

The Condition of College & Career Readiness 2018

Missouri Key Findings

Performance

- In the 2018 Missouri graduating class, 68,424 graduates (100 percent) took the ACT test with a Composite score average of 20.0. This compares to 48,865 (76 percent) with an average of 21.8 in 2014. Nationally, 55% of 2018 graduates took the ACT with an average Composite score of 20.8.
 - ~ The 2018 Missouri graduating class average English score was 19.5. This compares to 19.8 and 21.6 in 2017 and 2014, respectively.
 - ~ The 2018 Missouri graduating class average math score was 19.7. This compares to 19.9 and 21.1 in 2017 and 2014, respectively.
 - ~ The 2018 Missouri graduating class average reading score was 20.5. This compares to 20.8 and 22.3 in 2017 and 2014, respectively.
 - ~ The 2018 Missouri graduating class average science score was 20.0. This compares to 20.5 and 21.7 in 2017 and 2014, respectively.
- In 2018, 22 percent of Missouri graduates met all four ACT College Readiness Benchmarks. This compares to 23 and 29 percent of 2017 and 2014 graduates, respectively.
 - ~ In 2018, 39 percent of Missouri graduates met zero ACT College Readiness Benchmarks. This compares to 36 and 24 percent of 2017 and 2014 graduates, respectively.
 - ~ In 2018, 56 percent of Missouri graduates met the ACT English College Readiness Benchmark. This compares to 59 and 72 percent of 2017 and 2014 graduates, respectively.
 - 2018 Missouri graduates taking more advanced English coursework demonstrated markedly higher average English scores than those who did not. In fact, 65 percent of Missouri 2018 graduates taking four or more years of English met the ACT English College Readiness Benchmark. This compares to 35 percent of students taking less than four years of English meeting the benchmark.
 - ~ In 2018, 33 percent of Missouri graduates met the ACT Math College Readiness Benchmark. This compares to 34 and 45 percent of 2017 and 2014 graduates, respectively.
 - 2018 Missouri graduates taking more advanced math coursework demonstrated markedly higher average math scores than those who did not. In fact, 41 percent of Missouri 2018 graduates taking three or more years of math met the ACT Math College Readiness Benchmark. This compares to 4 percent of students taking less than three years of math meeting the benchmark.
 - ~ In 2018, 41 percent of Missouri graduates met the ACT Reading College Readiness Benchmark. This compares to 43 and 51 percent of 2017 and 2014 graduates, respectively.
 - 2018 Missouri graduates taking more advanced social studies coursework demonstrated markedly higher average reading scores than those who did not. In fact, 47 percent of Missouri 2018 graduates taking three or more years of social studies met the ACT Reading College Readiness Benchmark. This compares to 31 percent of students taking less than three years of social studies meeting the benchmark.

- ~ In 2018, 32 percent of Missouri graduates met the ACT Science College Readiness Benchmark. This compares to 34 and 42 percent of 2017 and 2014 graduates, respectively.
 - 2018 Missouri graduates taking more advanced science coursework demonstrated markedly higher average science scores than those who did not. In fact, 42 percent of Missouri 2018 graduates taking three or more years of science met the ACT Science College Readiness Benchmark. This compares to 19 percent of students taking less than three years of science meeting the benchmark.
- In 2018, 22,345 (33 percent) of Missouri graduates met three or four ACT College Readiness Benchmarks. This compares to 23,809 and 21,665 (35 and 44 percent) out of 2017 and 2014 graduates, respectively. For reference, the national percentage of 2018 graduates meeting three or four benchmarks was 38%.
- 43 percent of 2018 Missouri graduates were Proficient or Above Proficient in understanding complex texts.

STEM

- In 2018, 27,051 Missouri graduates (40 percent) indicated having an interest in STEM majors and/or careers.
 - ~ Nationally, 45 percent of graduates indicated having an interest in STEM.
- Compared to 15 percent of 2018 Missouri graduates meeting the ACT STEM College Readiness Benchmark, graduates in 2017 and 2014 had STEM Benchmark percentages of 16 and 21, respectively.
- 2018 Missouri graduates meeting the ACT STEM College Readiness Benchmark had an average science score of 28.7. This compares to 28.6 in 2014.
 - ~ 2018 graduates taking physics had an average science score of 21.9, compared to 19.6 for students not taking physics.
 - ~ 45 percent of 2018 Missouri graduates taking physics met the ACT Science College Readiness Benchmark, compared to 28 for students not taking physics.
- In 2018, 47,296 Missouri graduates (69 percent) indicated taking three or more years of math. This compares to 73 and 92 percent for 2017 and 2014 graduating classes, respectively.

