

The Condition of College & Career Readiness 2018

Montana Key Findings

Performance

- In the 2018 Montana graduating class, 9,731 graduates (100 percent) took the ACT test with a Composite score average of 20.0. This compares to 9,611 (100 percent) with an average of 20.5 in 2014. Nationally, 55% of 2018 graduates took the ACT with an average Composite score of 20.8.
 - ~ There were 551 American Indian graduates from Montana who took the ACT (6 percent) with an average Composite score of 15.5. This compares to 582 (6 percent) with an average of 16.0, and 424 (4 percent) with an average of 15.9, for the 2017 and 2014 graduating classes, respectively.
 - ~ There were 7,310 White graduates from Montana who took the ACT (75 percent) with an average Composite score of 20.4. This compares to 7,428 (75 percent) with an average of 20.8, and 7,468 (78 percent) with an average of 20.9, for the 2017 and 2014 graduating classes, respectively.
 - ~ There were 555 Hispanic graduates from Montana who took the ACT (6 percent) with an average Composite score of 18.4. This compares to 524 (5 percent) with an average of 18.7, and 461 (5 percent) with an average of 18.8, for the 2017 and 2014 graduating classes, respectively.
- The 2018 Montana graduating class average English score was 18.7. This compares to 19.0 and 19.3 in 2017 and 2014, respectively.
- The 2018 Montana graduating class average math score was 19.9. This compares to 20.2 and 20.5 in 2017 and 2014, respectively.
- The 2018 Montana graduating class average reading score was 20.7. This compares to 21.0 and 21.1 in 2017 and 2014, respectively.
- The 2018 Montana graduating class average science score was 20.0. This compares to 20.5 and 20.4 in 2017 and 2014, respectively.
- In 2018, 21 percent of Montana graduates met all four ACT College Readiness Benchmarks. This compares to 22 and 23 percent of 2017 and 2014 graduates, respectively.
 - ~ In 2018, 39 percent of Montana graduates met zero ACT College Readiness Benchmarks. This compares to 36 and 34 percent of 2017 and 2014 graduates, respectively.
 - ~ In 2018, 52 percent of Montana graduates met the ACT English College Readiness Benchmark. This compares to 55 and 60 percent of 2017 and 2014 graduates, respectively.
 - ~ In 2018, 35 percent of Montana graduates met the ACT Math College Readiness Benchmark. This compares to 37 and 39 percent of 2017 and 2014 graduates, respectively.
 - 2018 Montana graduates taking more advanced math coursework demonstrated markedly higher average math scores than those who did not. In fact, 47 percent of Montana 2018 graduates taking three or more years of math met the ACT Math College Readiness Benchmark. This compares to 7 percent of students taking less than three years of math meeting the benchmark.
 - ~ In 2018, 41 percent of Montana graduates met the ACT Reading College Readiness Benchmark. This compares to 44 and 44 percent of 2017 and 2014 graduates, respectively.

- ~ In 2018, 32 percent of Montana graduates met the ACT Science College Readiness Benchmark. This compares to 33 and 33 percent of 2017 and 2014 graduates, respectively.
 - 2018 Montana graduates taking more advanced science coursework demonstrated markedly higher average science scores than those who did not. In fact, 48 percent of Montana 2018 graduates taking three or more years of science met the ACT Science College Readiness Benchmark. This compares to 17 percent of students taking less than three years of science meeting the benchmark.
- In 2018, 3,187 (33 percent) of Montana graduates met three or four ACT College Readiness Benchmarks. This compares to 3,458 and 3,465 (35 and 36 percent) out of 2017 and 2014 graduates, respectively. For reference, the national percentage of 2018 graduates meeting three or four benchmarks was 38%.
- In 2018, 7 percent of Montana graduates took the ACT with extended time. This compares to 6 and 4 percent of 2017 and 2014 graduates, respectively.
- 44 percent of 2018 Montana graduates were Proficient or Above Proficient in understanding complex texts.

STEM

- In 2018, 2,340 Montana graduates (24 percent) indicated having an interest in STEM majors and/or careers.
 - ~ Nationally, 45 percent of graduates indicated having an interest in STEM.
- In 2018, 1,674 Montana graduates (17 percent) indicated taking physics. This compares to 18 and 33 percent for the 2017 and 2014 graduating classes, respectively.
- 2018 graduates taking physics had an average science score of 22.8, compared to 19.8 for students not taking physics.
 - ~ 53 percent of 2018 Montana graduates taking physics met the ACT Science College Readiness Benchmark, compared to 30 for students not taking physics.
- In 2018, 3,877 Montana graduates (40 percent) indicated taking three or more years of math. This compares to 42 and 78 percent for 2017 and 2014 graduating classes, respectively.
 - ~ 2018 graduates taking three or more years of math had an average math score of 21.3, compared to 16.4 for students taking less than three years of math.
 - ~ 47 percent of 2018 graduates taking three or more years of math met the ACT Math College Readiness Benchmark, compared to 7 percent for students taking less than three years of math.

