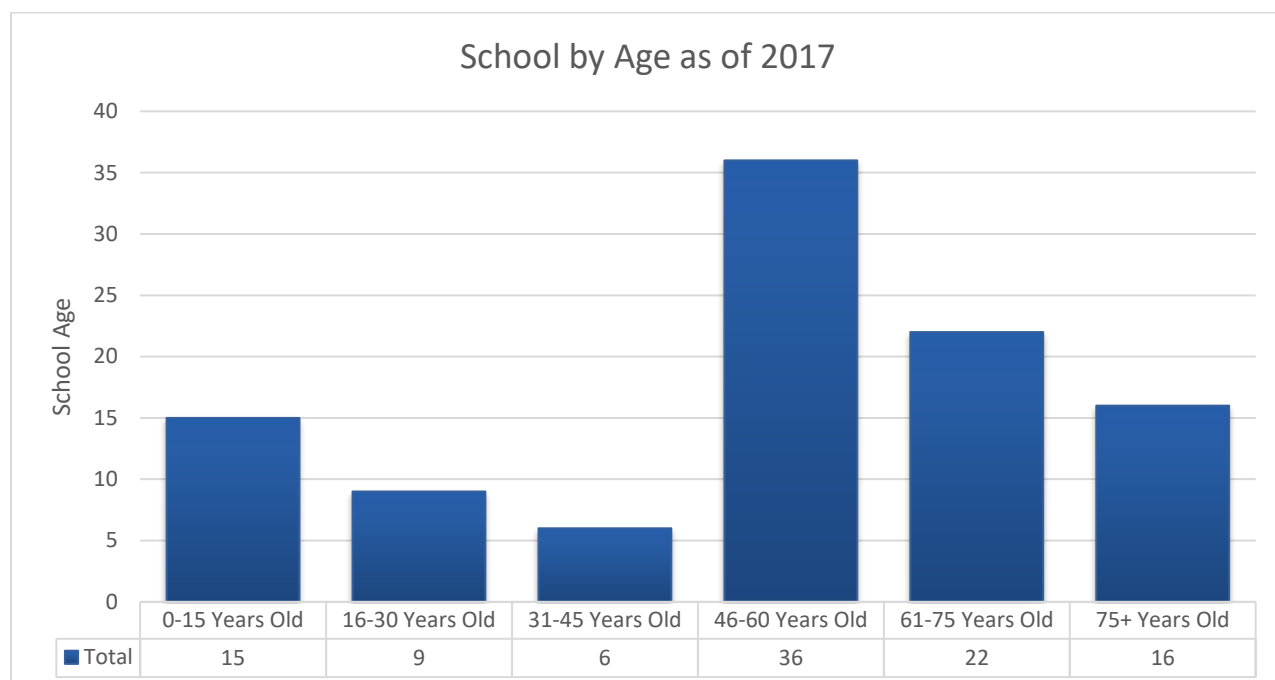


Section 1: Facilities at a Glance

Age of Facilities

There are currently 89 elementary schools and 15 secondary schools in operation at Hamilton-Wentworth District School Board. The schools range in age from less than 1 years old to 165 years old. Currently, the board has 15 schools that were built in the last 15 years, and 16 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 36 schools that are between the ages of 46 and 60, meaning they were built between 1957 and 1971 (the Baby Boom Era). The chart below depicts HWDSB school age.



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 number of students 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.

