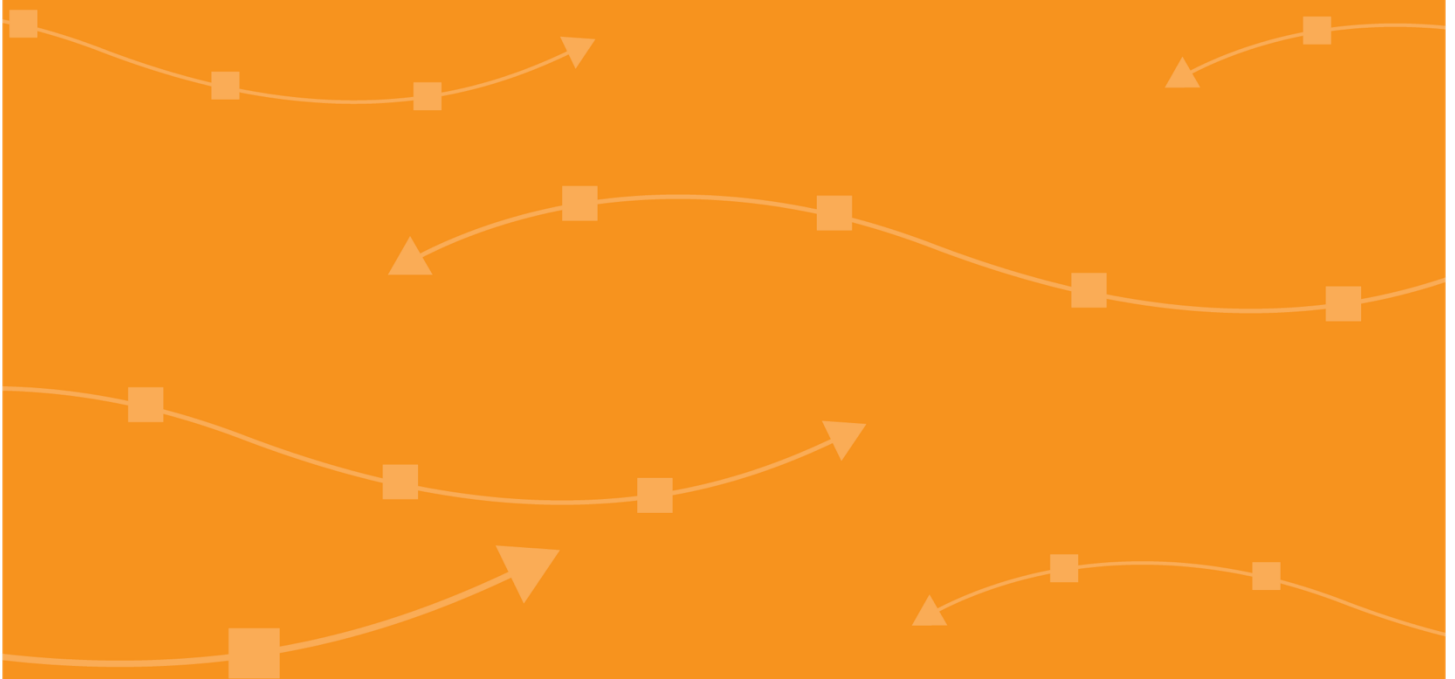National Student Clearinghouse™
Research Center™

HIGH SCHOOL
BENCHMARKS

December 1, 2021

National College Progression Rates

High School Benchmarks 2021 - National College Progression Rates

Contents

KEY FINDINGS 2021

Immediate College Enrollment *(graduating class of 2020)*

Fall 2020 enrollment trend for 2020 high school graduates in approximately 8,400 high schools nationwide shows evidence of a pandemic effect, in line with our preliminary report issued in March, 2021. The rates at which the class of 2020 immediately enrolled in college have fallen by unprecedented levels, 4 to 10 percentage point drops depending on high school categories, with disproportionately large drops among high-poverty or low-income high schools. Immediate enrollment rate gaps within groups grew wider compared to the previous class.

In fall 2020, higher-income high school graduates were still far more likely to enroll in college immediately than those from low-income schools (65% and 49%, respectively). The gap was even larger between low- and high-poverty schools (73% and 45%, respectively) as measured by the prevalence of eligible students for a free or reduced-price lunch program.

Gap Year Enrollment *(graduating class of 2020)*

There are no signs that the unusually large number of 2020 graduates who did not go to college immediately in fall 2020 have entered college this fall instead. When we rematched the panel of approximately 3,500 high schools used in our March preliminary report using an updated panel of postsecondary institutions with enrollment data as of October 21, 2021, we found that very few high school graduates followed the gap year enrollment pattern. In fact, the gap year enrollment rate for the class of 2020 declined slightly from previous classes, from 2.6 percent for 2018 and 2.2 percent for 2019, to just 2.0 percent of the class of 2020 who had not enrolled in their first fall. The gap year enrollment rate in fall 2021 is also low regardless of high school characteristics (ranging from 1.1% to 3.2%), a stark contrast with the patterns of disparity found in immediate college enrollment for the class of 2020.

Persistence *(graduating class of 2018)*

Once enrolled, 88 percent of students from higher-income high schools returned their second year of college, compared to 79 percent of students from low-income high schools.

Completion *(graduating class of 2014)*

Students from low-poverty high schools were more than twice as likely to earn a degree within six years of high school graduation (60%) as their counterparts from high-poverty schools (24%). Also, 38 percent of students from urban high schools completed a degree within six years, compared to 42 percent from rural schools and 48 percent from suburban schools.

When minority and income levels were cross-examined, enrollment and completion gaps between higher- and low-income high schools at each minority level were substantially larger than the gaps between high- and low-minority schools regardless of income levels. High school graduates from low-income and high-minority high schools completed college within six years at the lowest rate (28%), a gap of 24 percentage points from the rate for high school graduates from higher-income and low-minority schools (52%).

STEM Degree Completion *(graduating class of 2014)*

STEM degree completion was strongly associated with both the minority and income levels of originating high schools. Eighteen percent of students from higher-income schools earned STEM degrees within six years of high school graduation, but only nine percent of students from low-income schools did the same. Similarly, 17 percent of students from low-minority schools, but only 11 percent of students from high-minority schools, earned STEM degrees within six years of high school graduation. In addition, persistence gaps are notable in STEM majors. During enrollment, engineering was one of the top five majors at four-year colleges for graduates of both higher-income and low-income high schools. However, at completion, only graduates from higher-income schools had engineering as one of their top five most common majors.

Introduction

This ninth annual High School Benchmarks Report provides the updated data on high school graduates' college access, persistence, and completion outcomes. This report was designed with several features particularly tailored to secondary education practitioners and policymakers. First, results presented in this report update our last years' findings on high school graduates' enrollment in a college or university, persistence from first to second year, and eventual completion of a postsecondary degree. As a result, these metrics provide the relevant benchmarks that secondary education practitioners can use to evaluate and monitor progress in assisting students to make the transition from high school to college. Second, these outcomes were disaggregated by several high school characteristics, which include income level, minority enrollment, and locale. This was done to ensure that the postsecondary outcomes provided can be relevant to the specific needs and characteristics of the different types of high schools. Finally, in addition to providing the updated benchmarking figures for high schools, the enrollment, persistence, and completion data are more complete than other data sources because it covers all postsecondary enrollments. Specifically, National Student Clearinghouse data captures all patterns of enrollment and completion, regardless of which postsecondary institution that students attend (e.g., out of state, private, public, or for-profit institutions) and regardless of transfers.

