

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

Colorado Key Findings

Performance

- In Colorado, the percent of students meeting the ACT College Readiness Benchmarks decreased in each of the four subject areas:
 - ~ English fell from 63% to 61%, math from 40% to 39%, reading from 43% to 42%, and science from 39% to 36%.
 - ~ The number of students meeting all four Benchmarks also decreased from 26% to 25%.
 - ~ Of note is that the number of test takers increased from 57,328 to 58,616.
 - ~ Colorado also tied the nation at percent of students meeting Benchmarks in both English and science, which is significant since Colorado tested all students.
- Relative to ACT Composite score and subject level scores, Colorado saw the following:
 - ~ Subject area scores decreased by 0.1 or 0.2 in English, math, and reading, and increased by 0.1 in science.
 - ~ The average state Composite score, 20.6, currently lags behind the national average of 20.8.
 - ~ The achievement gap between Colorado and the nation is largest in reading, at 0.4.
- Since 2009, even with the increase in number of students testing (51,087 in 2009 and 54,654 in 2016), there have been gains in English scores, science scores, and average Composite scores, while math and reading have remained constant. (These figures refer to students testing with standard time.)

	English	Math	Reading	Science	Composite
2009 (51,087 students)	20.1	20.5	21.1	20.8	20.8
2016 (54,654 students)	20.3	20.5	21.1	21.1	20.9

STEM

- Colorado graduates who took advanced science and math courses show higher levels of achievement:
 - ~ Students who took physics earned significantly higher than 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 did not, in both ACT mathematics scores and in Benchmark attainment.

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 Colorado 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 Colorado, 66% of ACT tested graduates are considered making progress towards at least a gold ACT NCRC level. This compares to 68% nationally.
- This indicator will be helpful when looking at the projected jobs for the state. More information about what level of certificate is recommended for particular jobs can be found by searching the ACT JobPro database at <http://profiles.keytrain.com/>.

Impact

- The 0.1 decrease in Colorado's overall ACT Composite score translates to the following specific impacts on student success:
 - ~ 119 fewer students would enroll in college
 - ~ 143 fewer students would persist to year 2
 - ~ 109 more students would need remedial English
 - ~ 207 more students would need remedial math
 - ~ 163 fewer students would persist to year 4
 - ~ 177 fewer students would earn a postsecondary degree within 6 years

Behaviors that Impact Access and Opportunity

- Testing patterns
 - ~ Of the ACT-tested 2016 Colorado graduates testing during their 10th-, 11th-, or 12th-grade years:
 - 56.8% of White students, 71.3% of Hispanic students, and 57.1% of African American students tested only once.
 - 43.2% of White students, 28.7% of Hispanic students, and 42.9% of African American students tested more than once.
 - 1.7% of White students, 2.7% of Hispanic students, and 3.4% of African American students took their first and only test as a senior.
 - ~ Comparatively, of the ACT-tested 2016 graduates testing during their 10th-, 11th-, or 12th-grade years nationwide:
 - 52.4% of White students, 65.4% of Hispanic students, and 56.1% of African American students tested only once.
 - 47.6% of White students, 34.6% of Hispanic students, and 43.9% of African American students tested more than once.
 - 12.1% of White students, 23.1% of Hispanic students, and 17.2% of African American students took their first and only test as a senior.
- The Hispanic/Latino testing population has increased from 25.0% in 2012 to 27.4% in 2016.
 - ~ Even with the increase in the Hispanic/Latino population testing, there have been gains in the scores. The average Composite increased from 17.6 in 2012 to 17.9 in 2016.
- Below are the top five colleges and universities to which Colorado graduates sent their ACT score:
 1. University of Colorado–Boulder
 2. Colorado State University
 3. University of Northern Colorado
 4. University of Colorado–Colorado Springs
 5. Metropolitan State University of Denver
- Arizona State University is the out-of-state school that receives the most scores from Colorado students.
- Students can opt into the ACT Educational Opportunity Service (EOS) when they register for the ACT. EOS provides students with information about educational opportunities and scholarships by making their names available to colleges and scholarship agencies that meet EOS eligibility guidelines. The opt-in rate in Colorado range from 67.2%. The national opt-in rate is 73.1%.
- “Get Your Name in the Game” information: The “Get Your Name is the Game” campaign provides students an opportunity to find colleges that would be a good fit and helps students who were not thinking about postsecondary education to realize that college is a possibility.
 - ~ 15 Colorado schools have accessed more than 800,000 names since the inception of the initiative.

- Fee Waiver Usage
 - ~ In Colorado, there were 6,455 fee waivers issued and 4,742 of those were used. This equates to a 73.5% usage rate. The national rate was 74.5%.
 - ~ 62%, or 1,056 of the fee waivers that went unused were issued to Hispanic/Latinos.
 - ~ ACT provides students fee waivers to provide more access and opportunity for students.

