# Cohort 2016 Five-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 2016 five-year cohort graduation rate is calculated as follows:

# of students in cohort (denominator) who graduate in 5 years or less
[# of 1st time entering 9th graders in 2012-13] - transfers out/deaths + transfers in

The 2016 five-year cohort graduation rate for Massachusetts public high schools was 89.8 percent which represented an increase of 2.3 percentage points from the four-year rate for the 2016 cohort and is the highest five-year graduation rate since 2006. The 2016 five-year rate increased by 0.4 percentage points when compared to the 2015 cohort five-year rate of 89.4 percent.

Additional critical findings of the report include:

* African American males graduated at a rate that was 5.1 percentage points higher than their four-year rate.
* English language learners had a five-year rate that was 6.8 percentage points higher than their four-year rate.
* Students with disabilities had a five-year rate that was 4.7 percentage points higher than their four-year rate.
* Other special population subgroups including economically disadvantaged and high needs students also increased their four-year rates by 3.4 and 3.5 percentage points, respectively.

## Table 1. Cohort Graduation Rates 2006-2016

| **2006****Cohort** | **2007****Cohort** | **2008****Cohort** | **2009 Cohort** | **2010 Cohort** | **2011 Cohort** | **2012 Cohort** | **2013****Cohort** | **2014****Cohort** | **2015****Cohort** | **2016****Cohort** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **4-Yr Rate** | 79.9% | 80.9% | 81.2% | 81.5% | 82.1% | 83.4% | 84.7% | 85.0% | 86.1% | 87.3% | 87.5% |
| **5-Yr Rate** | 82.7% | 84.0% | 84.2% | 84.0% | 84.7% | 86.3% | 87.5% | 87.7% | 88.5% | 89.4% | 89.8% |

The following tables further summarize the five-year results for the 2016 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 Subgroups[[1]](#footnote-1)

|  |  | **Graduates** | Non-Graduates[[2]](#footnote-2) |
| --- | --- | --- | --- |
|  | 2016Cohort #[[3]](#footnote-3) | 5-Year Rate | 2016 4-Yr Difference | Still in School | Non-Grad Completer[[4]](#footnote-4) | HSEquiv. | Dropped Out | Expelled |
| All Students | 74,045 | 89.8% | +2.3 | 2.0% | 1.9% | 1.1% | 5.2% | 0.0% |
| Female | 36,350 | 92.0% | +1.8 | 1.5% | 1.7% | 0.9% | 4.0% | 0.0% |
| Male | 37,695 | 87.8% | +2.8 | 2.5% | 2.1% | 1.2% | 6.4% | 0.0% |
| ELL[[5]](#footnote-5) | 5,254 | 70.9% | +6.8 | 3.2% | 10.0% | 0.4% | 15.4% | 0.0% |
| Low Income/ED | 32,694 | 82.1% | +3.7 | 3.2% | 3.4% | 1.8% | 9.5% | 0.0% |
| Students w/ Disabilities | 14,361 | 76.5% | +4.7 | 8.2% | 4.4% | 1.4% | 9.5% | 0.0% |
| High Needs[[6]](#footnote-6) | 39,620 | 82.9% | +3.8 | 3.6% | 3.3% | 1.6% | 7.6% | 0.0% |
| African American | 6,826 | 83.4% | +4.5 | 3.8% | 4.2% | 1.0% | 8.4% | 0.1% |
| Asian | 4,236 | 94.8% | +1.9 | 1.3% | 1.6% | 0.5% | 1.9% | 0.0% |
| Hispanic | 11,675 | 76.8% | +4.1 | 3.1% | 5.3% | 1.5% | 13.3% | 0.0% |
| Multi-race, Non-Hisp. | 1,639 | 87.4% | +3.1 | 2.0% | 2.2% | 2.6% | 5.7% | 0.1% |
| Native American | 185 | 86.0% | +1.1 | 1.1% | 2.7% | 1.1% | 9.1% | 0.0% |
| Pacific Islander | 64 | 89.1% | +0.0 | 3.1% | 1.6% | 0.0% | 6.3% | 0.0% |
| White | 49,420 | 93.5% | +1.6 | 1.5% | 0.8% | 0.9% | 3.2% | 0.0% |
| Urban | 24,183 | 80.4% | +3.9 | 3.4% | 4.2% | 1.6% | 10.4% | 0.0% |

