

Student Yields

HWDSB's student yield analysis for projected new residential development provides the actual student yields for a specified geography using the housing data from the Municipal Property Assessment Corporation (MPAC) and the Board's student data. The MPAC and student data are both geocoded (digitally referenced on a map) which allows for matching to be done on each individual property to determine the units that have HWDSB students. From this, yield factors are calculated based on dwelling types (single family homes, semidetached, townhomes, and apartments) to determine and become comprised within projected student enrolments.

Residential development yields will vary based on community and are calculated accordingly. The following graphic illustrates the current Board- wide average student yields for elementary and secondary – they represent a single-family yield and a townhome yield. As per the current Board-wide yield, 4 new single family homes would yield 1 HWDSB elementary aged student $(.24 \times 4)$ and approximately 6.5 townhome units for 1 student $(6.6 \times .15)$.

Elementary Yields

Secondary Yields



=.24 Students



=.15 Students



= .10 Students



= .05 Students

Student Apportionment

HWDSB's apportionment of students compared to our co-terminus Board is illustrated in the table below by elementary and secondary panel. HWDSB's elementary apportionment has been steady at approximately 65% - secondary approximately 61%. The secondary panel has declined slightly by 2.5% since 2011. Both Boards have been experiencing decline in the elementary panel for the past 5 years.

Elementary Apportionment

HWDSB Elementary Students						
2011/2012	2012/13	2013/14	2014/2015	2015/2016	Avg	
31,113	30,885	31,013	34,336	34,202	32,310	
64.8%	64.7%	64.8%	64.7%	64.8%	65%	

HWCDSB Elementary Students					
2011/2012	2012/13	2013/14	2014/2015	2015/2016	Avg
16,878	16,876	16,846	18,699	18,558	17,571
35.17%	35.33%	35.20%	35.26%	35.17%	35%

Secondary Apportionment

HWDSB Secondary Students						
2011/2012	2012/13	2013/14	2014/2015	2015/2016	Avg	
16,715	16,289	15,535	14,801	14,355	15,539	
62.0%	61.6%	61.2%	60.3%	59.5%	61%	

HWCDSB Secondary Students					
2011/2012	2012/13	2013/14	2014/2015	2015/2016	Avg
10,245	10,172	9,842	9,763	9,759	9,956
38.00%	38.44%	38.78%	39.75%	40.47%	39%

Source: Ministry of Education, School Board Funding for the 2016-2017 School Year. Enrolment is ADE



Enrolment Projection Methodology

The enrolment projection calculations are comprised of two main components - the historic school community and students generated by new residential development. Enrolment projection software (Paradigm STGI - SPS Plus) allows staff to analyze historical enrolment trends, examine yield rates (by dwelling type) of residential development and factor in this information when projecting enrolments. The software analyzes and summarizes the grade by grade, year by year, progression of student. Each school and community exhibits different trends or movements which are used to create retention rates for each grade at each school. The retention rates capture any gains or losses in enrolment that a school may experience as students move from one grade to another. Retention rate methodology is a common practice in Ontario School Boards.

New residential development forecasts allow planning staff the ability to estimate the number of students generated by new development. Planning staff apply historical student yields (by unit type) to municipally approved development forecasts to project the estimated numbers of students generated by housing units. The yields are broken down by housing types which include single-detached, semi-detached, townhome and apartment. Each community has its own unique yield. Historical yields are determined using Municipal Property Assessment Corporation (MPAC) data and historical student data. The MPAC data indicates the count and unit type of homes in the community and staff then compare the number of existing students living in the houses. By comparing the two sets of data, a student yield for new residential homes can be determined and applied to the residential forecast.

Student enrolments are revised annually to reflect current actual student counts, and calculation variables are reexamined for adjustments that may be required. Any approved Board decision such as school closures, program or boundary changes are annually revised and incorporated into the student enrolment projections. There are several other school specific assumptions captured in the projections as well. These assumptions can include programing (i.e. French Immersion), Board policy (i.e. Out of Catchment) or Ministry initiatives (i.e. full-day kindergarten).

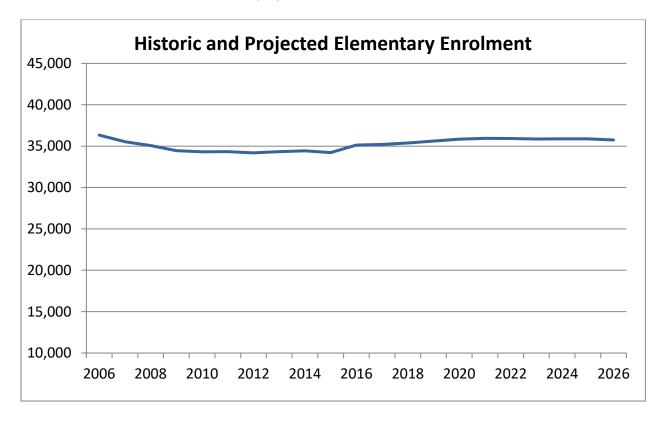
Enrolments projections are compared against historical enrolments, population forecasts, Census and birth data to validate that population information is trending in a similar manner.

Enrolment projections can be created for a variety of time frames; one year, five year or 10 year projections are typical time frames used by the Planning, Accommodation & Rentals Division. An added feature of the projection software also allows staff to create scenarios during accommodation and/or boundary reviews to show the effect of school closures or boundary changes on student enrolment.



Elementary

The following graph illustrates the elementary historical and projected enrolment of Hamilton-Wentworth District School Board from 2006 to 2026. Current and projected enrolments are as of October 31st, 2016.

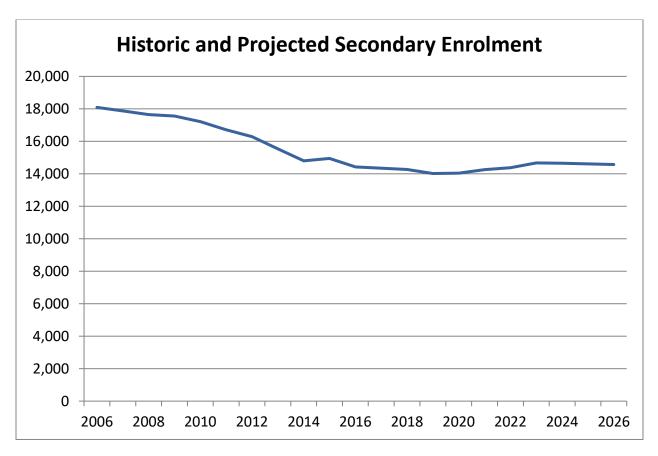


From 2006 to 2012 HWDSB's elementary enrolment rapidly declined from approximately 36,000 to 34,000. This decline was not only in Hamilton but was experienced everywhere across Ontario. Currently in 2016, elementary enrolment is approximately 35,100 students which is an increase from 2014 and 2015. HWDSB's elementary enrolment total is projected to remain stable over the next 10 years. Although the total enrolment is project to remain stable, individual school enrolments will fluctuate based on neighbourhood demographics or new residential development.



Secondary

The following graph demonstrates the secondary historic and projected average daily (ADE) enrolment of the Hamilton-Wentworth District School Board from 2006 to 2026. Current and projected enrolments are as of October 31st, 2016.



Since 2006, HWDSB secondary enrolment has decreased from over 18,000 students to approximately 14,400 students in 2016. Much like the elementary enrolment, the decline in enrolment is expected to stabilize within the next 5 years and can be expected to remain near 14,000 - 14,500 students. The stabilization of secondary enrolment can largely be attributed to the recent more consistent elementary enrolment.