

Section 1: HWDSB Facilities at a Glance

Age of Facilities

There are currently 93 elementary schools and 15 secondary schools in operation at Hamilton-Wentworth District School Board. In total, there are 108 active schools, which totals approximately 6.7 million square feet of space. The schools range in age from less than 2 years old to 163 years old. Currently, the board has 14 schools that were built in the last 15 years, and 15 schools that were built 75 years or more years ago. Due to the history and age of some of Hamilton’s neighborhoods, original neighbourhood school facilities still stand and continue to be in use. The board has 46 schools that are between the ages of 45 and 60, meaning they were built between 1954 and 1969 (the Baby Boom Era). Below in Figure 2, is a chart that depicts HWDSB school age.

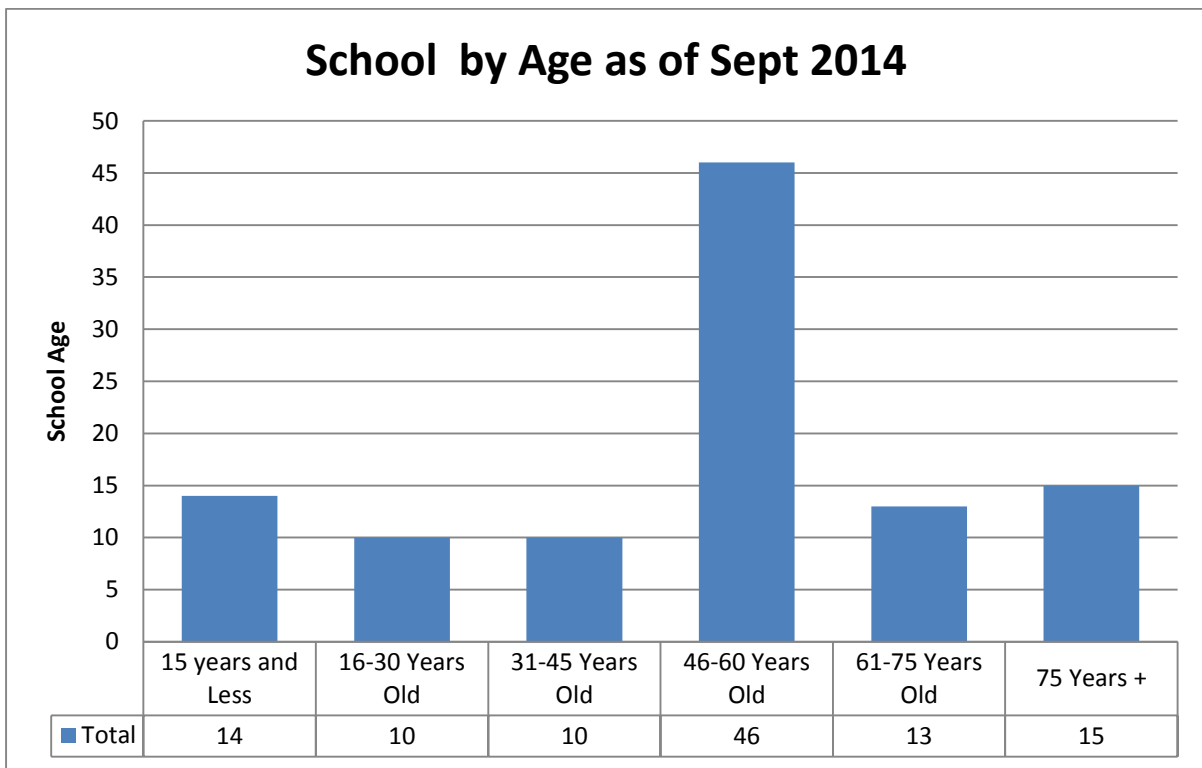


Figure 2: School by Age Chart

Size of Facilities

In Figure 3 below, the chart indicates the gross floor area (GFA) currently in Hamilton-Wentworth District School Board inventory and GFA in 2012, which was the initial release of the Long Term Facilities Master Plan.

