

## 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

## North Dakota Key Findings

### Performance

- In North Dakota, 7,379 students in the 2016 graduating class took the ACT. This is a slight increase of 272 students from 7,162 in 2015. The 2016 results reflect a change in overall percentage of students meeting ACT College Readiness Benchmark scores across all content areas:
  - ~ A 4% decrease in English and mathematics
  - ~ A 5% decrease in science
  - ~ No change in reading
  - ~ A 2% decrease in students meeting all four Benchmarks
- Relative to ACT Composite score and subject-level scores, North Dakota 2016 ACT results include the following:
  - ~ The average Composite score decreased by 0.3 from 2015.
  - ~ The proportion of Hispanic/Latino students in the testing pool has shown a dramatic increase both in numbers of students and percentages between 2012 and 2016 from 2% to 4%. Despite a decrease of 0.2 from 2015, the average ACT Composite score among Hispanic/Latino students increased from 18.1 in 2012 to 18.5 in 2016.
  - ~ The average state Composite score, 20.4, currently lags behind the national average of 20.8.
  - ~ 53% of the North Dakota 2016 graduating class reported taking "Core or More." This is consistent with students who tested in 2015. Across all content areas, students who reported taking "Core or More" significantly outperformed those students who reported taking "Less than Core."

### STEM

- North Dakota graduates who took advanced science and math courses show higher levels of achievement:
  - ~ Students who reported taking biology, chemistry, and physics earned significantly higher average ACT science scores than students who reported taking general science, biology, and chemistry.
  - ~ Students who reported taking algebra 1, algebra 2, geometry, trigonometry, and calculus scored significantly higher than those students who did not.
- 15% of North Dakota students met the STEM Benchmark of 26 in 2016
- The North Dakota average ACT STEM score was 20.8, while the national average STEM score was 20.9.
- Of the North Dakota students meeting the STEM Benchmark:
  - ~ The average ACT mathematics score was 27.8, while the national average score was 28.7. (The math STEM Benchmark is 27.)
  - ~ The average ACT science score was 27.9, while the national average was 28.6. (The science STEM benchmark is 25.)

## 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 North Dakota 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 North Dakota, 70% 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
  - ~ The percent of North Dakota ACT-tested graduates who took the exam only one time, 64%, is higher than the national average of 57%.
  - ~ Of North Dakota students who take the ACT one time, the average Composite score is 19.2; however, students who take the exam a second time average an increase in Composite score of 2.8 points (22.0).
- Below are the top five colleges and universities to which North Dakota graduates sent their ACT scores:
  - ~ North Dakota State University
  - ~ University of North Dakota
  - ~ Bismarck State College
  - ~ North Dakota State College of Science
  - ~ Minot State University
- University of Minnesota–Twin Cities is the out-of-state school that receives the most scores from North Dakota students.
- 66.8% of North Dakota students who registered for the ACT opted to participate in the ACT Educational Opportunity Service (EOS) for recruitment and scholarship opportunities across the country. The national EOS opt-in rate is 73.1%.
- Fee Waiver Usage
  - ~ In North Dakota, there were 222 fee waivers issued and 161 of those were used. This equates to a 72.5% usage rate. The national rate was 74.5%.
  - ~ 45.9%, or 28, of all unused fee waivers were issued to American Indian/Alaska Native students.
  - ~ ACT provides students fee waivers to provide more access and opportunity for students.

## Pipeline

- The top five intended educational majors reported by the 2016 North Dakota graduating class:
  - ~ Health Sciences and Technologies—1,328 students; average Composite score of 21.1
  - ~ Undecided—787 students; average Composite score of 20.8
  - ~ Business—457 students; average Composite score of 20.8
  - ~ Engineering—450 students; average Composite score of 22.7
  - ~ Education—420 students; average Composite score of 20.7
- Aspirations count. As a result of North Dakota offering testing to all juniors, there has been an increase in postsecondary interest from year to year:
  - ~ 904 students aspiring to an associate's degree had an average Composite score of 17.5.
  - ~ 3,170 students aspiring to a bachelor's degree had an average Composite score of 20.7.
  - ~ 642 students aspiring to a graduate degree had an average Composite score of 22.9.

