



National Student ClearinghouseSM
Research CenterTM

HIGH SCHOOL BENCHMARKS



2020

With a COVID-19 Special Analysis

National College Progression Rates



COVID-19 SPECIAL ANALYSIS

Preliminary College Enrollment Rates of the High School Graduating Class of 2020

This eighth annual report updates the key indicators of high school to college transition, persistence, and completion outcomes for high school graduates of 2019 and earlier. In addition, this year's report features a first look at the effect of COVID-19 on the immediate college enrollment rate of the high school graduating class of 2020.

Using preliminary data from high schools and colleges reporting as of September 18, 2020, the immediate enrollment rates are estimated for 2,324 high schools with differing income, minority, and urbanicity characteristics.

In response to the increasing need for up-to-date enrollment information during the COVID-19 pandemic, this year's report provides a special look at how the pandemic has impacted the immediate college enrollment patterns among the most recent high school graduates.

KEY FINDINGS

- Preliminary data shows little impact of COVID-19 on high school graduation in the school year 2019-2020.
- However, far fewer graduates went to college immediately after high school this fall, declining by 21.7 percent compared to 2019 graduates.
- COVID-19 impacted immediate college enrollments rates considerably for graduates of high poverty, low income, and urban high schools.
- Public college enrollment among graduates of low-income high schools declined at disproportionately higher rates, revealing impediments to college access during COVID-19.

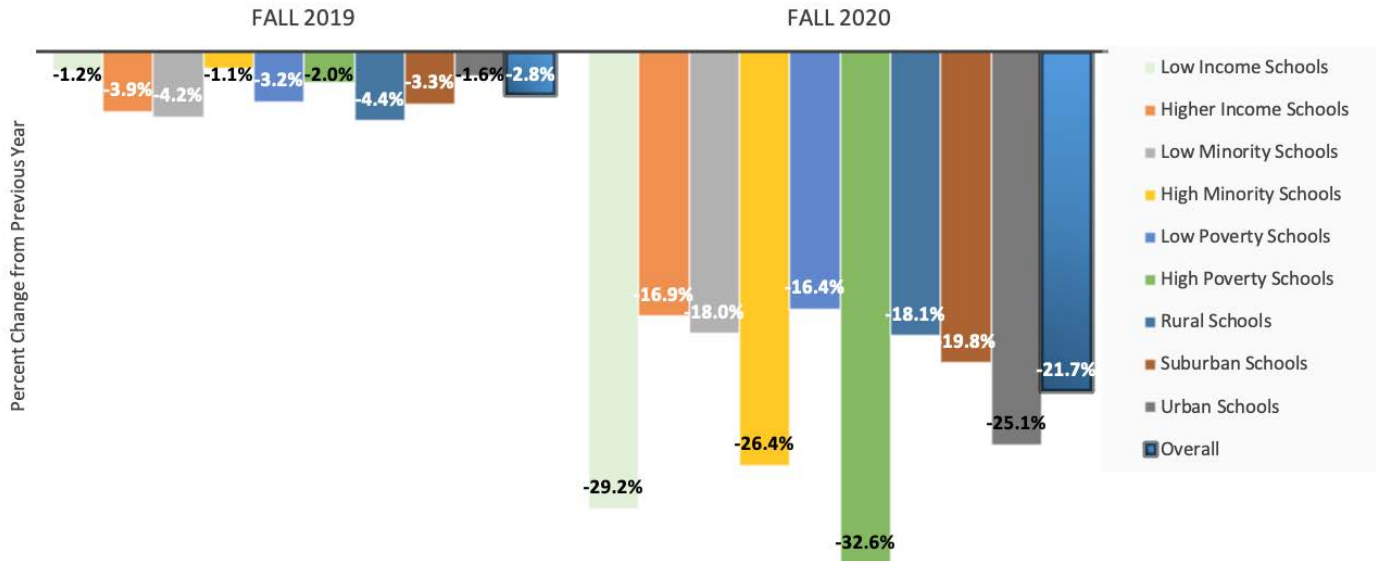
- 1. Preliminary data from 2,324 high schools across the nation shows that high school graduation was unaffected by COVID-19. The number of graduates from these high schools remained stable compared to the previous year.**

High school graduate numbers remained at last year's level (-0.1%). There was little change over last year (less than +/-1.0%), regardless of income level, poverty level, minority level, or urbanicity of high schools (see Appendix on page 6).

- 2. Despite steady high school graduate numbers, students going to college immediately after high school this fall fell steeply by 21.7 percent, nearly eight times the pre-pandemic loss rate (-2.8%).**

The degree of impacts tracks closely high schools' income, poverty, and minority levels, as well as urbanicity (**Figure 1**)—a 29.2 percent drop in college enrollment among graduates of low-income high schools versus a 16.9 percent drop at higher-income high schools; -26.4 percent for high-minority versus -18.0 percent for low-minority high schools; -32.6 percent for high-poverty versus -16.4 percent for low-poverty high schools; and -25.1 percent for urban high schools versus -19.8 percent for suburban and -18.1 percent for rural high schools. This fall's declines are far larger than those of the previous year (pre-pandemic).

Figure 1. Changes in Number of Students Enrolling in College After High School by High School Characteristics



3. The immediate college enrollment rate decreased to 27.7 percent from 35.3 percent last fall, a decline ten times steeper than last fall's drop (from 35.9% in 2018 to 35.3% in 2019).

Based on preliminary data representing 53 percent of colleges as of Sept 18, 2020, sharp decreases in the immediate enrollment rate over the same time last year are detected, ranging from 7 to 9 percentage point declines, irrespective of urbanicity, income level or minority level of high schools. The enrollment rate changes from the previous year were within +/- 2.5 percentage points.

Low-income high schools show a 8.7 percentage point drop in enrollment rate between 2019 and 2020 (from 30.0% to 21.4%), whereas higher-income high schools

show a 6.7 percentage point decline (from 39.1% to 32.4%) (Figure 2).

The high poverty high school student enrollment rate declined more than nine percentage points in comparison to a 7.3 percentage point drop in the low poverty schools' enrollment rate (Figure 3).

Both high minority and low minority school students declined nearly equally (-8.0 and -7.2 percentage points, respectively) (Figure 4).

Finally, urban high schools' enrollment rate decreased the sharpest at -8.5 percentage points, followed by suburban and rural schools (-7.0 and -6.7 percentage points, respectively) (Figure 5).

