1.1.b Preparation for College

Increase the proportion of Nebraska high school graduates who are adequately prepared to enroll in postsecondary education and proceed through degree completion.

The results of the ACT test are summarized in this section as indicators of the extent to which Nebraska high school graduates are prepared academically to enter and proceed through postsecondary education. Of particular interest are (1) the estimated percentages of Nebraska high school graduates who are prepared for college-level coursework and (2) the higher average ACT scores achieved by students who take the "core" high school courses recommended to prepare them for college.

Beginning with the 2018 graduating class, Nebraska students are tested using the Nebraska Student-Centered Assessment System (NSCAS ACT). This test is given to all students in the cohort minus one year (typically the 11th grade). As shown in the following section, this change has affected participation rates so that all students graduating from Nebraska high schools have theoretically taken the ACT test.⁵ However, due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment. ACT estimates that 86% of the 2021 graduating class, 94% of the 2022 graduating class, and 96% of the 2023 graduating class took the ACT Assessment.

Since the ACT test is the predominant college entrance exam available to measure the extent to which Nebraska students are prepared for academic coursework beyond high school, this section focuses exclusively on the ACT test.⁶

Nebraska ACT Assessment Scores

The ACT Assessment consists of four curriculum-based achievement tests in English, reading, mathematics, and science. A student's scores for each of these tests are reported on a 36-point scale. A composite score is reported on a 36-point scale to reflect the student's overall performance on the series of four tests.

- As shown in <u>Figure 1.1.b.1</u>, the average ACT composite score for Nebraska high school students in the graduating class of 2023 was 19.2, down from 21.5 in 2013. Nebraska's 2023 average ACT composite score was 0.3 points lower than the national average of 19.5.
- There are two known reasons for the recent fluctuations in the average ACT composite score.
 - First, beginning with the graduating class of 2018, all students take the ACT test in their cohort minus one year. The precise effects of this change on ACT scores are unknown; however, it is reasonable to postulate that students who normally would not have taken the ACT test unless required would perform lower than students who planned to take the ACT test.
 - Second, due to the COVID-19 pandemic and extensive school closures, Nebraska received a waiver from the U.S. Department of Education for 2019-2020 assessments, and Governor Ricketts signed an Executive Order waiving certain accountability and

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⁵ A potential exception to 100% testing of graduates would be out-of-state students that transferred into Nebraska's schools after their cohort minus one year.

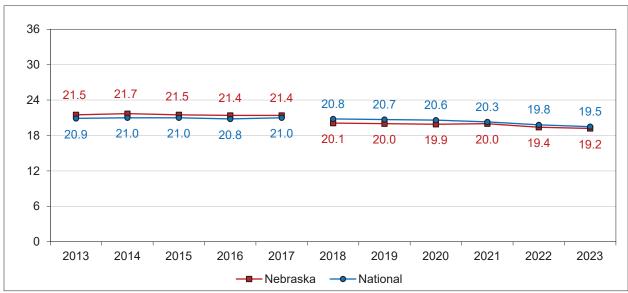
⁶ In 2023, only 1.3% of Nebraska high school graduates took the SAT Test.

assessment requirements. Therefore, for the graduating class of 2021, the requirement to take the ACT test during their junior year was waived. In addition, the Nebraska Department of Education reported that although the requirement was not waived for the graduating class of 2022, not all graduates took the assessment. ACT estimates that 86% of the 2021 graduating class and 94% of the 2022 graduating class took the ACT Assessment. For the 2023 graduating class, ACT estimates that 96% took the assessment.

Nationally, an estimated 37% of students in the high school graduating class of 2023 took
the ACT Assessment. Nebraska had the third highest average composite score among the
15 states where an estimated 90% or more of the 2023 high school graduates took the ACT
Assessment.