Career Readiness

- In 2018, 47,568 Missouri graduates (70 percent) were likely to attain the Silver ACT WorkKeys National Career Readiness Certificate 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 ACT WorkKeys 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 Missouri 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:
 - ~ 170 more students enrolling in college.
 - ~ 189 more students persisting to year two.
 - ~ 138 fewer students needing remedial English.
 - ~ 226 fewer students needing remedial math.
 - ~ 201 more students persisting to year four.
 - ~ 212 more students earning a postsecondary degree within six years.

Behaviors that Impact Access and Opportunity

- In Missouri, 34,020 of the 2018 graduates (49.7%) taking the ACT two or more times had an average Composite score of 22.6, compared to an average of 17.6 for 34,404 of the 2018 graduates (50.3%) who took the ACT only once.
- 145,058 score reports were sent to colleges by 2018 Missouri ACT-tested graduates.
 - ~ 68,018 score reports were sent to in-state public colleges by 2018 Missouri ACT-tested graduates.
 - ~ For Missouri's 2018 ACT-tested graduates, the top five schools to which scores were sent were Missouri State University, Univ of Missouri-Columbia, University of Central Missouri, University of Missouri-Kansas City, and Southeast Missouri State University.
 - ~ For Missouri's 2018 ACT-tested graduates, the top three out-of-state schools to which scores were sent were University of Kansas, University of Arkansas, and Kansas State University.
- Compared to 68 percent of 2018 graduates nationally, 64 percent of Missouri 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.
- In the 2017-2018 academic year, ACT issued 15,415 ACT fee waivers to qualified Missouri students. However, 4,087 students (26.5 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. This represents a great opportunity for high schools within the state to increase the socioeconomic diversity of its students tested. Note: this is the number of fee waivers issued for the state, not specific to this graduating class.

Pipeline

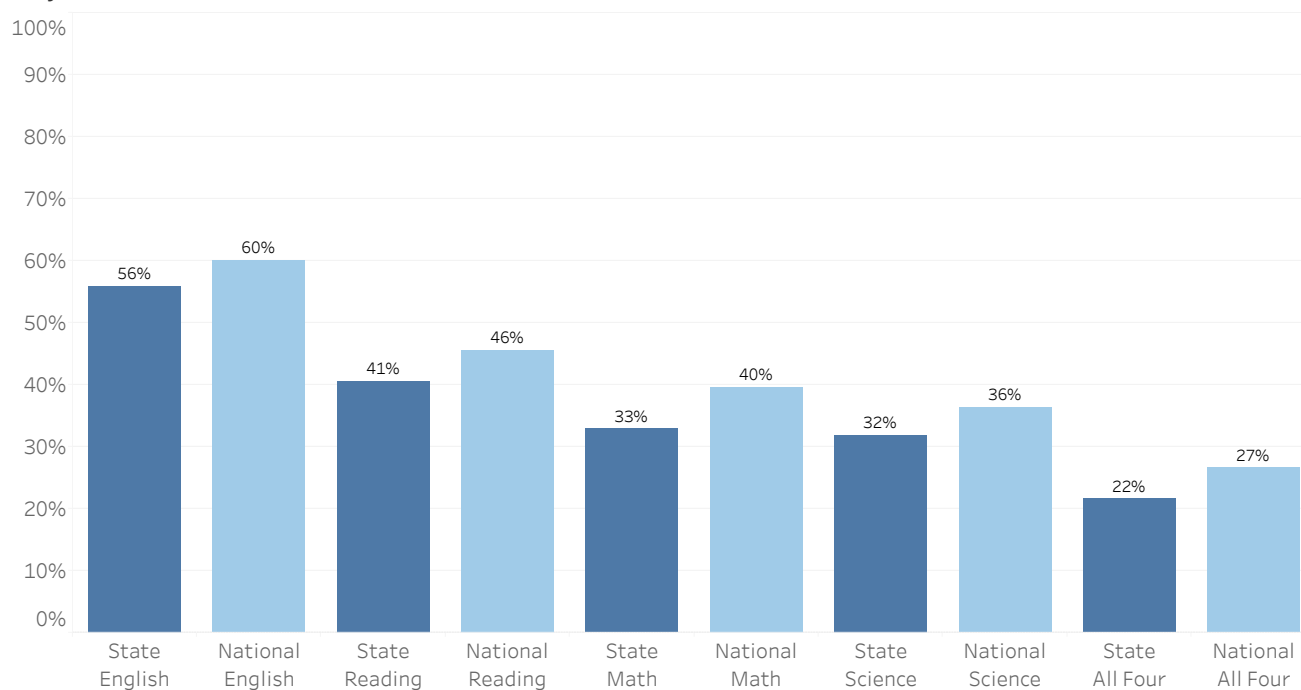
- Aspirations matter. Students who aspire to a higher level of postsecondary education typically achieve higher ACT Composite scores.
 - ~ 17,109 students (25 percent) aspired to attain a graduate or professional degree. They had an average Composite score of 23.6.
 - ~ 24,997 students (37 percent) aspired to attain a bachelor's degree. They had an average Composite score of 20.4.
 - ~ 5,416 students (8 percent) aspired to attain a vocational/technical or associate's degree. They had an average Composite score of 16.4.
- In order of prevalence, the five most commonly indicated college majors of interest for 2018 Missouri graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Business Administration and Management, General; and Computer Science and Programming.
 - ~ In the Missouri graduating class of 2018, 7,353 students (11 percent) indicated being undecided about their college major. They had an average Composite score of 21.2. Decision making regarding college major can be facilitated through activities included in ACT Aspire and PreACT testing experiences. In addition, the Student Score Report is a valuable tool for conversations using the College and Career Planning and Interest-Major Fit sections.
 - ~ In the Missouri graduating class of 2018, 3,268 (5 percent) indicated planning on majoring in education. They had an average Composite score of 20.1.
- There is good news in that 69% of Missouri's 2018 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 71% of Missouri's 2017 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 56% who actually did enroll. If we fully closed the aspirational gap, an additional 10,148 of the 2017 ACT-tested graduates from Missouri would have enrolled in postsecondary education.