## ACT Footprint

ACT Aspire® Summative	ACT Aspire® Periodic	ACT Engage®	ACT QualityCore®	PreACT™	ACT WorkKeys®
9,068	8,797	635	–	352*	3,769

\* 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.*

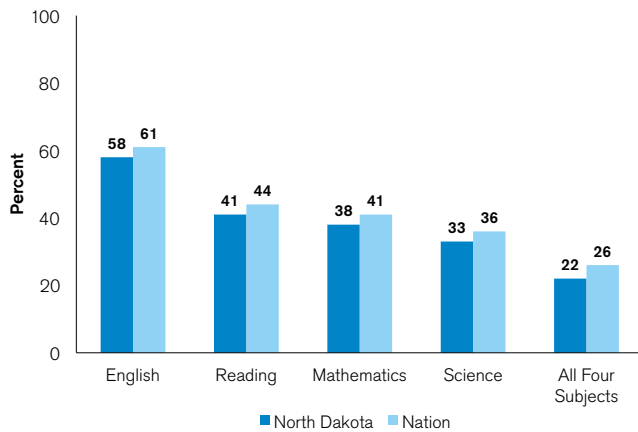
## Special State Talking Points

- 2016 College and Career Readiness Campaign award recipients:
  - ~ Community College: North Dakota College of Science
  - ~ High School: Ronald N. Davies High School
  - ~ Student: Sarah LaVallie (Turtle Mountain Community High School)
- ACT conducted three College and Career Readiness Workshops in North Dakota—in Bismarck, Fargo, and Grand Forks.

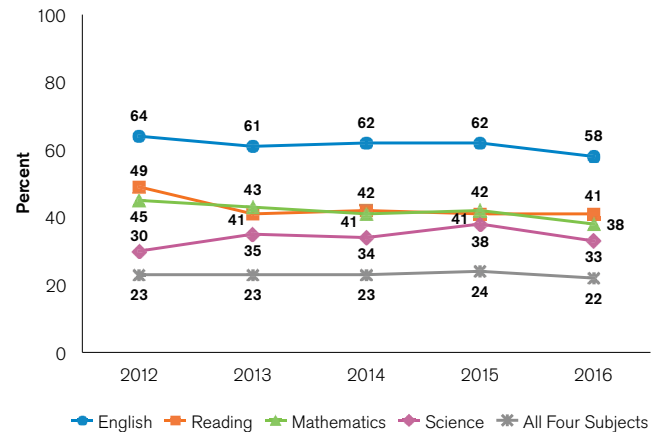
# Your State College and Career Readiness Attainment, Participation, and Opportunity

## North Dakota

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.

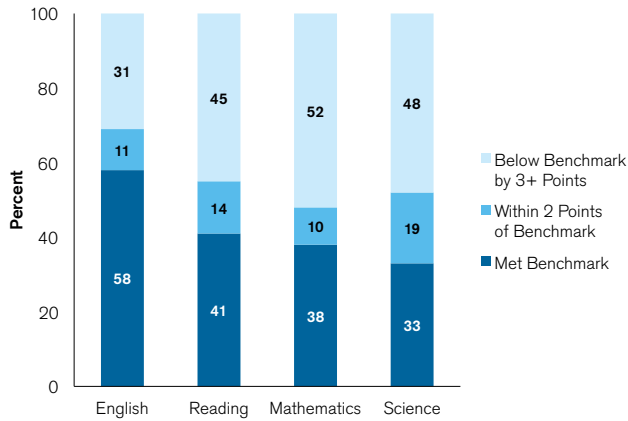
## Student Data Trends

- Between 2012 and 2016, the number of students taking the ACT in North Dakota increased by 7%.

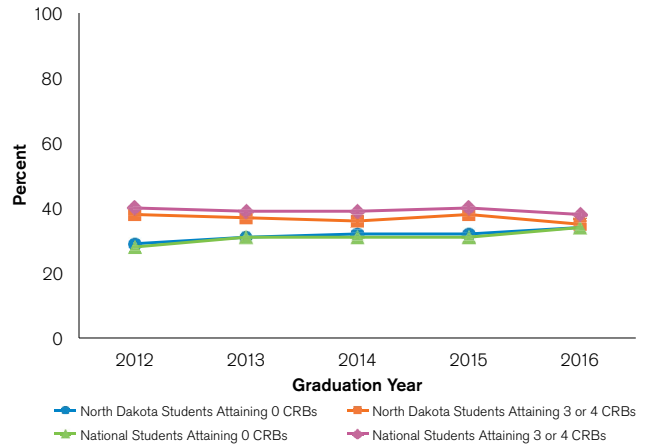
Student Condition Data Interest Trends: 2012–2016, State vs. Nation

