

Cohort 2015 Four-Year Graduation Rates – State Results

The Massachusetts Department of Elementary and Secondary Education (ESE) calculates and reports graduation rates as part of overall efforts to improve educational outcomes for all students.

The 2015 four-year cohort graduation rate is calculated as follows:

$$\frac{\text{\# of students in cohort (denominator) who graduate in 4 years or less}}{\text{\# of 1st time entering 9th graders in 2011-12] - transfers out/deaths + transfers in}}$$

The 2015 four-year cohort graduation rate for Massachusetts public high schools increased by 1.2 percentage points to 87.3 percent from 86.1 percent for the 2014 cohort. This represents the ninth consecutive year of increase in the four-year rate (see below). All student subgroups showed increased four-year rates as compared to the 2014 cohort. The largest increase among major racial and ethnic groups was shown by the Hispanic and African-American subgroups, which increased by 3.0 and 2.6 percentage points respectively. There are, however, significant gaps in the graduation rates among subgroups. Among the race and ethnicity subgroup rates, there is a 20.2 percentage point difference between the highest and lowest, belonging to Asian and Hispanic students, though this gap was reduced by 2.7 percentage points as compared to the 2014 cohort.

Additional critical findings of the report include:

- The dropout rate for the 2015 cohort was 5.1 percent, the lowest since the ESE began calculating cohort dropout rates in 2006 and was 0.5 percentage points lower than the 2014 rate.
- 5.6 percent of the 2015 cohort is still enrolled in high school.
- Hispanic male students graduated at a rate that was 3.4 percentage points higher than the 2014 cohort
- Male students graduated at a rate that was 1.3 percentage points higher than the 2013 cohort.
- 71.6 percent of school districts and 63.2 percent of high schools had a higher graduation rate than the state average of 87.3 percent.

Table 1. Cohort Graduation Rates 2006-2015

	2006 Cohort	2007 Cohort	2008 Cohort	2009 Cohort	2010 Cohort	2011 Cohort	2012 Cohort	2013 Cohort	2014 Cohort	2015 Cohort
4-Year Graduation Rate	79.9%	80.9%	81.2%	81.5%	82.1%	83.4%	84.7%	85.0%	86.1%	87.3%
5-Year Graduation Rate	82.7%	84.0%	84.2%	84.0%	84.7%	86.3%	87.5%	87.7%	88.5%	N/A

The following tables and graphs further summarize the results for the 2015 cohort. The results are based on data submitted by school districts through the Department's Student Information Management System.

Table 2. Graduation Results for All Students and Student Subgroups¹

	2015 Cohort # ¹	Graduates		Non-Graduates ²				
		4-Year Rate	Difference from 2014	Still in School	Non-Grad Completer ³	HS Equiv.	Dropped Out	Expelled
All Students	72,474	87.3%	+1.2	5.6%	1.1%	0.9%	5.1%	0.1%
Female	35,662	90.0%	+1.0	4.1%	1.1%	0.8%	3.9%	0.0%
Male	36,812	84.7%	+1.3	7.1%	1.1%	0.8%	6.2%	0.1%
ELL ⁴	4,905	64.0%	+0.1	14.3%	7.1%	0.4%	14.1%	0.0%
Low Income/ED	31,301	78.2%	+2.7	8.9%	2.0%	1.3%	9.5%	0.0%
Students w/ Disabilities	13,840	69.9%	+0.8	16.6%	2.5%	1.1%	9.7%	0.0%
High Needs ⁵	38,034	78.5%	+2.0	9.8%	2.0%	1.3%	8.5%	0.0%
African American	6,468	77.5%	+2.6	11.3%	2.7%	0.8%	7.7%	0.1%
Asian	4,135	92.4%	+0.3	3.8%	1.1%	0.5%	2.2%	0.0%
Hispanic	11,040	72.2%	+3.0	10.4%	3.2%	1.3%	12.8%	0.0%
Multi-race, Non-Hisp.	1,555	85.9%	+1.0	6.0%	0.6%	1.4%	6.1%	0.0%
Native American	195	79.5%	+3.6	10.3%	1.5%	1.5%	6.7%	0.5%
Pacific Islander	80	83.8%	+4.5	6.3%	3.8%	1.3%	5.0%	0.0%
White	49,001	91.6%	+0.7	3.9%	0.4%	0.8%	3.2%	0.0%
Urban	23,571	76.1%	+2.3	9.9%	2.4%	1.2%	10.3%	0.0%

¹ Due to rounding, row percentages may not equal 100 percent.

² In the reporting of aggregate results, students are included in the first column (from left to right) for which they qualify. For example, students who dropped out or were expelled, but earned a GED, are included in the GED category. Students are only reported in one category.