Immediate college enrollment rates of high school graduates at the national level are available through the Condition of Education published by NCES annually.[1] Thousands of high schools and districts also have access to timely reports on college access, persistence, and completion rates of their graduates through the StudentTracker® service of the National Student Clearinghouse. This report enables those schools to compare their students' outcomes to those of other schools with similar characteristics, and that also use the StudentTracker service. Using the results reported here, high schools and districts can place their own StudentTracker results into context with college access, persistence, and completion rates for schools with similar student populations in similar locales across the country.

The report provides college enrollment, persistence, and completion outcomes for public non-charter, public charter, and private high school graduates. It is important to note that the sample sizes for charter and private high schools are smaller than those of the public non-charter schools. Therefore, the results for charter and private schools are subject to higher variance and uncertainty than the results for public non-charter schools. For this reason, we do not recommend comparing these categories or using the results to draw conclusions about the differences between the school types. For students from public non-charter high schools, all outcomes are reported in nine categories. These categories,

which are defined by the aggregate characteristics of each high school, are as follows:
- Low-income schools
  — High-poverty
- Higher-income schools
  — Low-poverty
- Low-minority schools
- High-minority schools
- Urban schools
- Suburban schools
- Rural schools

For the purpose of this report:
- Low-income schools are defined as schools where at least 50 percent of the students are eligible for a free or reduced-price lunch.
- High-minority schools are defined as schools where at least 40 percent of the students are black or Hispanic.
- The NCES urban-centric locale code defines locale. Schools with a code from 11 to 13 are defined as urban. Schools with a code from 21 to 23 are defined as suburban. And those with a code from 31 to 43, covering both town and rural areas, are defined as rural.
- For schools in low-income and higher-income categories, we also have outcomes for graduates from a subset of low-income schools defined as high-poverty schools (schools where at least 75 percent of the student population is eligible for free or reduced-price lunch) and a subset of higher-income schools as low-poverty (schools where less than 25 percent of the student population is eligible for free or reduced-price lunch). Selected outcomes for high-and-low-poverty schools are highlighted in the main part of the report. All outcomes can be found in Appendix B.

A complete explanation of definitions can be found in Appendix A. The tables and figures present:
- Total college-going rate, including:
  o Enrollment in the first fall after high school graduation
  o Enrollment at any time in the first year after high school graduation
  o Enrollment at any time in the first two years after high school graduation
- Persistence from first to second year of college. This is the number of students who remained enrolled for their second year of college as a percent of the number of students who enrolled in during the first year after high school graduation. It includes students who may have transferred or re-enrolled at a different institution from the one where they started.
- Six-year college completion rates, both overall and in STEM (Science, Technology, Engineering, and Mathematics) fields expressed as the percentage of high

school graduates who complete a degree at any college within six years of high school graduation.

- Top five categories of majors at immediate college enrollment and at completion by high school type
- College enrollment rates are calculated for the high school graduating classes of 2020 and 2019 looking at first fall outcomes, the first-year outcome calculated for the classes of 2019 and 2018, and the first two years'

outcomes calculated for the classes of 2018 and 2017. The persistence rates were calculated for the high school graduating class of 2018. The six-year college completion rates were calculated for the high school graduating class of 2014. Results are also broken down by the type of college attended: Public and private institutions, two- and four-year institutions, as well as in-state and out-of-state institutions.

Important Note on the Data

The data for this report were drawn from a voluntary sample made up of all high schools participating in the StudentTracker for High Schools service (STHS) administered by the National Student Clearinghouse (The Clearinghouse). This is not a nationally representative sample of schools or of high school graduates. Compared to all U.S. high schools, participating STHS schools have greater representation among schools with more minority enrollments and more urban locales.

Table 1 describes the distribution of enrolled high school students in the class of 2020 and 2014 in comparison to national numbers derived from NCES by the different school characteristics. As the table demonstrates, the sample used in this report underrepresents rural enrollments and over-represents urban enrollments. The data also slightly over-represent high-minority and under-represent low-minority. In terms of the distribution across higher and low-income schools, however, the data coverage from this report aligns itself with the national data.

This is a descriptive study. Causal inferences should not be made based on these results. The data on which this report is

based do not comprise a nationally representative sample of schools or of high school graduates as described above. Yet, it is a large and broad sample, covering over one million students per year, a total of about six million students from public and private high schools for the five high school graduating classes, or about 40 percent of all U.S. high school graduates in each year. It includes data from all 50 states and the majority of the 100 largest districts in the U.S (for more detailed information about the sample, see Appendix A). In addition to providing reasonable benchmarks for each category of schools and districts using StudentTracker reports, we believe it also significantly contributes to discussions among practitioners and policymakers at the school, district, state, and national levels about equitable access to and completion in postsecondary education.

The data on college enrollment for this report, and for the STHS reports that the participating high schools receive, are drawn from the National Student Clearinghouse's unique, longitudinal data that cover 97 percent of the postsecondary enrollment across the nation as of fall 2019.

Table 1. Comparison of Samples in High School Benchmark Report with the National High School Population

School Characteristics	Enrolled Students (HS Class of 2020)			Enrolled Students (HS Class of 2014)		
	NSC	National*	Difference	NSC	National*	Difference
	N=1,636,864	N=3,199,153		N=1,657,190	N=3,101,747	
Low-Income Schools	38.75%	37.89%	0.86%	36.69%	38.72%	-2.03%
Higher-Income Schools	61.25%	62.11%	-0.86%	63.31%	61.28%	2.03%
High-Minority Schools	44.17%	40.16%	4.01%	38.35%	35.82%	2.53%
Low-Minority Schools	55.83%	59.84%	-4.01%	61.65%	64.18%	-2.53%
Urban Schools	33.60%	27.40%	6.20%	31.63%	26.86%	4.77%
Suburban Schools	45.23%	40.72%	4.51%	56.77%	41.34%	5.43%
Rural Schools	21.17%	31.88%	-10.71%	21.60%	31.81%	-10.21%
High-Poverty Schools	15.86%	14.17%	1.69%	13.63%	12.88%	0.75%
Low-Poverty Schools	25.77%	23.52%	2.25%	30.36%	25.73%	4.65%

* National numbers were obtained from the NCES, Elementary and Secondary Information System.

SECTION 1: NATIONAL RESULTS

This section below describes the results on three measures of college attendance (immediate fall enrollment, enrollment within a year from high school completion, and gap year enrollment) and two measures of college success (persistence and graduation) for high schools that serve different student populations.

1. Enrollment

1) Immediate Enrollment *(high school graduating class of 2020 entering college in fall 2020)*

Immediate college enrollment is one of the many important measures that high schools use to assess their impact on student academic success. **Figure A** shows the rates of immediate college enrollment in the first fall after high school graduation for the class of 2020 by different school characteristics. Income was the strongest correlate with immediate college enrollment. Students from higher-income schools were more likely to enroll immediately than students from low-income schools (65% and 49%, respectively). The gap became even larger when we examined this outcome for graduates of high-poverty schools (where at least 75% of the student population was eligible for a free or reduced-price lunch, or FRPL) and low-poverty schools (where less than 25% of their student population was eligible for FRPL). The immediate enrollment rates in high- and low-poverty schools differed by 28-percentage points (45% and 73%, respectively).