Pipeline

- Only 3% of ACT-tested Colorado 2016 graduates expressed an interest in pursuing education as a major. Those students earned an average ACT Composite score of 20.8, higher than the state average of 20.6. In comparison, 13% expressed an interest in pursuing Health Sciences and Technologies.
- Aspirations matter. Students in Colorado 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 24.4.
 - ~ Graduates who aspire to a bachelor's degree earn an average Composite score of 20.8.
 - ~ Graduates who aspire to an associate's degree earn an average Composite score of 16.5.
- The chart below shows the top five planned educational majors in the state.

	Student Interest
1	Health Sciences and Technologies (13%)
2	Business (9%)
3	Engineering (8%)
4	Visual & Performing Arts (7%)
5	Social Sciences and Law (7%)

ACT Footprint

ACT Aspire® Summative	ACT Aspire Periodic	ACT Engage®	ACT QualityCore®	PreACT™	ACT WorkKeys®
22,310	135,462	809	–	1,313*	13,738

* 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.

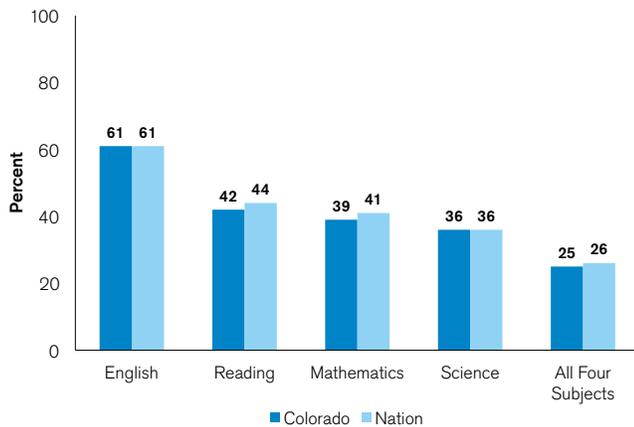
Special State Talking Points

- In 2016, ACT honored exemplars in 41 states as part of our ACT College & Career Readiness Campaign. In Colorado, these honorees include:
 - ~ Student—Saviano Perry, East High School
 - ~ High School—KIPP Denver Collegiate High School (also a National Semifinalist)
- In September 2015, 170 educators participated in the Colorado ACT State Organization conference
- There will be five ACT College and Career Readiness Workshops offered throughout the state in fall 2016 (in Denver, Fort Collins, Golden, Colorado Springs, and Breckenridge). Last year there were 167 registrants
- Mesa County is working toward becoming a certified ACT Work Ready Community

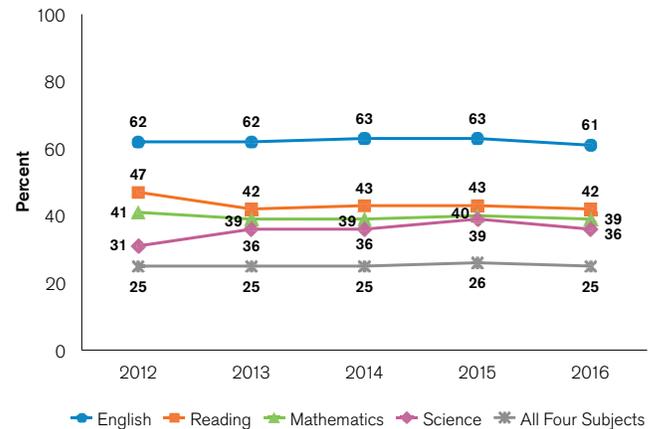
Your State College and Career Readiness Attainment, Participation, and Opportunity

Colorado

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.

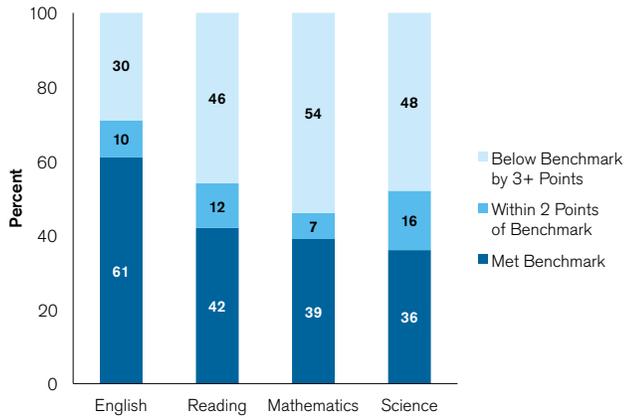
Student Data Trends

- Between 2012 and 2016, the number of students taking the ACT in Colorado increased by 10.4%.