Figure 1.1.b.1

Comparison of Nebraska and National Average ACT Composite Scores for the High School Graduating Classes of 2013 through 2023

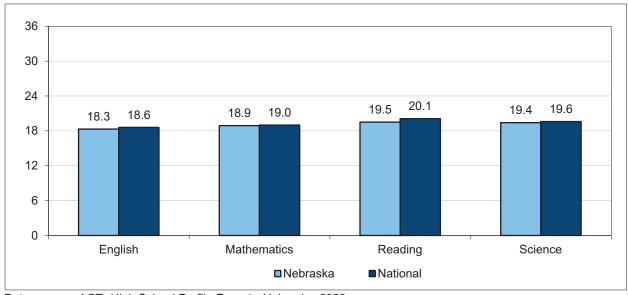


Note. Beginning with the 2018 graduating class, Nebraska students are tested using the Nebraska Student-Centered Assessment System (NSCAS ACT). This test is given to all students in the cohort minus one year (typically the 11th grade). Due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment. Data source: ACT, *High School Profile Report - Nebraska*, 2013 through 2023.

• As shown in <u>Figure 1.1.b.2</u>, Nebraska students in the 2023 graduating class scored below the national average on each of the subject-area tests that constitute the ACT Assessment.

Figure 1.1.b.2

Comparison of National and Nebraska Average ACT Composite Scores in English, Reading, Mathematics, and Science for the High School Graduating Class of 2023



Data source: ACT, High School Profile Report - Nebraska, 2023.

ACT College Readiness Benchmark Scores

Based on research conducted by ACT, Inc., students are prepared to succeed in entry-level college courses if their scores on the ACT Assessment meet or exceed ACT College Readiness Benchmark Scores. A benchmark score is the minimum score needed on an ACT subject-matter test to indicate that a student has a 50% chance of earning a B or higher or about a 75% chance of earning a C or higher in related entry-level, credit-bearing college courses. Corresponding to the subject-matter tests that constitute the ACT Assessment, these courses include English composition, social sciences, algebra, and biology. For each college course or subject area, the ACT subject-area test and College Readiness Benchmark Scores are:

College Course or Area	ACT Subject-Area Test	College Readiness <u>Benchmark Score</u>
English Composition	English	18
Social Science	Reading	22
Algebra	Mathematics	22
Biology	Science	23

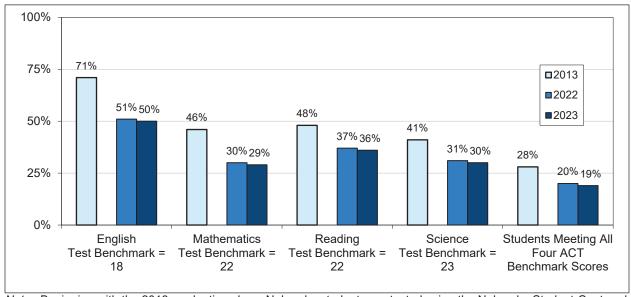
Percentages of Nebraska ACT-Tested Students Ready for College-Level Coursework

- Based on the data summarized in <u>Figure 1.1.b.3</u>, 50% of the ACT-tested Nebraska high school graduating class of 2023 met or exceeded the College Readiness Benchmark Score of 18 on the ACT English test, indicating that there is a relatively high probability that these students will earn at least a C in college-level English composition courses.
- In comparison, 29% met or exceeded the mathematics benchmark score of 22 for college algebra; 36% met or exceeded the benchmark score of 22 on the reading test; and 30% met or exceeded the science benchmark score of 23 for biology.
- Between 2013 and 2023, the percentages of Nebraska students who met or exceeded ACT College Readiness Benchmarks on the English, mathematics, reading, and science tests decreased 21, 17, 12, and 11 percentage points, respectively.
- The percentages of students meeting or exceeding ACT benchmark scores have been trending downward since 2013, and large declines have occurred since Nebraska started testing all students in the cohort minus one year. Between 2017 and 2023, the percentage of Nebraska students who met or exceeded ACT College Readiness Benchmarks for English, mathematics, reading, and science decreased 17, 13, 14, and 11 percentage points, respectively. (See Table A4.1 in Appendix 4 for more detail.)
- Only 19% of Nebraska's high school graduates in the class of 2023 met or exceeded the ACT College Readiness Benchmarks in all four subject areas included in the ACT Assessment. This is nine percentage points lower than in 2013.