Career Readiness

- In 2018, 1,826 Montana graduates (19 percent) were likely to attain the Gold ACT WorkKeys® National Career Readiness Certificate® or higher based upon ACT Composite score, compared to 499,653 (26 percent) nationally.
- In 2018, 7,006 Montana graduates (72 percent) were likely to attain the Silver NCRC® or higher based upon ACT Composite score, compared to 1,393,517 (73 percent) nationally.
 - ~ The ACT Composite scores associated with a 50% chance of earning each NCRC level or higher are: 13 for Bronze, 17 for Silver, 25 for Gold, and 35 for Platinum. Based on those cut scores, students who earned an ACT Composite score of less than 13 would be classified as “Needs Improvement,” 13 to 16 as “Bronze,” 17 to 24 as “Silver,” and 25 or above as “Gold or Higher.”

Impact

- Based on the actual test volume and ACT score distributions of 2018 ACT-tested Montana high school graduates, ACT research estimates that an increase of 0.1 in state average ACT Composite score for the 2018 graduating class would result in:
 - ~ 24 more students enrolling in college.
 - ~ 27 more students persisting to year two.
 - ~ 22 fewer students needing remedial English.
 - ~ 34 fewer students needing remedial math.
 - ~ 29 more students persisting to year four.
 - ~ 31 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

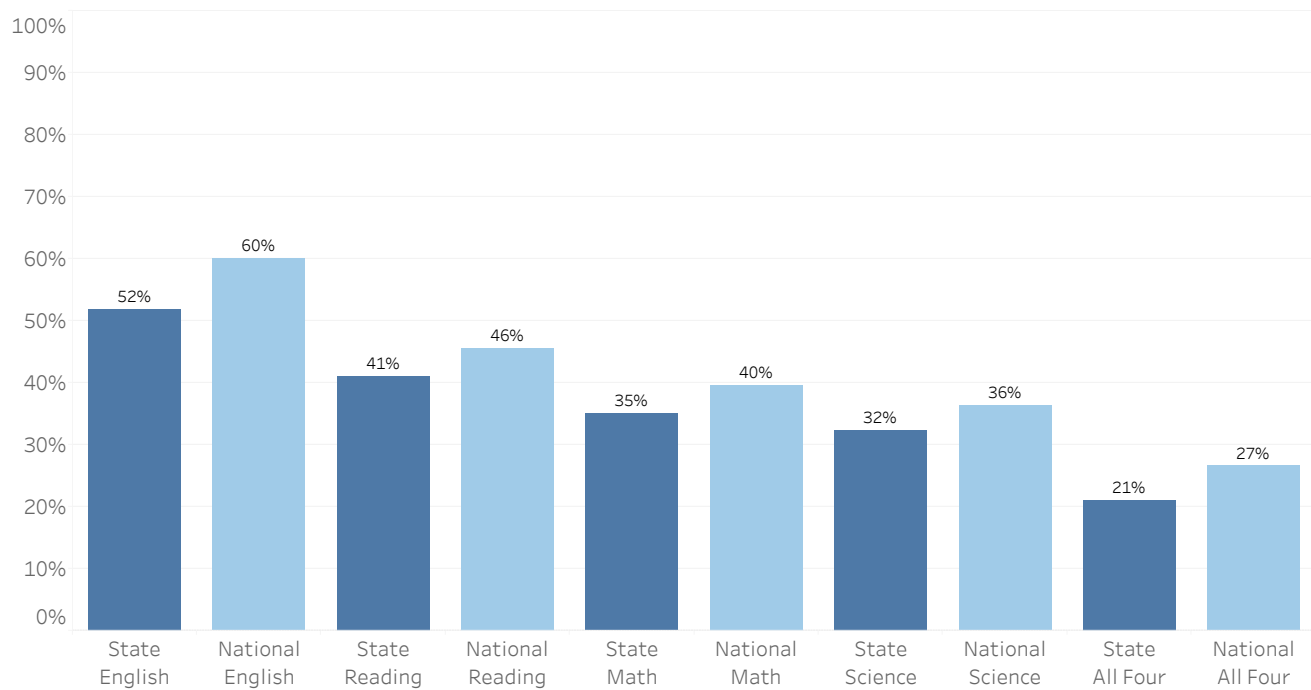
- In Montana, 2,063 of the 2018 graduates (21.2%) taking the ACT two or more times had an average Composite score of 23.3, compared to an average of 19.1 for 7,668 of the 2018 graduates (78.8%) who took the ACT only once.
- 26,645 score reports were sent to colleges by 2018 Montana ACT-tested graduates.
 - ~ 12,994 score reports were sent to in-state public colleges by 2018 Montana ACT-tested graduates.
 - ~ For Montana's 2018 ACT-tested graduates, the top five schools to which scores were sent were Montana State University-Bozeman, University of Montana, Montana State University-Billings, Montana Tech of the University of Montana, and Carroll College.
 - ~ For Montana's 2018 ACT-tested graduates, the top three out-of-state schools to which scores were sent were University of Washington, University of Oregon, and Arizona State University.
- Compared to 68 percent of 2018 graduates nationally, 39 percent of Montana graduates opted into the ACT Educational Opportunity Service (EOS). EOS is a free service that allows students to gain exposure to recruitment, scholarship agencies, colleges, and universities that students may not have accessed on their own. The ACT Get Your Name in the Game initiative encourages colleges and universities to recruit underserved EOS participants to increase access and opportunity for all.
 - ~ Compared to 73 percent of American Indian students nationally, 52 percent of Montana American Indian 2018 graduates opted into EOS.
 - ~ Compared to 66 percent of White students nationally, 39 percent of Montana White 2018 graduates opted into EOS.
 - ~ Compared to 80 percent of Hispanic students nationally, 41 percent of Montana Hispanic 2018 graduates opted into EOS.
- In the 2017-2018 academic year, ACT issued 461 ACT fee waivers to qualified Montana students. However, 147 students (31.9 percent) did not take advantage of this opportunity to test for free. This compares to 542,506 waivers issued nationally, of which 152,227 (28.1 percent) students did not take advantage. Fee waivers represent a great opportunity for students of low socioeconomic status to retest without incurring any fees. Note: this is the number of fee waivers issued for the state, not specific to this graduating class.
 - ~ American Indian Montana students represent 29 percent of fee waivers issued, and they account for 36 percent of unused fee waivers.
 - ~ White Montana students represent 47 percent of fee waivers issued, and they account for 38 percent of unused fee waivers.
 - ~ Hispanic Montana students represent 7 percent of fee waivers issued, and they account for 9 percent of unused fee waivers.

