

Completing College

National and State Reports



About This Report

As the ninth in the *Completing College* series, the report presents the latest information on the six-year completion outcomes of the fall 2014 cohort of beginning college students, nationally and by state, and the eight-year completion outcomes of the fall 2012 cohort of beginning students, through June 2020.

The national completion rate counts all students who enter postsecondary education for the first time each year, enrolling full-time or part-time at two-year or four-year institutions, and completing at any U.S. degree-granting institution. It includes those who complete after transfer, not just completions at the starting institution. Thus, the results more fully capture today's students' diverse pathways to success, which increasingly involve mobility across institutions and across state lines, re-entry after stop-out, and changes in enrollment intensities.

Keep in mind that completions are captured through June 2020, three months into the pandemic-induced campus shutdowns. Since our [COVID-19 Supplement Enrollment Report](#) found little intra-term impact in the spring of 2020, it is unlikely that the reported completion outcomes for the 2012 and 2014 student cohorts are impacted.

Key Findings

- The national six-year completion rate appears to have reached a plateau, showing the smallest increase of the last five years, a 0.3 percentage point growth to 60.1 percent. The national completion rate has stalled largely because traditional age students and community college starters have lost ground.
- The national eight-year completion rate fell for the first time in three years, by 0.5 percentage points. The marginal increase in completion rates arising from the additional two years between the six- and eight-year outcomes, has shrunk.
- The six-year completion rate dropped slightly at community colleges (0.5 percentage points) after having risen for two consecutive years. Private nonprofit four-year institutions made a 0.2 percentage point gain, while public four-year colleges improved by 0.7 percentage points. For-profit four-year institution completion rates jumped 3.1 percentage points, marking an increase of over 10 percentage points in the last four years. But it has little impact on the national rate, as less than 2 percent of the cohort start at a for-profit four-year college.
- The six-year completion rate of community college starters declined for Hispanic and Black students, despite previous growth. Only Asian students made gains, whose rate improved by 1.3 percentage points. Notably, Black students who started at public four-year institutions made stronger gains than white students.
- Traditional age student completion rates slipped after having increased for four straight years. But adult students continue to make progress, with men improving more than women.
- In line with the national trends, the six-year completion rate was slow to improve at the state level, now with more states experiencing a decline compared to last year, largely due to the decreases at community colleges in many states.

1. The national six-year overall completion rate has reached 60.1 percent after having made the smallest gain of the last five years.

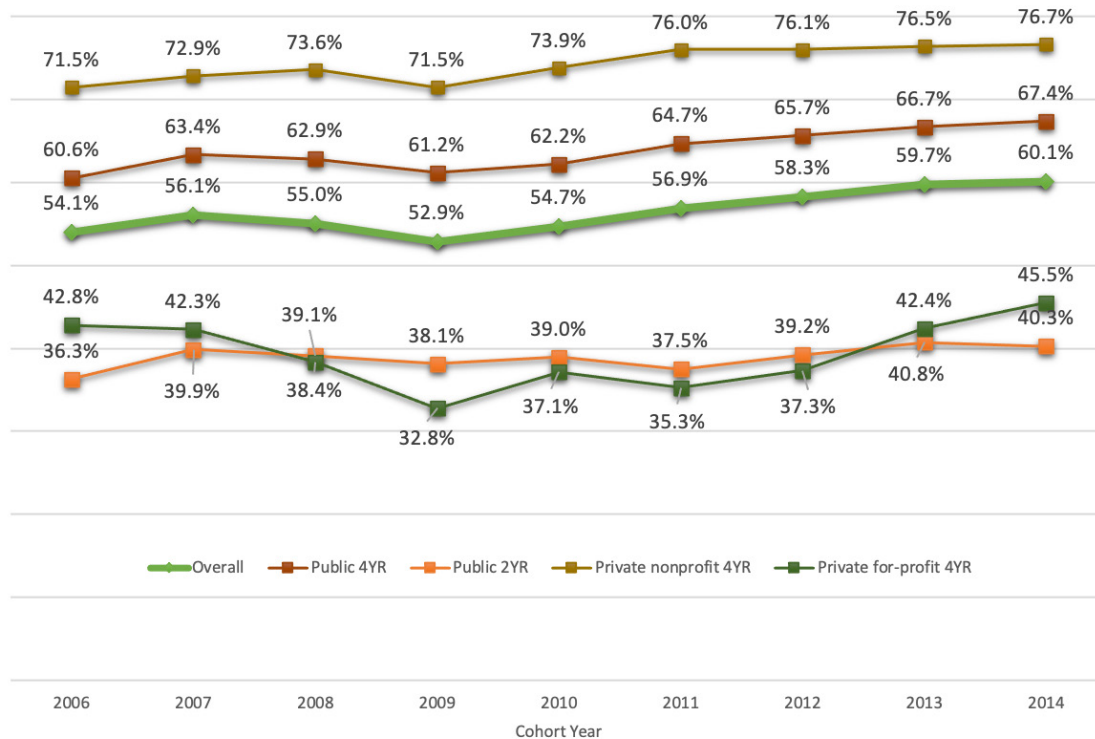
The 60.1 percent six-year completion rate for fall 2014 beginning students represents a 0.3 percentage point increase, in contrast to a 1.4 percentage point growth in the previous cohort year (Figure 1). This finding affirms a slowing pace of improvement in the national six-year completion rate, as identified in last year's report.