Additional Points

- The Missouri ACT State Organization continues to grow in membership and in diversity, with members from across the state. The membership includes educators from state agencies, K-12, access, and postsecondary institutions, as well as members involved in workforce development. Each year, ACT hosts state conferences that bring together professionals representing each of these areas, providing a unique and diverse professional development opportunity.
- According to the US Department of Labor's Bureau of Labor Statistics, among the fastest-growing careers in Missouri requiring education beyond high school are: Occupational Therapy Assistants, Physical Therapy Assistants, Operations Research Analysts, Statisticians, Biochemists and Biophysicists.

MISSOURI 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

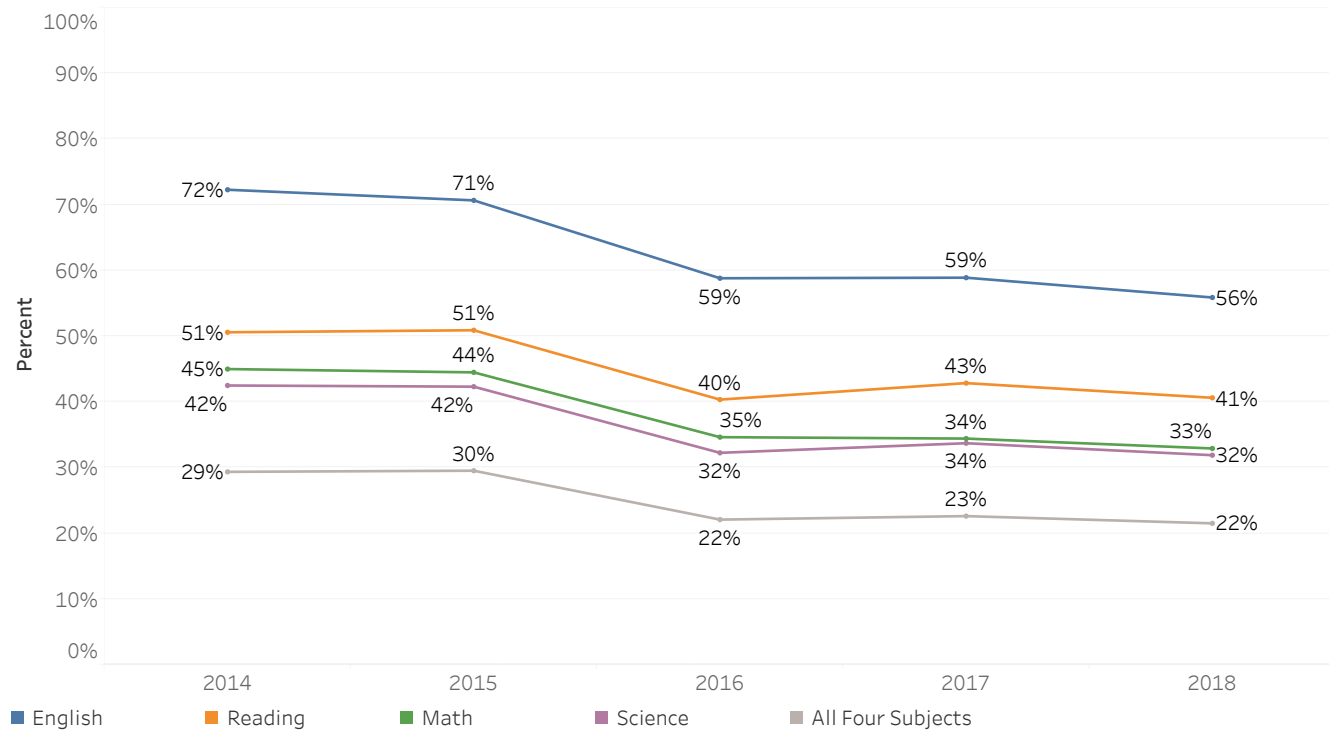
State English	National English	State Reading	National Reading	State Math	National Math	State Science	National Science	State All Four	National All Four
56%	60%	41%	46%	33%	40%	32%	36%	22%	27%

* 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.

MISSOURI 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

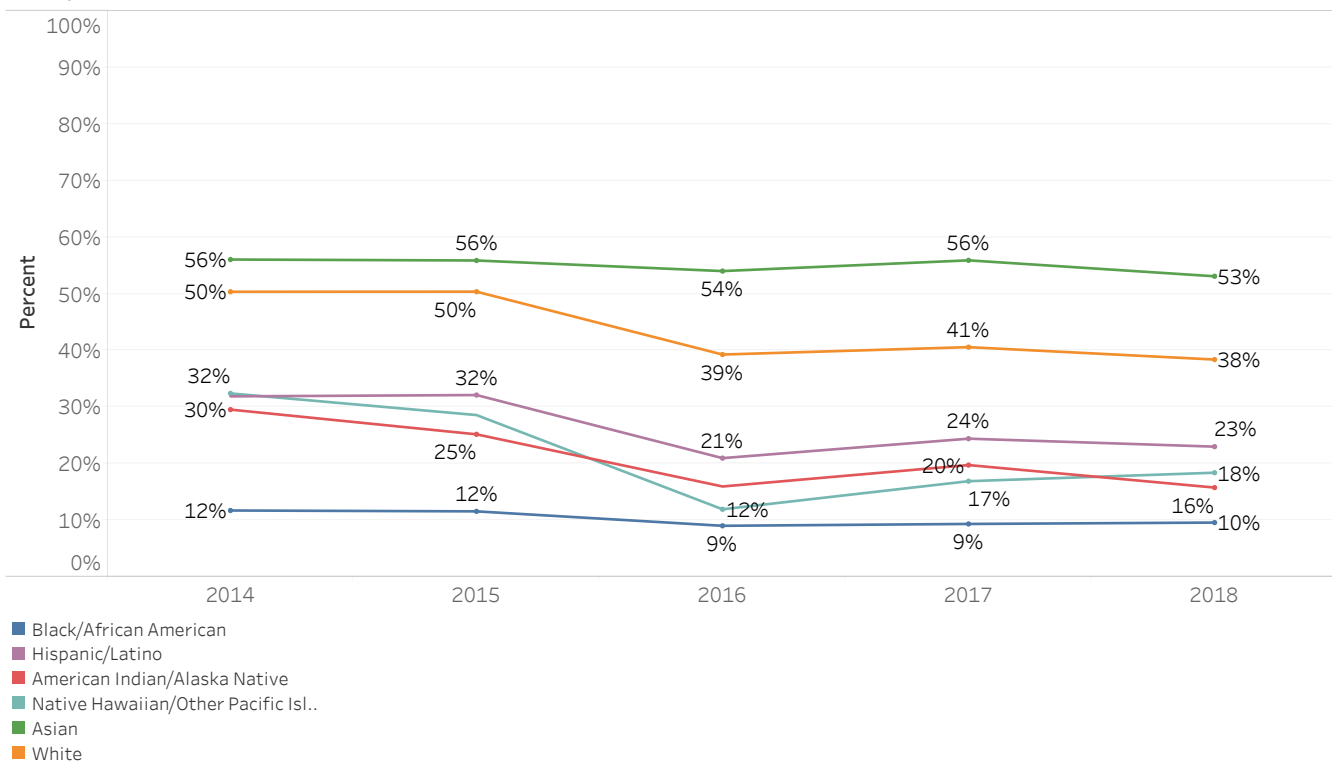
	English	Reading	Math	Science	All Four Subjects
2014	72%	51%	45%	42%	29%
2015	71%	51%	44%	42%	30%
2016	59%	40%	35%	32%	22%
2017	59%	43%	34%	34%	23%
2018	56%	41%	33%	32%	22%