The school minority level was also strongly correlated with immediate college enrollment. Students from low-minority high schools were more likely to enroll immediately than those from high schools with higher minority populations (64% and 52%, respectively). Location was not as strongly correlated, but still demonstrated some relationship with immediate college enrollment. Students from suburban schools (62%) were more likely to immediately enroll than those from urban (56%) or rural (56%) schools. Enrollments at out-of-state institutions were higher for students from higher-income and

low-minority high schools. Fifteen percent of the college-going graduates from higher-income schools enrolled at out-of-state institutions, compared to just 5 percent of those from low-income high schools. Fifteen percent of graduates from low-minority high schools enrolled in an out-of-state institution, compared to just 6 percent of graduates from high-minority high schools (see Appendix B, Table 1).

It is important to note the unusually large, potentially pandemic-related, one-year declines in immediate fall enrollment rates in 2020 (4 to 10 percentage point drops depending on high school categories; see Appendix B, Tables 1 and 2). For instance, the immediate enrollment rate fell sharply from 55 to 45 percent between 2019 and 2020 graduates from high-poverty high schools. The gaps within each group have also increased during the pandemic. The immediate enrollment rate gap between graduates of higher- and low-income high schools grew wider, by 3 percentage points from 13 to 16 percentage points between 2019 and 2020 high school graduates. The enrollment rate gaps by poverty level increased even more, from a 22-percentage point gap in 2019 to a 28 percentage point gap in 2020, between high- and low-poverty high schools. The gap between high- and low-minority schools was relatively stable in 2020 compared to 2019 with only a one percentage point gap increase.

Figure A.
College Enrollment Rates in the First Fall after High School Graduation, Class of 2020, Public Non-Charter Schools

This figure is based on data shown in Appendix B, Table 1.
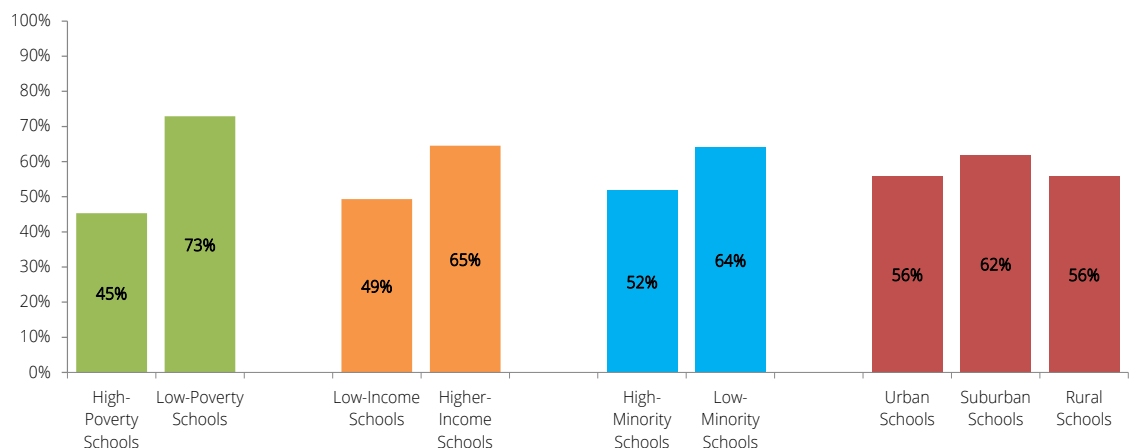
2) Enrollment Within a Year of High School Completion *(high school graduating class of 2019 entering college by fall 2020)*

Similar patterns of enrollment by high school characteristics are seen with the graduating class of 2019 and when the data are expanded to include students who delay their enrollment until the spring and summer terms (enrollment in the first year) or the following year (enrollment in the first two years) (see Appendix B, Tables 2-6). Across all groups of students defined by high school characteristics, enrollment rates increased markedly when we counted all enrollments in the first two years after graduation, compared to the first fall enrollments. Students attending two-year institutions drove most of the increases, which is not surprising as two-year institutions generally allow more flexibility in start times.

3) Gap Year Enrollment *(high school graduating class of 2020 entering college for the first time in fall 2021 based on a panel)*
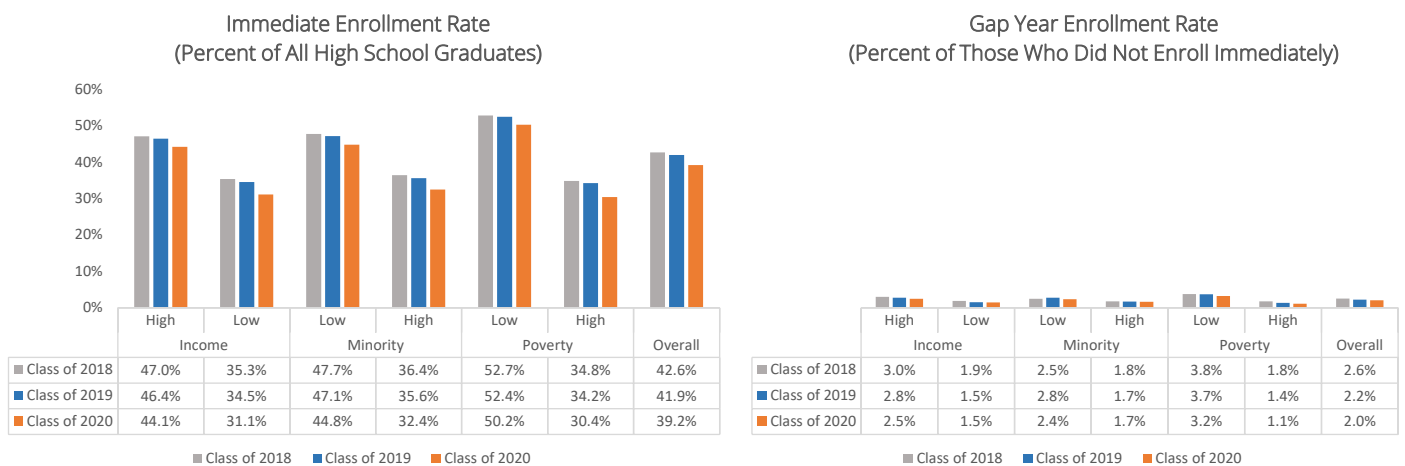
Immediate fall enrollment rates declined by unprecedented levels for 2020 high school graduates. This occurred both across and within groups defined by high school characteristics, such as income and poverty levels, and the prevalence of minority students, as shown in our March 2021 report (see Figure B). In order to see how many of these graduates returned to enroll for the first time the following year, in fall 2021, we analyzed "gap year" enrollment. The panel of high schools (2018-2020) used for the *COVID-19 Special Analysis* released in March 2021 was rematched using an updated postsecondary institutional panel as of October 21, 2021. This new college panel includes institutions who reported their fall enrollment within the same time frame across all four comparison years (2018-2021).