Pipeline

- Aspirations matter. Students who aspire to a higher level of postsecondary education typically achieve higher ACT Composite scores.
- In order of prevalence, the five most commonly indicated college majors of interest for 2018 Montana graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Business Administration and Management, General; and Engineering (Pre-Engineering), General.
 - ~ In the Montana graduating class of 2018, 252 (3 percent) indicated planning on majoring in education. They had an average Composite score of 20.4.

MONTANA College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2018 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks* by Subject



Data From Graph Above

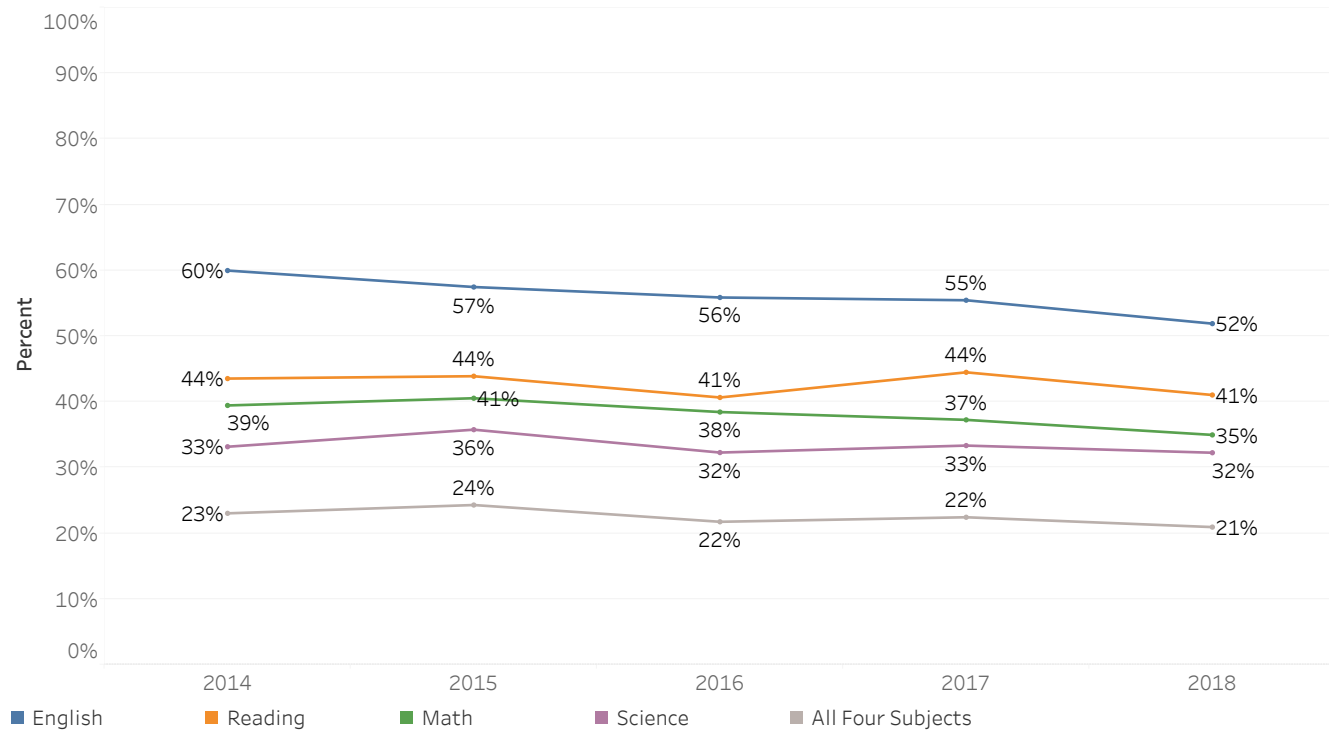
State English	National English	State Reading	National Reading	State Math	National Math	State Science	National Science	State All Four	National All Four