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

|  |  | **Graduates** | Non-Graduates |
| --- | --- | --- | --- |
|  | 2016Cohort # | 5-Year Rate | 2016 4-Yr Difference | Still in School | Non-Grad Completer | HSEquiv. | Dropped Out | Expelled |
| African American Female | 3,411 | 86.1% | +4.0 | 3.0% | 3.8% | 0.9% | 6.1% | 0.0% |
| African American Male | 3,415 | 80.8% | +5.1 | 4.5% | 4.5% | 1.1% | 9.1% | 0.0% |
| Asian Female | 2,109 | 95.2% | +1.8 | 0.7% | 2.0% | 0.3% | 1.7% | 0.0% |
| Asian Male | 2,127 | 94.4% | +2.4 | 1.8% | 1.1% | 0.7% | 2.1% | 0.0% |
| Hispanic Female | 5,556 | 81.3% | +3.4 | 2.4% | 4.9% | 1.5% | 9.9% | 0.0% |
| Hispanic Male | 6,119 | 72.7% | +4.6 | 3.7% | 5.7% | 1.5% | 16.4% | 0.1% |
| Multi-race Female | 846 | 89.8% | +2.2 | 1.7% | 1.5% | 2.5% | 4.5% | 0.0% |
| Multi-race Male | 793 | 84.9% | +4.1 | 2.4% | 2.9% | 2.6% | 7.0% | 0.1% |
| Native American Female | 87 | 89.7% | +0.0 | 1.1% | 1.1% | 2.3% | 5.7% | 0.0% |
| Native American Male | 98 | 82.8% | +2.2 | 1.0% | 4.0% | 0.0% | 12.1% | 0.0% |
| Pacific Islander Female | 37 | 94.6% | +0.0 | 2.7% | 0.0% | 0.0% | 2.7% | 0.0% |
| Pacific IslanderMale | 27 | 81.5% | +0.0 | 3.7% | 3.7% | 0.0% | 11.1% | 0.0% |
| White Female | 24,304 | 95.0% | +1.1 | 1.1% | 0.6% | 0.8% | 2.5% | 0.0% |
| White Male | 25,116 | 92.0% | +2.0 | 2.0% | 1.0% | 1.1% | 3.9% | 0.0% |

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

|  |  | **Graduates** | Non-Graduates |
| --- | --- | --- | --- |
|  | 2016Cohort # | 5-Year Rate | 2016 4-Yr Difference | Still in School | Non-Grad Completer | HSEquiv. | Dropped Out | Expelled |
| Students w/ Disabilities Female | 5,360 | 78.6% | +4.0 | 7.5% | 4.4% | 1.4% | 8.2% | 0.0% |
| Students w/ Disabilities Male | 9,001 | 75.3% | +5.2 | 8.6% | 4.5% | 1.3% | 10.3% | 0.0% |

## Table 5. Graduation Results for Low-Income Students by Gender

|  |  | **Graduates** | Non-Graduates |
| --- | --- | --- | --- |
|  | 2016Cohort # | 5-Year Rate | 2016 4-Yr Difference | Still in School | Non-Grad Completer | HSEquiv. | Dropped Out | Expelled |
| Low-Inc./ED Female | 15,893 | 85.3% | +3.0 | 2.5% | 3.1% | 1.6% | 7.5% | 0.0% |
| Low-Inc./ED Male | 16,801 | 79.0% | +4.3 | 4.0% | 3.7% | 1.9% | 11.4% | 0.0% |

## Table 6. Graduation Results for High Needs Students

|  |  | **Graduates** | Non-Graduates |
| --- | --- | --- | --- |
|  | 2016Cohort # | 5-Year Rate | 2016 4-Yr Difference | Still in School | Non-Grad Completer | HSEquiv. | Dropped Out | Expelled |
| High Needs Female | 18,464 | 85.7% | +3.2 | 2.7% | 3.1% | 1.5% | 6.9% | 0.0% |
| High Needs Male | 21,156 | 80.3% | +4.2 | 4.3% | 3.5% | 1.7% | 10.1% | 0.0% |