2. The national eight-year completion rate fell for the first time in three years, by 0.5 percentage points to 61.3 percent. The marginal increase between the six- to the eight-year completion rates has reduced.

Currently, the national eight-year completion rate stands at 61.3 percent, down from 61.8 percent in the previous cohort year (Figure 2). The eight-year rate decreased across all types of institutions this year, whereas only community colleges and private for-profit four-year institutions had declined slightly in the previous cohort.

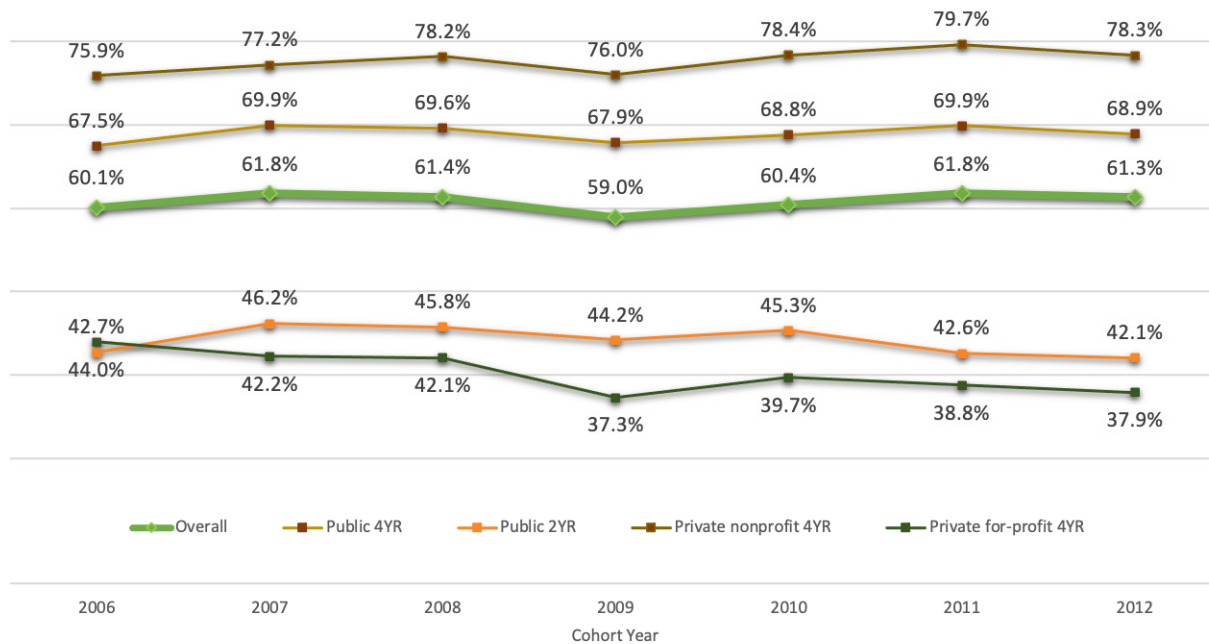
With an additional two years, the completion rate for fall 2012 beginning students increased three percentage points, from 58.3 percent (six-year completion rate) to 61.3 percent (eight-year completion rate). However, this three-percentage point gain is 40 percent smaller than the increase for the previous cohort (4.9 percentage points), adding to the growing evidence of a slowing pace of improvement.