Figure 1.1.b.3

Percentages of ACT-Tested Students Meeting ACT College Readiness Benchmarks that Indicate Sufficient Preparation for College-Level Courses

Nebraska High School Graduating Classes: 2022 and 2023 Compared to 2013



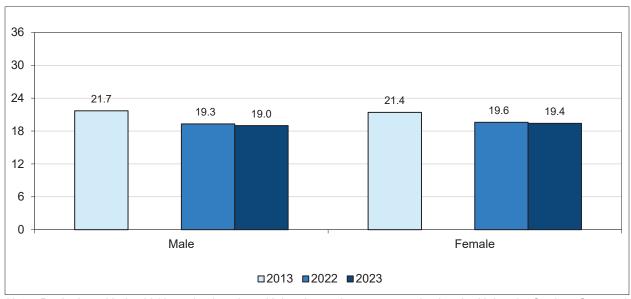
Note. Beginning with the 2018 graduating class, Nebraska students are tested using the Nebraska Student-Centered Assessment System (NSCAS ACT). This test is given to all students in the cohort minus one year (typically the 11th grade). Due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment. See <u>Table A4.1</u> in <u>Appendix 4</u> for supporting data. Data source: ACT, *High School Profile Report - Nebraska*, 2013, 2022, and 2023.

ACT Composite Scores and College Readiness Percentages by Gender

- As shown in Figure 1.1.b.4, average ACT composite scores vary slightly by gender.
- In 2013, the average composite score for male students was slightly higher than the score
 for female students. This trend continued through the graduating class of 2017. When
 Nebraska instituted the Nebraska Student-Centered Assessment System (NSCAS ACT)
 with the 2018 graduating class, the trend changed and the average scores for female
 students have consistently been slightly higher than the average scores for male students.
- Between 2022 and 2023, average composite scores decreased for male and female students.

Figure 1.1.b.4

Nebraska Average ACT Composite Scores by Gender 2022 and 2023 Compared to 2013

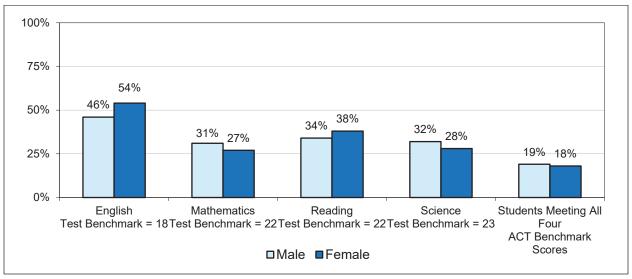


Note. Beginning with the 2018 graduating class, Nebraska students are tested using the Nebraska Student-Centered Assessment System (NSCAS ACT). This test is given to all students in the cohort minus one year (typically the 11th grade). Due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment. Data source: ACT, *High School Profile Report - Nebraska*, 2013, 2022, and 2023.

- Based on the data for the graduating class of 2023 summarized in <u>Figure 1.1.b.5</u>, the
 percentage of students who met or exceeded benchmark scores varies by subject manner
 and by gender. While a higher percentage of male graduates are sufficiently prepared for
 college-level coursework in mathematics and science compared to female graduates,
 female graduates are more likely than male graduates to be sufficiently prepared for collegelevel coursework in English and reading.
- Overall, 19% of males and 18% of females met or exceeded the benchmarks for all four subject-matter tests in 2023.

Figure 1.1.b.5
ercentages of ACT-Tested High School Students in t

Percentages of ACT-Tested High School Students in the Graduating Class of 2023
Who Met or Exceeded ACT College Readiness Benchmark Scores that
Indicate Sufficient Preparation for College-Level Courses
by Gender



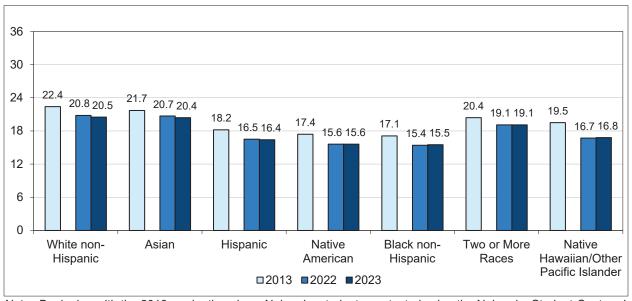
Note. Data source: ACT, High School Profile Report - Nebraska, 2023.

