## The Condition of College & Career Readiness

This report looks at the achievement of the ACT®-tested 2017 graduating class relative to college and career readiness. A total of 60% of students in the 2017 US graduating class took the ACT® test, compared to 64% last year, 54% in 2013, and 42% in 2007. The growing percentage of the nation's graduates taking the ACT over the past decade has enhanced the breadth and depth of the data pool, providing a comprehensive picture of the current graduating class in the context of college readiness.

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

- Holistic view of readiness. The ACT report, Broadening the Definition of College and Career Readiness: A Holistic Approach, shows academic readiness is only one of multiple domains critical in determining an individual's readiness for success in college and career. Social and emotional learning skills (SEL) are also vital. Behavioral skills, cross-cutting capabilities, and navigational skills should be measured and addressed. Together, these elements provide a comprehensive picture of student readiness for success after high school.
- 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 educational 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 2017

### **North Dakota Key Findings**

#### **Performance**

- In the North Dakota graduating class of 2017, 7,399 graduates took the ACT® test, compared to 7,102 in 2013.
- North Dakota graduates of 2017 had an average Composite score of 20.3, compared to the national average of 21.0.
- In 2017, 22 percent of North Dakota graduates met all four ACT College Readiness Benchmarks.
   This compares to 22 and 23 percent of 2016 and 2013 graduates, respectively.
  - This compares to 27 percent nationally.
  - 34 percent of North Dakota students met three or four ACT College Readiness Benchmarks, compared to 39 percent nationally.
  - North Dakota students exceeded the national readiness ranges for all reporting categories in English, math, and science. Only reading lagged behind the national ranges, with 56 percent scoring below proficiency in reading complex texts.
  - 48 percent of North Dakota 2017 graduates taking three or more years of math met the ACT Math College Readiness Benchmark. This compares to 5 percent of students taking less than three years of math.
  - 42 percent of North Dakota 2017 graduates taking three or more years of science met the ACT Science College Readiness Benchmark. This compares to 13 percent of students taking less than three years of science.

#### **STEM**

- In 2017, 3,368 North Dakota graduates (46 percent) indicated having an interest in STEM majors and/or careers.
- 16 percent of North Dakota students met the ACT STEM College Readiness Benchmark of 26, compared to 21 percent nationally, and had an average math STEM score of 28.0 and a science STEM score of 27.7.
- In North Dakota, 2017 graduates taking three or more years of math had an average math score
  of 21.4 compared to the average math score of 16.3 for students taking less than three years of
  math.
- In North Dakota, 2017 graduates taking physics had an average science score of 22.7, compared to the average science score of 20.0 for students not taking physics.

#### **Career Readiness**

- In 2017, 1,471 North Dakota graduates (20 percent) were likely to attain the Gold ACT WorkKeys® National Career Readiness Certificate® or higher based upon ACT Composite score, compared to 538,392 (27 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." For comparison, individual student score reports classify those who scored 12 to 13, 14 to 17, and 18 and higher as making progress toward Bronze, Silver, and Gold certificates.

#### **Impact**

- Based on the actual test volume and ACT score distributions of 2016 ACT-Tested North Dakota high school graduates, ACT research estimates that an increase of 0.1 in state average ACT Composite score for the 2017 graduating class would result in:
  - 15 more students enrolling in college.
  - 19 more students persisting to year two.
  - 16 fewer students needing remedial English.
  - 27 fewer students needing remedial math.
  - 21 more students persisting to year four.
  - 23 more students earning a postsecondary degree within six

