

The Condition of College and Career Readiness

This report looks at the progress of the 2016 ACT®-tested graduating class relative to college and career readiness. This year's report shows that **64%** of students in the 2016 US graduating class took the ACT test, up from 59% in 2015 and 49% in 2011. The increased number of test takers over the past several years enhances the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of college readiness, as well as offering a glimpse at the emerging educational pipeline.

As a research-based nonprofit organization, ACT is committed to providing information and solutions to support the following:

- **Holistic view of readiness.** The 2014 ACT report, *Broadening the Definition of College and Career Readiness: A Holistic Approach*, shows academic readiness is only one of four critical domains in determining an individual's readiness for success in college and career. Cross-cutting capabilities, behavioral skills, and the ability to navigate future pathways are also important factors to measure and address. Together, these elements define a clear picture of student readiness for postsecondary education.
- **Providing meaningful data for better decisions.** ACT is focused on providing better data to students, parents, schools, districts, and states so that all can make more informed decisions to improve outcomes. We accomplish this goal by taking a holistic view and using consistent and reliable historical information so that individuals and institutions have a better context to make critical decisions about the journey they have undertaken.

The Condition of College & Career Readiness 2016

Michigan Key Findings

Performance

- In Michigan, the percent of students meeting the ACT College Readiness Benchmarks increased in three subject areas:
 - ~ A 1% increase in English, from 59% to 60% (national 61%)
 - ~ A 2% increase in mathematics, from 34% to 36% (national 41%)
 - ~ A 1% increase in science, from 34% to 35% (national 36%)
 - ~ Reading remained the same at 40% (national 44%)
 - ~ A 1% increase in all four Benchmarks, from 22% to 23% (national 26%)
- Relative to ACT Composite score and subject level scores, Michigan saw the following:
 - ~ Even as the size of the state's graduating class taking the ACT has stayed consistent (based on census testing), the average ACT Composite score has increased from 20.1 to 20.3. This is notable. When we see the number of students declining in the future, we should see that the ACT Composite score will rise even more without the state contract in place, as not all students will have the opportunity to take the ACT.
 - ~ The average state Composite score, 20.3, currently lags behind the national average of 20.8; however, not all states have the number of students testing as Michigan has at this time. This means that not all students are afforded access to a college entrance exam in all states.
 - ~ The achievement gap between Michigan and the nation is largest in mathematics, at 0.7, with reading a close second at a gap of 0.6.
 - ~ The average Composite score of African American graduates increased 0.2 point from 2015, with approximately 900 fewer African American students taking the ACT.

STEM

- Michigan graduates who took advanced science and math courses show higher levels of achievement.
 - ~ Students who took physics earned significantly higher average ACT science scores and were more likely to meet or surpass the ACT College Readiness Benchmark in science than those who did not.
 - ~ Students who took a fourth year of math in high school, regardless of course, significantly outperformed those students who self-reported not taking four years of math, in both ACT mathematics scores and in Benchmark attainment.
- Since 2012, the average science score for Michigan students for meeting the STEM benchmark has gone up each year, with the 2016 average being the same as the national.

Career Readiness

- This year, for the first time, ACT has provided an indicator of career readiness based on ACT composite scores. Table 3.4 in the state ACT Profile Report details how ACT-tested Michigan graduates are progressing toward the ACT National Career Readiness Certificate™ (ACT NCRC®).
- Progress toward career readiness is based on research linking ACT Composite scores to ACT NCRC levels. The ACT Composite cut score for each ACT NCRC level corresponds to a 50% chance of obtaining that level. If a student's ACT Composite score surpassed the cut score for an ACT NCRC level, they are categorized as making progress towards the next higher ACT NCRC level. Attainment of ACT NCRC levels indicates workplace employability skills that are critical to job success.
- In Michigan, 65% of ACT tested graduates are considered making progress towards at least a gold ACT NCRC level. This compares to 68% nationally.