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MISSOURI 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



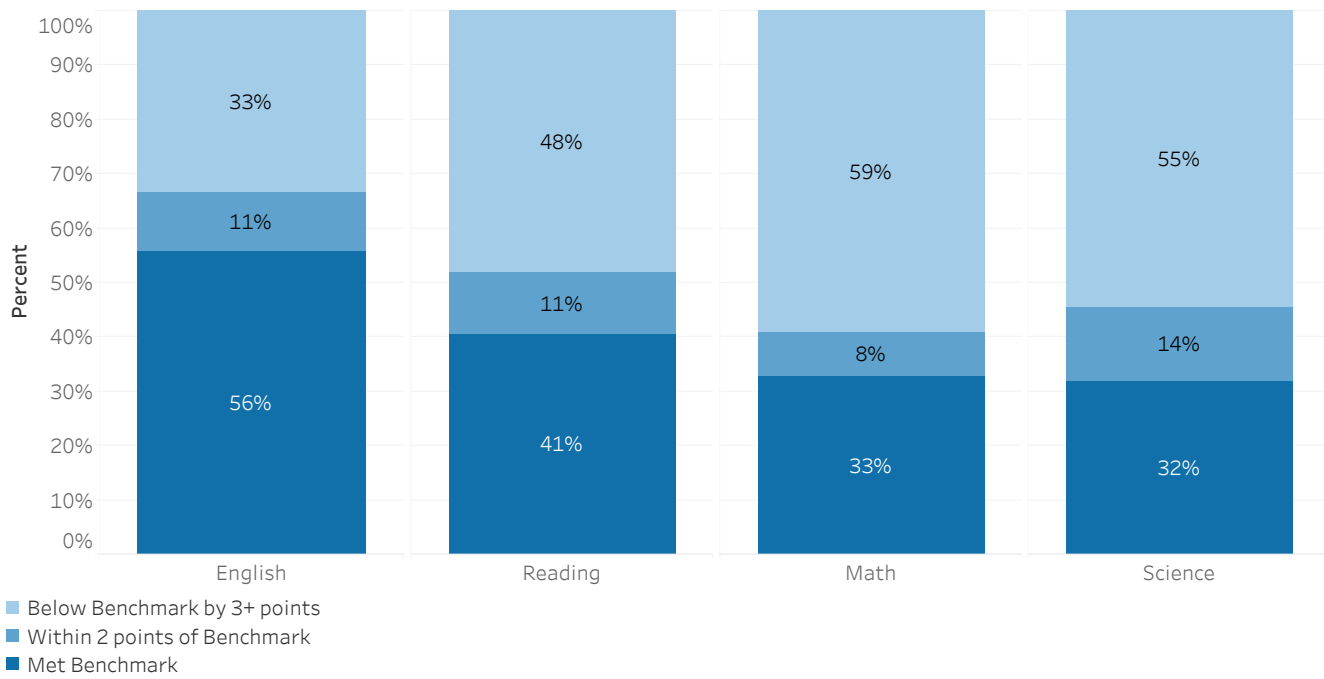
Data From Graph Above

	Black/African American	Hispanic/Latino	American Indian/Alaska Native	Native Hawaiian/Other Pacific Islander	Asian	White
2014	12%	32%	30%	32%	56%	50%
2015	12%	32%	25%	29%	56%	50%
2016	9%	21%	16%	12%	54%	39%
2017	9%	24%	20%	17%	56%	41%
2018	10%	23%	16%	18%	53%	38%