Figures 2 – 5. Immediate College Enrollment Rate by High School Characteristics

Figure 2. Income Level

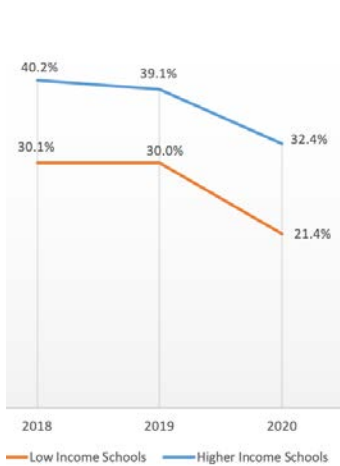


Figure 3. Poverty Level

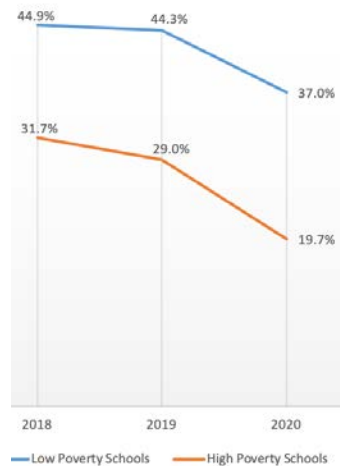


Figure 4. Minority Level

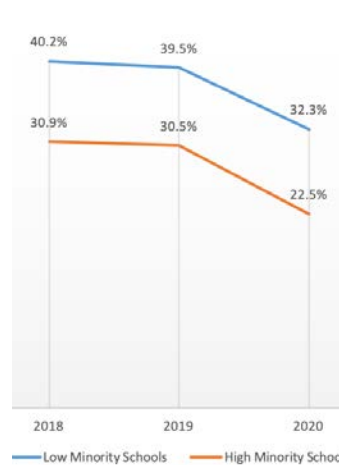
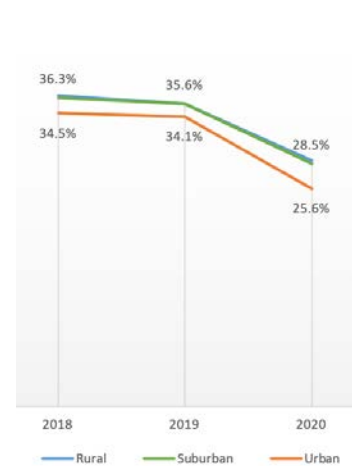


Figure 5. Urbanicity



Method in Brief

The COVID-19 Special Analysis 2020 estimates the impact of the pandemic on high school graduate numbers as well as the immediate postsecondary enrollment pathways for the graduating class of 2020. Analyses are based on a fixed panel of both high schools and colleges (the same subset of high schools and the same subset of colleges that reported data to the Clearinghouse within the same early time frame across all three comparison years, 2018-2020).

As of September 18, 53 percent of colleges that participate in the Clearinghouse had submitted enrollment data. As of the same date, 2,324 high schools had submitted graduate data. Only those high school graduates that enrolled in one of these

colleges are counted in the results. Thus, the results should be considered highly preliminary, representing roughly half of the colleges reporting, for graduates from roughly one-tenth of the nation's high schools. Accordingly, the panel college enrollment rates shown for the class of 2019 in this COVID-19 Special Analysis are roughly half of those shown for the same class using complete college enrollment data in the standard report.

We will update these COVID-19 results as additional data become available.

More details on methodology and data can be found on page 8.

Although COVID-19 impacted all high school graduates in their immediate college enrollment rates, graduates from high poverty, low income, and urban high schools have been hit hardest and the enrollment gaps appear to be widening due to COVID-19.

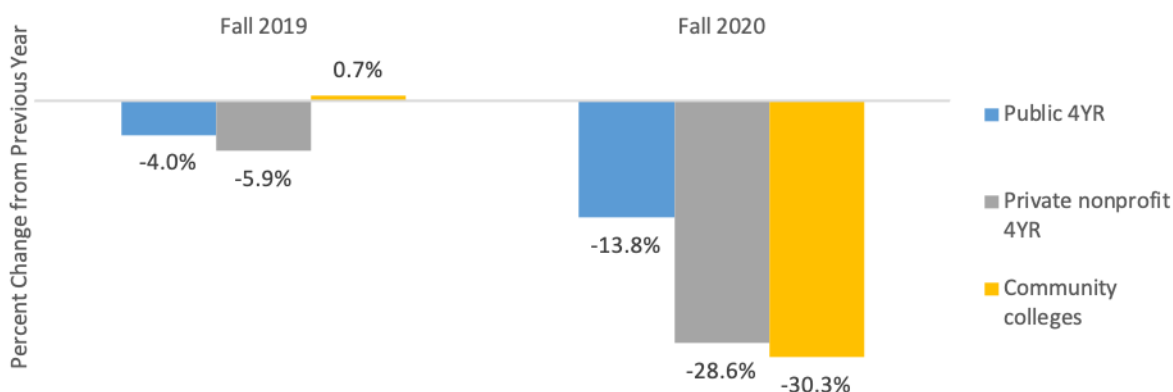
4. Public college enrollment among graduates of low-income high school graduates declined at disproportionately higher rates, revealing impediments to college access during COVID-19.

The immediate college enrollments dropped sharply this fall across all institution types (**Figure 6**). Community college enrollees dropped the most at 30.3 percent, doubling the declines in public four-year college enrollees (-13.8%). Private nonprofit four-year institutions surpassed public four-year colleges, with a drop of 28.6 percent.

In addition to these overall declines, enrollment impacts emerge that are attributable to the inequitable effect of the pandemic (**Figure 7**). For example, immediate enrollments across all institution types fell more sharply for low-income high school graduates, by 29.2 percent, compared to a 16.9 percent drop for their counterparts from higher-income high schools.

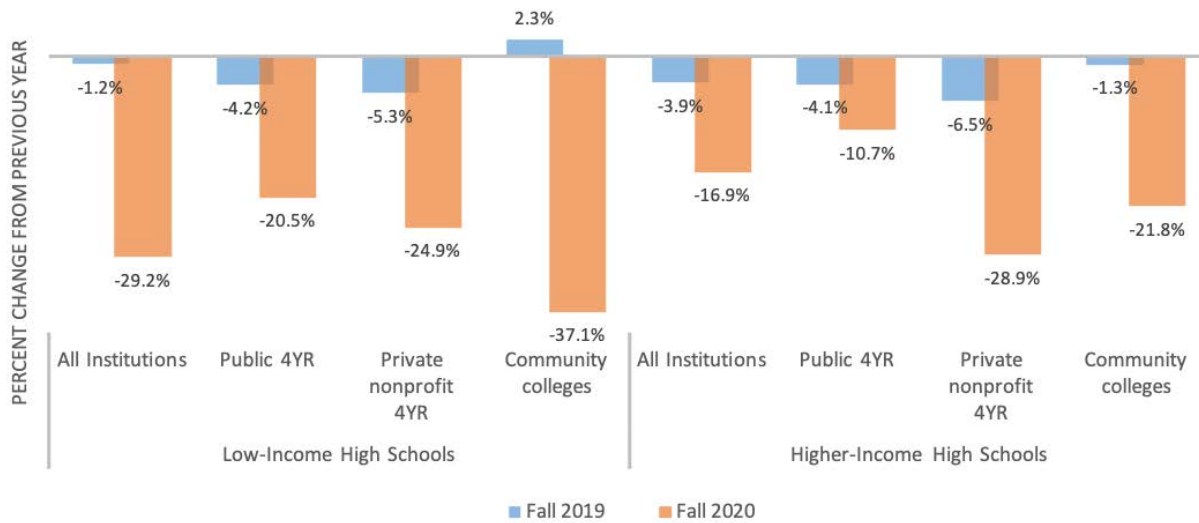
Moreover, low-income high school graduates' enrollments declined in public colleges at considerably higher percentages than for higher-income high school graduates (-20.5% versus -10.7% at public four-year colleges; and -37.1% versus -21.8% at community colleges). In contrast, their counterparts at higher-income high schools show relatively larger enrollment drops in private four-year colleges than in public institutions. These facts help to quantify the significant impediments to college access that low-income students are experiencing during COVID-19.