³ Non-Grad Completer includes 1) students who earned a certificate of attainment, 2) students who met local graduation requirements but the district does not offer certificates of attainment, and 3) students with special needs who reached the maximum age (22) but did not graduate.

⁴ The English language learner, special education, and low income subgroups include all students that were reported in those categories at least once in high school. Students can be counted in more than one group.

⁵ High Needs subgroup includes students categorized as any of the following as of October 1, 2014: 1) Low Income/Economically Disadvantaged, 2) English language learner, 3) Students with disabilities, as well as students categorized as an English language learner during the prior two school years (2013-14 and/or 2012-13).

Table 3. Graduation Results for Race/Ethnicity Groups by Gender

	2015 Cohort #	Graduates		Non-Graduates				
		4-Year Rate	Difference from 2014	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
African American Female	3,197	82.3%	+3.1	8.6%	2.5%	0.6%	6.0%	0.0%
African American Male	3,271	72.8%	+2.0	13.9%	2.9%	0.9%	9.3%	0.2%
Asian Female	2,097	93.9%	+0.3	3.1%	1.0%	0.3%	1.6%	0.0%
Asian Male	2,038	90.9%	+0.3	4.5%	1.3%	0.7%	2.7%	0.0%
Hispanic Female	5,347	76.8%	+2.4	8.0%	3.6%	1.3%	10.3%	0.0%
Hispanic Male	5,693	67.8%	+3.4	12.7%	2.9%	1.3%	15.2%	0.1%
Multi-race Female	786	88.4%	-0.1	4.5%	0.9%	0.9%	5.3%	0.0%
Multi-race Male	769	83.2%	+1.9	7.7%	0.4%	1.8%	6.9%	0.0%
Native American Female	89	79.8%	+1.4	10.1%	0.0%	2.2%	7.9%	0.0%
Native American Male	106	79.2%	+5.3	10.4%	2.8%	0.9%	5.7%	0.9%
Pacific Islander Female	31	87.1%	-2.4	3.2%	3.2%	0.0%	6.5%	0.0%
Pacific Islander Male	49	81.6%	+10.2	8.2%	4.1%	2.0%	4.1%	0.0%
White Female	24,115	93.7%	+0.6	2.7%	0.4%	0.8%	2.4%	0.0%
White Male	24,886	89.6%	+0.7	5.1%	0.5%	0.9%	4.0%	0.0%

Table 4. Graduation Results for Students Receiving Special Education Services by Gender

	2015 Cohort #	Graduates		Non-Graduates				
		4-Year Rate	Difference from 2014	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
Students w/ Disabilities Female	5,100	72.7%	+1.1	14.9%	2.8%	1.0%	8.6%	0.0%
Students w/ Disabilities Male	8,740	68.3%	+0.7	17.6%	2.4%	1.2%	10.4%	0.1%

Table 5. Graduation Results for Low-Income/Economically Disadvantaged Students by Gender

	2015 Cohort #	Graduates		Non-Graduates				
		4-Year Rate	Difference from 2014	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
Low-Inc./ED Female	15,260	82.3%	+2.4	6.8%	2.1%	1.3%	7.5%	0.0%
Low-Inc./ED Male	16,041	74.3%	+2.8	10.9%	2.0%	1.4%	11.4%	0.1%

Table 6. Graduation Results for High Needs Students by Gender

	2015 Cohort #	Graduates		Non-Graduates				
		4-Year Rate	Difference from 2014	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
High Needs Female	17,749	82.3%	+2.0	7.6%	2.1%	1.3%	6.9%	0.0%
High Needs Male	20,285	75.2%	+2.0	11.7%	1.9%	1.3%	9.9%	0.1%

Table 7. Graduation Results for English Language Learner Students by Gender

	2015 Cohort #	Graduates		Non-Graduates				
		4-Year Rate	Difference from 2014	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
ELL Female	2,264	68.1%	+0.6	12.0%	8.2%	0.4%	11.3%	0.0%
ELL Male	2,641	60.5%	-0.2	16.2%	6.2%	0.4%	16.5%	0.0%
ELL in Original Cohort	2,723	70.4%	+2.0	10.8%	5.1%	0.4%	13.3%	0.0%
ELL Entered Cohort after 10/1/11	2,182	56.0%	-1.0	18.7%	9.6%	0.4%	15.2%	0.0%

Table 8. Graduation Results for Race/Ethnicity by English Language Learner Status