Behaviors that Impact Access and Opportunity

- Testing patterns
 - ~ In 2005, 57% of White students tested only once, and in 2016, 63% of White students tested only once.
 - ~ In 2005, 57% of African American students tested only once, and in 2016, 64% of African American students tested only once.
 - ~ In 2016, ALL students (not depending on grade) tested better on overall Composite scores by taking the test more than once. Composite scores of 10th graders who took the test more than once jumped over 3 points, 11th graders' scores increased by 1 point, and 12th graders' scores increased by 0.6 point. These results show that if students are willing to put in the time and effort to take the assessment again, they will more than likely see a jump in Composite score.
 - ~ Over the past five years, the number of minority graduates in Michigan taking the ACT has seen some variability.
 - African American students: The number of African American test takers has dropped 8%, and their average composite scores rose from 16.0 in 2012 to 16.5 in 2016.
 - Hispanic students: The number of Hispanic test takers has increased by nearly 20%, and their average composite scores rose from 18.2 in 2012 to 18.5 in 2016.
- Below are the top five colleges and universities to which Michigan graduates sent their ACT scores:
 1. Michigan State University
 2. Central Michigan University
 3. University Of Michigan—Ann Arbor
 4. Grand Valley State University
 5. Western Michigan University
- Ohio State University is the out-of-state school that receives the most scores from Michigan students.
- The ACT Educational Opportunity Service (EOS) opt-in rate for Michigan was 74.1%, the racial breakdowns are as followed.

African American	American Indian	Asian	Hispanic	Pacific Islander	Two or More Races	White
81.7	69.5	76.5	80.6	76.9	78.9	74.1

- "Get Your Name in the Game" information
 - ~ A total of 11 institutions took advantage of access to underserved learners' names to possibly get involved in the college recruiting process. More than 292,000 names were loaded and available to these 11 institutions to work with students who submitted their names via EOS.
- Fee Waiver Usage
 - ~ In Michigan, there were 9,412 fee waivers issued and 6,472 of those were used. This equates to a 68.8% usage rate. The national rate was 74.5%.
 - ~ 60.0%, or 1,766, of all unused fee waivers were issued to African Americans.
 - ~ ACT provides students fee waivers to provide more access and opportunity for students.

Pipeline

- Only 4% of ACT-tested Michigan 2016 graduates expressed an interest in pursuing education as a major or career. Those students earned an average ACT Composite score of 20.5, higher than the state average of 20.3. In comparison, 18% expressed an interest in pursuing Health Sciences and Technologies and 9% expressed interest in business.
- Aspirations matter. Students in Michigan who aspire to a higher level of postsecondary education achieve higher ACT Composite scores.
 - ~ Graduates who aspire to a graduate degree earn an average Composite score of 23.3.
 - ~ Graduates who aspire to a bachelor's degree earn an average Composite score of 20.1.
 - ~ Graduates who aspire to an associate's degree earn an average Composite score of 16.6.

ACT Footprint

ACT Aspire® Summative	ACT Aspire® Periodic	ACT Engage®	ACT QualityCore®	PreACT™	ACT WorkKeys®
15,874	3,962	3,416	–	1,452	58,980

* PreACT refers to preorders for FY17.

These are the number of each of these assessments delivered in the state and not reflective of the 2016 ACT-tested graduating class.

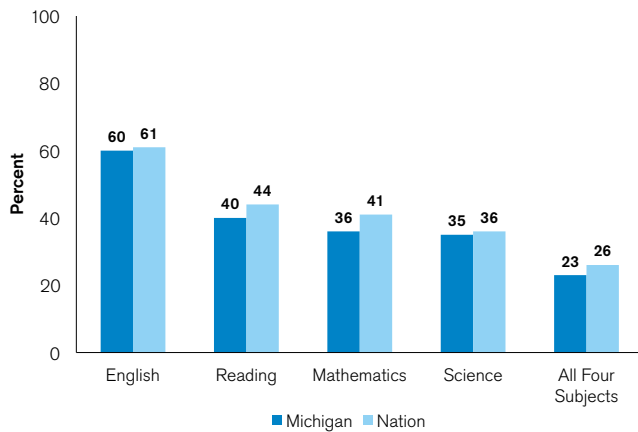
Special State Talking Points

- In 2016, ACT honored exemplars in 41 states as part of our ACT College & Career Readiness Campaign. In Michigan, these honorees include:
 - ~ Student—Juhi Patel, Huron High School
 - ~ School—Bloomingdale Middle and High School
 - ~ Career/Workforce—Butterball Farms, Inc.
- ACT will be conducting three College and Career Readiness Workshops in the fall for educators to attend free of charge:
 - ~ Detroit (9/26/16)
 - ~ East Lansing (10/12/16)
 - ~ Sault Ste. Marie (11/7/16)