Figure 6. Changes in Immediate College Enrollments by Institution Type



Note: For-profit four-year and private two-year colleges are not shown due to small numbers.

Figure 7. Changes in Immediate College Enrollments by Institution Type and Income Level of High Schools



Note: All Institutions include for-profit four-year and private two-year colleges that are not shown due to small numbers.

Summary

The preliminary High School Benchmarks report for the class of 2020 shows that graduates of higher-income, low minority, and suburban high schools continue to demonstrate higher levels of college enrollment than their counterparts from low-income, high minority, and urban high schools. During COVID-19, enrollment gaps not only remain, but disparities are magnified particularly for students from low-income high schools.

Based on preliminary data, there is little evidence that COVID-19 impacted high school graduation rates, but emerging evidence that the pandemic has impacted immediate college enrollments considerably, especially for low-income students, and particularly their access to public colleges.

COVID-19 Special Analysis Appendix

Changes in High School Graduates, Immediate College Enrollees, and Immediate College Enrollment Rates by High School Characteristics

High School Characteristic	Graduating Class 2018			Graduating Class of 2019					Graduating Class of 2020				
	High School Graduates (as a share)	Immediate College Enrollees (as a share)	Immediate College Enrollment Rate	High School Graduates (as a share)	Immediate College Enrollees (as a share)	High School Graduates (% Change from Previous Year)	Immediate College Enrollees (% Change from Previous Year)	Immediate College Enrollment Rate	High School Graduates (as a share)	Immediate College Enrollees (as a share)	High School Graduates (% Change from Previous Year)	Immediate College Enrollees (% Change from Previous Year)	Immediate College Enrollment Rate
Overall			35.9%			-1.0%	-2.8%	35.3%			-0.1%	-21.7%	27.7%
Income Level													
Low Income	45.1%	38.1%	30.1%	45.1%	38.7%	-1.0%	-1.2%	30.0%	44.9%	35.0%	-0.4%	-29.2%	21.4%
Higher Income	54.9%	61.9%	40.2%	54.9%	61.3%	-1.1%	-3.9%	39.1%	55.1%	65.0%	0.3%	-16.9%	32.4%
Minority Level													
Low Minority	50.6%	57.2%	40.2%	49.9%	56.4%	-2.4%	-4.2%	39.5%	50.1%	59.0%	0.3%	-18.0%	32.3%
High Minority	49.4%	42.8%	30.9%	50.1%	43.6%	0.3%	-1.1%	30.5%	49.9%	41.0%	-0.3%	-26.4%	22.5%
Poverty Level*													
Low Poverty	58.5%	66.6%	44.9%	56.4%	66.4%	-1.9%	-3.2%	44.3%	56.6%	71.0%	0.2%	-16.4%	37.0%
High Poverty	41.5%	33.4%	31.7%	43.6%	33.6%	6.9%	-2.0%	29.0%	43.4%	29.0%	-0.7%	-32.6%	19.7%
Urbanicity													
Rural	17.2%	17.7%	36.6%	17.1%	17.4%	-1.8%	-4.4%	35.6%	17.2%	18.2%	0.8%	-18.1%	28.9%
Suburban	42.1%	42.9%	36.3%	42.0%	42.7%	-1.3%	-3.3%	35.6%	42.0%	43.7%	-0.1%	-19.8%	28.5%
Urban	40.7%	39.4%	34.5%	40.9%	39.9%	-0.4%	-1.6%	34.1%	40.8%	38.2%	-0.3%	-25.1%	25.6%

*About 40% of the participating high schools have an assigned poverty level. High poverty schools have at least 75% of students, and low poverty schools have no more than 25% of students, who are eligible for the federal free and reduced lunch program.

Changes in Immediate College Enrollments by High School Income Level and Institutional Sector

High School Income Level and Fall 2020 Institutional Sector	Graduating Class 2018	Graduating Class 2019		Graduating Class 2020	
	Enrollees (as a share)	Enrollees (as a share)	Enrollees (% Change from Previous Year)	Enrollees (as a share)	Enrollees (% Change from Previous Year)
Low Income					
Public 4YR	42.7%	41.4%	-4.2%	46.4%	-20.5%
Private Nonprofit 4YR	8.8%	8.4%	-5.3%	8.9%	-24.9%
Public 2YR	48.1%	49.8%	2.3%	44.2%	-37.1%
Other	0.4%	0.3%	7.4%	0.4%	-39.7%
Higher Income					
Public 4YR	56.6%	56.5%	-4.1%	60.6%	-10.7%
Private Nonprofit 4YR	18.9%	18.4%	-6.5%	15.7%	-28.9%
Public 2YR	24.2%	24.9%	-1.3%	23.4%	-21.8%
Other	0.2%	0.2%	-9.6%	0.2%	-26.2%
All					
Public 4YR	51.4%	50.7%	-4.0%	55.8%	-13.8%
Private Nonprofit 4YR	15.8%	15.3%	-5.9%	13.9%	-28.6%
Public 2YR	32.6%	33.7%	0.7%	30.0%	-30.3%
Other	0.3%	0.3%	-1.3%	0.3%	-33.9%

Participating High School Profiles

High School Characteristics	Participating High Schools		All US High Schools		Participating High Schools as a Share	
	No. of High Schools	No. of Graduates	No. of High Schools	Grade 12 Enrollment	High Schools	Graduates
Overall	2,324	596,605	24,912	3,664,048	9.3%	16.3%
Low Income	1,179	263,450	7,889	1,271,467	14.9%	20.7%
Higher Income	1,061	320,714	11,609	2,150,260	9.1%	14.9%
High Poverty	509	108,605	3,327	487,250	15.3%	22.3%
Low Poverty	437	140,358	3,185	781,257	13.7%	18.0%
Poverty unranked	1,378	347,642	18,400	2,395,541	7.5%	14.5%
High Minority	980	292,497	6,222	1,383,799	15.8%	21.1%
Low Minority	1,260	291,667	13,276	2,037,928	9.5%	14.3%
Urban	833	239,153	4,539	978,987	18.4%	24.4%
Suburban	633	245,292	4,650	1,386,056	13.6%	17.7%
Rural	774	99,719	10,309	1,056,684	7.5%	9.4%
Missing/Unknown	84	12,441	5,414	242,321	1.6%	5.1%

Note: Most participating high schools are public schools (96%). Calculations based on the latest 2018-19 Common Core Dataset by NCES.

Methodological Notes for the COVID-19 Special Analysis

This special analysis is designed to estimate early impacts of COVID-19 on immediate postsecondary enrollment for the 2020 graduating class of high school seniors, based on partial enrollment data reported as of Sept 18, 2020, in comparison to historical data from 2018 and 2019 as pre-pandemic baselines.

This special analysis differs from the traditional High School Benchmarks report in that it employs a fixed panel of high schools and postsecondary institutions that reported data on high school graduates and fall enrollment as of September 18, 2020.