Figure 1. Six-Year Completion Rates by Starting Institution Type: 2006-2014 Entering Cohorts



Note: Two methodological changes are noteworthy. Beginning in 2011, current dual enrollment students (students taking college courses while in high school) are excluded from our definition of first-time entering student cohort, impacting largely two-year institutions. Also, all-years look-back was applied in defining prior enrollments. After these changes, year-over-year comparisons can still be reliably made. But interpret the trends with caution for two-year starters because removing current dual enrollment students caused the completion rate to decline. See Methodological Notes for details.

Figure 2. Eight-Year Completion Rates by Starting Institution Type: 2006-2012 Entering Cohorts



Note: Two methodological changes are noteworthy. Beginning in 2011, current dual enrollment students (students taking college courses while in high school) are excluded from our definition of first-time entering student cohort, impacting largely two-year institutions. Also, all-years look-back was applied in defining prior enrollees. After these changes, year-over-year comparisons can still be reliably made. But interpret the trends with caution for two-year starters because removing current dual enrollment students caused the completion rate to decline. See Methodological Notes for details.

3. Community colleges are the only institution type to experience a drop in the six-year completion rate, reversing the upward trends over the previous two cohort years.

Community colleges, in which one third of the fall 2014 cohort enrolled at entry (Figure 3), saw their completion rate fall by 0.5 percentage points six years later, after an increase of 1.5 to 1.7 percentage points in two consecutive years. This decline occurred while the rate at which community college starters are still enrolled at the end of 6th year increased by 3.1 percentage points, the largest increase of all institution types (Figure 4). The stop-out rate for community college starters declined by 2.6 percentage points.

The six-year completion rate grew at a differing rate across four-year colleges. At public four-year institutions, the rate grew 0.7 percentage points to 67.4 percent this year, followed by private nonprofit four-year institutions' 0.2 percentage point gain, to 76.7 percent. In contrast, the private for-profit four-year college completion rate jumped by 3.1 percentage points, largely due to the improved completion rate among adults aged 25 and older who completed at the same institution (a 6.3 percentage point gain). Adults aged 25 and older comprise 57.1 percent of for-profit four-year college completers.

It is noteworthy that same as last year, completions at the starting institution continue to increase overall (0.5 percentage points) and for public four-year starters (0.7 percentage points). However, community college starters show a small drop in completions at the starting college as well as completions elsewhere (0.3 and 0.2 percentage points, respectively). Completions elsewhere remained unchanged from last year for public four-year starters (Figure 4).

Figure 3. 2014 Entering Cohort By Starting Institution Type

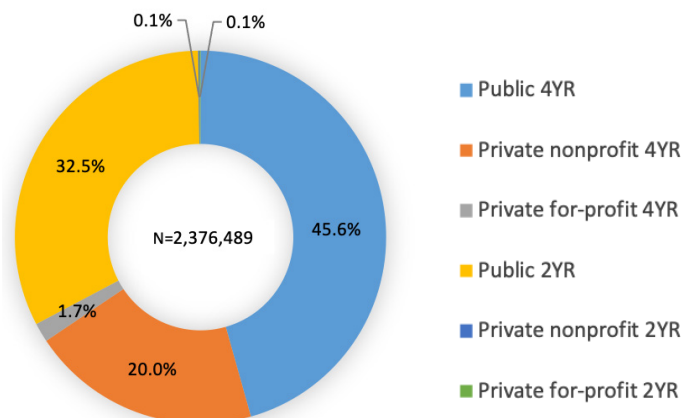
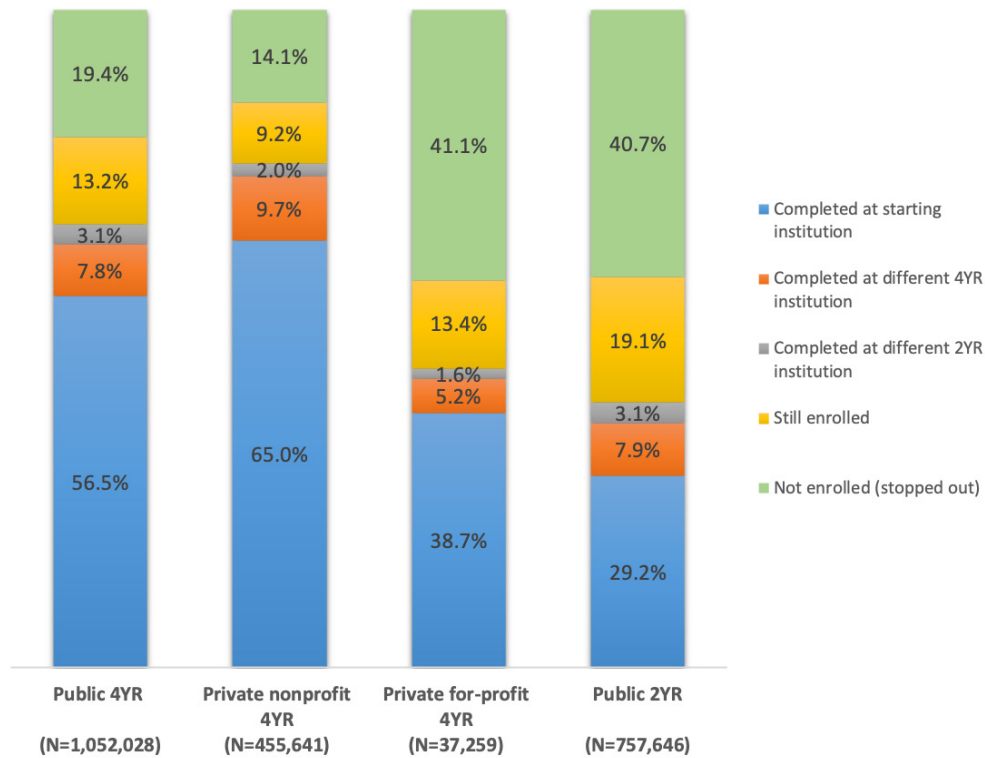