#### **Behaviors that Impact Access and Opportunity**

- In North Dakota, 2017 graduates taking the ACT two or more times had an average Composite score of 22.4, compared to 19.1 for single-time testers.
  - The vast majority of North Dakota students only test once. Native American students carry the largest percentage of single-testers at 81 percent. Native American students who retested improved their score by 0.5 points.
- Of North Dakota's 2017 graduating class, there were 169 (2 percent) African American students taking the ACT. This compares to 256,756 (13 percent) nationally.
- Of North Dakota's 2017 graduating class, there were 315 (4 percent) American Indian students taking the ACT. This compares to 16,135 (1 percent) nationally.
- Of North Dakota's 2017 graduating class, there were 5,511 (74 percent) White students taking the ACT. This compares to 1,062,439 (52 percent) nationally.
- Of North Dakota's 2017 graduating class, there were 294 (4 percent) Hispanic students taking the ACT. This compares to 347,906 (17 percent) nationally.
- Of North Dakota's 2017 graduating class, there were 102 (1 percent) Asian students taking the ACT. This compares to 96,097 (5 percent) nationally.
- Compared to 73 percent of 2017 graduates nationally, 73 percent of North Dakota graduates opted into EOS.
  - ~ This compares to 66.8 percent from the 2016 graduating class.
- For North Dakota's 2017 ACT-tested graduates, the top five schools to which scores were sent were North Dakota State University, University of North Dakota, Bismarck State College. North Dakota State College of Science, and Minot State
  - For North Dakota's 2017 ACT-tested graduates, the top three out-of-state schools to which scores were sent were University of Minnesota-Twin Cities, Minnesota State University Moorhead, and Concordia College-Moorhead.
- ACT issued 230 ACT fee waivers to qualified North Dakota students. However, 86 students (37 percent) did not take advantage of this opportunity to test for free. This compares to 656,061 issued nationally, of which 181,092 (28 percent) did not take advantage. Fee waivers represent a great opportunity for students with socio-economic challenges to retest without incurring any fees. Note: This is the number of fee waivers issued for the state, not specific to this graduating class.
- In North Dakota, 20,692 ACT scores were sent to colleges.

#### **Pipeline**

- In the North Dakota graduating class of 2017, 954 (13 percent) had parents who did not attend college.
- In the North Dakota graduating class of 2017, 1,104 (15 percent) aspired to attain a professional degree. They had an average Composite score of 22.9.
- In the North Dakota graduating class of 2017, 635 (9 percent) aspired to attain a graduate degree. They had an average Composite score of 23.1.
- In the North Dakota graduating class of 2017, 3,156 (43 percent) aspired to attain a bachelor's degree. They had an average Composite score of 20.7.
- In the North Dakota graduating class of 2017, 849 (11 percent) aspired to attain an associate's degree. They had an average Composite score of 17.2.
- In order of prevalence, the five most commonly indicated college majors of interest for 2017 North Dakota graduates were: Undecided; Nursing, Registered (BS/RN); Medicine (Pre-Medicine); Business Administration and Management, General; and Engineering (Pre-Engineering), General.
  - In the North Dakota graduating class of 2017, 796 (11 percent) indicated being undecided about their college major. They had an average Composite score of 20.2.
  - In the North Dakota graduating class of 2017, 456 (6 percent) indicated planning on majoring in education. They had an average Composite score of 20.5.

#### **ACT Footprint**

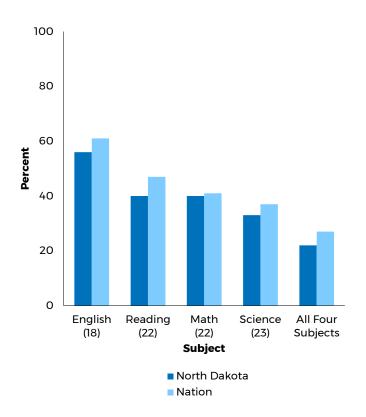
- Number of administrations:
  - ACT Aspire® Summative: 17,810
  - ACT Aspire Periodic: 22,048
  - ACT Engage®: 606
  - PreACT®: 1,269
  - ACT WorkKeys: 4,208

#### **Additional Points**

- There were three students who scored a 36 ACT Composite score in the class of 2017, compared to one in 2016.
- Females outperformed males in the percentage of students meeting English and reading benchmarks, and males outperformed females in math by 3 percent and 0 percent in science.
- According to the US Department of Labor's Bureau of Labor Statistics, the fastest-growing careers in North Dakota requiring education beyond high school are: Wind Turbine Service Technicians, Film and Video Editors, Nurse Practitioner, and Operations Research Analysts.