Two analytical approaches were used to estimate the impact: First, the change in the number of high school graduates from fall 2019 to fall 2020 was compared to the corresponding change occurring between fall 2018 and fall 2019 (the pre-pandemic baseline). Second, the college enrollment rate for fall 2020 was compared to the 2019 rate. Comparisons are based on a fixed panel of both high schools and colleges (the same high schools and the same colleges that reported data to the Clearinghouse within the same early time frame across all three comparison years, 2018-2020).

As of September 18, 53 percent of colleges that participate in the Clearinghouse had submitted enrollment data. Only those high school graduates that enrolled in one of these colleges are counted in the results. Thus, the results should be considered highly preliminary.

Key high school characteristic definitions regarding income, minority, poverty, and urbanicity levels are discussed in detail in the main report on page 10.

Pre-Pandemic Baseline Development

To accurately assess the impact of COVID-19 on the immediate high school to postsecondary enrollment pathway, the analyses focused on a fixed panel of all high schools and institutions that submitted data to the Clearinghouse during the same time frame across all comparison years. We created the panel to control for year-to-year variations in school and institutional coverage as well as the variations in postsecondary data submission dates. To control for coverage, only the high schools and institutions that submitted enrollment data in 2018, 2019, and 2020 were included in the analyses. Schools or institutions that discontinued or only started submitting data at any point within these years were excluded. To control for submission timing among postsecondary institutions, only fall term data that was submitted within the data submission window in each of the three years was included. However, it is important to note that even with these controls, enrollments at some institutions in the panel may have been overcounted or undercounted for 2020 due to unusual file submission patterns. Our investigations suggest that such data noise is minor.

Student Population

This study includes only postsecondary enrollments of degree-seeking students who were enrolled at a Title IV, degree-granting institution in the U.S. in the fall of the applicable year, as reported by September 18. This definition also includes students who were dual enrolled prior to the beginning of their postsecondary career but excludes current dual enrollees. To track the immediate high school to postsecondary enrollment rate, graduate files submitted by high schools are matched to the enrollment files submitted by institutions. The enrollment rate calculations are based on students who graduated from a select, limited panel of high schools, who then enrolled in a select, limited panel of institutions. As a result, the enrollment rates presented in this special analysis are partial outcomes for the fall due to limited postsecondary data coverage and caution should be used when interpreting these results.

HIGH SCHOOL BENCHMARKS



High School Benchmarks 2020: National College Progression Rates

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KEY FINDINGS 2020

Postsecondary Enrollment

Higher-income high school graduates were 24 percent more likely to enroll in college immediately than those from low-income schools (68 percent and 55 percent, respectively). The gap was even larger between low- and high-poverty schools measured by the prevalence of eligible students for a free or reduced-price lunch program.

Persistence During the First Year of College

Once enrolled, 88 percent of students from higher-income high schools returned to their second year in college, compared to 78 percent from low-income high schools.

Completion Within Six Years of High School Graduation

Students from low-poverty high schools were more than twice as likely to earn a degree within six years of high school graduation (60 percent) as their counterparts from high-poverty schools (23 percent). Also, 37 percent of students from urban high schools completed a degree within six years, compared to 41 percent from rural schools and 47 percent from suburban schools.

When minority and income levels are 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.

Low-income and high-minority high school graduates completed college within six years at the lowest rate (28 percent), a gap of 25 percentage points from the rate for higher-income and low-minority school graduates (53 percent).

STEM Degree Completion

STEM degree completion was strongly associated with both the minority and income levels of originating high schools. Eighteen percent from higher-income schools, but only nine percent from low-income schools, and similarly, 17 percent from low-minority schools, but only 10 percent 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 eighth annual High School Benchmarks Report provides the updated data on high school graduates' college access, persistence, and completion outcomes. The 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 of 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.

¹Hussar, B., NCES; Zhang, J., Hein, S., Wang, K., Roberts, A., Cui, J., Smith, M., AIR; Bullock Mann, F., Barmer, A., and Dilig, R., RTI (2020): *The Condition of Education 2020 (NCES 2020-144)*. U.S. Department of Education. Washington, DC: National Center for Education Statistics.

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 central 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:
 - Enrollment in the first fall after high school graduation
 - Enrollment at any time in the first year after high school graduation
 - 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, in particular, 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 2019 and 2018 looking at first fall outcomes, the first-year outcome calculated for the classes of 2018 and 2017, and the first two years' outcomes calculated for the classes of 2017 and 2016. The persistence rates were calculated for the high school graduating class of 2017. The six-year college completion rates were calculated for the high school graduating class of 2013. 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). High schools participating in this service pay a small annual fee to receive an extensive set of analytic data reports, three times per year, detailing the postsecondary access and success outcomes for up to eight cohorts of their graduating classes.

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. See Table 1 for a breakdown of the current sample in comparison to the national population.

Table 1 describes the distribution of enrolled high school students in the class of 2019 and 2013 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 enrollments. In terms of the distribution across higher and low-income schools, however, the data coverage from this report is similar to 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 enrollments 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 enrollments at US colleges and universities as of 2018.

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

School Characteristics	Enrolled Students (HS Class of 2019)			Enrolled Students (HS Class of 2013)		
	NSC	National	NSC - National	NSC	National	NSC - National
	N = 1,469,189	N = 3,227,188		N = 1,532,495	N = 3,109,677	
Low Income Schools	39.14%	37.47%	1.67%	36.83%	36.62%	0.21%
Higher Income Schools	60.86%	62.53%	-1.67%	63.17%	63.38%	-0.21%
High Minority Schools	46.33%	39.51%	6.81%	40.96%	35.19%	5.77%
Low Minority Schools	53.67%	60.49%	-6.81%	59.04%	64.81%	-5.77%
Urban Schools	35.32%	26.85%	8.47%	34.83%	26.92%	7.91%
Suburban Schools	45.04%	41.26%	3.77%	45.48%	41.14%	4.35%
Rural Schools	19.64%	31.89%	-12.25%	19.69%	31.94%	-12.25%
High Poverty Schools	15.21%	13.99%	1.22%	13.16%	11.39%	1.77%
Low Poverty Schools	26.63%	23.51%	3.13%	30.87%	26.58%	4.29%

* National numbers were obtained from the National Center for Education Statistics, Elementary and Secondary Information System.

SECTION 1: NATIONAL RESULTS

This section below describes the results on one measure of college attendance (enrollment) and two measures of college success (persistence and graduation) for high schools that serve different student populations.