Outcome	Cohort	2012	2013	2014	2015	2016
Percent Tested	North Dakota	100%	98%	100%	100%	100%
	Nation	52%	54%	57%	59%	64%
N Tested	North Dakota	6,896	7,102	7,227	7,162	7,379
	Nation	1,666,017	1,799,243	1,845,787	1,924,436	2,090,342
Average English Score	North Dakota	19.6	19.5	19.6	19.6	19.1
	Nation	20.5	20.2	20.3	20.4	20.1
Average Reading Score	North Dakota	20.7	20.5	20.8	20.7	20.7
	Nation	21.3	21.1	21.3	21.4	21.3
Average Mathematics Score	North Dakota	21	20.8	20.7	20.6	20.3
	Nation	21.1	20.9	20.9	20.8	20.6
Average Science Score	North Dakota	20.9	20.7	20.6	20.8	20.7
	Nation	20.9	20.7	20.8	20.9	20.8
Average Composite Score	North Dakota	20.7	20.5	20.6	20.6	20.3
	Nation	21.1	20.9	21	21	20.8

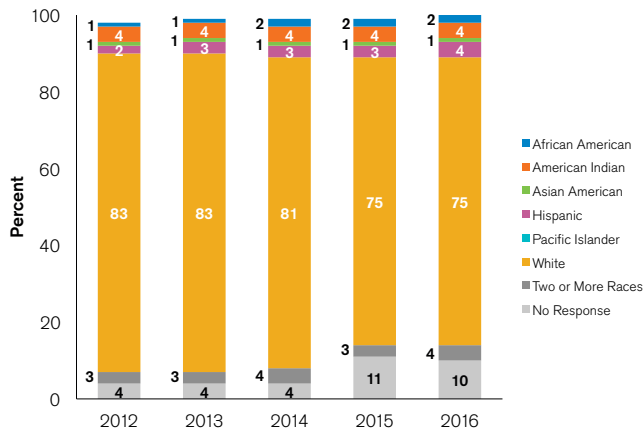
**Percent of 2016 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject**



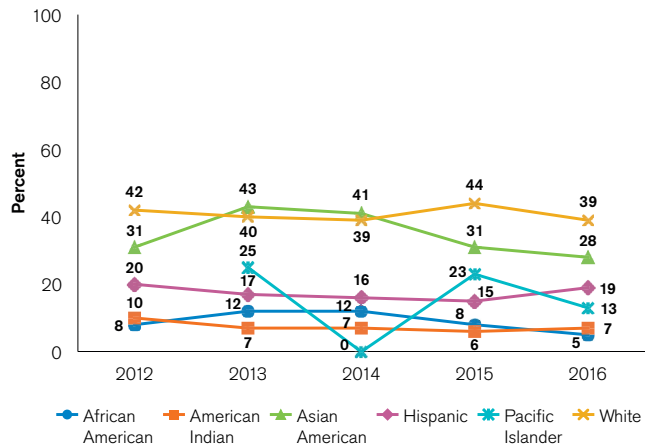
**Trends in Percent of ACT-Tested High School Graduates by Number of ACT College Readiness Benchmarks (CRBs) Attained**



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

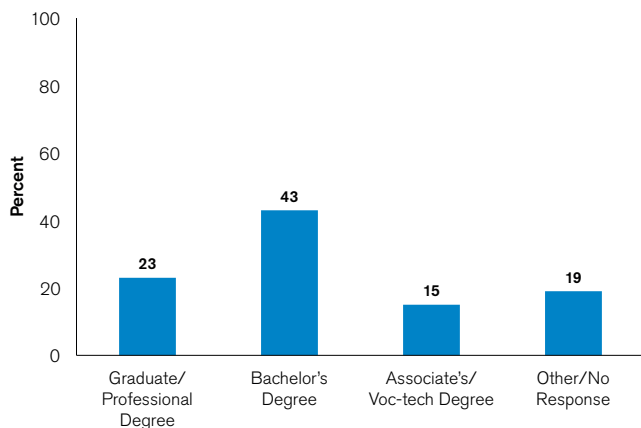


**Percent of 2012–2016 ACT-Tested High School Graduates Meeting Three or More Benchmarks by Race/Ethnicity**



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 81% of North Dakota's 2016 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 83% of North Dakota's 2015 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 59% who actually did enroll. If we fully closed the aspirational gap, an additional 1,658 of the 2015 ACT-tested graduates from North Dakota 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<sup>®</sup>

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

### Pre-ACT<sup>™</sup>

- 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<sup>®</sup> 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<sup>®</sup> Aspire<sup>®</sup>

- 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

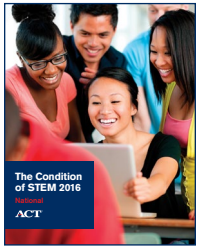
### ACT<sup>®</sup> Engage<sup>®</sup>

- 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<sup>®</sup> WorkKeys<sup>®</sup>

- 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

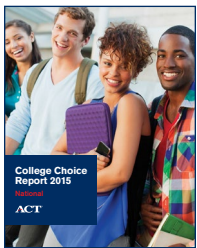
## Key ACT Research



### **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."