## Table 7. Graduation Results for English Language Learner Students

|  |  | **Graduates** | Non-Graduates |
| --- | --- | --- | --- |
|  | 2016Cohort # | 5-Year Rate | 2016 4-Yr Difference | Still in School | Non-Grad Completer | HSEquiv. | Dropped Out | Expelled |
| ELLFemale | 2,408 | 74.7% | +6.8 | 2.7% | 10.4% | 0.4% | 11.9% | 0.0% |
| ELLMale | 2,846 | 67.7% | +6.9 | 3.7% | 9.7% | 0.5% | 18.4% | 0.1% |
| ELL in Original Cohort | 3,112 | 74.0% | +4.5 | 3.9% | 7.0% | 0.7% | 14.4% | 0.1% |
| ELL Entered Cohort after 10/1/12 | 2,142 | 66.3% | +9.1 | 2.2% | 14.4% | 0.1% | 17.0% | 0.0% |

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

|  |  | **Graduates** | Non-Graduates |
| --- | --- | --- | --- |
|  | 2016Cohort # | 5-Year Rate | 2016 4-Yr Difference | Still in School | Non-Grad Completer | HSEquiv. | Dropped Out | Expelled |
| African American ELL | 1,147 | 76.8% | +7.8 | 2.9% | 11.3% | 0.3% | 8.7% | 0.0% |
| African American Non-ELL | 5,679 | 84.8% | +3.9 | 4.0% | 2.7% | 1.2% | 7.4% | 0.1% |
| Asian ELL | 704 | 86.8% | +7.3 | 2.6% | 6.1% | 0.3% | 4.3% | 0.0% |
| Asian Non-ELL | 3,532 | 96.4% | +1.1 | 1.0% | 0.7% | 0.5% | 1.4% | 0.0% |
| Hispanic ELL | 2,864 | 62.9% | +6.5 | 3.6% | 11.0% | 0.4% | 22.1% | 0.1% |
| Hispanic Non-ELL | 8,811 | 81.4% | +4.3 | 2.9% | 3.4% | 1.9% | 10.4% | 0.0% |
| Multi-race ELL | 42 | 83.3% | +0.0 | 2.4% | 9.5% | 0.0% | 4.8% | 0.0% |
| Multi-race Non-ELL | 1,597 | 87.6% | +3.3 | 2.0% | 2.0% | 2.6% | 5.8% | 0.0% |
| Native American ELL | 5 |  |  |  |  |  |  |  |
| Native American Non-ELL | 180 | 86.2% | +1.2 | 1.1% | 2.2% | 1.1% | 9.4% | 0.5% |
| Pacific-Islander ELL | 3 |  |  |  |  |  |  |  |
| Pacific Islander Non-ELL | 61 | 90.2% | +0.0 | 3.3% | 1.6% | 0.0% | 4.9% | 0.0% |
| White ELL | 489 | 80.3% | +6.9 | 2.4% | 6.9% | 1.4% | 8.9% | 0.0% |
| White Non-ELL | 48,931 | 93.6% | +1.5 | 1.5% | 0.7% | 0.9% | 3.2% | 0.0% |

## Table 9. Graduation Results for Non-Mobile and Mobile Students

|  |  | **Graduates** | Non-Graduates |
| --- | --- | --- | --- |
| High Schools Attended | 2016Cohort # | 5-Year Rate | 2016 4-Yr Difference | Still in School | Non-Grad Completer | HSEquiv. | Dropped Out | Expelled |
| One School | 54,086 | 92.4% | +1.3 | 1.3% | 1.5% | 0.8% | 3.9% | 0.0% |
| Two Schools | 15,121 | 84.5% | +3.6 | 3.4% | 2.7% | 1.6% | 7.7% | 0.0% |
| ThreeSchools | 2,529 | 66.5% | +7.9 | 7.9% | 5.0% | 4.4% | 16.1% | 0.1% |
| Four or More Schools | 738 | 47.2% | +12.8 | 12.9% | 9.4% | 4.6% | 25.8% | 0.1% |