Figure 4. Six-Year Outcomes by Starting Institution Type: 2014 Entering Cohort



4. The six-year completion rate for community college starters declined among Hispanic and Black students. Increases were only observed for Asian students, who made a 1.3 percentage point gain over the previous cohort year. For public four-year starters, however, Black students made larger gains than white students.

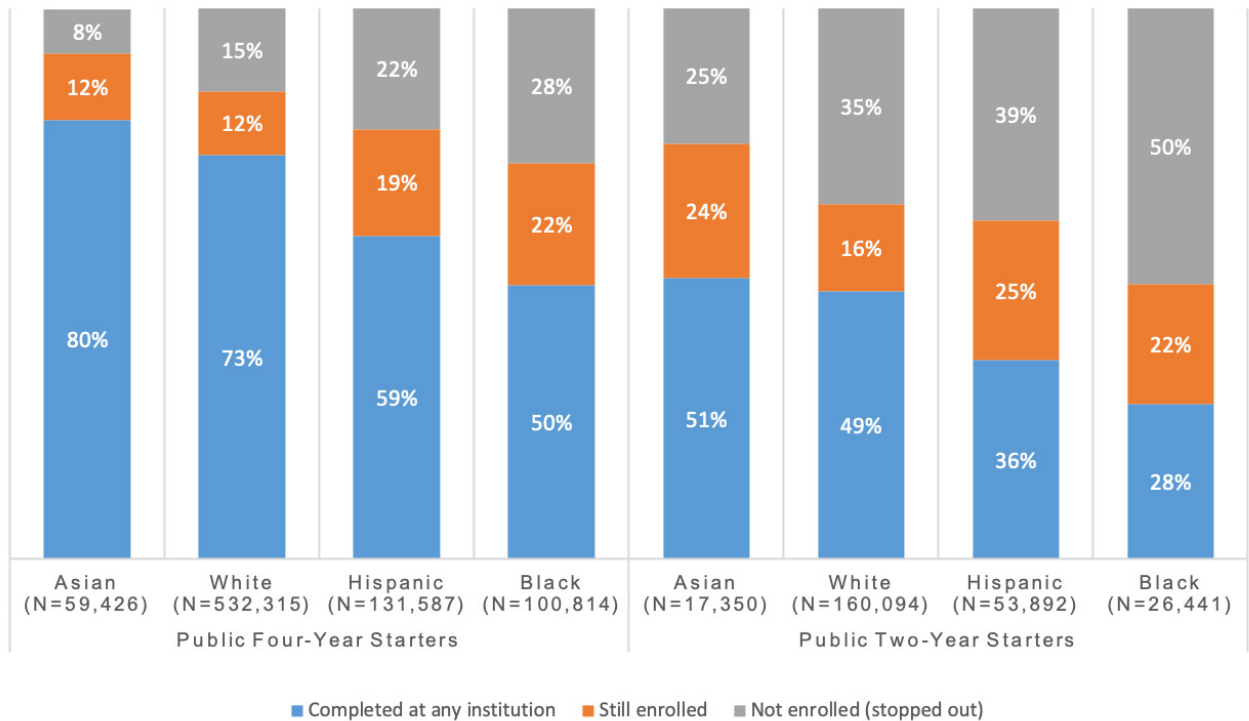
Following increases in the year prior, considerable declines in community college completion rates were seen in delayed entry and older Hispanic students (-4.8 and -2.2 percentage points, respectively) (see [Appendix](#)). Likewise, the six-year completion rate for Black students declined slightly (-0.6 percentage points) to 28.2 percent (Figure 5), following an increase of 1.2 percentage points in the previous cohort year. Like their Hispanic counterparts, Black delayed-entry students largely contributed to this drop, having declined 2 percentage points over last year.