## North Dakota College and Career Readiness Attainment, Participation, and Opportunity

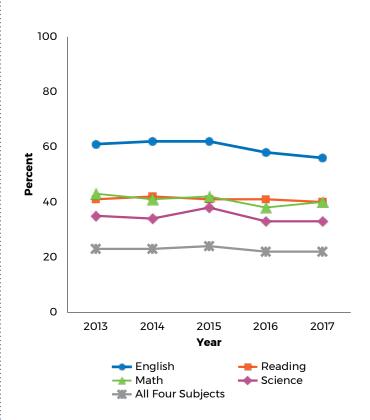
Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks\* by Subject



#### Data from graph above:

State / Nation	English (18)	Reading (22)	Math (22)	Science (23)	All Four
North Dakota	56	40	40	33	22
Nation	61	47	41	37	27

Percent of 2013-2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks

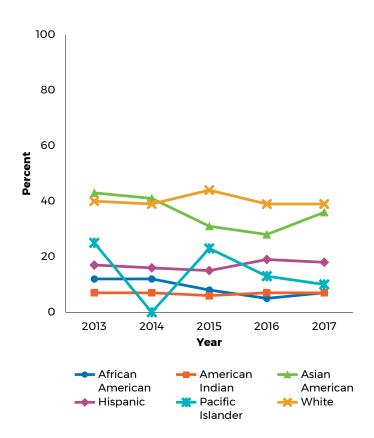


#### Data from graph above:

Subject	2013	2014	2015	2016	2017
English	61	62	62	58	56
Reading	41	42	41	41	40
Math	43	41	42	38	40
Science	35	34	38	33	33
All Four Subjects	23	23	24	22	22

<sup>\*</sup> 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 score values in parentheses ().

#### Percent of 2013-2017 ACT-Tested High School Graduates Meeting Three or More ACT College Readiness Benchmarks by Race/Ethnicity\*



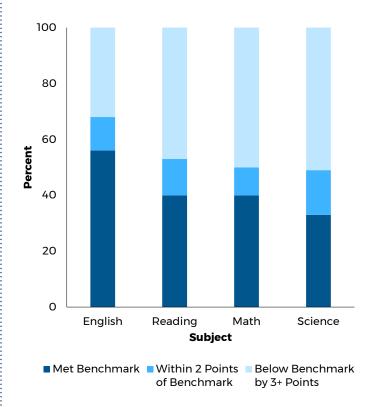
#### Data from graph above:

Race	2013	2014	2015	2016	2017
African American	12	12	8	5	7
American Indian	7	7	6	7	7
Asian American	43	41	31	28	36
Hispanic	17	16	15	19	18
Pacific Islander	25	0	23	13	10
White	40	39	44	39	39

<sup>\*</sup> Percentages for groups with insufficient counts will be missing.

#### Percent of 2017 ACT-Tested High School Graduates by ACT College Readiness Benchmark Attainment and Subject

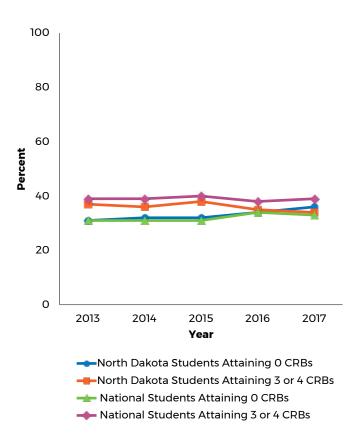
Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



#### Data from graph above:

Attainment	English	Reading	Math	Science
Met Benchmark	56	40	40	33
Within 2 Points of Benchmark	12	13	10	16
Below Benchmark by 3+ Points	32	47	50	51

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

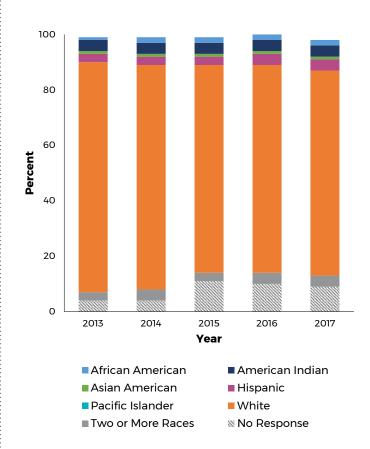


#### Data from graph above:

Attainment	2013	2014	2015	2016	2017
North Dakota Students Attaining 0 CRBs	31	32	32	34	36
North Dakota Students Attaining 3 or 4 CRBs	37	36	38	35	34
National Students Attaining 0 CRBs	31	31	31	34	33
National Students Attaining 3 or 4 CRBs	39	39	40	38	39

## Percent of 2013-2017 ACT-Tested High School Graduates by Race/Ethnicity

Note: Percents in this graph may not sum to 100% due to rounding. Values less than 0.5% will not appear.



