Wales PS, and Park Dale School. Hillcrest School has the lowest cost in facility renewal needs measured against projected enrolment in this review area.

FACILITY RENEWAL NEEDS PER PUPIL PLACE



Program and Facility Recommendations:

- Convert Quinte SS to Grade 7-12 facility and redirect Grades 7 and 8 pupils from Park Dale School, Prince of Wales PS, Harmony PS and Tyendingaga PS to this facility.
- Harmony PS is converted to a JK-6 facility.
- Redirect JK-6 pupils from Deseronto in PE05 to Tyendingaga PS and redirect Hillcrest School JK-6 pupils to Prince of Wales PS. (Note: Hillcrest School is not of sufficient size to accommodate a combined student population of Hillcrest and Prince of Wales JK-6 pupils.)