52%	60%	41%	46%	35%	40%	32%	36%	21%	27%

* The ACT College Readiness Benchmarks are scores on the ACT subject area tests that represent the level of achievement required for students to have a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in corresponding credit-bearing first-year college courses. Throughout this report, benchmark attainment corresponds with students meeting or exceeding 18 in English, 22 in Reading, 22 in Math and 23 in Science.

Note, missing data points in tables and graphs reflect insufficient data for reporting.

MONTANA College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2014–2018 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks*



Data From Graph Above

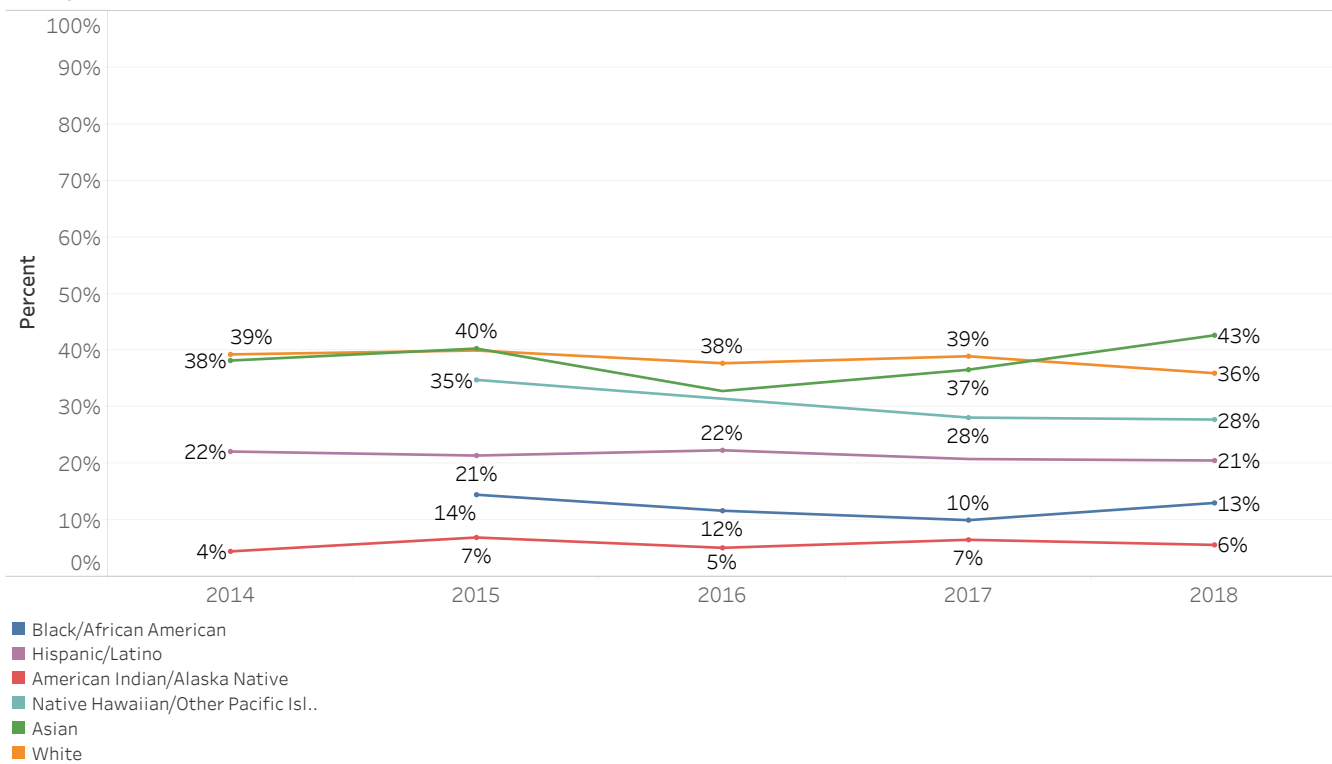
	English	Reading	Math	Science	All Four Subjects
2014	60%	44%	39%	33%	23%
2015	57%	44%	41%	36%	24%
2016	56%	41%	38%	32%	22%
2017	55%	44%	37%	33%	22%
2018	52%	41%	35%	32%	21%