#### Data from graph above:

Race	2013	2014	2015	2016	2017
African American	1	2	2	2	2
American Indian	4	4	4	4	4
Asian American	1	1	1	1	1
Hispanic	3	3	3	4	4
Pacific Islander	0	0	0	0	0
White	83	81	75	75	74
Two or More Races	3	4	3	4	4
No Response	4	4	11	10	9

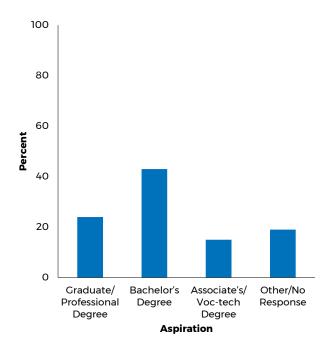
North Dakota: Between 2013 and 2017, the number of students taking the ACT in North Dakota increased by 297 students (4 percent).

#### Student Data Trends: 2013-2017, State vs. Nation

Outcome	Cohort	2013	2014	2015	2016	2017
Percent	North Dakota	98	100	100	100	98
Tested	Nation	54	57	59	64	60
Marked	North Dakota	7,102	7,227	7,162	7,379	7,399
N Tested	Nation	1,799,243	1,845,787	1,924,436	2,090,342	2,030,038
Average	North Dakota	19.5	19.6	19.6	19.1	19.0
English Score	Nation	20.2	20.3	20.4	20.1	20.3
Average	North Dakota	20.5	20.8	20.7	20.7	20.5
Reading Score	Nation	21.1	21.3	21.4	21.3	21.4
Average Math	North Dakota	20.8	20.7	20.6	20.3	20.4
Score	Nation	20.9	20.9	20.8	20.6	20.7
Average	North Dakota	20.7	20.6	20.8	20.7	20.6
Science Score	Nation	20.7	20.8	20.9	20.8	21.0
Average	North Dakota	20.5	20.6	20.6	20.3	20.3
Composite Score	Nation	20.9	21.0	21.0	20.8	21.0

#### Percent of 2017 ACT-Tested High School Graduates by Educational Aspirations

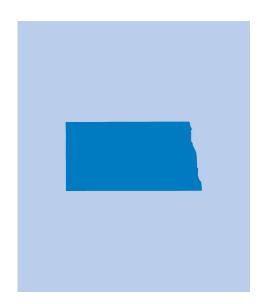
Note: Percents in this graph may not sum to 100% due to rounding.



There is good news in that 81% of North Dakota's 2017 ACT-tested graduates aspired to postsecondary education. Interestingly enough, 81% of North Dakota's 2016 ACT-tested graduating class aspired to enroll in postsecondary education, compared to 61% who actually did enroll. If we fully closed the aspirational gap, an additional 1,528 of the 2016 ACT-tested graduates from North Dakota would have enrolled in postsecondary education.

#### Data from graph

Aspiration	Percent
Graduate / Professional Degree	24
Bachelor's Degree	43
Associate's / Voc-tech Degree	15
Other / No Response	19



#### North Dakota State Exemplar 2017 ACT College and Career Readiness Campaign

#### **Amy Horter**

Grafton High School, Grafton Public Schools

"Since I have a sense of responsibility, I will be able to excel in an environment where hard work is required."

Living with just her father, Amy has had to take more personal responsibility than most teenagers. However, she has used this as an opportunity to practice the independence needed to succeed in college.

Amy plans to major in engineering in college and has taken five dual-credit courses in high school to prepare herself for the rigors of postsecondary education.