First, it is important to note that very few graduates typically take gap years. Prior to the COVID-19 pandemic, only 2.2 percent of those who did not enroll in their first fall entered college in the following fall (see Figure C). Despite the pandemic causing large declines in immediate college enrollment in 2020, in fall 2020, gap year enrollment rates in fall 2021 remained very low (see Figure B); in fact, for the class

2020, the gap year enrollment rate went down slightly from the previous class (0.2 percentage points, from 2.2% to 2.0%). This is the opposite of what one would expect, given that the number of potential gap year students (graduates not enrolling in their first fall) had increased. This follows the trend found between the gap year enrollment rate of the classes 2018 and 2019, where there was a decrease of 0.3 percentage points (see Figure C), reinforcing the finding that students who did not enroll last fall due to the pandemic have not returned in any significant numbers this fall.
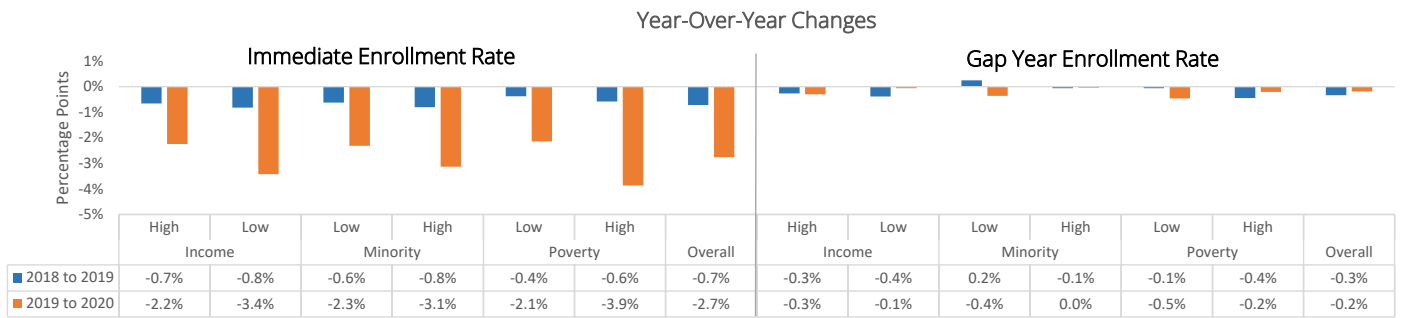
Disaggregating the results by high school characteristics did not reveal any disproportionate effects among the categories of income level, poverty level, and minority level. For example, both higher- and low-income schools saw no significant change in the gap year enrollment rate from 2019 to 2020 (0.1 to 0.3 percentage point drops). In contrast, there were larger drops in the immediate fall enrollment rates in fall 2020 (by 2.2 and 3.4 percentage points, respectively).

Figure B. Enrollment Rate by Class Year and High School Characteristics

Immediate Enrollment Rate (Percent of All High School Graduates)

	High	Low	Low	High	Low	High	Overall
	Income		Minority		Poverty		
Class of 2018	47.0%	35.3%	47.7%	36.4%	52.7%	34.8%	42.6%
Class of 2019	46.4%	34.5%	47.1%	35.6%	52.4%	34.2%	41.9%
Class of 2020	44.1%	31.1%	44.8%	32.4%	50.2%	30.4%	39.2%

Gap Year Enrollment Rate (Percent of Those Who Did Not Enroll Immediately)

	High	Low	Low	High	Low	High	Overall
	Income		Minority		Poverty		
Class of 2018	3.0%	1.9%	2.5%	1.8%	3.8%	1.8%	2.6%
Class of 2019	2.8%	1.5%	2.8%	1.7%	3.7%	1.4%	2.2%
Class of 2020	2.5%	1.5%	2.4%	1.7%	3.2%	1.1%	2.0%

These figures are based on data shown in Appendix D.

Figure C. Changes in Enrollment Rate by High School Characteristics

Year-Over-Year Changes

| | Immediate Enrollment Rate | | | | | | | Gap Year Enrollment Rate | | | | | | |
| | High | Low | Low | High | Low | High | | High | Low | Low | High | Low | High | |
	Income		Minority		Poverty		Overall	Income		Minority		Poverty		Overall
2018 to 2019	-0.7%	-0.8%	-0.6%	-0.8%	-0.4%	-0.6%	-0.7%	-0.3%	-0.4%	0.2%	-0.1%	-0.1%	-0.4%	-0.3%
2019 to 2020	-2.2%	-3.4%	-2.3%	-3.1%	-2.1%	-3.9%	-2.7%	-0.3%	-0.1%	-0.4%	0.0%	-0.5%	-0.2%	-0.2%

These figures are based on data shown in Appendix D.

2. Persistence

Figure D presents persistence rates from the first to second year of college for the high school graduating class of 2018, disaggregated by high school characteristics. Persistence rate is the percentage of students who returned to college (anywhere) at any time in the second year out of all students from a given high school graduating class who enrolled at any time in the first year. Persistence rates for students from all types of high schools presented in Figure D range from 79 to 88 percent. College-bound students from higher-income high schools show the highest persistence rate (88%), in contrast to graduates from low-income high schools, who return for their second year of college at the lowest rate across all groups (79%). Students from low-minority high schools had higher

rates of persistence (87%) than those from high-minority high schools (81%). Students from suburban high schools (87%) persist at greater rates than those from rural (83%) and urban (83%) high schools.

Regardless of high school type, persistence rates among students who enrolled in private colleges and universities were higher than those in public institutions. These differences were all between 5 to 11 percentage points. Persistence rates for all students were also higher in four-year institutions than in two-year institutions and at out-of-state institutions than in-state institutions (see Appendix B, Table 7).

Figure D.
Persistence Rates from First to Second Year of College, Class of 2018, Public Non-Charter Schools

This figure is based on data shown in Appendix B, Table 7.
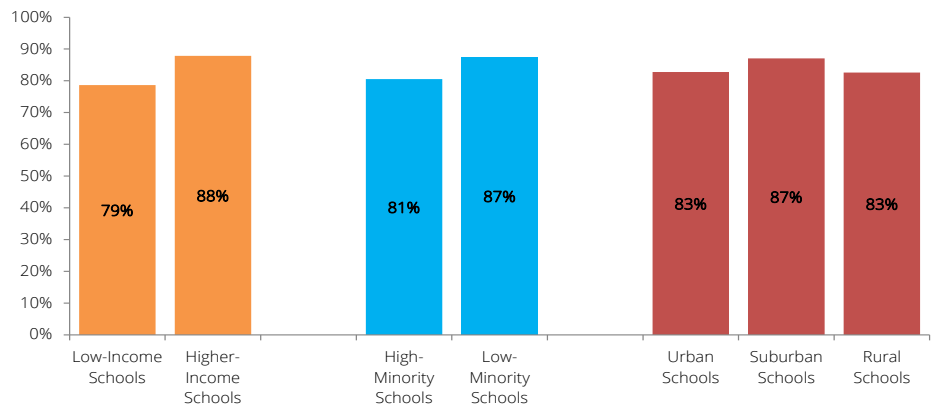
3. Completion

The differences among students from different types of high schools become most pronounced in the rates of college completion. **Figure E** presents the rates of college completion as a percentage of all students in the high school graduating class, not just those who enrolled in college. Again, income is the strongest correlate. Fifty-one percent of all students from higher-income high schools in the class of 2014 completed a college degree within six years of their graduation, compared to 29 percent of students from low-income schools. As it was the case in the immediate college enrollment rates, the

achievement gap is even larger among graduates of high- and low-poverty schools. Only 24 percent of graduates from high-poverty high schools graduated college within six years of finishing high school, compared to 60 percent of low-poverty school graduates.