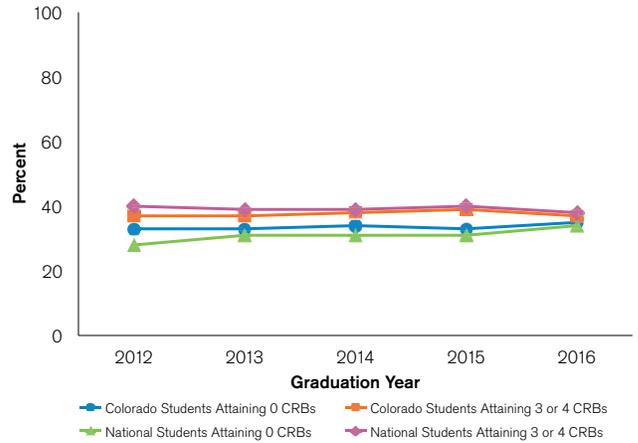
Student Condition Data Interest Trends: 2012–2016, State vs. Nation

Outcome	Cohort	2012	2013	2014	2015	2016
Percent Tested	Colorado	100%	100%	100%	100%	100%
	Nation	52%	54%	57%	59%	64%
N Tested	Colorado	53,071	56,027	56,510	57,328	58,616
	Nation	1,666,017	1,799,243	1,845,787	1,924,436	2,090,342
Average English Score	Colorado	19.9	19.9	20.1	20.2	20
	Nation	20.5	20.2	20.3	20.4	20.1
Average Reading Score	Colorado	20.7	20.5	20.9	21	20.9
	Nation	21.3	21.1	21.3	21.4	21.3
Average Mathematics Score	Colorado	20.5	20.4	20.4	20.4	20.3
	Nation	21.1	20.9	20.9	20.8	20.6
Average Science Score	Colorado	20.8	20.5	20.6	20.8	20.9
	Nation	20.9	20.7	20.8	20.9	20.8
Average Composite Score	Colorado	20.6	20.4	20.6	20.7	20.6
	Nation	21.1	20.9	21	21	20.8

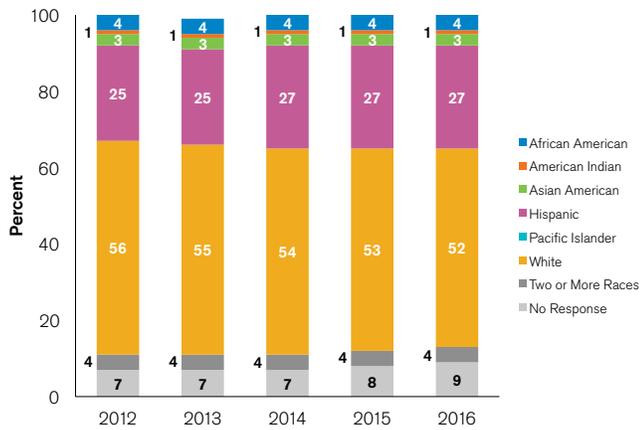
Percent of 2016 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject



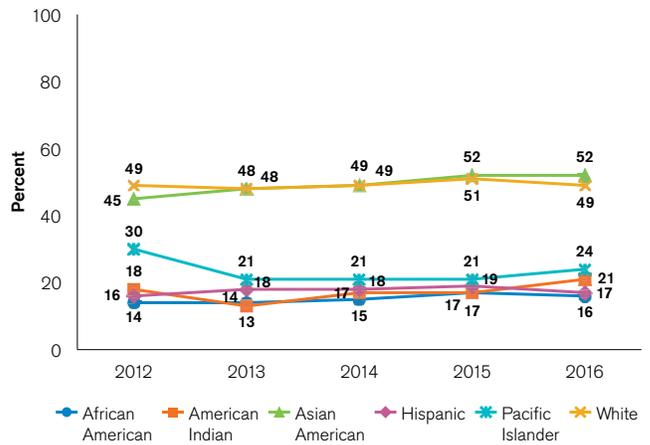
Trends in Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks (CRBs) Attained



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

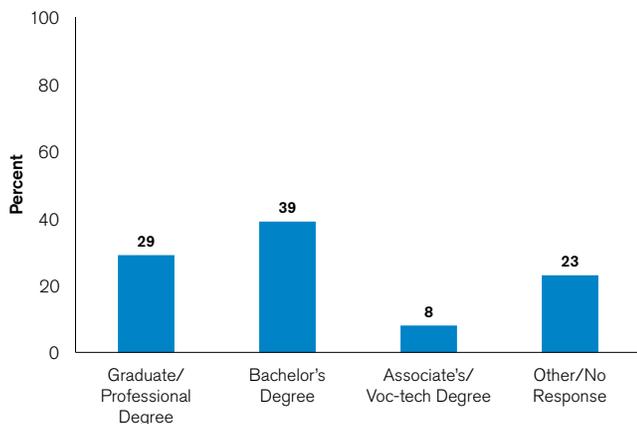


Percent of 2012–2016 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity



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 77% of Colorado's 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 80% of Colorado's 2015 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 52% who actually did enroll. If we fully closed the aspirational gap, an additional 16,357 of the 2015 ACT-tested graduates from Colorado 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

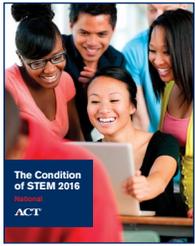
ACT[®] Engage[®]

- 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

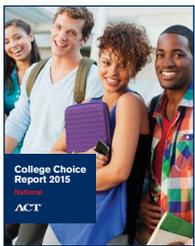
Key ACT Research



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."