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MONTANA College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2014-2018 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity



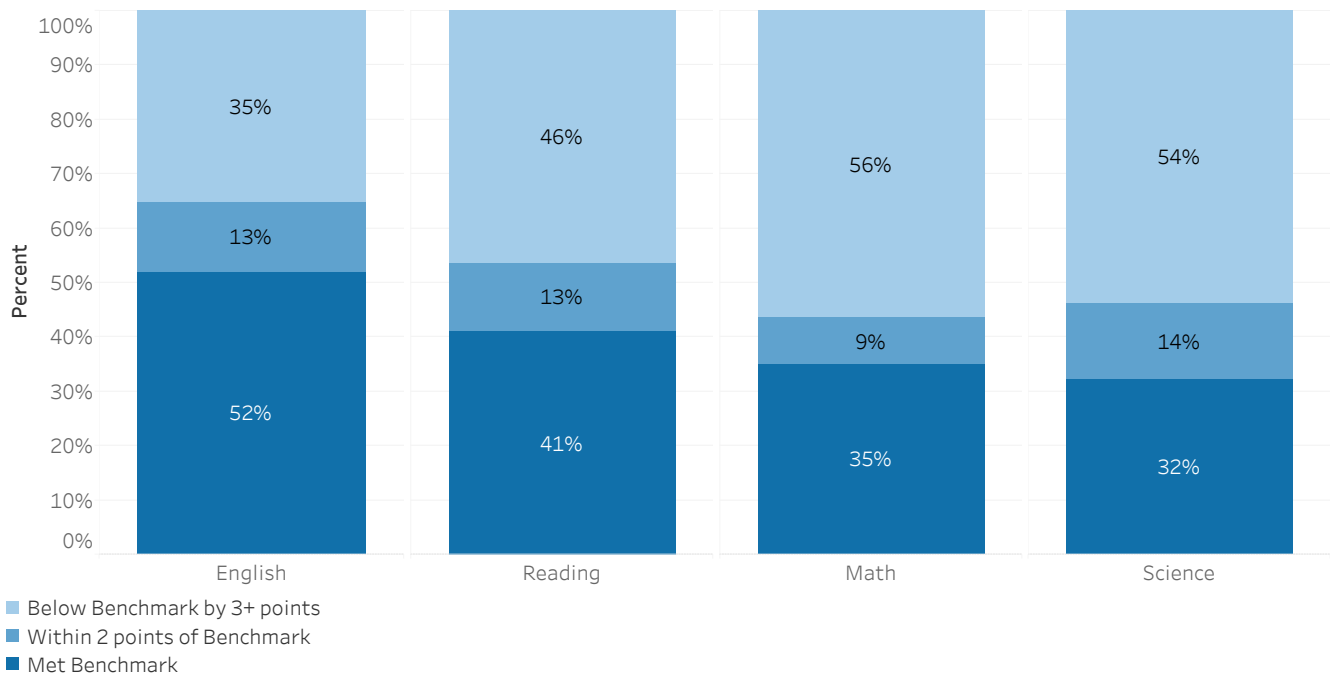
Data From Graph Above

	Black/African American	Hispanic/Latino	American Indian/Alaska Native	Native Hawaiian/Other Pacific Islander	Asian	White
2014		22%	4%		38%	39%
2015	14%	21%	7%	35%	40%	40%
2016	12%	22%	5%		33%	38%
2017	10%	21%	7%	28%	37%	39%
2018	13%	21%	6%	28%	43%	36%