	2015 Cohort #	Graduates		Non-Graduates				
		4-Year Rate	Difference from 2014	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
African American ELL	1,049	67.7%	-0.4	14.7%	9.4%	0.1%	8.1%	0.0%
African American Non-ELL	5,419	79.4%	+3.1	10.6%	1.4%	0.9%	7.6%	0.1%
Asian ELL	794	81.4%	0.0	9.6%	3.9%	0.8%	4.4%	0.0%
Asian Non-ELL	3,341	95.1%	+0.3	2.4%	0.4%	0.4%	1.6%	0.0%
Hispanic ELL	2,580	55.0%	+0.3	16.7%	7.8%	0.3%	20.2%	0.0%
Hispanic Non-ELL	8,460	77.4%	+3.5	8.5%	1.8%	1.6%	10.6%	0.1%
Multi-race ELL	34	50.0%	-32.6	20.0%	16.7%	0.0%	13.3%	0.0%
Multi-race Non-ELL	1,521	85.7%	+1.9	6.0%	0.5%	1.6%	6.2%	0.1%
Native American ELL	5							
Native American Non-ELL	190	78.9%	+2.0	10.5%	1.6%	1.6%	6.8%	0.5%
Pacific-Islander ELL	7							
Pacific Islander Non-ELL	73	83.6%	+4.8	6.8%	4.1%	1.4%	4.1%	0.0%
White ELL	436	76.1%	-0.9	8.0%	4.1%	0.9%	10.8%	0.0%
White Non-ELL	48,565	91.8%	+0.7	3.9%	0.4%	0.8%	3.1%	0.0%

Table 9. Graduation Results for Non-Mobile and Mobile Students⁶

High Schools Attended	2015 Cohort #	Graduates		Non-Graduates				
		4-Year Rate	Difference from 2014	Still in School	Non-Grad Completer	HS Equiv.	Dropped Out	Expelled
One School	54,086	91.1%	+0.9	3.3%	1.1%	0.6%	3.8%	0.0%
Two Schools	15,121	80.9%	+1.4	9.6%	1.1%	1.3%	7.1%	0.0%
Three Schools	2,529	58.6%	+1.0	21.6%	1.6%	3.4%	14.7%	0.1%
Four or More Schools	738	34.4%	-3.4	37.7%	2.6%	3.4%	21.8%	0.1%

⁶ Mobility refers to the number of different high schools that the student attended within the Commonwealth. Students who never moved or moved in from another state or a private school and attended one public high school in Massachusetts are represented in the “One School” row.

Table 10. Competency Determination (CD) Status for Select Non-Graduate Groups

	Still in School			Dropped Out ⁷		
	Number	CD	No CD	Number	CD	No CD
All Students	4,070	55.9%	44.1%	1,991	63.1%	36.9%
Female	1,468	53.6%	46.4%	809	63.7%	36.3%
Male	2,602	57.1%	42.9%	1,182	62.8%	37.2%
English Language Learner	701	44.1%	55.9%	247	25.1%	74.9%
Low Income/Econ Dis.	2,801	56.7%	43.3%	1,522	59.5%	40.5%
Students w/ Disabilities	2,295	41.6%	58.4%	699	52.5%	47.5%
High Needs	3,710	53.1%	46.9%	1,680	59.9%	40.1%
African American	731	55.1%	44.9%	213	46.5%	53.5%
Asian	157	54.8%	45.2%	41	70.7%	29.3%
Hispanic	1,152	52.3%	47.7%	578	48.1%	51.9%
Multi-race, Non-Hisp.	94	58.5%	41.5%	59	69.5%	30.5%
Native American	20	75.0%	25.0%	4		
Pacific Islander	5			3		
White	1,911	58.0%	42.0%	1,093	73.6%	26.4%

Table 11. Distribution of Graduation Rates in the Aggregate for Districts⁸

2015 Four-Year Graduation Rate	Number of Districts	Percentage of Districts
< 50%	10	3.4%
50 - <60%	1	0.3%
60 - <70%	5	1.7%
70 - <80%	28	9.5%
80 - <85%	23	7.8%
85 - <90%	42	14.2%
90 - <95%	106	35.8%
95 - 100%	81	27.4%
Total	296	100.0%

⁷ Only includes cohort dropouts that attempted the 10th grade ELA and Mathematics test at least once. This represents a change from previous reports where all dropouts regardless of test status were included in the analysis.

⁸ Includes districts with at least six students in the cohort. District analyses include charter schools, regional school districts and vocational/technical high schools.

Table 12. Distribution of Graduation Rates in the Aggregate for Schools⁹

2015 Four-Year Graduation Rate	Number of Schools	Percentage of Schools
< 50%	45	11.6%
50 - <60%	8	2.1%
60 - <70%	13	3.3%
70 - <80%	24	6.2%
80 - <85%	29	7.5%
85 - <90%	51	13.6%
90 - <95%	102	13.1%
95 – 100%	117	26.2%
Total	389	100.0%

⁹ Includes schools with at least six students in the cohort