The relationship between college completion rates and the minority level of the school was also strong. Fifty percent of students from low-minority high schools completed a college degree within six years, compared to only 32 percent from

high-minority schools. Students from urban high schools lagged as well: 38 percent of students from urban schools completed a degree within six years of graduation, compared to 42 percent from rural schools and 48 percent from suburban school.

Figure E.
College Completion Rates Six Years after High School Graduation, Class of 2014, Public Non-Charter Schools

This figure is based on data shown in Appendix B, Table 8.
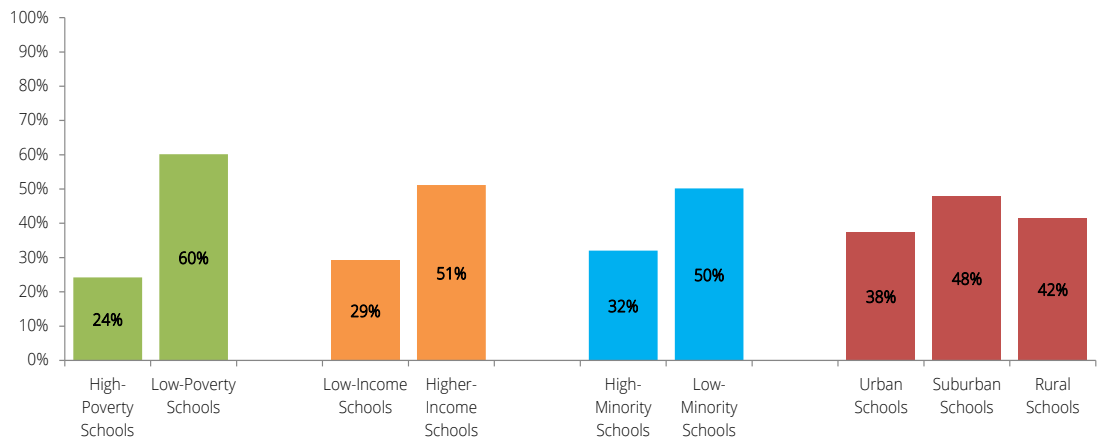
4. Enrollment and Completion Rates by School Minority and Income Levels

Figures **F** and **G** show postsecondary enrollment in the first year after high school completion (class of 2020) and completion rates (class of 2014) by school minority and income levels combined. The results show that graduates from high-minority and low-income high schools had the lowest rate of immediate college enrollment (49%), a gap of 17 percentage points from the highest rate (66%), observed for students from low-minority, higher-income high schools. Further, the outcome differences between higher- and low-income levels, within each minority level, were substantially larger than the outcome differences between high and low-minority levels, within income. For example, in Figure F, the difference in enrollment rate by income levels while keeping the minority status unchanged (e.g., within low-minority schools, 66 percent enrollment rate for higher-income schools versus 52 percent for low-income schools) is substantially larger than the difference in enrollment rate by minority levels while keeping the income level constant (e.g., within higher-income schools, low-minority schools' 66 percent enrollment rate versus high-minority schools' 60 percent enrollment rate). In terms of six-year college completion rates, graduates from high-minority and low-income high schools had also the lowest rate (28%), a gap of 24 percentage points from the highest rate (52percent), observed for students from low-minority, higher-income high schools (Figure G).

Figure F.
College Enrollment Rates in the First Fall after High School Graduation, Class of 2020, Public Non-Charter Schools, Controlling for Income and Minority Levels

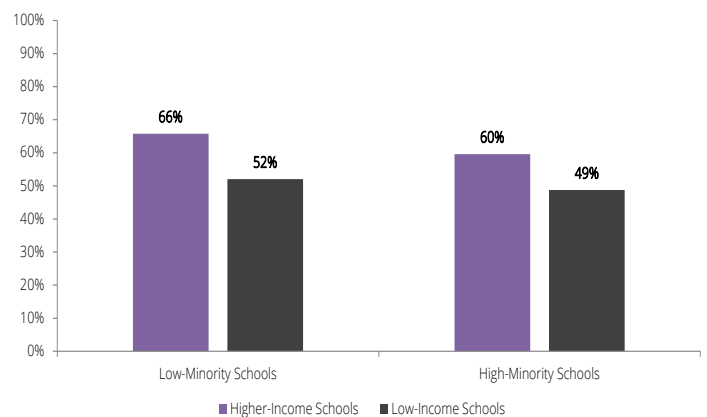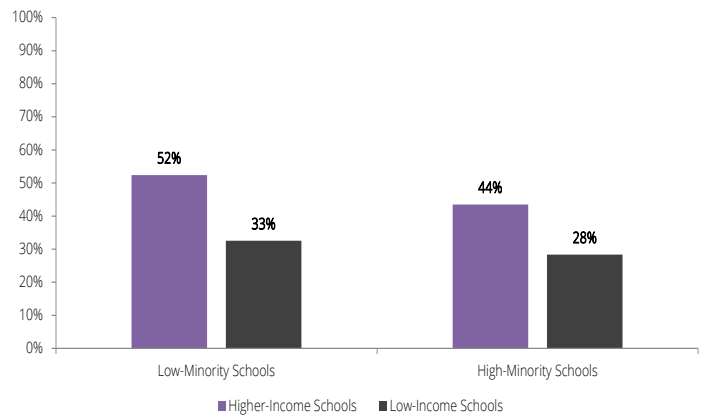*This figure is based on data shown in Appendix B, Table 11*

Figure G.
College Completion Rates Six Years after High School Graduation, Class of 2014, Public Non-Charter Schools, Controlling for Income and Minority Levels

This figure is based on data shown in Appendix B, Table 12

Low-Minority Schools: Higher-Income Schools 52%, Low-Income Schools 33%
High-Minority Schools: Higher-Income Schools 44%, Low-Income Schools 28%

■ Higher-Income Schools ■ Low-Income Schools

5. Top Categories of Majors at Immediate College Enrollment and at Completion

These analyses examine patterns of majors at immediate college enrollment and at completion for those who enrolled in or completed a degree from two-year or four-year schools separately. The results of these analyses are presented in **Appendix B**. It is important to note that the high school graduating classes used to compare majors at immediate college enrollment versus majors at completion were not the same. Specifically, the high school class of 2020 was used to examine majors at enrollment whereas the high school class of 2014 was used to examine majors at completion.

When examining the most common categories of majors for graduates of low-income and higher-income high schools, the results showed that overall, there were only small changes in the most common types of majors declared at first enrollment in two-year institutions and the most common major fields

students graduated with from two-year institutions. The most common majors at both first enrollment and completion were in the categories of liberal arts and sciences, general studies and humanities followed by categories of health professions, and business. For students from higher-income high schools, business majors were more common than health professions majors in the first fall of enrollment but equal upon completion.

In the four-year sector, the most common majors declared at initial college enrollment, regardless of whether the student graduated from a higher-income or low-income high school, were in the liberal arts and sciences, general studies, and humanities categories. The most common majors at completion, however, were in the business, management, marketing, and related support categories.

6. STEM Completion

Figure H presents the rates at which graduates from different types of high schools in the Class of 2014 completed a STEM degree within six years of high school graduation. The minority and income level of students in a school were strongly associated with STEM degree completion. Eighteen percent of students from higher-income schools, but only nine percent of students from low-income schools, completed STEM degrees within six years of high school graduation. Similarly,17 percent of students from low-minority high schools completed a STEM degree within six years, compared to 11 percent of students from high-minority schools. The relationship between high school location and STEM degree completion was less pronounced. Seventeen percent of students from suburban

high schools completed STEM degrees, compared to 12 percent of students from rural and 14 percent from urban high schools. The largest disparity was found among high- and low-poverty high schools where there was a 14-percentage point completion rate gap across six years (22% and 8%, respectively).