Gross Floor Area (GFA)	15 Years and Less	16-30 Years Old	31-45 Years Old	46-60 Years Old	61-75 Years Old	75 Years Old +	Total
2012 Building GFA	926,716	838,634	1,643,726	2,400,979	320,860	1,139,525	7,270,440
2014 Building GFA	915,784	803,231	746,804	2,632,627	474,639	1,124,085	6,697,170
Future Building GFA with Approved Closures and New Builds	1,338,577	803,231	534,850	2,378,457	417,590	873,854	6,346,559

Figure 3: Gross Floor Area Table

HWDSB's current school inventory totals approximately 6.7 million square feet. Since 2012, HWDSB has reduced its GFA by approximately 550,000 square feet through school consolidation. The distribution of square footage in Figure 3 above is the same as the school age graph in the previous section. There is over 2.6 million square feet in HWDSB's inventory that is 46-60 years old, and over 1.1 million square feet over 75 years old. The reduction of gross floor area reduces operating, maintenance and capital costs for HWDSB. The reduction in square footage allows for allocating more funds to remaining schools, as funding is not based on the number of pupil places, but on the number of pupils enrolled at a school board.. The GFA is projected to decrease by approximately 350,000 square feet upon all Board approved closures and approved additions - they include additions to Dundas Valley and Saltfleet, as well as the construction of three new schools which includes New Ancaster Tiffany Elementary School, New North Secondary and Nora Frances Henderson.

On the Ground Capacity

On the Ground Capacity (OTG) is the number that the Ministry of Education uses to quantify the capacity of a school for students. The OTG represents what the permanent structure of a school building can accommodate, by instructional space, and as per room loadings set by the Ministry of Education. Different types of rooms have a different loading and they differ between elementary and secondary panels. The total of the rooms in a school, and their assigned capacities are added together to calculate its OTG. Loading examples of classroom types for elementary and secondary panels are shown below.

Instructional Space	Elementary Loading	Secondary Loading
Kindergarten	26	-
Classroom	23	21
Special Education	9	9
Resource Room	12	12

Figure 4: Elementary and Secondary Loading

Recent Ministry of Education initiatives have impacted the capacity of elementary schools throughout Ontario. Specifically, kindergarten room capacities have changed from a loading of 20 to 26 students per classroom as of September 2014. This change in capacity increased HWDSB’s overall capacity by approximately 1,400 pupil places.

School OTGs are recorded in a Ministry database that tracks information for all schools in Ontario. The database is called the School Facilities Inventory System (SFIS). SFIS indicates a capacity for each school based on the number and type of instructional spaces it has (see above table). HWDSB has undergone the process of renewing all school architectural floor plans which helps ensure accurate data is being used for long term capital planning and that room information aligns with the Ministry SFIS. For a more comprehensive breakdown of space type and loading please see page 61 of the SFIS user manual located on the Ministry of Educations Capital Programs Branch website:

http://faab.edu.gov.on.ca/Capital%20Programs%20Branch/091116_SFI_%20P2.0_User_Manua_EN.pdf

HWDSB’s inventory of elementary schools has reduced from 103 schools in 2004 to 92 schools in 2014. As of 2014, the combined OTG of the elementary panel is just over 40,000 pupil places, while enrolment is approximately 34,400 students. This equates to roughly 5,000 excess pp. As a comparison, in 2004 HWDSB had a capacity of just over 38,000 pp and the enrolment at that time was just over 38,000 students.