However, Black student completion rates increased at public four-year colleges by 1.0 percentage points to 49.8 percent (Figure 5). This rate of improvement surpassed that of white students, who saw a 0.5 percentage point

increase to 73.4 percent. While the delayed-entry student completion rate declined 0.4 percentage points, both traditional aged (20 and younger) and older (25+) Black students improved by 1.0 and 2.2 percentage points, respectively. Further, Black students had the sharpest decrease of all groups in stop-out rates (a 4.5 percentage point drop), particularly among Black men (a 5.4 percentage point drop).

In the national eight-year completion rates among racial and ethnic groups, Black and Hispanic public four-year starters continue to benefit the most from the additional two years, with their completion rates having increased four percentage points to 51.6 and 61.5 percent, respectively (see [Appendix](#)). For community college starters, however, Asian students benefited the most. Their completion rate increased almost five percentage points to 53.7 percent, followed by Hispanic and White students with a 3.6 and 3.2 percentage point increase, respectively. The Black student completion rate increased 2.7 percentage points to 30.2 percent.

Figure 5. Percent Completed, Stopped-Out, and Still Enrolled Six Years After Enrolling by Race/Ethnicity: 2014 Entering Cohort

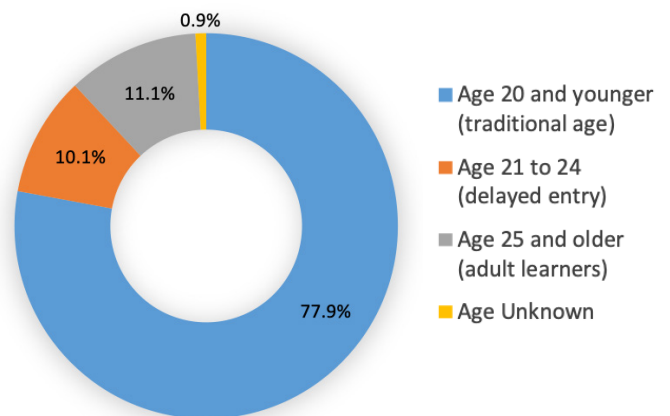


5. Traditional age student completion rates slipped after having increased for four straight years. But adult students continue to make progress, with men improving more than women.

For traditional age students, still the vast majority (78%) of beginning college students (Figure 6), the six-year completion rate decreased slightly from 64.1 to 64.0 percent (Figure 7). This small downward turn is offset by continuing progress made by adult students, having increased less than half a percent over last year. Delayed-entry students (ages 21 to 24) and older students (age 25 and older) improved by 1.1 and 2.7 percentage points to a 46.2 percent and 48.4 percent completion rate, respectively.