Figure H presents the number of students attaining degrees as a percentage of the number that graduated high school. The definition of STEM used in this analysis is based on a listing of six-digit CIP codes used by the National Science Foundation and includes social sciences and psychology (for a complete list, see Appendix A).

Figure H.
College Completion Rates Six Years after High School Graduation, STEM Field of Study, Class of 2014, Public Non-Charter Schools

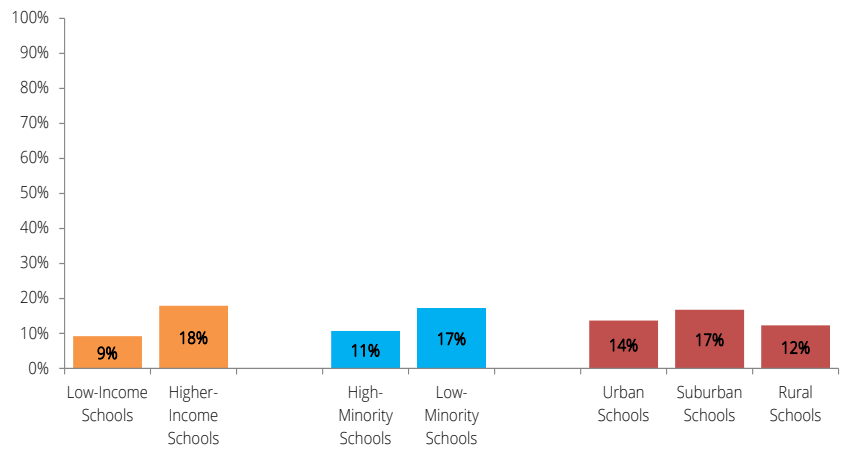*This figure is based on data shown in Appendix B, Table 9*

Figure I shows STEM degree completion by field of study and reveals further patterns of disparities among students from different types of high schools. Most STEM degrees for students from both low-income (47%) and high-minority (48%) high schools are awarded in either psychology or the social sciences, compared to 38 percent for both higher-income and from low-minority schools.

Figure I. Distribution of Fields of Study among STEM Completers, Class of 2014, Public Non-Charter Schools
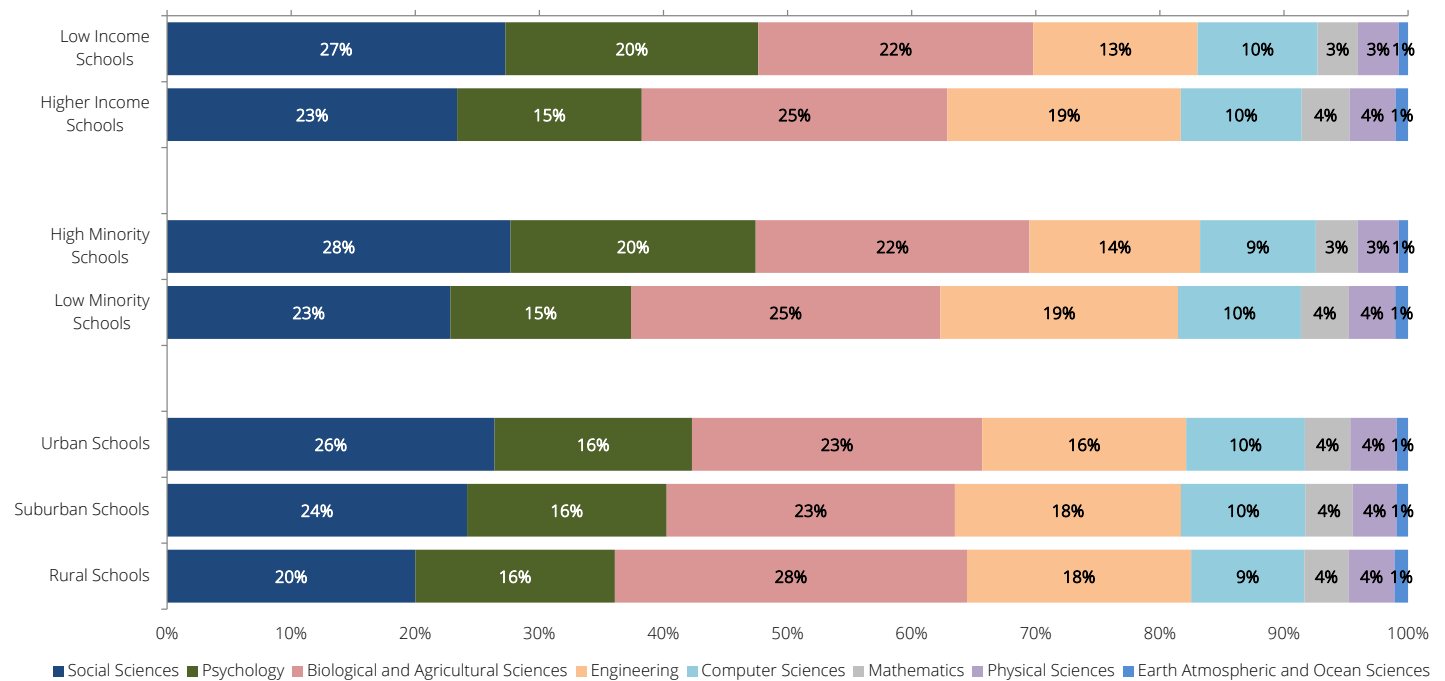
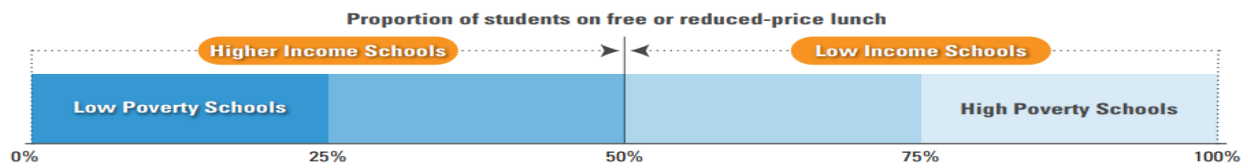
This figure is based on data shown in Appendix B, Table 10.

SECTION 2: RESULTS BY HIGH SCHOOL TYPE (FOR USE BY INDIVIDUAL HIGH SCHOOLS)

Proportion of students on free or reduced-price lunch

Higher Income Schools — Low Income Schools

Low Poverty Schools — High Poverty Schools

0% — 25% — 50% — 75% — 100%

Guidance on How to Interpret the Outcomes in this Section

This section provides detailed results for schools in low-income and higher-income categories as well as in high-poverty and low-poverty categories. Section 2 is intended for use by individual high schools as benchmarks against which to compare their own results. Outcomes are provided in two different ways: student-weighted totals and school percentile distributions. Tables with student-weighted totals are designed to enable individual schools and districts to compare their StudentTracker results directly to the national benchmarks. Totals are calculated by computing the mean among all schools within the category, weighted by the size of each school's graduating class. By placing their own results into the context of these aggregate totals, practitioners can better understand the meaning of their students' college access and persistence outcomes. Tables with school percentile distributions are designed to enable individual schools and districts to identify the approximate percentile rank of their students' college-going rate. These distributions are calculated by ranking schools on outcome without considering school size or number of graduates. Thus, if a school's college-going rate is the same as the rate at the 75th percentile, the school is said to have a college-going rate equal to or higher than that of 75 percent of all StudentTracker schools in that category.