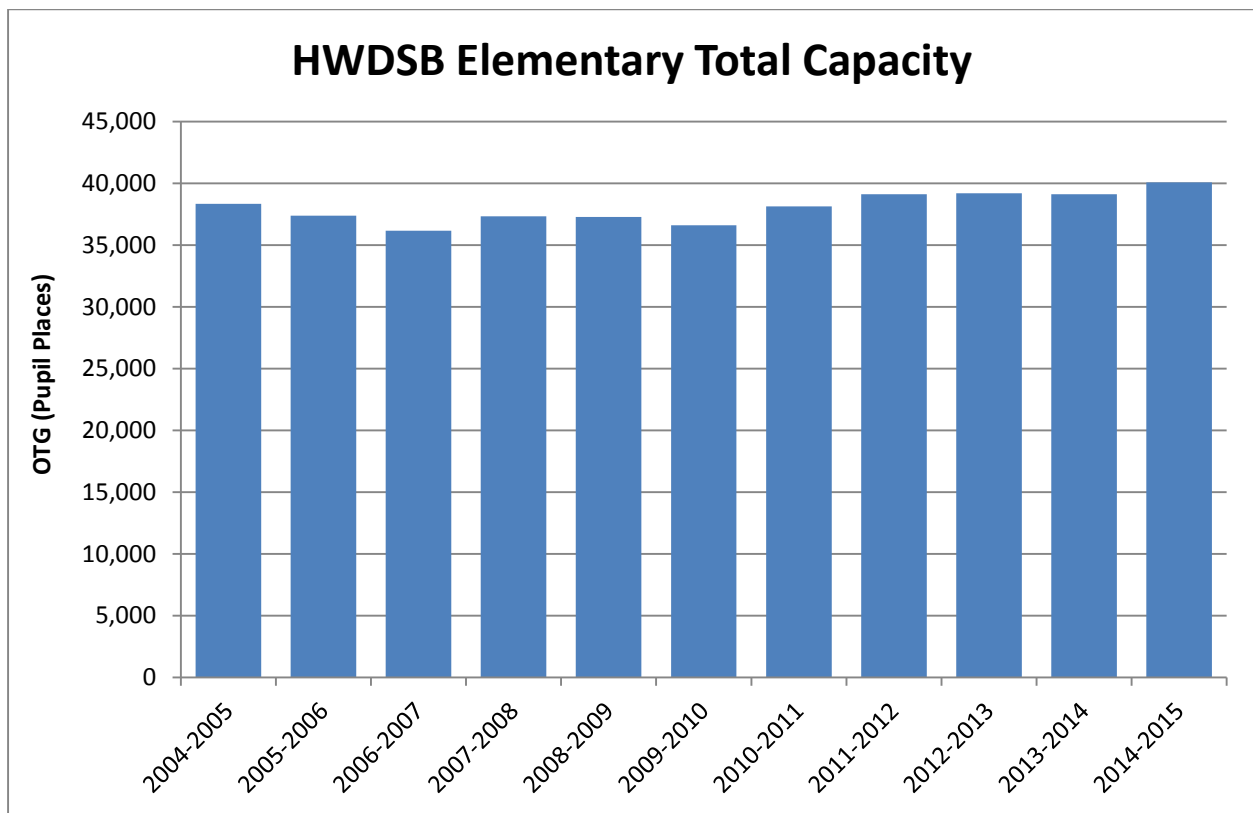


Figure 5: Elementary Total Capacity Chart

Since 2004, the Board’s total secondary panel capacity has remained stable at approximately 20,000 pupil places. The last year that HWDSB secondary enrolment counts closely matched this total capacity (20,000 pp) was in 2000 - approximately 19,500 students. Significant changes to secondary capacity took place in the following years: the opening of a new wing at Waterdown District High School in 2012 and the closure of Hill Park, Parkside and Parkview in 2014. Different types of classrooms have a different loading for the secondary panel.