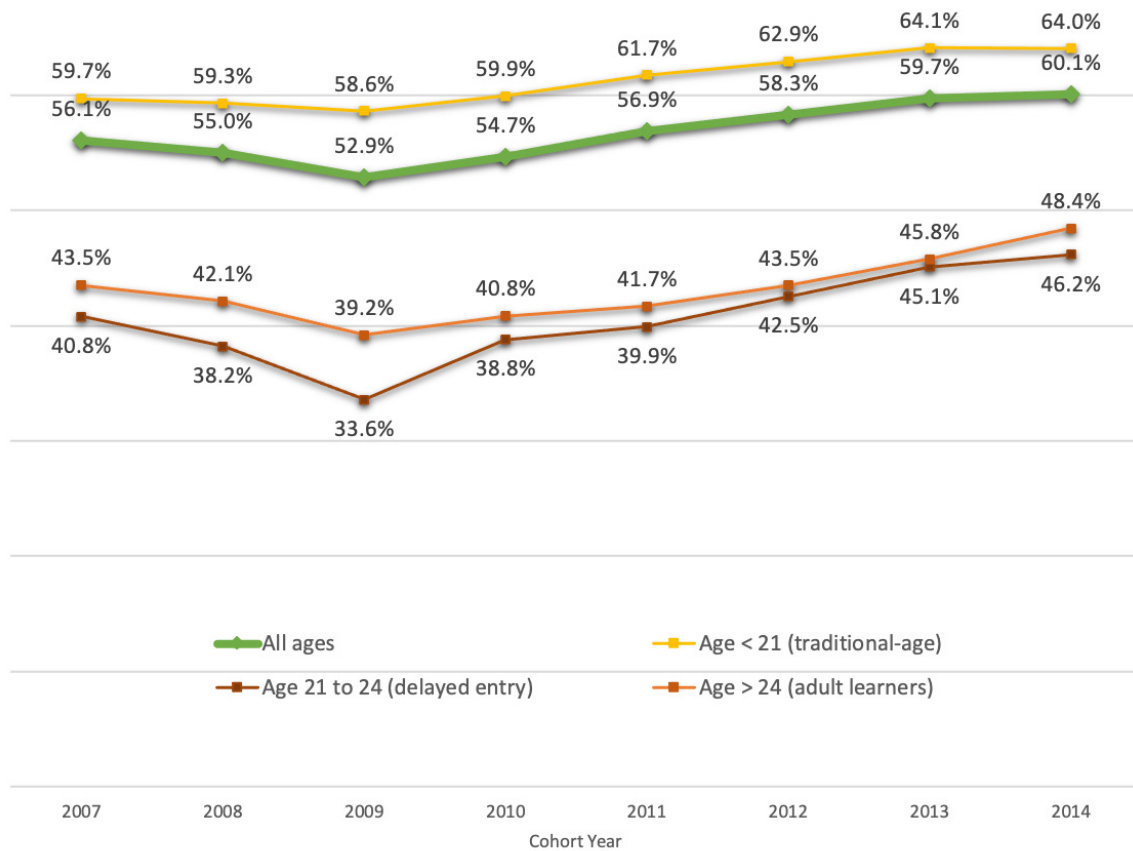
The delayed-entry and older student completion rate increases were consistent across all institution types except for community colleges, where declines occurred across all age groups (see [Appendix](#)). Notably, among private nonprofit four-year starters, older male completion rate jumped 5.5 percentage points to 66.5 percent, which is almost two percentage points above older female

Figure 6. 2014 Entering Cohort by Student Age at First Entry



completion rate gain (3.9 percentage points to 63.9 percent). In fact, for delayed-entry students, male completion rate increased (1.5 percentage points) whereas women’s completion rate decreased (0.3 percentage points).

Figure 7. Six-Year Completion Rates by Student Age at First Entry: 2007-2014 Entering Cohorts



6. States’ college completion patterns appear to be shifting. Unlike the upward trends we reported last year, out of 42 states with sufficient data, 11 states have slipped for the fall 2014 cohort.