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MONTANA College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2018 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



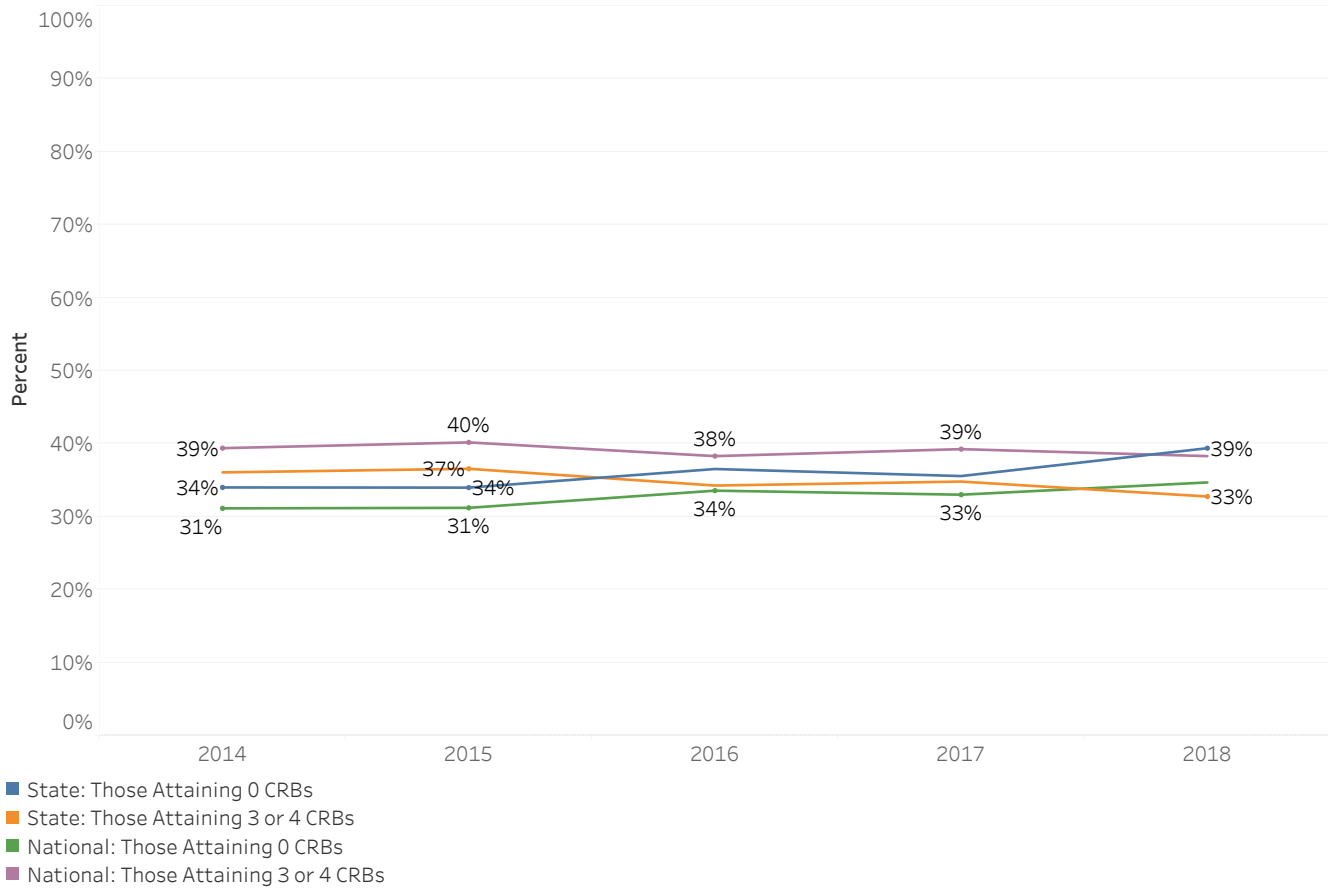
Data From Graph Above

	Below Benchmark by 3+ points	Within 2 points of Benchmark	Met Benchmark
English	35%	13%	52%
Math	56%	9%	35%
Reading	46%	13%	41%
Science	54%	14%	32%