Results Tables & Figures

- Public Non-Charter High Schools
  - Public Non-Charter High Schools by Poverty Level
- Public Charter High Schools
- Private High Schools

APPENDIX A. METHODOLOGICAL NOTES

This report contains college enrollment, persistence, and completion outcomes of high school graduating students. The results presented in the report center on the following outcomes:

1) College enrollment in the
   - first fall after high school graduation
   - first year after high school graduation
   - first two years after high school graduation
2) Persistence from the first to the second year of college.
3) College completion within six years after high school graduation.

The outcomes are presented by type of college attended, including public and private institutions, two-year and four-year institutions, and in-state and out-of-state institutions. These characteristics are defined by IPEDS Institutional Characteristics data as of 2019-20. In-state designations are defined relative to the state in which the high school is located, not the residency of individual students.

The high school dataset used for this report is based on a voluntary sample and is not a nationally representative sample of schools or of high school graduates. High school diploma data are submitted to the National Student Clearinghouse (the Clearinghouse) by schools and districts that participate in the StudentTracker for High Schools (STHS) service. In general, the participating schools tend to have greater representation among schools with lower-income, higher minority enrollments, and urban locales.

This report is based on the data submitted to the Clearinghouse on graduating classes of 2014, 2017, 2018, 2019, and 2020. Table A1 below shows the number of participating high schools and high school graduates included in this report compared to the total number of US high schools and high school graduates. All types of high schools, including both public and private schools, participate in the Clearinghouse STHS service.

Table A1. Number of public, non-charter high schools and public, non-charter high school graduates included in the report*

Academic year[1]	No. of participating high schools	Percent of all US public high schools[2]	Percent of US grade 12 enrollment represented[3]	Total N (No. of graduates in participating high schools)
2013-2014	7,333	38%	53%	1,549,127
2016-2017	7,618	39%	55%	1,630,503
2017-2018	8,052	39%	57%	1,737,491
2018-2019	7,959	39%	56%	1,697,703
2019-2020	7,325	36%	51%	1,574,520

[1]Academic year is defined as the period between September 1-August 31.
[2] The total number of schools used in the denominator of this calculation was obtained from NCES' Elementary and Secondary Information System (ELSi). The public school information is available from the Common Core of Data through 2019-20.
[3] The numbers used in both the denominator and numerator of this calculation were obtained from NCES' Elementary and Secondary Information System (ELSi). Grade 12 enrollment information is available from the Common Core of Data through 2019-20.

Table A2. Number of public, charter high schools and public, charter high school graduates included in the report*

Academic year[1]	No. of participating high schools	Percent of all US public high schools[2]	Percent of US grade 12 enrollment represented[3]	Total N (No. of graduates in participating high schools)
2013-2014	537	28%	34%	40,199
2016-2017	670	31%	35%	56,698
2017-2018	741	32%	36%	63,109
2018-2019	711	30%	34%	57,007
2019-2020	747	32%	35%	59,577

[1]Academic year is defined as the period between September 1-August 31.
[2] The total number of schools used in the denominator of this calculation was obtained from NCES' Elementary and Secondary Information System (ELSi). The public school information is available from the Common Core of Data through 2019-20.
[3] The numbers used in both the denominator and numerator of this calculation were obtained from NCES' Elementary and Secondary Information System (ELSi). Grade 12 enrollment information is available from the Common Core of Data through 2019-20.

Table A3. Number of private high schools and private high school graduates included in the report*

Academic year[1]	Number of participating high schools	Percent of all US private high schools[2]	Percent of US grade 12 enrollment represented[3]	Total N (No. of graduates in participating high schools)
2013-2014	537	28%	34%	40,199
2016-2017	670	31%	35%	56,698
2017-2018	741	32%	36%	63,109
2018-2019	711	30%	34%	57,007
2019-2020	747	32%	35%	59,577

[1]Academic year is defined as the period between September 1-August 31.

[2] The total number of schools used in the denominator of this calculation was obtained from NCES' Elementary and Secondary Information System (ELSi). The private school information is available from the Private School Survey, which is collected every two years through 2017-18. The number of private schools for intermediate years are estimates, equal to the number from the prior available year.

[3] The numbers used in both the denominator and numerator of this calculation were obtained from NCES' Elementary and Secondary Information System (ELSi). Grade 12 enrollment information is available from the Private School Survey, which is collected every two years through 2017-18. The numbers for intermediate years are estimates, equal to the numbers from the prior available year.

Definitions of Public, Non-Charter High School Categories

We used the Common Core of Data (CCD) to construct the sampling frame of schools. The CCD is the Department of Education's primary database on public elementary and secondary education in the United States. From the CCD, we created a sample frame that contains all regular public schools with a 12th grade.

To enable public, non-charter high schools to compare their own outcomes with those of similar high schools, the outcomes in this report are presented based on school-level characteristics: low-income and higher-income; high-minority and low-minority; and urban, suburban, or rural. Membership in these categories for each academic year is based on CCD data for the corresponding year.

Low-income schools are defined as schools where at least 50% of the entire student population (not just graduating seniors) is eligible for free or reduced-price lunch. Minority

schools are defined as those schools where at least 40% of the students are Black or Hispanic. Locale is defined by the NCES urban-centric locale code. Schools with a code from 11 to 13 are defined as urban. Schools with a code from 21 to 23 are defined as suburban. And those with a code 31 to 43, covering both town and rural areas, are defined as rural.

Combinations of these characteristics results in seven groups of high schools. Thus, the outcomes are presented for the following categories of high schools:
- Low-income schools
- Higher-income schools
- Low-minority schools
- High-minority schools
- Urban schools
- Suburban schools
- Rural schools

Table A4. Number of public, non-charter high schools and public, non-charter high school graduates included in the report by category of high schools*

Group	Academic year	Number of participating high schools	Percent of US grade 12 enrollment represented	Number of states represented	Total N (No. of graduates in sample)
Low-income Schools	2013-2014	2,815	51%	50	547,389
	2016-2017	2,908	56%	44	596,180
	2017-2018	3,138	57%	46	644,297
	2018-2019	3,112	57%	46	632,480
	2019-2020	2,923	52%	46	609,764
Higher-income Schools	2013-2014	4,518	55%	51	1,001,738
	2016-2017	4,710	55%	51	1,034,323
	2017-2018	4,914	57%	51	1,093,194
	2018-2019	4,847	55%	51	1,065,223
	2019-2020	4,402	50%	51	964,756
High-minority Schools	2013-2014	2,210	57%	43	577,982
	2016-2017	2,383	60%	42	659,424
	2017-2018	2,487	60%	42	712,312
	2018-2019	2,506	61%	42	717,930
	2019-2020	2,405	56%	46	691,736
Low-minority Schools	2013-2014	5,123	51%	51	971,145
	2016-2017	5,235	52%	51	971,079
	2017-2018	5,565	54%	51	1,025,179
	2018-2019	5,453	53%	51	979,773
	2019-2020	4,920	48%	51	882,784
Urban Schools	2013-2014	1,781	63%	50	479,188
	2016-2017	1,913	66%	50	518,764
	2017-2018	1,958	66%	50	537,769
	2018-2019	1,948	66%	50	526,555
	2019-2020	1,896	63%	50	517,682
Suburban Schools	2013-2014	2,242	60%	49	733,200
	2016-2017	2,333	62%	48	758,359
	2017-2018	2,415	64%	48	814,129
	2018-2019	2,381	63%	48	797,999
	2019-2020	2,159	57%	48	721,248
Rural Schools	2013-2014	3,310	36%	50	336,739
	2016-2017	3,372	37%	48	353,380
	2017-2018	3,679	39%	48	385,593
	2018-2019	3,630	38%	48	373,149
	2019-2020	3,270	34%	48	335,590

The numbers used in both the denominator and numerator of this calculation were obtained from NCES' Elementary and Secondary Information System (ELSi). The denominator is the number of grade 12 enrollments for all schools in a particular category of high schools. The numerator is the number of grade 12 enrollments for participating public high schools in the category. Grade 12 enrollment information is available from the Common Core of Data through 2019-20.