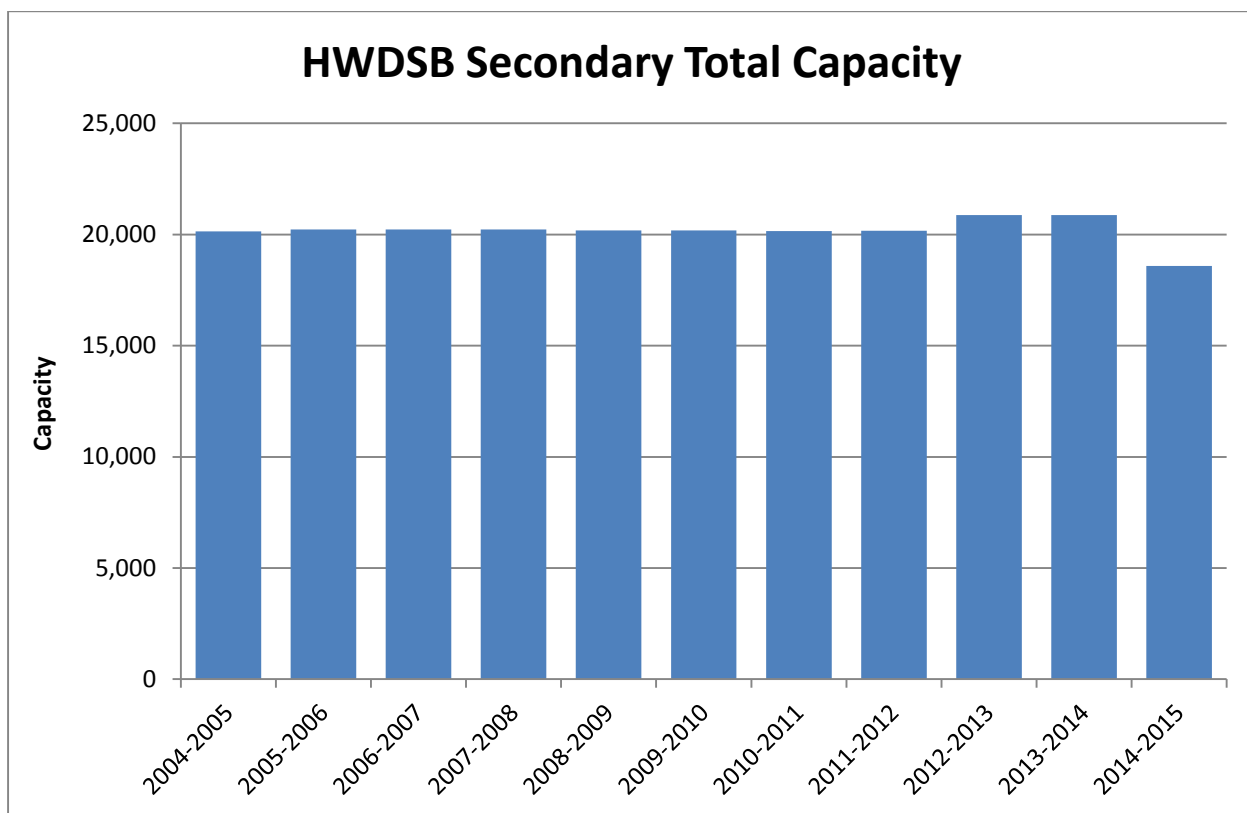


Figure 6: Secondary School Total Capacity Chart

Currently, the secondary enrolment is approximately 15,000 (ADE) students which equates to approximately 3,500 excess secondary pupil places. Hamilton-Wentworth District School board has approved the closure of Barton (currently the temporary site of Nora Frances Henderson Secondary), Delta, Mountain and Sir John A. Macdonald. To replace these schools, the Ministry of Education has approved the construction of Nora Frances Henderson Secondary School (Rymal Road East at Upper Sherman) and a New North Secondary school located at the former Scott Park Secondary School site. With these closures and new construction, the capacity of the secondary panel will be approximately 17,000 pp.

In the last 15 years, Hamilton-Wentworth District School Board has built 15 new elementary schools. The average capacity of these facilities is 655 pupil places. This is considerably larger than the average size of elementary schools built prior to 1998. Schools with ages between 16 and 30 averaged almost 200 less pupil places. Schools built between 31 to 45 years old were even smaller with an average OTG of 424. Schools built between 30 to 60 years ago have an even smaller average capacity. Figure 6 shows the average OTG of elementary schools in HWDSB’s inventory.