ACT Composite Scores and College Readiness Percentages by Race/Ethnicity

- As shown in Figure 1.1.b.6, average ACT composite scores vary by race/ethnicity.
- The average composite scores for Hispanics, Native Americans, Black non-Hispanics, and Native Hawaiian/Other Pacific Islanders who graduated from Nebraska high schools in 2013, 2022, and 2023 were generally lower than the average composite scores of their White non-Hispanic, Asian, and multi-racial classmates.
- Between 2022 and 2023, average composite scores decreased for White non-Hispanics, Asians, and Hispanics.
- It is unknown how much of the composites score changes were attributable to the variability of the percentage of graduates who took the ACT test.

Figure 1.1.b.6

Nebraska Average ACT Composite Scores by Race/Ethnicity
2022 and 2023 Compared to 2013



Note. Beginning with the 2018 graduating class, Nebraska students are tested using the Nebraska Student-Centered Assessment System (NSCAS ACT). This test is given to all students in the cohort minus one year (typically the 11th grade). Due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment. Data source: ACT, *High School Profile Report - Nebraska*, 2013, 2022, and 2023.

- Based on the data for the graduating class of 2023 summarized in <u>Figure 1.1.b.7</u>, lower percentages of Hispanic, Native American, Black non-Hispanic, multiracial, and Native Hawaiian/Other Pacific Islander graduates are sufficiently prepared for college-level coursework compared to their White non-Hispanic and Asian classmates.
- For example, only 26% of multiracial students in the class of 2023 met or exceeded the ACT College Readiness Benchmark Score in mathematics, compared to 37% of White non-Hispanic students and 40% of Asian students. More dramatically, only 12% of Hispanics, 12% of Native Hawaiian/Other Pacific Islanders, 7% of Black non-Hispanics, and 5% of Native Americans met or exceeded the benchmark score in mathematics.
- However, the percentage of students who met or exceeded benchmark scores varied by subject manner. For example, Native Hawaiian/Other Pacific Islander students tended to have higher scores in English, reading, and science compared to mathematics.
- Overall, 26% of Asians and 24% of White non-Hispanics met or exceeded the benchmarks for all four subject-matter tests in 2023, while only 18% of multiracial students, 7% of Hispanics, 6% of Native Hawaiian/Other Pacific Islanders, 4% of Black non-Hispanics, and 3% of Native Americans met or exceeded the benchmarks for all four subject-matter tests.

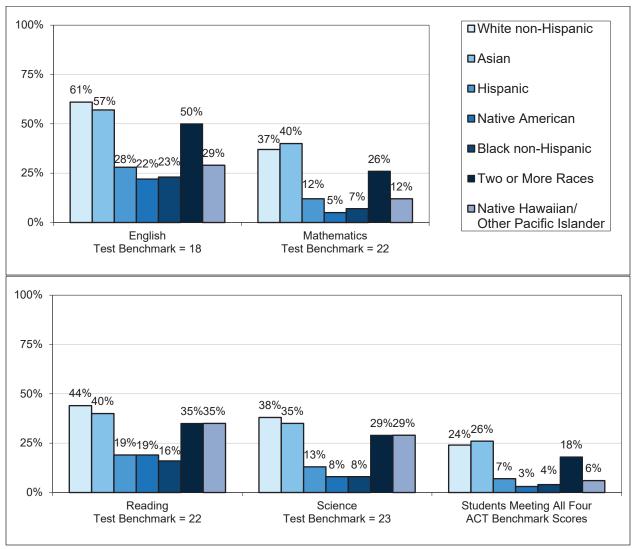
Figure 1.1.b.7

Percentages of ACT-Tested High School Students in the Graduating Class of 2023

Who Met or Exceeded ACT College Readiness Benchmark Scores that

Indicate Sufficient Preparation for College-Level Courses

by Race/Ethnicity



Note. Data source: ACT, High School Profile Report - Nebraska, 2023.