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MISSOURI College and Career Readiness Attainment, Participation, and Opportunity

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



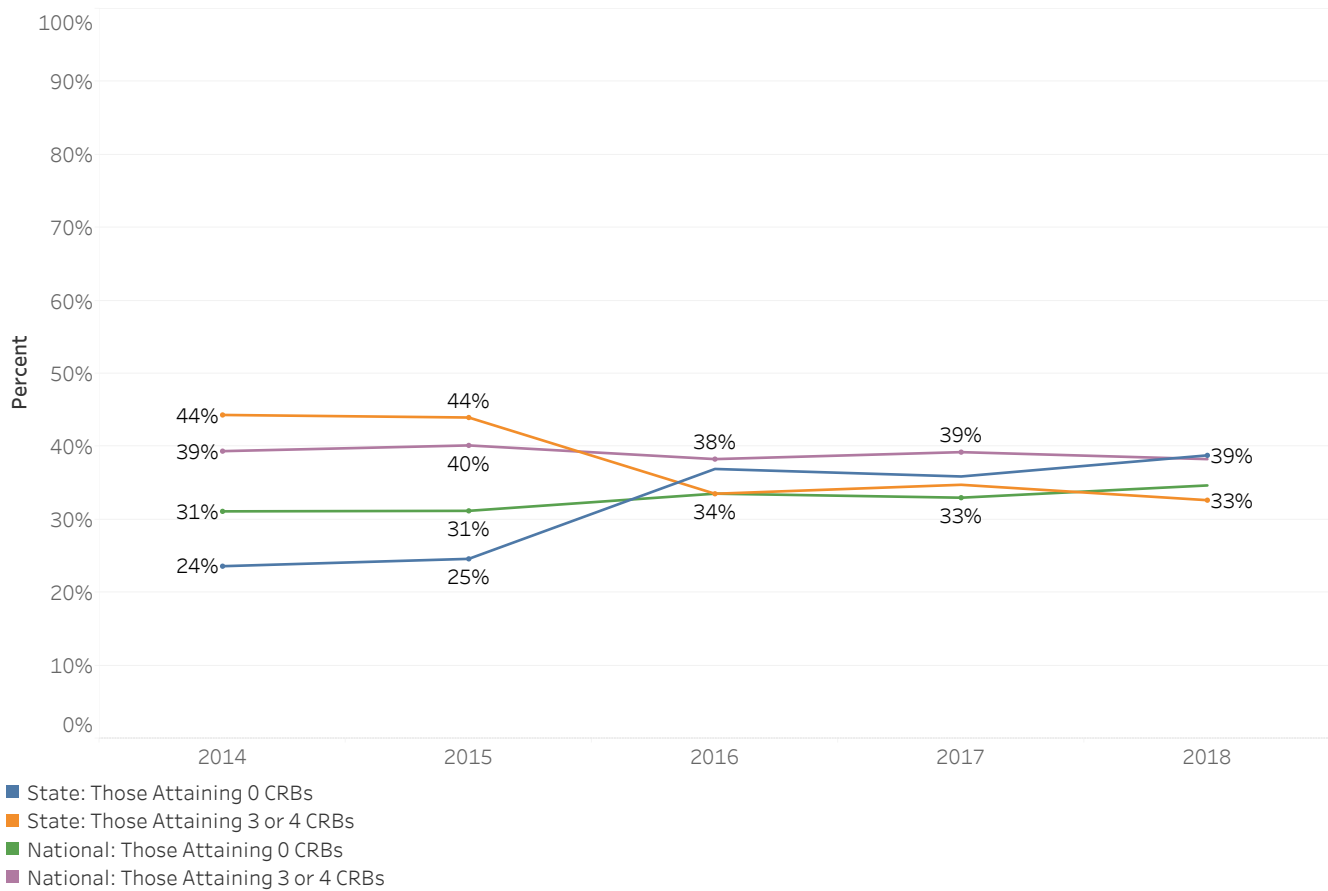
Data From Graph Above

	Below Benchmark by 3+ points	Within 2 points of Benchmark	Met Benchmark
English	33%	11%	56%
Math	59%	8%	33%
Reading	48%	11%	41%
Science	55%	14%	32%