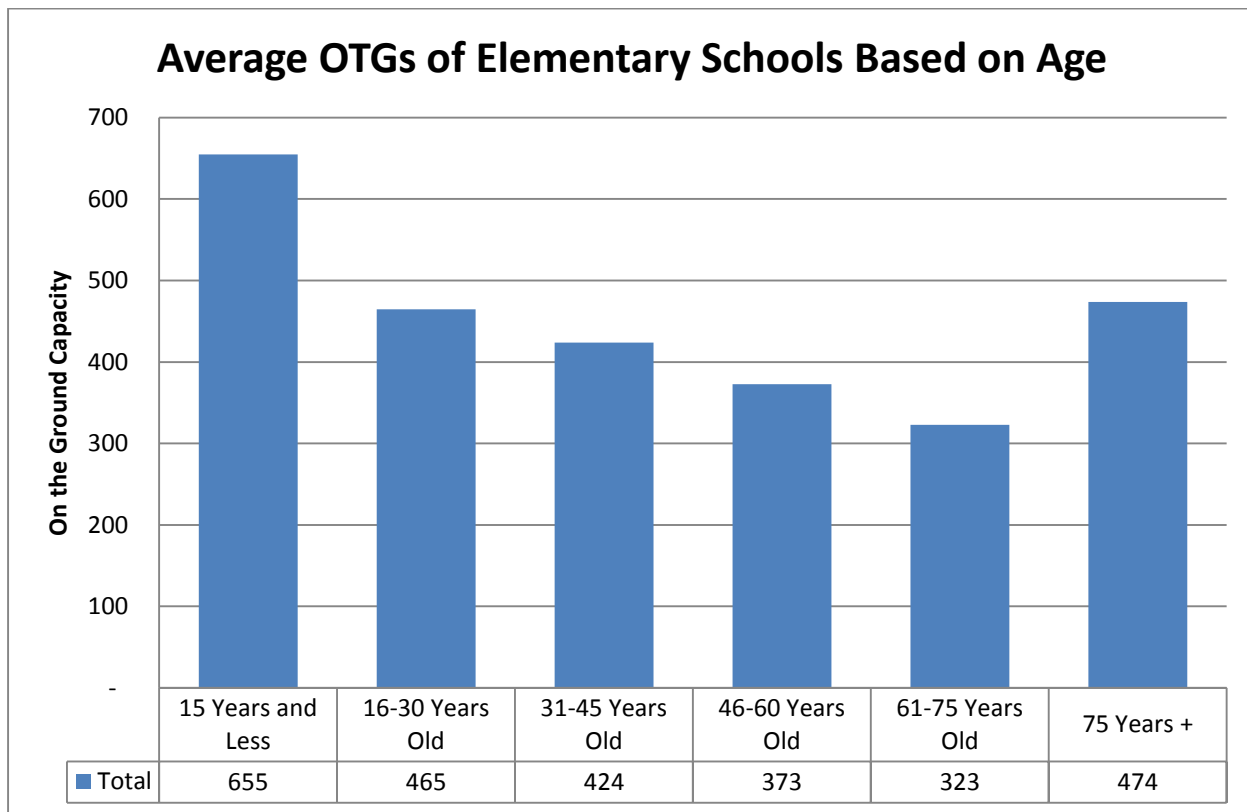


Figure 7: Average OTG of Elementary Schools by Age Chart

School Closures and Builds

Since 1998 (board amalgamation), HWDSB has closed 5 secondary schools and 32 elementary schools. While 32 elementary schools were closed, in this time six schools have been rebuilt and there have been nine new elementary schools. Through the accommodation review process, HWDSB has approved the closure of an additional three secondary schools and nine elementary schools in the next three school years. HWDSB is currently in the process of building two new secondary schools and a new elementary school. Figure 7 is a complete list of all schools closed, built and under construction.

#	Schools Closed since 1998	Closed
1	G.P. Vanier	1998
2	Allenby	2001
3	Scott Park	2001
4	Bennetto	2002
5	Fernwood Park (Shared site with Fernwood)	2003
6	Hampton Heights (Shared site with Hampton Heights)	2003
7	Lloyd George	2003
8	Lynden	2003
9	Parkwood	2003
10	Peace Memorial	2003
11	Ryckman's Corners	2003
12	Sheffield	2003
13	Sherwood Heights	2003
14	Fairfield	2004
15	Pleasant Valley	2004
16	Robert Land	2004
17	Tweedsmuir	2004
18	Burkholder Drive	2005
19	Grange	2005
20	Maple Lane	2005
21	Thornbrae	2005
22	Hillsdale (Shared site with old Hillcrest)	2006
23	Central Park	2007
24	Dundas District	2007
25	Seneca	2007
26	Vern Ames (Demolished 2008/Land sold)	2007
27	Gibson	2009
28	Stinson	2009
29	Sanford Ave	2010
30	Winona	2011
31	King George	2012
32	Bell-Stone	2014
33	Prince Philip	2014
34	Hill Park	2014
35	Parkside	2014
36	Parkview	2014
37	Barton	2014

#	Approved closures	Projected Closure
1	Cardinal Heights	2015
2	Eastmount Park	2015
3	Linden Park	2015
4	Roxborough Park	2015
5	Woodward	2015
6	Beverly Central	2016
7	Dr. John Seaton	2016
8	Greensville	2016
9	Sir John A Mcdonald	2017
10	Delta	2017
11	Mountain	2017