The Importance of the ACT-Recommended High School Core Curriculum

ACT, Inc. defines the core, college-preparatory high school curriculum (i.e., the core) as consisting of four years of English and three or more years each of social studies, science, and mathematics (beginning with Algebra I). Specifically, the core is defined as consisting of the following courses:

- 4 years of English: English 9, English 10, English 11, and English 12
- <u>3 years of Math</u>: Selected from Algebra I, Algebra II, Geometry, Trigonometry, and Calculus
- <u>3 years of Social Sciences</u>: Selected from American History, World History, American Government, Economics, Geography, and Psychology
- <u>3 years of Natural Sciences</u>: Selected from General/Physical/Earth Science, Biology, Chemistry, and Physics

When students register to take the ACT Assessment, they are asked to report the courses they have taken or plan to take before they graduate from high school. Based on the combinations of courses that students report they have taken or plan to take, ACT, Inc. conducts research to determine how taking the core—or more than the core—is related to scores on the ACT Assessment and academic achievement in college.

- Research conducted by ACT, Inc. has repeatedly confirmed that students who complete the
 high school core generally score higher on the ACT Assessment and are more likely to
 progress successfully through postsecondary education programs than students who do not
 complete the recommended core courses.
- Furthermore, research conducted by ACT, Inc. indicates that students who take rigorous courses beyond the recommended minimum number of core courses are even more likely to be ready for college than students who take the minimum core. This research indicates that students whose coursework beyond the core includes advanced courses in mathematics, such as trigonometry or calculus, as well as courses in biology, chemistry, and physics, are the likeliest of all high school students to be ready for college-level coursework.⁷

Consequently, it is important to monitor the average ACT composite scores of students who report that they completed the core—or more than the core—compared to the scores of students who report taking less than the minimum core courses.

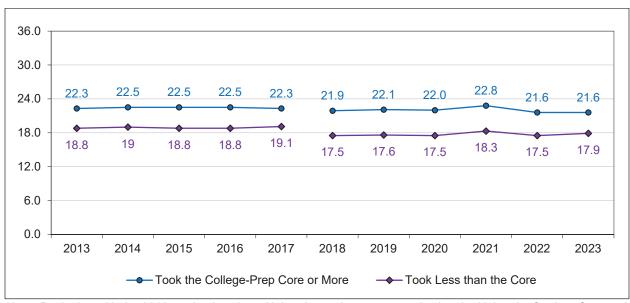
⁷ Mind the Gaps: How College Readiness Narrows Achievement Gaps in College Success, ACT, Inc., 2010.

Nebraska ACT Composite Scores of Students Who Take the ACT-Recommended Core and Students Who Take Less than the Core Curriculum⁸

- As shown in <u>Figure 1.1.b.8</u>, Nebraska students who have taken or plan to take the core college preparatory courses—or more than the core—in high school have consistently scored higher on the ACT than the students who have completed or plan to complete less than the minimum core.
- Of the ACT-tested students in the class of 2023, those who took the core or more had an average composite score of 21.6 compared to an average score of 17.9 for the students who reported that they took courses that did not meet the minimum core requirements.
- The average ACT composite score for the students who took the core or more was 0.7 points lower in 2023 than it was in 2013 while the average score for students who took less than the core was 0.9 points lower in 2023 than it was in 2013.

Figure 1.1.b.8

Nebraska Average ACT Composite Scores of Students Who Took the College-Preparatory Core and Students Who Took Less than the Core 2013 through 2023



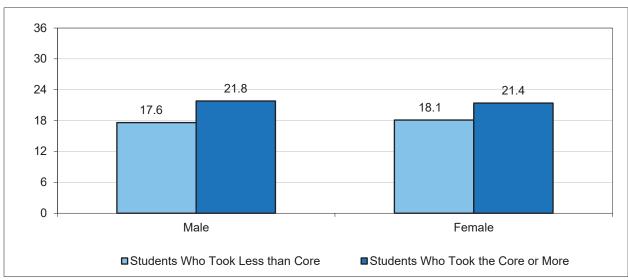
Note. Beginning with the 2018 graduating class, Nebraska students are tested using the Nebraska Student-Centered Assessment System (NSCAS ACT). This test is given to all students in the cohort minus one year (typically the 11th grade). Due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment. Data source: ACT, *High School Profile Report - Nebraska*, 2013 through 2023.