In addition to our standard results for schools in low-income and higher-income categories, the report also presents postsecondary outcomes for graduates from a subset of low-income schools defined as high-poverty schools and a subset of higher-income schools defined as low-poverty schools. High-poverty schools are defined as those where at least 75% of the student population is eligible for free or reduced-price lunch. Low-poverty schools are defined as those where less than 25% of the student population is eligible for free or reduced-price lunch.

Table A5. Number of public, non-charter high schools and public, non-charter high school graduates in high-poverty and low-poverty schools included in the report by category

Group	Academic year	Number of participating high schools	Percent of US grade 12 enrollment represented	Number of states represented	Total N (No. of graduates in sample)
High-poverty Schools	2013-2014	1,147	57%	46	200,629
	2016-2017	1,213	61%	42	233,236
	2017-2018	1,330	60%	44	246,982
	2018-2019	1,310	60%	41	250,726
	2019-2020	1,278	57%	39	253,584
Low-poverty Schools	2013-2014	1,738	63%	50	486,361
	2016-2017	1,678	64%	44	462,269
	2017-2018	1,714	66%	45	482,875
	2018-2019	1,689	64%	45	462,260
	2019-2020	1,476	56%	45	406,624

The numbers used in both the denominator and numerator of this calculation were obtained from NCES' Elementary and Secondary Information System (ELSi). The denominator is the number of grade 12 enrollments for all schools in a particular category of high schools. The numerator is the number of grade 12 enrollments for participating public high schools in the category. Grade 12 enrollment information is available from the Common Core of Data through 2019-20.

Postsecondary Data

College enrollment, persistence, and completion outcomes are determined by matching the graduate files received from high schools each year, to the postsecondary enrollment data held by the National Student Clearinghouse. The National Student Clearinghouse is a unique and trusted source for higher education enrollment and degree verification. Currently, Clearinghouse data include 3,600 postsecondary institutions and 97 percent of U.S. postsecondary enrollments (for detailed coverage of postsecondary enrollments see Appendix C). Because the database is comprised of student-level data, researchers can use it to link concurrent as well as consecutive enrollments of individual students at multiple institutions — a capability that distinguishes the Clearinghouse data from national databases built with institution-level data.

To preserve comparability to the reports that schools and districts receive on their graduates' college access, persistence, and completion rates through the Clearinghouse's StudentTracker service, results have not been adjusted to account for a student's outcome not being captured due to noncoverage by Clearinghouse data.

Definitions of Outcomes

College enrollment in the first fall after high school graduation: Percentage of high school students who enrolled in a two- or four- year postsecondary institution in the fall semester immediately following graduation. The fall semester immediately following graduation is defined as any enrollment that occurs between August 15 and October 31.

College enrollment in the first year after high school graduation: Percentage of high school students who enrolled in a two- or four-year postsecondary institution in the academic year immediately following graduation. The first year after high school includes any enrollment that occurs between August 15 of the graduation year and August 14 of the following year.

College enrollment in the first two years after high school graduation: Percentage of high school students who enrolled in a two- or four-year postsecondary institution in the first two years following graduation. The first two years after high school includes any enrollment that occurs between August 15 of the graduation year and August 14 of the second year.

Persistence from first to second year of college: Percentage of students enrolled in the first year after high school graduation who remained enrolled in postsecondary education in the second year. This is the percentage of students who re-enrolled at any postsecondary institution, not necessarily the same one they started in. Thus, it is different from the typical measure of retention at the same institution.

College completion within six years after high school graduation: Percentage of high school students who attained a degree in a two- or four-year postsecondary institution in the six academic years immediately following graduation. Only associate's, bachelor's, and advanced degrees are counted in these rates. Certificates are not included.

STEM College Completions

Analysis is based on degree records that were awarded to students within six years of high school graduation. Only associate's, bachelor's, and advanced degrees are considered. Certificates are not included. The field of study, whenever reported by the postsecondary institution, is mapped to the NCES' Classification of Instructional Programs (CIP) code. NCES classifies instructional programs by a six-digit CIP code at the most granular level and organizes them into CIP families by their two-digit prefix.

The definition of STEM (science, technology, engineering, and math) used in this analysis is based on a listing of six-digit CIP codes used by the National Science Foundation, and it includes the following disciplines:
- Biological and Agricultural Sciences
- Computer Sciences
- Earth, Atmospheric, and Ocean Sciences
- Engineering
- Mathematics
- Physical Sciences
- Psychology
- Social Sciences

If a student is awarded more than one degree and at least one of them is in a STEM discipline, the earliest STEM degree is considered for this analysis.

Panel of High Schools & Colleges (Gap Year Enrollment Analysis)

The COVID-19 special analysis section of this report is designed to estimate impacts of COVID-19 on gap year postsecondary enrollments for the 2020 graduating class of high school seniors in comparison to historical data from 2018 and 2019 as pre-pandemic baselines. This special analysis differs from the rest of the High School Benchmarks report in that it employs a fixed panel of high schools and postsecondary institutions that consistently reported data on high school graduates and fall enrollments over a four-year period.

Different panels were used for the high schools and postsecondary institutions. The High School Panel is the same that was used in the *COVID-19 Special Analysis* report the Research Center released in March 2021. This panel includes high schools that consistently reported their high school graduates within a similar time frame from the 2018 through 2020. It covers 859,449 graduates from 3,498 high schools and their immediate fall enrollments.

The postsecondary panel includes approximately 1,900 institutions that consistently reported their fall enrollments within a similar time frame from 2018 through 2021. The 2021 fall enrollments are based on preliminary data reported to the National Student Clearinghouse as of October 21, 2021. To control for submission timing among postsecondary institutions, only fall term data that was submitted within the data submission window in each of the four years was included.

It is important to note that while the enrollment rates follow a similar pattern in this report compared to the March 2021 publication, the total student counts are slightly lower due to the use of a four-year panel rather than the three-year panel used in March 2021. The addition of the 2021 fall enrollment caused institutions that were not consistent in their enrollment reporting across all four years to be removed from the final panel. This in turn means high school graduates who were included in the March publication may have not been captured by this report's analysis if their postsecondary institution was no longer included in the panel. The fall 2021 postsecondary coverage rate for this updated panel is 66.8 percent, 9.2 percentage points lower than the 76 percent coverage rate from March.

Appendix B. Full Result Tables

Appendix C. Postsecondary Coverage Tables

Appendix D. Gap Year Analysis Tables