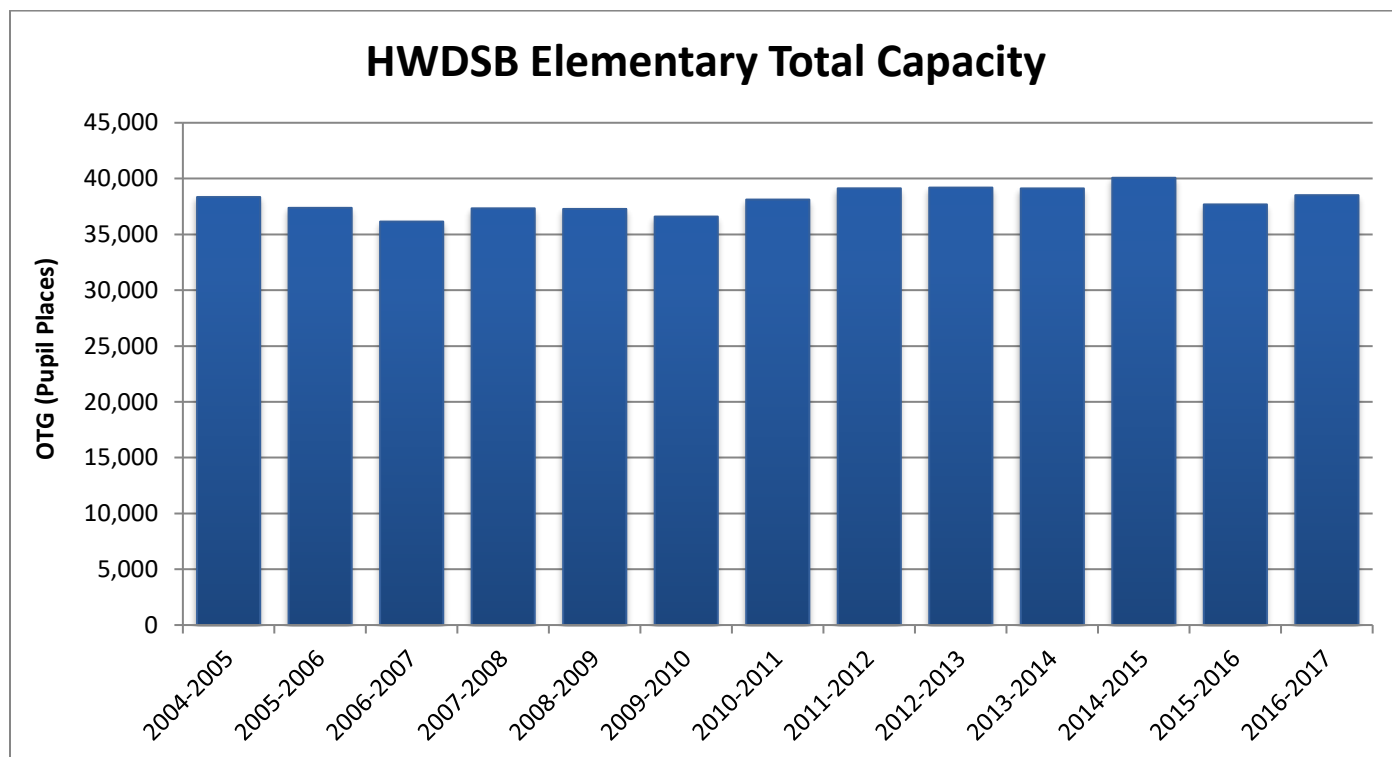
Instructional Space	Elementary Loading	Secondary Loading
Kindergarten	26	-
Classroom	23	21
Special Education	9	9
Resource Room	12	12

Section 1: Facilities at a Glance

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 entitled School Facilities Inventory System (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.

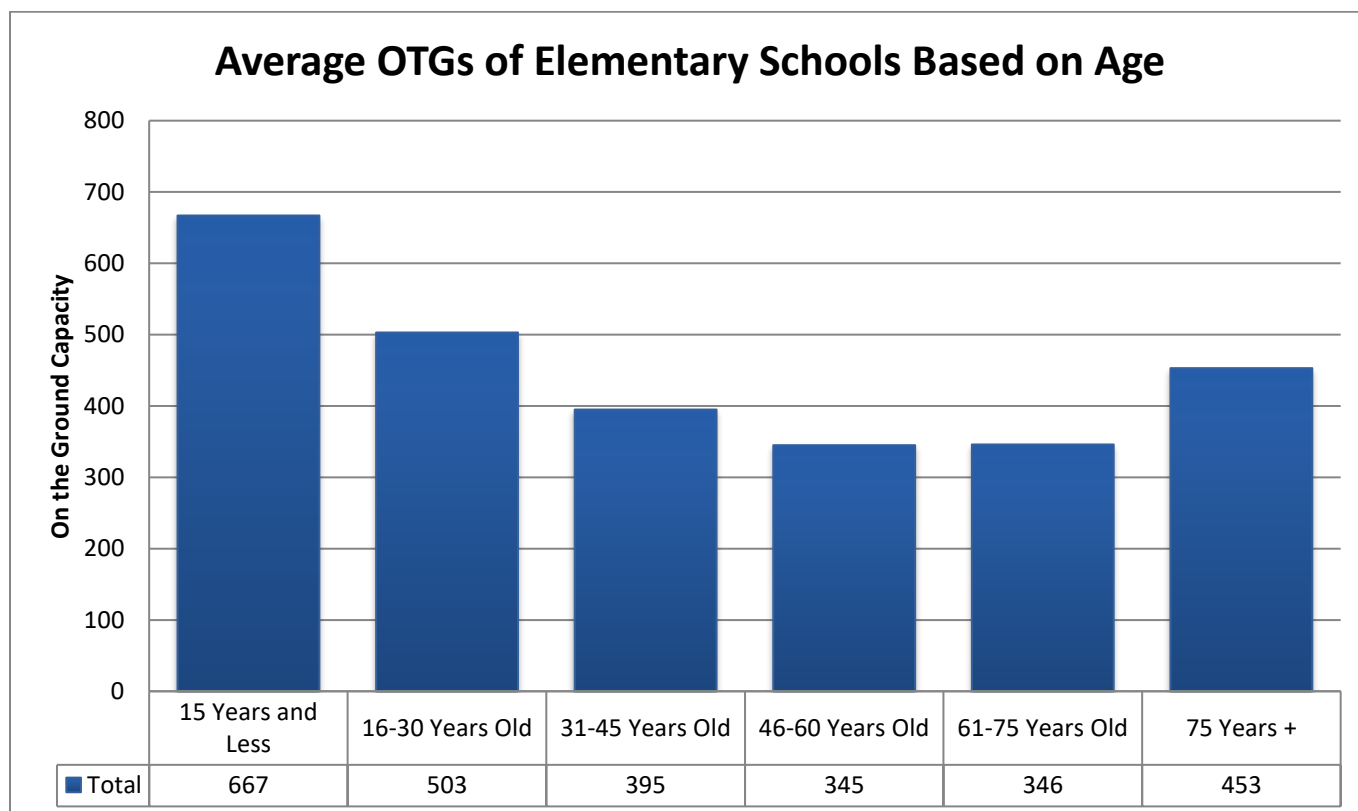
HWDSB's inventory of elementary schools has reduced from 103 in 2004 to 89 schools in 2017. As of 2017, the combined OTG of the elementary panel is just over 38,500 pupil places, while enrolment was approximately 35,128 students as of October 31, 2016. This equates to roughly 3,370 excess pupil places, down from 5,000 excess pupil places in 2014. Please see the chart below which depicts elementary capacity since 2004.