⁸ *Note:* Beginning with the 2014-2015 school year, Nebraska school districts are required to adopt and implement graduation requirements that include meeting standards similar to those represented by the core, college-preparatory high school curriculum advocated by ACT, Inc. Prior to adoption of the new statewide standards, Nebraska high school graduation requirements were set by each school district individually and may or may not have included "the core" as defined by ACT, Inc. Data source: Nebraska Department of Education, *Rule 10, Regulations and Procedures for the Accreditation of Schools* (pages 5-6), August 1, 2015.

- Regardless of score variations, the data summarized in <u>Figure 1.1.b.8</u> provide strong evidence that taking the college-preparatory curriculum continues to have a positive effect on ACT composite scores and improves a student's chances for achieving academic success in college-level courses.
- Taking "the core or more" helps students regardless of gender or race/ethnicity. As shown in Figure 1.1.b.9, the average ACT composite scores were higher for male and female students in the graduating class of 2023 who took the college-preparatory core or more. Within each of the racial/ethnic groups, the average ACT composite score was higher for the students who took the college-preparatory core than the average score for students who took less than the core, as illustrated in Figure 1.1.b.10.

Figure 1.1.b.9

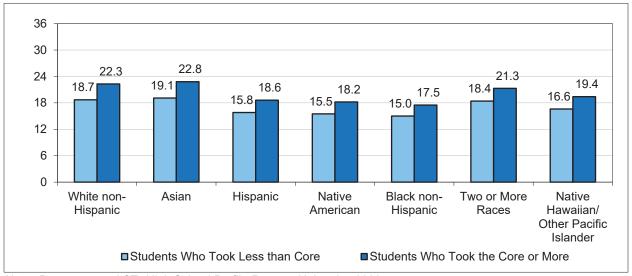
Nebraska ACT Composite Scores for Students Who Took the College-Preparatory
Core or More and Students Who Took Less than the Core by Gender
for the High School Graduating Class of 2023



Note. Data source: ACT, High School Profile Report - Nebraska, 2023.

Figure 1.1.b.10

Nebraska ACT Composite Scores for Students Who Took the College-Preparatory Core or More and Students Who Took Less than the Core by Race/Ethnicity for the High School Graduating Class of 2023



Note. Data source: ACT, High School Profile Report - Nebraska, 2023.

Percentage of Nebraska ACT-Tested Students Who Take the Core or More

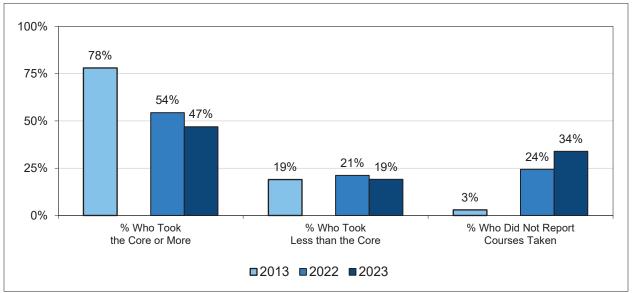
As mentioned earlier in this section, the students themselves report the courses they have taken and plan to take before they graduate from high school when they register for the ACT Assessment. Self-reporting may make the data less accurate and/or less reliable. The percentage of ACT-tested students who reported the courses they took or planned to take in high school was 97% in 2013, 76% in 2022, and 66% in 2023.