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MISSOURI College and Career Readiness Attainment, Participation, and Opportunity

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



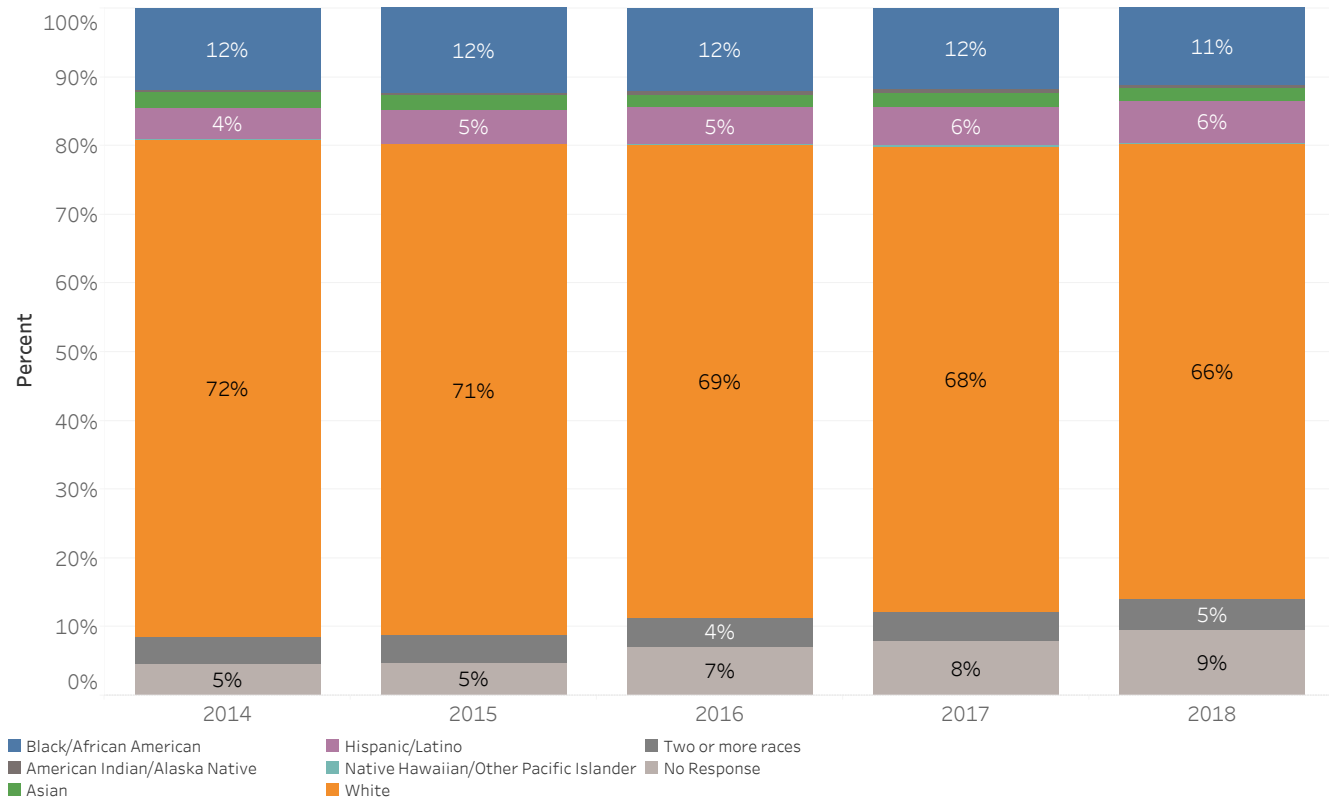
Data from Graph Above

	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	24%	44%	31%	39%
2015	25%	44%	31%	40%
2016	37%	34%	34%	38%
2017	36%	35%	33%	39%
2018	39%	33%	35%	38%

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MISSOURI 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	12%	0%	2%	4%	0%	72%	4%	5%
2015	12%	0%	2%	5%	0%	71%	4%	5%
2016	12%	1%	2%	5%	0%	69%	4%	7%
2017	12%	1%	2%	6%	0%	68%	4%	8%
2018	11%	0%	2%	6%	0%	66%	5%	9%