Enrollment

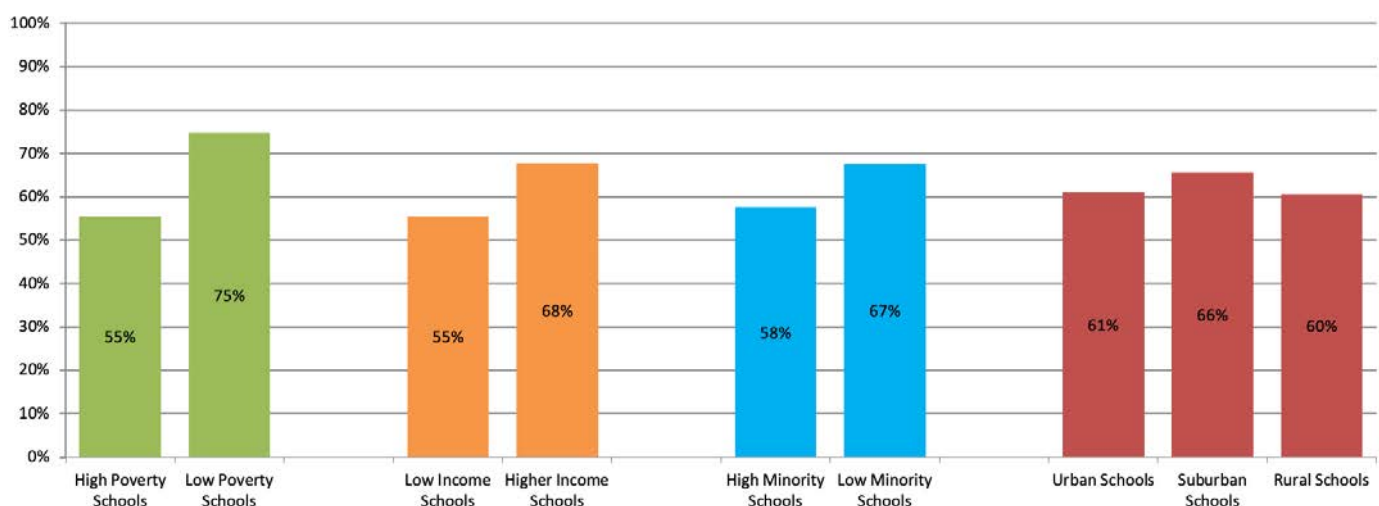
Immediate college enrollment is one of the many important measures that high schools use to assess their impact on student academic success. **Figure A** shows the rates of immediate college enrollment in the first fall after high school graduation for the class of 2019 by different school characteristics. Income was the strongest correlate with immediate college enrollment. Students from higher income schools were more likely to enroll immediately than students from lower income schools (68 percent and 55 percent, respectively). The gap became even larger when we examined this outcome for graduates of high-poverty schools (where at least 75 percent of the student population was eligible for a free or reduced-price lunch, or FRPL) and low-poverty schools (where less than 25 percent of their student population was eligible for FRPL). A 20 percentage point difference exists between high and low poverty schools (55 percent and 75 percent, respectively).

The school minority level was also a strong correlate. Students from low minority high schools were more likely to enroll immediately than those from high schools with higher minority populations (67 percent and 58 percent, respectively). Location was not as strongly correlated, but still demonstrated some relationship with immediate college enrollment. Students from suburban schools (66 percent) were more likely to immediately enroll than those from urban (61 percent) or rural (60 percent) schools.

These patterns are consistent with the graduating class of 2018 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, 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.

Enrollments at out-of-state institutions were higher for students from higher income and low minority high

Figure A. College Enrollment Rates in the First Fall after High School Graduation, Class of 2019, Public Non-Charter Schools



This figure is based on data shown in Appendix B, Table 1.

schools. Seventeen percent of the college-going graduates from higher income schools enrolled at out-of-state institutions, compared to just five percent of those from low income high schools. Seventeen percent of graduates

from low minority high schools enrolled in an out-of-state institution, compared to just seven percent of graduates from high minority high schools (see [Appendix B](#), Table 1).

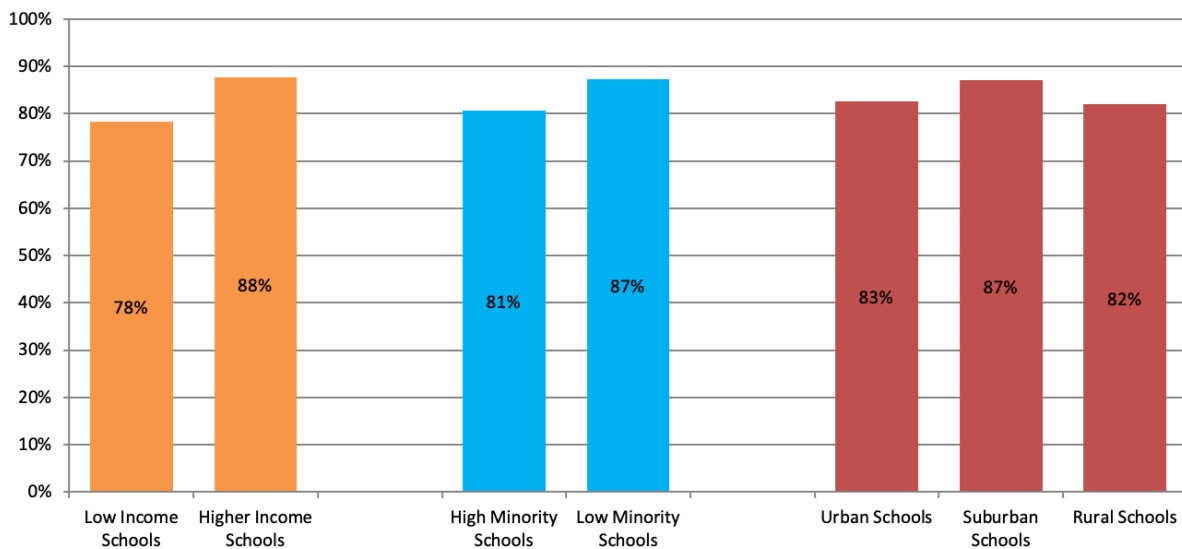
Persistence

Figure B presents persistence rates from the first to second year of college for the high school graduating class of 2017, 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 B range from 78 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 (78%). 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 (82%) 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. Persistence rates for all students were also higher in four-year institutions than in two-year institutions and at out-of-state institutions versus in-state institutions (see [Appendix B](#), Table 7).

Figure B. Persistence Rates from First to Second Year of College, Class of 2017, Public Non-Charter Schools