#### Information and products for further review

	Knowledge & Skills	Social & Emotional			
	ACT Aspire®	ACT Tessera™			
Assessments	PreACT®	ACT Engage®			
	The ACT® Test				
	ACT WorkKeys®				
	Condition of College & Career Readiness				
	ACT® National Curriculum Survey®	A Rosetta Stone for Noncognitive Skills			
Research	The Forgotten Middle	Tessera Comprehensive			
	Rigor at Risk	Theory of Action			
	ACT Holistic Framework™				
	PLDs Learning Description Review	Tessera Teacher Playbook			
D	Curriculum Review Worksheets	,			
Resources	OpenEd Learning Resources				
	Test Prep				
	Professional Learning Sessions				
Training	College & Career Readiness Workshops				
3	Holistic Framework Webinars				

We are more than just the ACT test. ACT products and services encompass a variety of researchand assessment-based solutions.

As research leaders, we continue to innovate education and workforce solutions to help guide individuals to education and career success.

Find out more at www.act.org.

#### **Key ACT Research**

As students navigate their education and career journeys, it is critical for them to be ready for college and career success. College and career readiness is supported by the ACT Holistic Framework, a research-based, multidimensional model for understanding the essential knowledge and skills needed for success, and the solutions that can meet students' navigation needs. Visit act.org/condition2017 to access key reports listed below.

- Serving students' navigation needs from kindergarten to career requires a holistic approach:
  - Beyond Academics: A Holistic Framework for Enhancing Education and Workplace Success
  - The Importance of Behavioral Skills and Navigation Factors for Education and Workforce Success
- The ACT Holistic Framework is supported by prolific research:
  - ~ Core Academic Skills:
    - 2017 State and National Condition Reports
    - Profiles of STEM Students: Persisters, Joiners, Changers, and Departers
    - ACT Composite Score by Parental Education Level, 2012-2016
    - Comparisons of Student Achievement Levels by District Performance and Poverty
  - Behavioral Skills (also called Social and Emotional Learning):
    - The Development of Behavioral Performance Level Descriptors
  - ~ Cross-Cutting Capabilities:
    - ACT National Curriculum Survey 2016
  - Student journeys continue into postsecondary education and careers:
    - Higher Education Research Digest
    - Predicted Attainment of ACT National Career Readiness Certificates for the 2016 ACT-tested High School Cohort

#### Recommendations

- 1. Use a holistic assessment model for school accountability that measures student readiness for college and career across multiple domains. While it is essential to measure students' academic achievement in assessing college and career readiness, it is not enough. Social and emotional learning skills are important and measurable, and they can be impacted. Assessment models should take into account core academic skills, behavioral skills, cross-cutting capabilities, and education and career navigation skills to provide an integrated picture of college and work readiness.
- 2. Make special efforts to ensure that underrepresented students have equal access and opportunity to pursue postsecondary education. According to ACT research, most underrepresented students want to continue their education after high school, but they face many barriers. Ensuring they have access to the same rigorous core curriculum as others is just one step. Many also lack the resources, information, and familial and peer support they need to prepare for success after high school. Special efforts must be made to level the playing field for underrepresented students so they have equal opportunity to succeed.
- 3. Increase emphasis on STEM readiness initiatives, measures, and programs. With technology advancing rapidly, the importance of STEM readiness is only increasing. The threat of robotic and computer-assisted technologies eliminating jobs is growing while the remaining and emerging jobs will likely require higher-level skills. ACT data continue to show that many graduates are not ready. Without improvement in STEM readiness, far too many will be ill-prepared for the future workforce.
- 4. Focus on fewer, higher, and clearer learning standards in K-12 schools. Far too many students continue to graduate from high school without all of the core skills they will need to ably succeed at the next level. Many will struggle, and many will likely fail to realize their aspirations. The push toward raising the bar on learning standards and focusing on the essential skills necessary for success must continue.
- 5. Begin assessing learning and implementing intervention strategies early. Early assessment and intervention are critical to improving educational outcomes. If students are not on track for college and career readiness by the time they reach middle school, it may be too late. Assessing learning and implementing intervention strategies to help students get on the right path for college and career readiness must begin in elementary school.