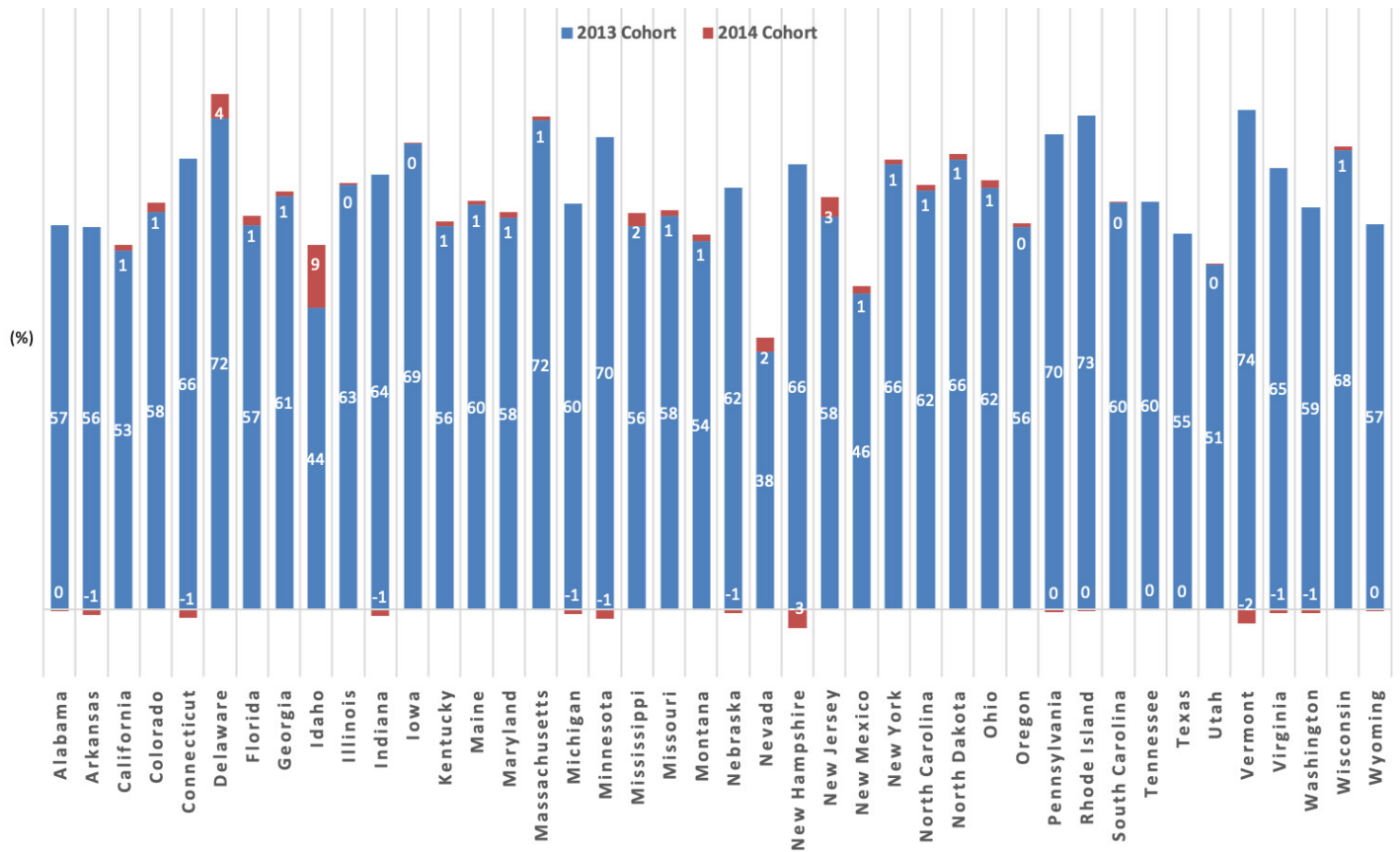
Among 42 states for which sufficient data are available, the statewide six-year completion rate decreased by at least 0.5 percentage points in 11 states, including 5 states that show at least 1 percentage point drop (see [Appendix](#)). Completion rates improved in 21 states, with 9 states showing at least 1 percentage point gain (Figure 8). These patterns are contrasted with the previous cohort, where only 4 states experienced corresponding declines while 33 states saw improved completion rates, with 25 states having gained at least 1 percentage point over the preceding cohort year.

Idaho showed the strongest overall gains this year, with a 9.3 percentage point increase in their completion rate to 53.7 percent overall while the beginning student cohort remained stable in size. Delaware saw the second largest gain of 3.6 percentage points to an overall completion rate of 75.9 percent. In both Idaho and Delaware, there were substantial increases in the number of students that completed at the same institution (6.8 and 5.5 percentage point increase, respectively).

In line with the national trend, public four-year completion rates rose in 32 out of 46 states for which sufficient data are available, while community college rates declined in 26 states out of 42 states with sufficient data. However, the pace of improvement at public four-year colleges has slowed in 18 out of the 32 states that improved. Particularly, Ohio, Nevada, New Mexico, and Utah had gains that were two percentage points smaller than in the previous cohort.

For community college starters, twice as many states had a decline this year: Only 16 states increased in their six-year community college completion rate, compared to 33 states in the previous cohort. Of these 16 states, only six states—Colorado, Georgia, Idaho, Maine, New Mexico, and South Dakota—saw improvement of more than 1 percentage point, compared to 27 states in the previous cohort year. A slowing of improvement for community college starters is even more apparent relative to those of public four-year starters. Specifically, while community college starters had greater increases in their completion rates than public four-year starters in 23 states in the previous cohort, this was only true for 4 states in the 2014 cohort (Colorado, Georgia, Idaho, and New Mexico).