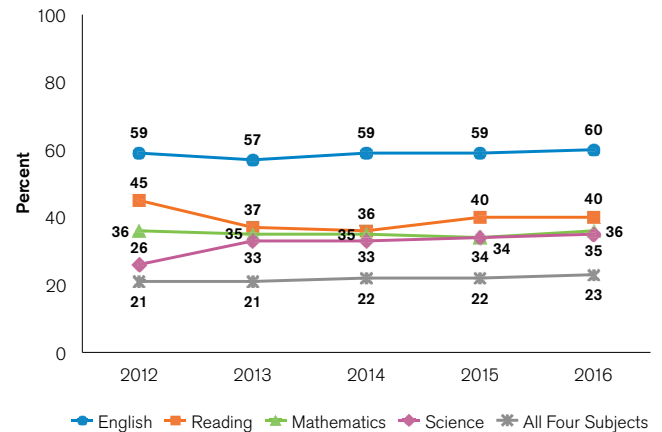
Your State College and Career Readiness Attainment, Participation, and Opportunity

Michigan

Percent of 2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



Percent of 2012–2016 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks*



Note: Percents in this report may not sum to 100% due to rounding.

* ACT College Readiness Benchmarks in reading and science were revised in 2013.

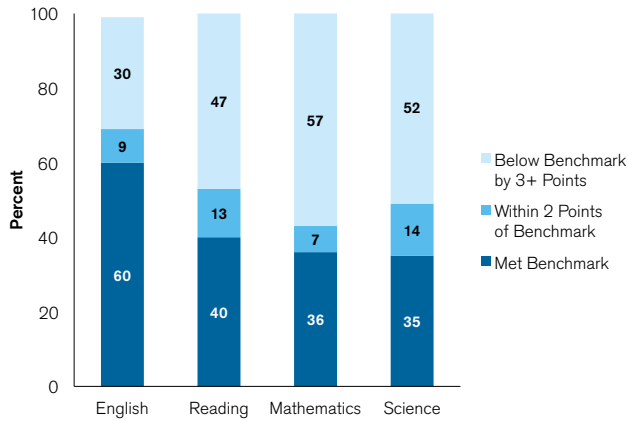
Student Data Trends

- Between 2012 and 2016, the number of students taking the ACT in Michigan increased by 0.6%.

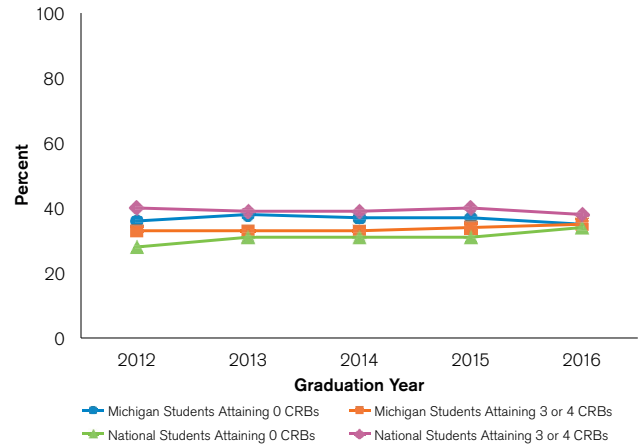
Student Condition Data Interest Trends: 2012–2016, State vs. Nation

Outcome	Cohort	2012	2013	2014	2015	2016
Percent Tested	Michigan	100%	100%	100%	100%	100%
	Nation	52%	54%	57%	59%	64%
N Tested	Michigan	114,727	120,451	119,990	118,555	115,454
	Nation	1,666,017	1,799,243	1,845,787	1,924,436	2,090,342
Average English Score	Michigan	19.3	19.1	19.3	19.4	19.9
	Nation	20.5	20.2	20.3	20.4	20.1
Average Reading Score	Michigan	20	20	20.2	20.3	20.7
	Nation	21.3	21.1	21.3	21.4	21.3
Average Mathematics Score	Michigan	20.1	19.9	19.9	19.9	19.9
	Nation	21.1	20.9	20.9	20.8	20.6
Average Science Score	Michigan	20.4	20.2	20.4	20.4	20.5
	Nation	20.9	20.7	20.8	20.9	20.8
Average Composite Score	Michigan	20.1	19.9	20.1	20.1	20.3
	Nation	21.1	20.9	21	21	20.8