- At baseline in 2013, only 522 students did not report the courses they had taken (3% of test takers). By 2018, this increased to 3,107 students (13% of test takers) and has since increased dramatically, up to 8,337 students (34% of test takers) in 2023.
- The increase in non-response has continued to trend upward since 2018 as the state moved to using the NSCAS ACT. (See <u>Table A4.2</u> in <u>Appendix 4</u> for more details.)
- A direct comparison of 2022 and 2023 percentages indicates that the percentage of high school students who reported they took the core or more decreased 7 percentage points over the last year. As shown in <u>Figure 1.1.b.11</u>, the percentage of students who reported that they took the core or more was 31 percentage points lower in 2023 than in 2013.

⁹ The high school graduating class of 2018 was the first class that had all Nebraska juniors take the ACT test. Due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment.

Figure 1.1.b.11

Percentages of Nebraska's ACT-Tested Students Who Took the
College-Preparatory Core or More and Students Who Took Less than the Core
2022 and 2023 Compared to 2013

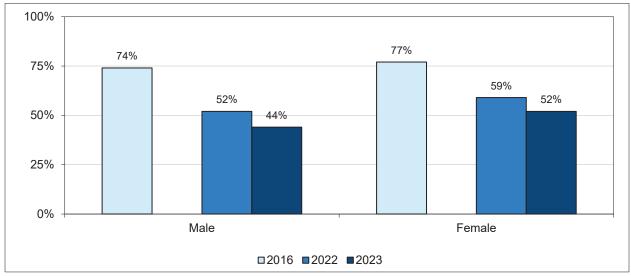


Note. Beginning with the 2018 graduating class, Nebraska students are tested using the Nebraska Student-Centered Assessment System (NSCAS ACT). This test is given to all students in the cohort minus one year (typically the 11th grade). Due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment. See <u>Table A4.2</u> in <u>Appendix 4</u> for supporting data. Data source: ACT, *High School Profile Report - Nebraska*, 2013, 2022, and 2023.

- <u>Figure 1.1.b.12</u> shows that for both male and female students, there has been a large decrease since 2016 in the percentage of the ACT-tested students who have reported taking the core or more in high school. (Data by gender is unavailable prior to the graduating class of 2016.)
- Similarly, <u>Figure 1.1.b.13</u> shows that for all major racial/ethnic groups, there has been a
 dramatic decrease since 2013 in the percentage of the ACT-tested students who have
 reported taking the core or more in high school.

Figure 1.1.b.12

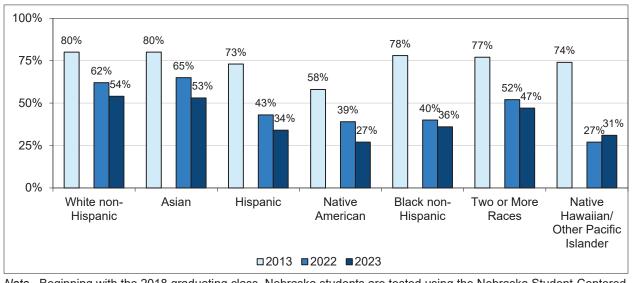
Percentage of Nebraska ACT-Tested Students Who Reported
That They Took the College-Preparatory Core or More by Gender
2022 and 2023 Compared to 2016



Note. Data is unavailable prior to the 2016 graduating class. Beginning with the 2018 graduating class, Nebraska students are tested using the Nebraska Student-Centered Assessment System (NSCAS ACT). This test is given to all students in the cohort minus one year (typically the 11th grade). Due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment. Data source: ACT, *High School Profile Report - Nebraska*, 2016, 2022, and 2023.

Figure 1.1.b.13

Percentage of Nebraska ACT-Tested Students Who Reported
That They Took the College-Preparatory Core or More by Race/Ethnicity
2022 and 2023 Compared to 2013



Note. Beginning with the 2018 graduating class, Nebraska students are tested using the Nebraska Student-Centered Assessment System (NSCAS ACT). This test is given to all students in the cohort minus one year (typically the 11th grade). Due to the COVID-19 pandemic, Nebraska waived the ACT testing requirement for the 2021 graduating class and not all 2022 graduates took the assessment. Data source: ACT, *High School Profile Report - Nebraska*, 2013, 2022, and 2023.