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MONTANA College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2014–2018 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks*



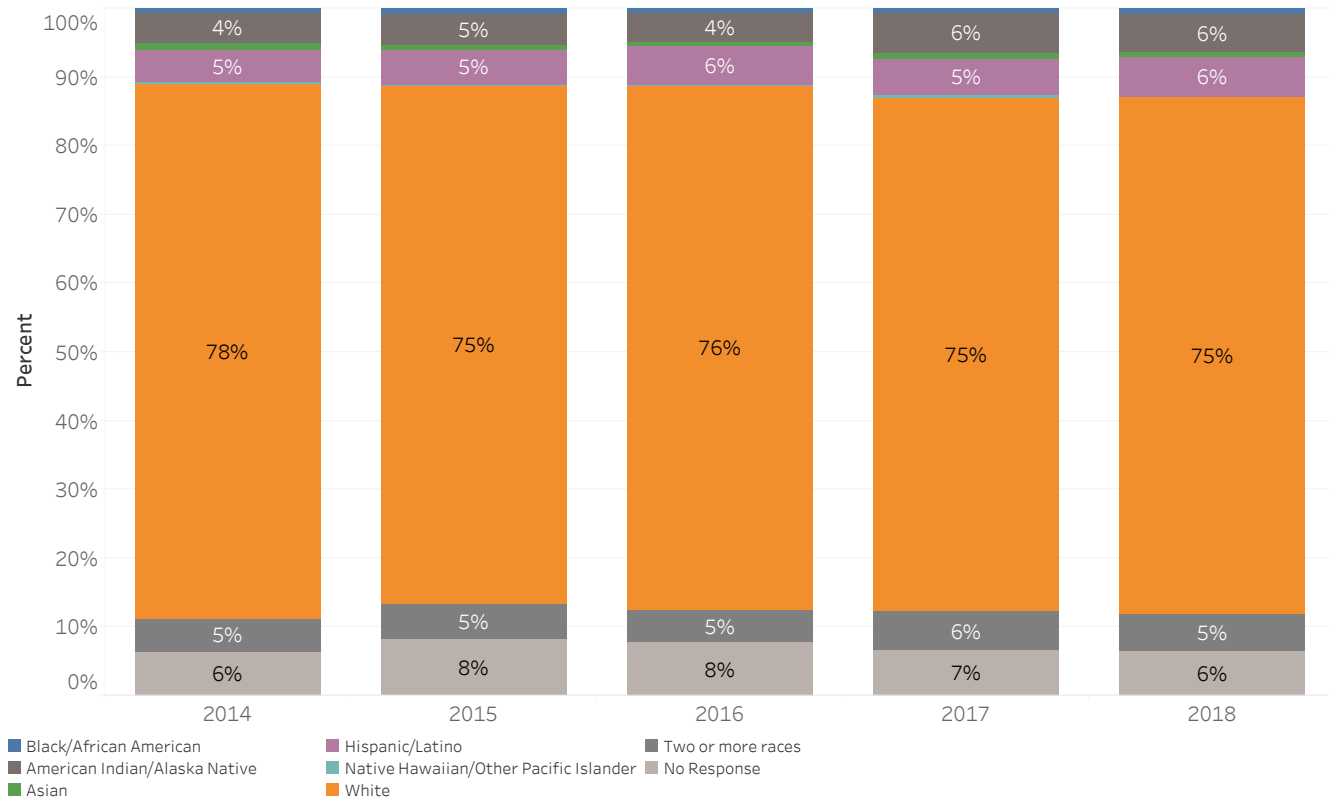
Data from Graph Above

	State: Those Attaining 0 CRBs	State: Those Attaining 3 or 4 CRBs	National: Those Attaining 0 CRBs	National: Those Attaining 3 or 4 CRBs
2014	34%	36%	31%	39%
2015	34%	37%	31%	40%
2016	37%	34%	34%	38%
2017	36%	35%	33%	39%
2018	39%	33%	35%	38%

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MONTANA College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2014-2018 ACT-Tested High School Graduates by Race/Ethnicity



Data From Graph Above

	Black/African American	American Indian/Alaska Native	Asian	Hispanic/Latino	Native Hawaiian/Other Pacific Islander	White	Two or more races	No Response
2014	1%	4%	1%	5%	0%	78%	5%	6%
2015	1%	5%	1%	5%	0%	75%	5%	8%
2016	1%	4%	1%	6%	0%	76%	5%	8%
2017	1%	6%	1%	5%	0%	75%	6%	7%
2018	1%	6%	1%	6%	0%	75%	5%	6%