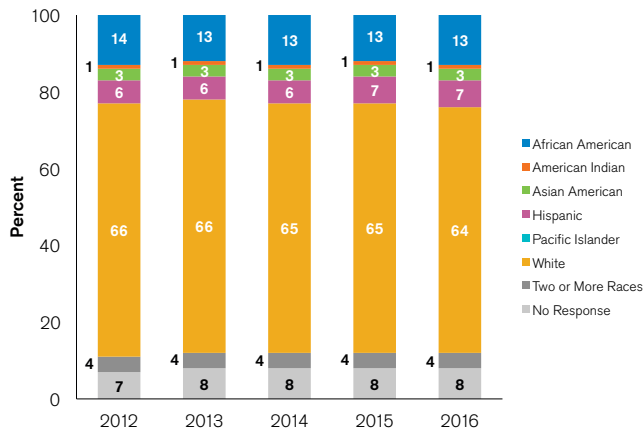
Percent of 2016 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



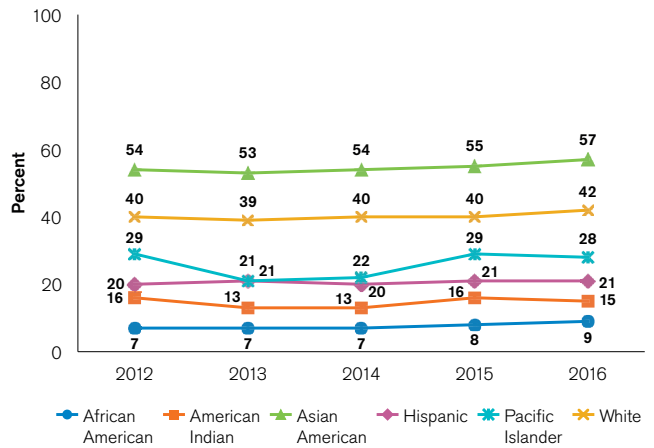
Trends in Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks (CRBs) Attained



Percent of 2012–2016 ACT-Tested High School Graduates by Race/Ethnicity

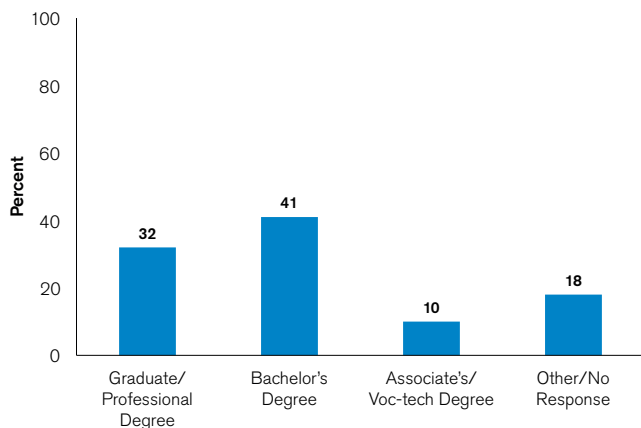


Percent of 2012–2016 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity



Note: Values less than 0.5% will not appear.

Percent of 2016 ACT-Tested High School Graduates by Educational Aspirations



There is good news in that 82% of Michigan's 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 83% of Michigan's 2015 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 58% who actually did enroll. If we fully closed the aspirational gap, an additional 29,797 of the 2015 ACT-tested graduates from Michigan would have enrolled in postsecondary education.

What You Need to Know

At ACT, we are inspired every day to make a positive difference. Here are a few ways we are making an impact each day in the lives of students, teachers, education, policy makers, and workforce leaders.