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

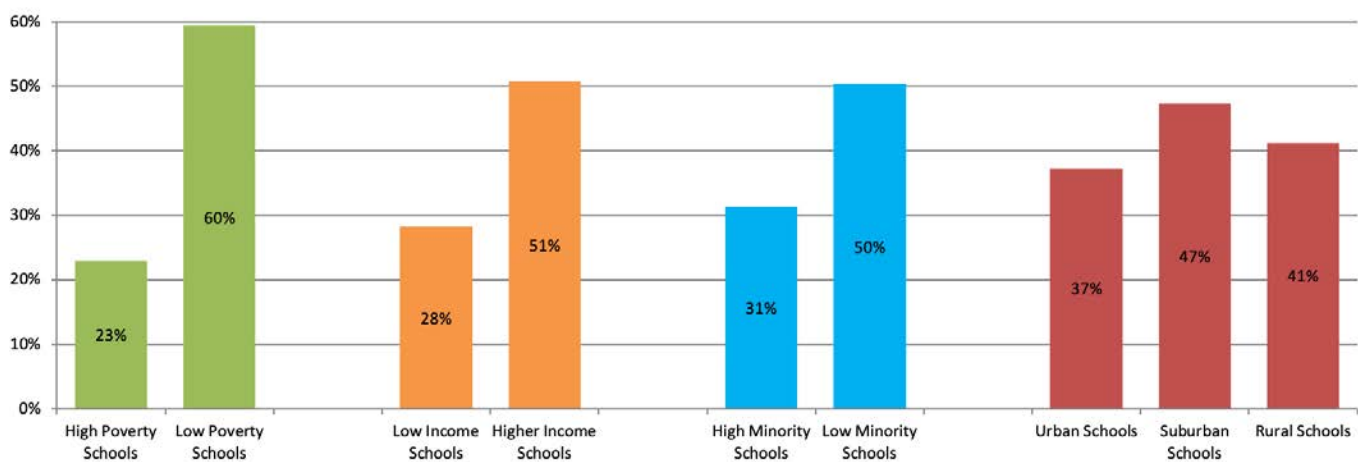
Completion

The differences among students from different types of high schools become most pronounced in the rates of college completion. **Figure C** 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 2013 completed a college degree within six years of their graduation, compared to 28 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 23 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 31 percent from high minority schools. Students from urban high schools lagged behind as well: 37 percent of students from urban schools completed a degree within six years of graduation, compared to 41 percent from rural schools and 47 percent from suburban schools.

Figure C. College Completion Rates Six Years after High School Graduation, Class of 2013, Public Non-Charter Schools



This figure is based on data shown in Appendix B, Table 8.

Enrollment and Completion Rates by School Minority and Income Levels

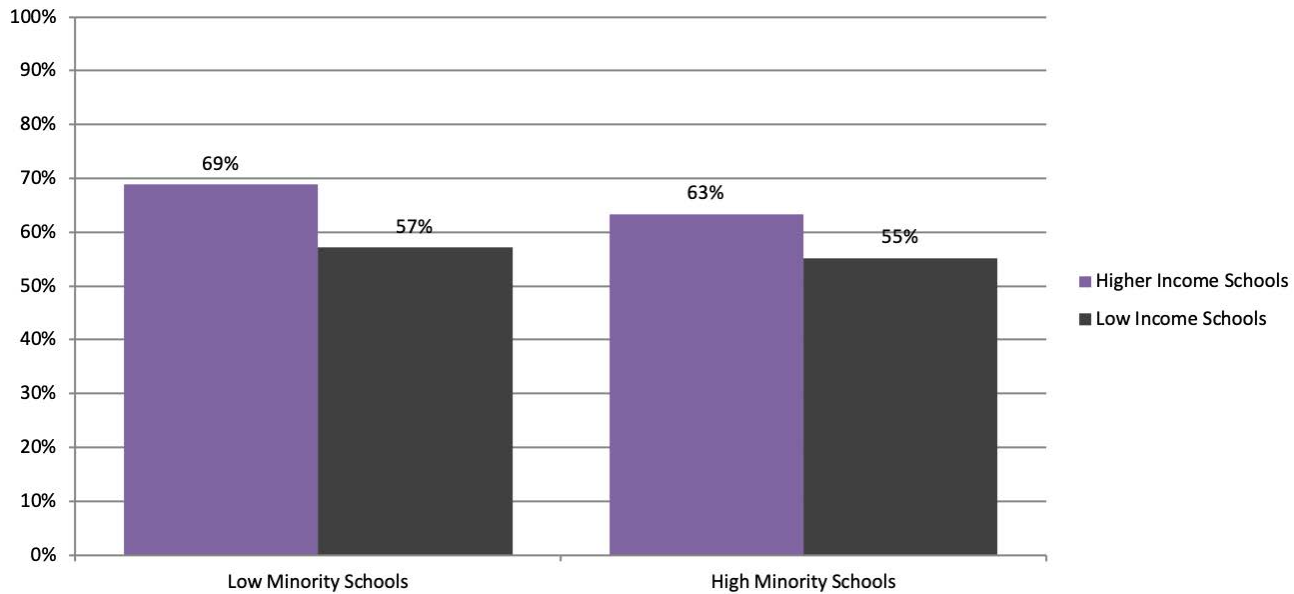
Figures D and E show postsecondary enrollment in the first year after high school completion (class of 2019) and completion rates (class of 2013) by school minority and income levels combined. The results show that graduates from high minority and low income high schools had the lowest rate of immediate college enrollment (55 percent), a gap of 14 percentage points from the highest rate (69 percent), 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 D, the difference in enrollment rate by income levels while keeping the minority status unchanged (e.g., within low minority schools, 69 percent enrollment rate for higher income schools versus 57 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' 69 percent enrollment rate versus high minority schools'

63 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 percent),

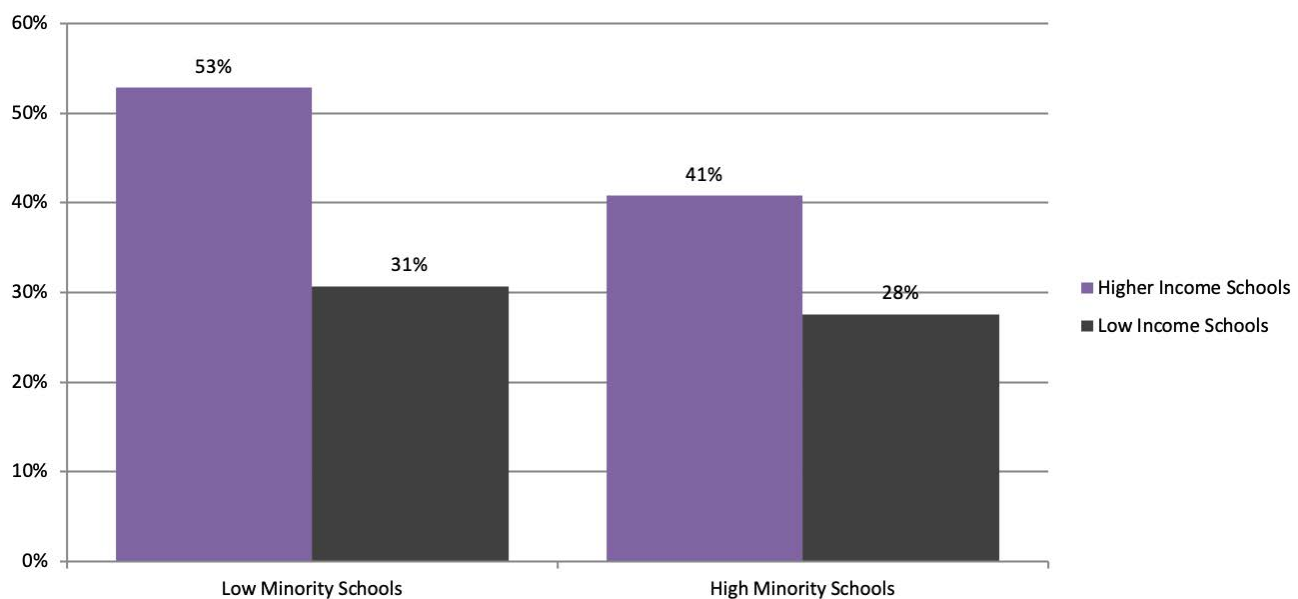
a gap of 25 percentage points from the highest rate (53 percent), observed for students from low minority, higher income high schools (Figure E).