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MISSOURI College and Career Readiness Attainment, Participation, and Opportunity

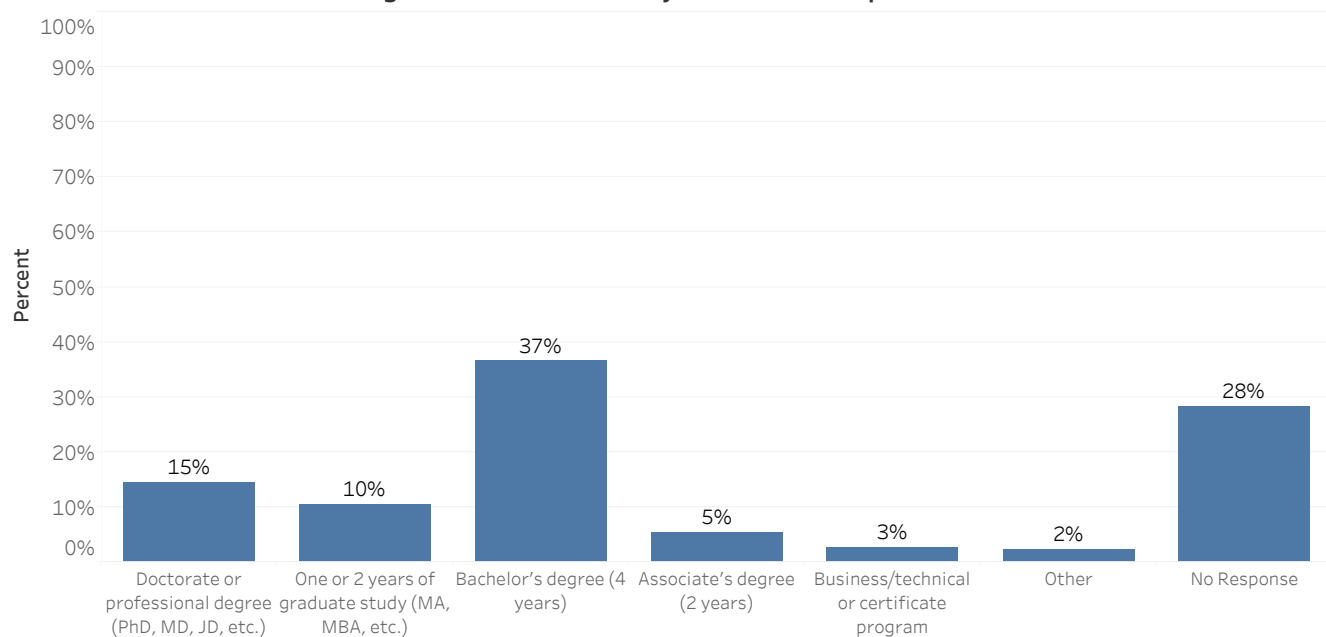
Student Data Trends: 2014-2018, State vs. Nation

	2014	2015	2016	2017	2018
State N-count	48,865	49,640	68,446	68,480	68,424
National N-count	1,845,787	1,924,436	2,090,342	2,030,038	1,914,817
Average ACT English Score - State	21.6	21.4	19.7	19.8	19.5
Average ACT English Score - National	20.3	20.4	20.1	20.3	20.2
Average ACT Reading Score - State	22.3	22.2	20.6	20.8	20.5
Average ACT Reading Score - National	21.3	21.4	21.3	21.4	21.3
Average ACT Math Score - State	21.1	21.0	19.8	19.9	19.7
Average ACT Math Score - National	20.9	20.8	20.6	20.7	20.5
Average ACT Science Score - State	21.7	21.7	20.4	20.5	20.0
Average ACT Science Score - National	20.8	20.9	20.8	21.0	20.7
Average ACT Composite Score - State	21.8	21.7	20.2	20.4	20.0
Average ACT Composite Score - National	21.0	21.0	20.8	21.0	20.8

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MISSOURI 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.)	15%
One or 2 years of graduate study (MA, MBA, etc.)	10%
Bachelor's degree (4 years)	37%
Associate's degree (2 years)	5%
Business/technical or certificate program	3%
Other	2%
No Response	28%

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