The ACT[®]

- Enhancements to ACT Score Reports starting in September 2016
- Introduction of ACT Kaplan Online Prep Live in September 2016
- New Score Reports

Pre ACT[™]

- Affordable cost—\$12 per student tested for schools, districts, and states
- Flexible administration—Schools, districts, and/or states may administer on any date between September 1, 2016 and June 1, 2017
- Structured test environment—Similar to what the student will experience when taking the ACT test

Online Prep Live

ACT[®] KAPLAN

- A virtual classroom experience that delivers all the benefits of ACT Online Prep, plus an interactive teaching experience
- Live learning experiences available at no cost to students who register for the ACT using a fee waiver
- Recorded sessions available on demand to provide maximum flexibility to students

ACT[®] Aspire[®]

- New Performance Level Descriptors coming in August 2016
- More than 5 million ACT Aspire online assessments administered to US students since January 2016, a major milestone for the program and up by more than 130% compared to the previous year
- New Score Reports

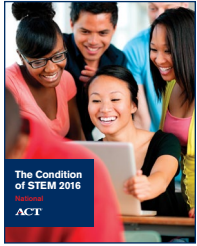
ACT[®] Engage[®]

- Helps schools face the challenge of preparing students for success after high school. Read the latest white paper, *Identifying Skills to Succeed in School, at Work, and in the "Real World."*
- New Score Reports

ACT[®] WorkKeys[®]

- Updated versions of the ACT National Career Readiness Certificate (ACT NCRC) assessments and credential coming in summer 2017
- Fully updated ACT WorkKeys curriculum and test prep available in summer 2017 to support the updated ACT NCRC assessments
- Will include a new test delivery platform that will introduce features and functionality important to ACT WorkKeys customers

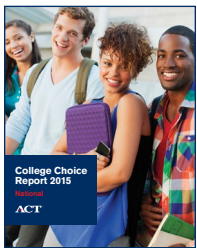
Key ACT Research



The Condition of STEM 2016— Releasing November 2016

This report provides national and state data about the 2016 graduating class in

the context of STEM-related fields (Science, Technology, Engineering, Mathematics) to determine student interest levels in specific STEM fields and, more importantly, readiness in math and science of those interested in STEM careers.



College Choice Report 2015

This report follows the ACT-tested high school graduating class of 2015, focusing on specific testing behaviors that

may expand college opportunities available to students. This is an important topic for enrollment managers and admissions officers to consider, as students' participation in these testing behaviors have implications for colleges' chances to recruit, advise, and place these prospective students.

Recommendations

1. Create an assessment model that measures a variety of skill domains and competencies required for college and career success.

Historically, college and career readiness assessments have focused only on academic skills. ACT research has clearly established areas of competency important for college and career readiness success. While our research shows that ACT solutions independently measure key components of college AND career readiness, we and others have begun to realize that no single solution can measure the full breadth of this readiness, nor should it. Simply put, the ACT alone is not enough to measure the full breadth of career readiness. A more holistic assessment model, incorporating multiple domains and specific skills associated with career clusters or occupations, will typically be most appropriate for describing and evaluating student readiness for college and career.

2. Optimize opportunities to influence awareness and engagement of underserved learners.

Initiatives designed to aid underserved learners are only as effective as they are visible. We must inform advocates and ALL underserved learners about the available and effective programs designed for this purpose. For example, in the 2015–2016 academic year, approximately 730,000 students registered to take the ACT using fee waivers valued at more than \$36 million. Yet, not all eligible students took advantage of this offer. Similarly, institutions must use data to inform intervention strategies if they are going to help underserved students be prepared for postsecondary success.

3. Take the guesswork out of STEM.

It is critically important to align STEM initiatives to capitalize on performance, measured interest, and expressed interest. Essential to this effort is expanding and nurturing interest in STEM, which will impact the emerging pipeline of STEM majors, teachers, and workers. This requires capturing a wider range of students and employing concrete measures to inform intervention and programming. To do so, states and districts must look for partnering opportunities from K–12 to postsecondary education to the workplace.

4. Focus on the implementation of fewer, higher, clearer, standards in K–12 classrooms to raise the bar for all students.

No matter the adopted standards, proper implementation must focus on the most critical component for increasing readiness—effective, high-quality teaching. This requires investment in postsecondary teaching programs, professional development, and state-level collaboration among K–12 and higher education.

5. Don't over test students.

When states, schools, and districts build an assessment strategy that recognizes the limits and promise of test scores, they will reduce the likelihood of over testing. Used ethically and appropriately, assessments can inform decisions at individual and institutional levels. Misunderstood, misused, or abused, assessments cause confusion, can be perceived as punitive, or result in ill-conceived strategies. To quote ACT founder E.F. Lindquist, "Assessment is valuable to the extent it bridges teaching and learning."