Figure D. College Enrollment Rates in the First Fall after High School Graduation, Class of 2019, Public Non-Charter Schools, Controlling for Income and Minority Levels



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

Figure E. College Completion Rates Six Years after High School Graduation, Class of 2013, Public Non-Charter Schools, Controlling for Income and Minority Levels



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

Top Categories of Majors at Immediate College Enrollment and at Completion

In these analyses, we examined the 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 2019 was used to examine majors at enrollment whereas the high school class of 2013 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 types of majors 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 this student group graduates college with more health professions majors than business majors.

For the four-year sector, the results showed that the most common majors declared at initial college enrollment, regardless of whether the student graduated from higher income or low income high schools, was in the liberal arts and sciences, general studies and humanities category. The most common majors at completion, however, were in the business, management, marketing, and related support category.

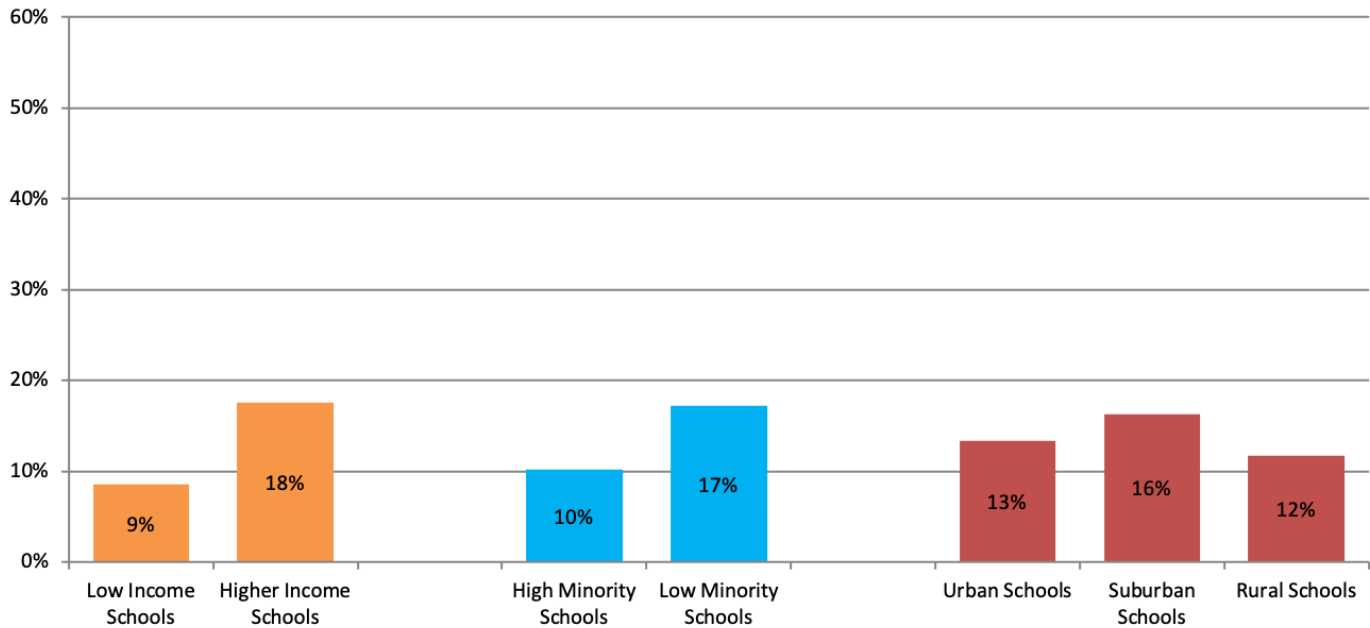
STEM Completion

Figure F presents the rates at which graduates from different types of high schools in the class of 2013 completed a STEM degree within six years of high school graduation. The percentages of both minority and low-income 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 10 percent of students from high minority

schools. The relationship between high school location and STEM degree completion was less pronounced. Sixteen percent of students from suburban high schools completed STEM degrees, compared to 12 percent of students from rural and 13 percent from urban high schools.

Figure F presents the number 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 F. College Completion Rates Six Years after High School Graduation, STEM Field of Study, Class of 2013, Public Non-Charter Schools

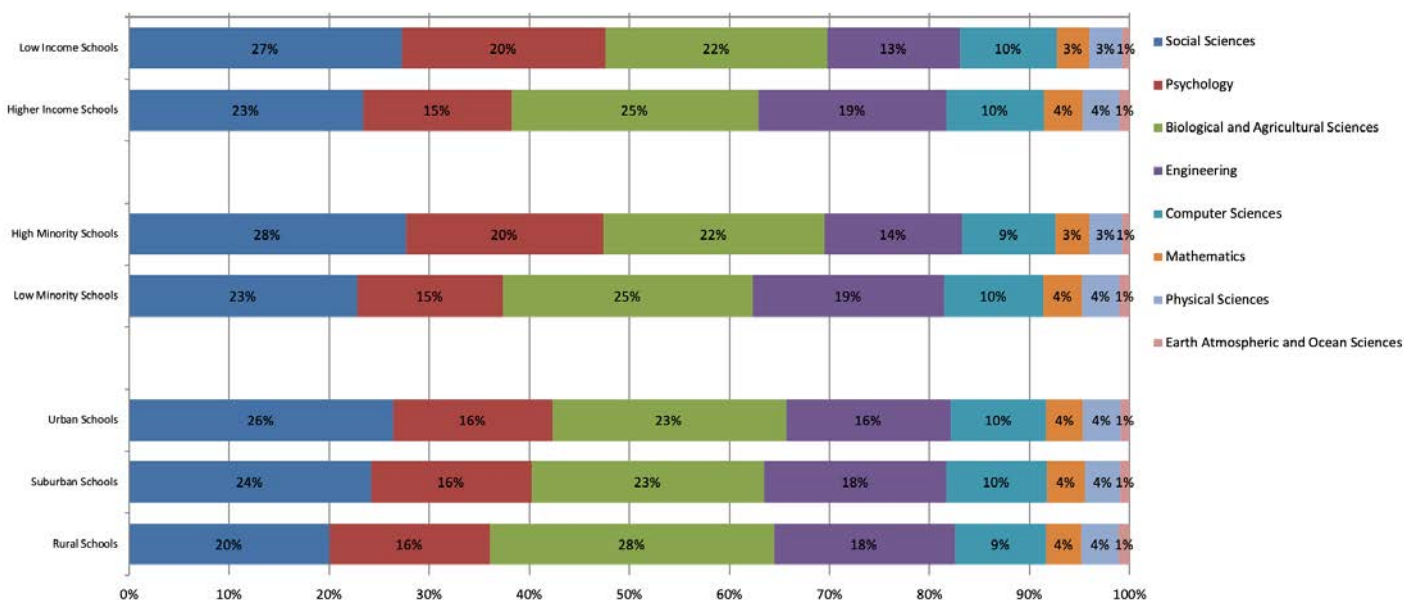


This figure is based on data shown in Appendix B, Table 9.