The Ministry of Education has approved the construction of four new elementary schools. Eastdale, Greenville and Beverly Community Centre site school are replacement schools approved through the accommodation reviews. Six schools will close with the construction of these facilities. The Ministry of Education approved the construction on the Summit Park site in Glanbrook/Upper Stoney Creek. The construction of Summit Park is considered a growth school. Upon completion of construction and closures of the above-mentioned schools, HWDSB's elementary capacity will increase slightly to just above 38,800.

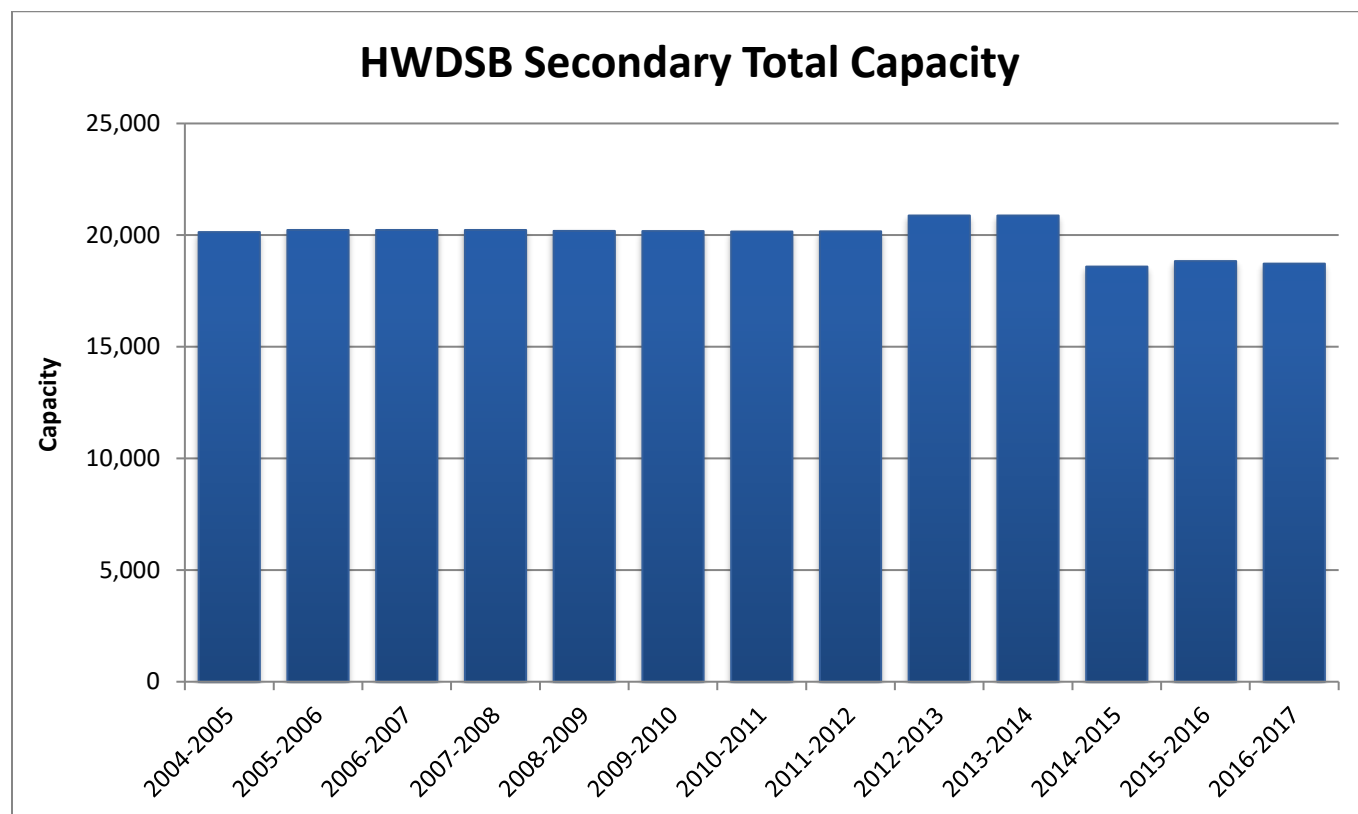
Section 1: Facilities at a Glance

In the last 15 years, Hamilton-Wentworth District School Board has built 15 new elementary schools. The average capacity of these facilities is 667 pupil places. This is considerably larger than the average size of elementary schools built prior to 2002. Schools with ages between 16 and 30 averaged almost 165 less pupil places at just over 500 pupil places. Schools built between 31 to 45 years old were even smaller with an average OTG of 395. Schools built between 45 to 60 years ago have an even smaller average capacity at 345 pupil places. The figure below shows the average OTG of elementary schools in HWDSB's inventory.



Section 1: Facilities at a Glance

From 2004 to 2012, the Board's total secondary panel capacity remained stable at approximately 20,000 pupil places. HWDSB secondary enrolment counts that last matched this total capacity (20,000 pp) was in 2000 - approximately 19,500 students. Significant changes to secondary capacity took place in 2012, 2014 and 2015. Construction of a new wing at Waterdown District High School in 2012 and the closures of Hill Park, Parkside and Parkview in 2014. In 2015, an addition was completed at Saltfleet Secondary School. Please see the chart below which depicts secondary capacity since 2004.



As of October 31, 2016, the secondary enrolment was approximately 14,423 (FTE) students which equates to approximately 4,300 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 16,600 pp.

Section 1: Facilities at a Glance

Facility Condition Index (FCI)

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 are 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 estimated 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.

$$\text{Facility Condition Index} = \frac{\text{5 Year Renewal Needs}}{\text{Building Replacement Value}}$$