#	Schools Built since 1998	Opened
1	Allan Greenleaf	2000
2	Templemead	2003
3	Ancaster Meadow	2005
4	Gatestone	2005
5	Ray Lewis	2005
6	Cathy Wever	2006
7	Sir William Osler	2007
8	Bellmoore	2012
9	Winona	2012

#	Schools Rebuilt since 1998	Rebuilt
1	Hillcrest (Shared site with Hillsdale)	2006
2	Lawfield	2007
3	Prince of Wales	2009
4	Queen Victoria	2009
5	Dr. J Edgar Davey	2010
6	Guy Brown	2011

#	Approved New Builds	Projected Opening
1	New North Secondary	2017
2	Nora Frances Henderson Secondary	2017
3	Ancaster Tiffany Hills Elementary	2016
4	West Flamborough	2017

Figure 8: School Closures, Rebuilds and Builds since 1998

HWDSB Facility Condition Index

Facility condition assessments are an analysis of a building's systems and components. Systems include the architectural, mechanical, electrical and plumbing elements of a building. Each system has many components which are all inspected for deficiencies through the facility conditions assessment. Each component is assessed and remaining service life is identified. Also known as a lifecycle, the remaining service life identifies the estimated number of years the component will function in proper condition. By identifying the remaining service life of building components, the facility condition assessment can identify replacement timing and estimated costs for building components. Replacement costs represent the renewal needs. Five year renewal needs is the total cost of repairing or replacing all the components in a school which have five or fewer years in remaining service life.

Using the five-year renewal needs, a facility condition index (FCI) can be calculated. FCI is the ratio of 5-year renewal costs to the estimated replacement value of the school facility. To calculate the FCI, divide the total estimated five-year renewal needs by the estimated replacement value. FCI is represented as a percentage. The replacement value is the estimate dollar amount needed to replace a school of the same size, built with current Ministry of Education standards. A facility with a lower FCI will require less expenditure for remedial or renewal work relative to the facility's value.

School condition and the condition of learning environments is important when ensuring equity and safety for all students. HWDSB monitors facility condition through facility condition assessments completed by VFA Canada. VFA Canada has been tasked with assessing all the schools under the Ministry of Education in Ontario. Assessments have been underway since 2012 and all school assessments are projected to be completed by the end of 2015. Data is housed in the Total Capital Planning Solution (TCPS) system. TCPS is a database system where VFA Canada houses all facilities condition data for every school. Once initial assessments are complete it is the responsibility of the school board to update the facility condition database as work on renewal items is completed. Every five years, each school is reassessed by VFA Canada and the database is updated.

Facility condition assessments and FCI are both a valuable tool that assists boards in creating capital plans and assist in identifying facility needs. It is important to note that these assessments and the FCI are tools and only one factor in determining the facility condition. FCI does not account for items such as accessibility, asbestos abatement, program updates and safe schools initiatives. FCI is a tool that aides Facility Management staff in identifying major renewal needs and allows staff to monitor these items as they reach the end of their lifecycle.

The table below lists FCI values of each HWDSB school. The schools are identified in 4 categories – good, average, fair and poor. The chart breaks the schools into the four categories and gives a description of each