Figure G shows STEM degree completion by field of study and reveals further patterns of disparities among students from different types of high schools within the group of STEM completers. The majority of STEM degrees for students from both low income (47 percent) and high

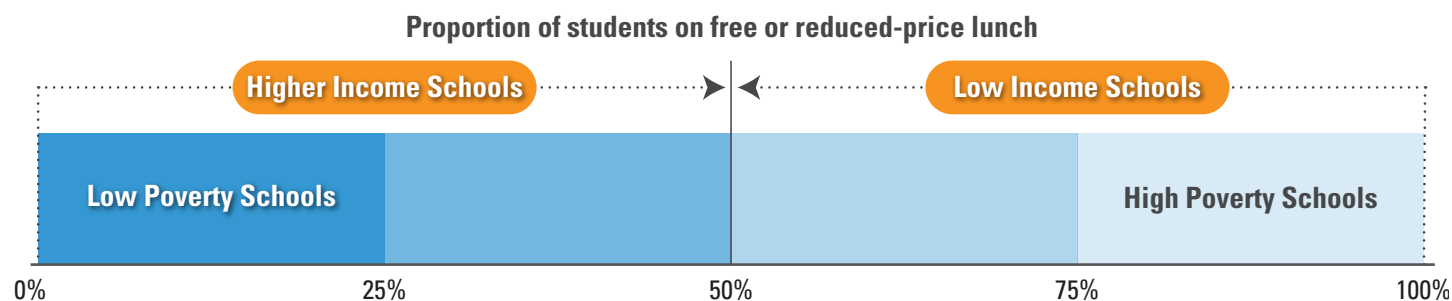
minority (48 percent) high schools are awarded in either psychology or the social sciences, compared to 38 percent for those from higher income and 38 percent for those from low minority schools.

Figure G. Distribution of Fields of Study among STEM Completers, Class of 2013, 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)



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 the outcome without considering school size or the 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
https://nscresearchcenter.org/wp-content/uploads/HSBR2020_PUBLIC_NONCHARTER_SCHOOLS-7-groups.xlsx
- Public Non-Charter High Schools by Poverty Level
https://nscresearchcenter.org/wp-content/uploads/HSBR2020_PUBLIC_NONCHARTER_SCHOOLS_BY_POVERTY-2-groups.xlsx
- Public Charter High Schools
https://nscresearchcenter.org/wp-content/uploads/HSBR2020_PUBLIC_CHARTER_SCHOOLS.xlsx
- Private High Schools
https://nscresearchcenter.org/wp-content/uploads/HSBR2020_PRIVATE_SCHOOLS.xlsx

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; and
 - 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 2018-19. 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. High schools participating in this service pay a small fee (typically \$425) to receive a packet of reports with postsecondary access and success outcomes for their graduating classes. 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 2013, 2016, 2017, 2018, and 2019. **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	Number of participating high schools	Percent of all US public high schools ²	Percent of US grade 12 enrollment represented ³	Total N (Number of graduates in participating high schools)
2012-2013	6,390	38%	49%	1,421,491
2015-2016	6,636	39%	50%	1,495,904
2016-2017	6,664	39%	51%	1,495,059
2017-2018	6,642	39%	50%	1,534,426
2018-2019	6,111	36%	46%	1,414,830

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 2018-19.

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 2018-19.

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

Academic year¹	Number of participating high schools	Percent of all US public high schools²	Percent of US grade 12 enrollment represented³	Total N (Number of graduates in participating high schools)
2012-2013	451	25%	29%	32,546
2015-2016	551	26%	34%	46,957
2016-2017	602	28%	32%	50,009
2017-2018	631	28%	32%	52,795
2018-2019	534	23%	26%	44,754

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 2018-19.

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 2018-19.

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

Academic year¹	Number of participating high schools	Percent of all US private high schools²	Percent of US grade 12 enrollment represented³	Total N (Number of graduates in participating high schools)
2012-2013	454	8%	24%	57,634
2015-2016	355	7%	20%	44,939
2016-2017	338	7%	20%	42,743
2017-2018	320	6%	17%	39,993
2018-2019	212	4%	11%	28,329

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.

In order 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 on the basis of 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 percent 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 percent 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	# of states represented	Total N (Number of Graduates in sample)
Low Income Schools	2012-2013	2,493	50%	51	504,641
	2015-2016	2,645	51%	48	566,136
	2016-2017	2,565	53%	45	555,375
	2017-2018	2,613	51%	46	577,047
	2018-2019	2,435	48%	45	542,507
Higher Income Schools	2012-2013	3,897	49%	52	916,850
	2015-2016	3,991	50%	51	929,768
	2016-2017	4,099	50%	51	939,684
	2017-2018	4,029	49%	51	957,379
	2018-2019	3,676	44%	51	872,323
High Minority Schools	2012-2013	2,120	57%	42	567,099
	2015-2016	2,327	58%	42	641,552
	2016-2017	2,325	59%	43	643,353
	2017-2018	2,353	58%	42	679,853
	2018-2019	2,180	53%	42	646,460
Low Minority Schools	2012-2013	4,270	45%	51	854,392
	2015-2016	4,309	46%	50	854,352
	2016-2017	4,339	46%	51	851,706
	2017-2018	4,289	45%	51	854,573
	2018-2019	3,931	40%	51	768,370
Urban Schools	2012-2013	1,747	64%	51	482,319
	2015-2016	1,829	65%	48	501,809
	2016-2017	1,864	65%	48	504,463
	2017-2018	1,881	64%	48	518,676
	2018-2019	1,757	60%	47	490,067
Suburban Schools	2012-2013	1,904	54%	49	655,260
	2015-2016	1,990	56%	48	693,206
	2016-2017	1,993	56%	48	684,401
	2017-2018	1,959	55%	48	701,927
	2018-2019	1,772	50%	47	645,456
Rural Schools	2012-2013	2,739	30%	51	283,912
	2015-2016	2,817	31%	50	300,889
	2016-2017	2,807	32%	49	306,195
	2017-2018	2,802	32%	50	313,823
	2018-2019	2,582	28%	50	279,307

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 2018-19.

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 percent of the student population is eligible for free or reduced price lunch. Low poverty schools are defined as those where less than 25 percent 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	# of states represented	Total N (Number of Graduates in sample)
High Poverty Schools	2012-2013	1,039	57%	47	177,629
	2015-2016	1,141	56%	44	209,537
	2016-2017	1,114	56%	42	207,599
	2017-2018	1,175	53%	43	217,243
	2018-2019	1,082	49%	39	207,649
Low Poverty Schools	2012-2013	1,596	57%	51	454,802
	2015-2016	1,537	60%	50	435,095
	2016-2017	1,510	59%	46	423,283
	2017-2018	1,512	58%	47	426,445
	2018-2019	1,392	52%	47	384,653

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 2018-19.

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.

In order 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.

APPENDIX B: FULL RESULT TABLES

<https://nscresearchcenter.org/wp-content/uploads/HSBR2020-Appendix-B-Full-Tables-Field-of-Study-Results.xlsx>

<https://nscresearchcenter.org/wp-content/uploads/HSBR2020-Appendix-B-Full-Tables-Overall-Results.xlsx>

APPENDIX C: POSTSECONDARY COVERAGE TABLES

<https://nscresearchcenter.org/wp-content/uploads/HSBR2020-Appendix-C-Postsecondary-Coverage.xlsx>