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 with all school assessments completed by 2015. School are reassessed every 5 years. Assessment data is housed by VFA Canada. Once assessments are complete it is the responsibility of the school board to update the facility condition database based on completed capital and maintenance projects.

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 school 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 1: Facilities at a Glance

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>	<p>Allan A. Greenleaf Ancaster Meadow Bellmoore Cathy Wever Dr. J Edgar Davey Gatestone Guy Brown Hillcrest Janet Lee</p>	<p>Lawfield Lincoln M. Alexander Prince of Wales Queen Mary Queen Victoria Ray Lewis Sir William Osler Tiffany Hills Winona</p>
<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>	<p>A.M. Cunningham Adelaide Hoodless Ancaster High Balaclava Bennetto Billy Green Chedoke Cootes Paradise Franklin Road Gordon Price Helen Detwiler Hess Street James Macdonald Memorial Stoney Creek Millgrove</p>	<p>Mount Hope Norwood Park Orchard Park Queens Rangers Ryerson Saltfleet Sir Allan MacNab Sir Isaac Brock Sir John A. MacDonald Sir Wilfrid Laurier Sir Winston Churchill Strathcona Templemead Waterdown Westwood</p>

Section 1: Facilities at a Glance

FCI Levels	HWDSB Schools	
<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>Buchanan Park Cecil B. Stirling Central Colligate Avenue Dr. John Seaton Dundana Dundas Valley Earl Kitchener Eastdale Michaelle Jean Fessenden Flamborough Centre George L. Armstrong Glen Brae Glen Echo Glendale Glenwood Green Acres Greensville Holbrook</p>	<p>Huntington Park Lake Avenue Mary Hopkins Memorial Hamilton Mountain View Mountview Mountain Secondary Nora Frances Henderson Pauline Johnson Queensdale RA Riddell RL Hyslop Sherwood Spencer Valley Tapleystown Westdale Westview Yorkview</p>
<p><u>Poor (65%+)</u></p> <p>Facilities will look worn with obvious deterioration</p> <p>Enrolment 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>Ancaster Senior Beverly Central CH Bray Dalewood** Delta Dundas Central Elizabeth Bagshaw Highview Lisgar</p>	<p>Mount Albion Parkdale Richard Beasley Ridgemount** Rosedale Rousseau Viscount Montgomery WH Ballard Westmount</p>

** Note: Capital work at Dalewood and Ridgemount have not been taken into consideration for this analysis.