Section 3: Facility Condition

Condition Index (5 Year FCI)																																	
FCI Levels	HWDSB Schools																																
<p><u>Good (0-20%)</u></p> <p>Facilities will look clean and functional</p> <p>Limited and manageable component and equipment failure may occur</p> <p>Facilities will compete well for enrolment</p>	<table> <tr> <td>Allan A. Greenleaf</td> <td>Lawfield</td> </tr> <tr> <td>Ancaster Meadow</td> <td>Prince of Wales</td> </tr> <tr> <td>Balaclava</td> <td>Queen Mary</td> </tr> <tr> <td>Bellmoore</td> <td>Queen Victoria</td> </tr> <tr> <td>Dr. J Edgar Davey</td> <td>Ray Lewis</td> </tr> <tr> <td>Gatestone</td> <td>Sir Wilfrid Laurier</td> </tr> <tr> <td>Guy Brown</td> <td>Sir William Osler</td> </tr> <tr> <td>Hillcrest</td> <td>Winona</td> </tr> <tr> <td>Janet Lee</td> <td></td> </tr> </table>	Allan A. Greenleaf	Lawfield	Ancaster Meadow	Prince of Wales	Balaclava	Queen Mary	Bellmoore	Queen Victoria	Dr. J Edgar Davey	Ray Lewis	Gatestone	Sir Wilfrid Laurier	Guy Brown	Sir William Osler	Hillcrest	Winona	Janet Lee															
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<p><u>Average (21-40%)</u></p> <p>Facilities are beginning to show signs of wear.</p> <p>More frequent component and equipment failure may occur</p>	<table> <tr> <td>Bennetto</td> <td>Millgrove</td> </tr> <tr> <td>Beverly Central</td> <td>Mount Hope</td> </tr> <tr> <td>Central</td> <td>Nora Frances Henderson</td> </tr> <tr> <td>Chedoke</td> <td>Orchard Park</td> </tr> <tr> <td>Cootes Paradise</td> <td>Pauline Johnson</td> </tr> <tr> <td>Dalewood</td> <td>Queens Rangers</td> </tr> <tr> <td>Delta</td> <td>Ryerson</td> </tr> <tr> <td>Dr. John Seaton</td> <td>Saltfleet HS</td> </tr> <tr> <td>Dundas Valley Secondary School</td> <td>Sir Allan MacNab</td> </tr> <tr> <td>Flamborough Centre</td> <td>Sir Isaac Brock</td> </tr> <tr> <td>Franklin Road</td> <td>Sir John A Macdonald</td> </tr> <tr> <td>Gordon Price</td> <td>Spencer Valley</td> </tr> <tr> <td>Greensville</td> <td>Templemead</td> </tr> <tr> <td>Helen Detwiler</td> <td>Waterdown DHS</td> </tr> <tr> <td>Hess Street</td> <td>Westview</td> </tr> <tr> <td>Holbrook</td> <td>Westwood</td> </tr> </table>	Bennetto	Millgrove	Beverly Central	Mount Hope	Central	Nora Frances Henderson	Chedoke	Orchard Park	Cootes Paradise	Pauline Johnson	Dalewood	Queens Rangers	Delta	Ryerson	Dr. John Seaton	Saltfleet HS	Dundas Valley Secondary School	Sir Allan MacNab	Flamborough Centre	Sir Isaac Brock	Franklin Road	Sir John A Macdonald	Gordon Price	Spencer Valley	Greensville	Templemead	Helen Detwiler	Waterdown DHS	Hess Street	Westview	Holbrook	Westwood
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<p><u>Fair (41-64%)</u></p> <p>Facilities will look worn with apparent and increasing deterioration</p> <p>Potential frequent component and equipment failure may occur.</p> <p>The facility will be at a competitive disadvantage and enrolment could be impacted</p>	<p>A. M. Cunningham Ancaster High Billy Green Buchanan Park Collegiate Avenue Earl Kitchener Eastdale Fessenden George L. Armstrong Glen Brae Glendale Glenwood (Formerly Fairview) Green Acres Huntington Park James Macdonald Lake Avenue</p>	<p>Lincoln M. Alexander Lisgar Memorial (Stoney Creek) Mountain Secondary Mountain View Mountview Norwood Park Queensdale R A Riddell R. L. Hyslop Richard Beasley Ridgemount Rosedale Sir Winston Churchill SS Strathcona Tapleytown Viscount Montgomery</p>
<p><u>Poor (65% +)</u></p> <p>Facilities will look worn with Obvious deterioration</p> <p>Equipment failure in critical items more frequent. Occasional building shut down could occur. Management risk is high</p> <p>The facility will be at a competitive disadvantage and will be at a high risk of enrolment shortfall</p>	<p>Adelaide Hoodless Ancaster Senior C H Bray Cardinal Heights Cecil B. Stirling Dundana Dundas Central Ecole Elementaire Michaele Jean Elizabeth Bagshaw Glen Echo</p>	<p>Highview Mary Hopkins Memorial (Hamilton) Mount Albion Parkdale Rousseau Sherwood SS W. H. Ballard Westdale Westmount SS Yorkview</p>