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MONTANA College and Career Readiness Attainment, Participation, and Opportunity

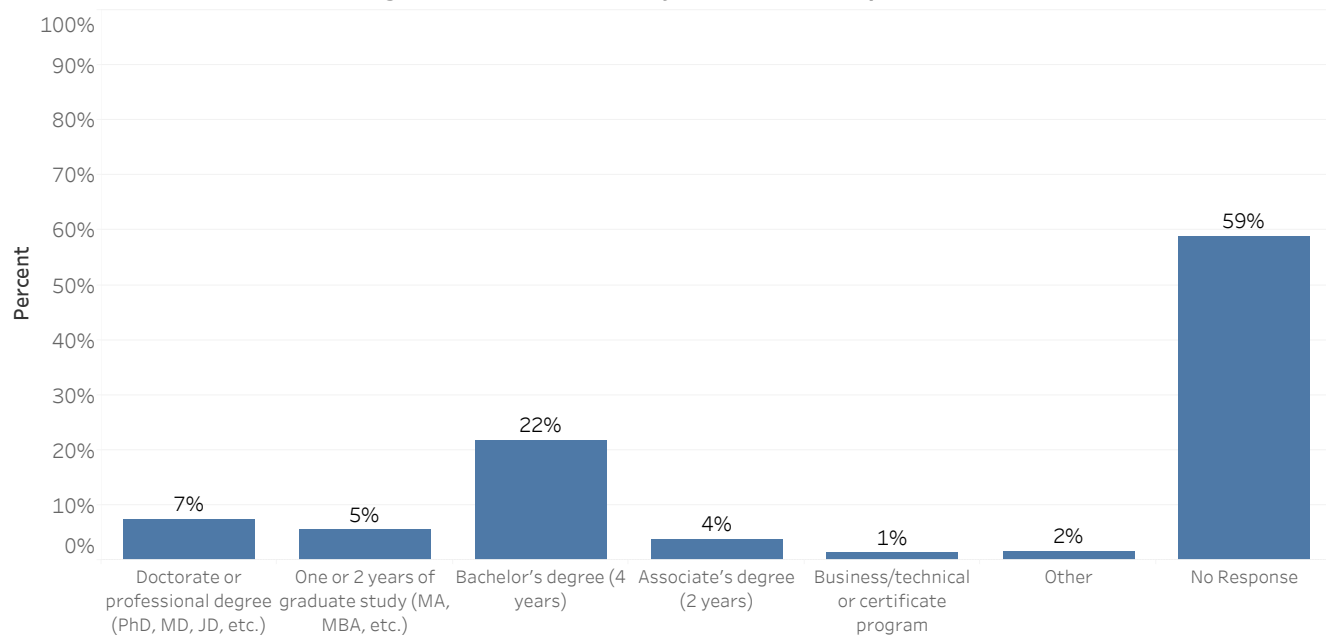
Student Data Trends: 2014-2018, State vs. Nation

	2014	2015	2016	2017	2018
State N-count	9,611	9,489	9,568	9,938	9,731
National N-count	1,845,787	1,924,436	2,090,342	2,030,038	1,914,817
Average ACT English Score - State	19.3	19.1	19.0	19.0	18.7
Average ACT English Score - National	20.3	20.4	20.1	20.3	20.2
Average ACT Reading Score - State	21.1	21.0	20.8	21.0	20.7
Average ACT Reading Score - National	21.3	21.4	21.3	21.4	21.3
Average ACT Math Score - State	20.5	20.4	20.2	20.2	19.9
Average ACT Math Score - National	20.9	20.8	20.6	20.7	20.5
Average ACT Science Score - State	20.4	20.5	20.5	20.5	20.0
Average ACT Science Score - National	20.8	20.9	20.8	21.0	20.7
Average ACT Composite Score - State	20.5	20.4	20.3	20.3	20.0
Average ACT Composite Score - National	21.0	21.0	20.8	21.0	20.8

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MONTANA College and Career Readiness Attainment, Participation, and Opportunity

Percent of 2018 ACT-Tested High School Graduates by Educational Aspirations



Data From Graph Above

	% of Graduates
Doctorate or professional degree (PhD, MD, JD, etc.)	7%
One or 2 years of graduate study (MA, MBA, etc.)	5%
Bachelor's degree (4 years)	22%
Associate's degree (2 years)	4%
Business/technical or certificate program	1%
Other	2%
No Response	59%

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