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

|  | **Still in School**  | **Dropped Out** |
| --- | --- | --- |
|  | Number | CD | No CD | Number | CD | No CD |
| All Students | 1,542 | 32.0% | 68.0% | 2,303 | 65.1% | 34.9% |
| Female | 559 | 32.2% | 67.8% | 909 | 65.6% | 34.4% |
| Male | 983 | 31.8% | 68.2% | 1,394 | 64.8% | 35.2% |
| English Language Learner | 204 | 22.5% | 77.5% | 293 | 29.0% | 71.0% |
| Low Income/Econ Dis. | 979 | 30.4% | 60.6% | 1,772 | 62.0% | 38.0% |
| Students w/Disabilities | 1,177 | 20.4% | 79.6% | 824 | 55.1% | 44.9% |
| High Needs | 1,484 | 30.1% | 69.9% | 1,962 | 62.1% | 37.9% |
| African American | 250 | 39.2% | 60.8% | 272 | 51.5% | 48.5% |
| Asian | 57 | 31.6% | 68.4% | 46 | 69.6% | 30.4% |
| Hispanic | 400 | 36.2% | 63.7% | 685 | 52.0% | 48.0% |
| Multi-race, Non-Hisp. | 30 | 30.0% | 70.0% | 70 | 72.9% | 27.1% |
| Native American | 5 |  |  | 5 |  |  |
| Pacific Islander | 2 |  |  | 4 |  |  |
| White | 798 | 27.4% | 72.6% | 1,220 | 74.8% | 25.2% |

## Table 11. Distribution of Graduation Rates in the Aggregate for Districts[[7]](#footnote-7)

| **2016 Five-Year****Graduation Rate** | **Number of Districts** | **Percentage of Districts** |
| --- | --- | --- |
| < 50% | 9 | 3.0% |
| 50 - <60% | 1 | 0.3% |
| 60 - <70% | 5 | 1.7% |
| 70 - <80% | 12 | 4.1% |
| 80 - <85% | 22 | 7.4% |
| 85 - <90% | 37 | 12.5% |
| 90 - <95% | 88 | 29.7% |
| 95 – 100% | 122 | 41.2% |
| Total | 296 | 100.0% |

## Table 12. Distribution of Graduation Rates in the Aggregate for Schools[[8]](#footnote-8)

| **2016 Five-Year****Graduation Rate** | **Number of Schools** | **Percentage of Schools** |
| --- | --- | --- |
| < 50% | 30 | 7.9% |
| 50 - <60% | 9 | 2.4% |
| 60 - <70% | 12 | 3.1% |
| 70 - <80% | 16 | 4.2% |
| 80 - <85% | 21 | 5.5% |
| 85 - <90% | 47 | 12.3% |
| 90 - <95% | 94 | 24.6% |
| 95 – 100% | 153 | 40.1% |
| Total | 382 | 100.0% |

1. Due to rounding, row percentages may not equal 100 percent. [↑](#footnote-ref-1)
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. [↑](#footnote-ref-2)
3. The cohort count is as of the end of 2015-16 school year. The status (e.g. graduate, enrolled) is updated as of October 1, 2014. [↑](#footnote-ref-3)
4. 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. [↑](#footnote-ref-4)
5. The limited English proficient, 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. [↑](#footnote-ref-5)
6. High Needs subgroup includes students categorized as any of the following as of October 1, 2016:1) Low Income, 2) Limited English Proficient, 3) Students with Disabilities, as well as students categorized as Limited English Proficient during the prior two school years (2012-13 and/or 2013-14). [↑](#footnote-ref-6)
7. Includes districts with at least six students in the cohort. District analyses include charter schools, regional school districts and vocational/technical high schools. [↑](#footnote-ref-7)
8. Includes schools with at least six students in the cohort [↑](#footnote-ref-8)