Figure 8. Change in Overall Six-Year College Completion Rate by State



Note: Data for both cohort years are available in the [Appendix](#). In the chart, for example, Connecticut's completion rate for the 2014 cohort is 66-1, or 65%; California's rate is 53+1, or 54%. Data are not shown for the following eight states due to insufficient data coverage: Alaska, Arizona, Hawaii, Kansas, Louisiana, Oklahoma, South Dakota, and West Virginia.

Summary and Implications

The latest data reveal a shifting college completion picture for the nation as well as states. We reported last year that the rate of increase in six-year completion rates was slowing, from 2.2 percentage points (2010 to 2011 cohorts) to 1.4 percentage points (2012 to 2013). This number is down to 0.3 percentage points for the 2014 cohort. This drop is largely due to the flattening completion rate for traditional age students, who comprised the vast majority of the beginning college student cohort (78%), as well as a decline among community college starters, particularly Hispanic and Black students. While adult completion rates continue to increase, the flattening traditional age completion rate largely shaped the completion picture nationally.

Far more states reported a drop in six-year completion rates, particularly among community college starters, than they did in the previous cohort year. In addition, the

national eight-year completion rate decreased regardless of institution type, and the marginal increase in completion rates arising from the additional two years between the six- and eight-year outcomes has shrunk.

It is unlikely that the dwindling national eight-year completion rate and the six-year completion rate for community college starters are attributable to the pandemic, since their completions are counted through June 2020 and our [research](#) found little intra-term impact in the spring of 2020. However, as the [Stay Informed report](#) shows, community colleges suffered the most from enrollment declines in the summer and the fall of 2020, revealing a looming enrollment crisis for community colleges in the age of COVID-19. If community college enrollment and completion rates continue to trend downward during the pandemic, the steady progress in college completions made by the nation and most states since the 2010 cohort could be jeopardized.

Methodological Notes

This report examines six-year and eight-year college student success outcomes, focusing primarily on degree and certificate completion of a cohort of first-time-in-college, degree-seeking students who started their postsecondary education at U.S. colleges and universities in the fall of 2014 and fall of 2012 through June 30, 2020. Outcomes examined include completion (i.e., receipt of any postsecondary credential by the end of the study period), major at completion, persistence (i.e., having enrollment records at any postsecondary institution during the last year of the study period), and stop-out without completion (i.e., having no enrollment records at any postsecondary institution during the last year of the study period). The report mainly focuses on students' first ever completions, with further distinctions drawn between completions awarded at the institution where a student first enrolled (his or her starting institution) and those awarded at an institution other than their starting institutions. For students who started at a two-year public institution, this report also presents an overview of their completions at a four-year institution, either as a first completion (i.e., those who completed at a four-year institution without having first earned a credential at a two-year institution¹) or as a subsequent degree after a first completion awarded in the two-year sector. In addition to results on degree and certificate completion rates by enrollment intensity, age group, gender, race and ethnicity, and starting institution type, the report includes results on completion across state lines and for students who started at multistate institutions.

¹ Throughout this report, "two-year institution" is used broadly to designate institutions offering both associate degrees and less-than two-year degrees and certificates.

Data Coverage

The National Student Clearinghouse currently collects data from more than 3,600 postsecondary institutions, which represent 97 percent of the nation's postsecondary enrollments in degree-granting institutions, as of 2019. The enrollment data used in this report provide an unduplicated headcount for the fall 2014 first-time college entering student cohort. Clearinghouse data track enrollments nationally and are not limited by institutional and state boundaries. Moreover, because this 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.

Cohort Identification, Data Cut, and Definitions

This report examines completion, over a span of six years, for the cohort of first-time-in-college degree-seeking students who started their postsecondary studies at U.S. colleges and universities in the fall of 2014 for six-year outcomes as well as in the fall of 2012 for eight-year outcomes (through June 30th, 2020). To limit the cohort to first-time undergraduate students only, the study uses data from the Clearinghouse's enrollment reporting and DegreeVerify services to confirm that students included in the study fulfilled the following conditions:

1. Enrolled in a Title IV degree-granting institution in fall 2014, excluding territories outside the U.S. (e.g., Guam, Puerto Rico, or the U.S. Virgin Islands).
2. Did not have a previous enrollment record, as shown in the Clearinghouse data, prior to the first day of enrollment in the fall of 2014, unless the previous enrollment record was before the student turned 18 years old (qualified as former dual enrollment students);
3. Did not receive any degree or certificate from a postsecondary institution prior to the first day of enrollment in fall 2014, according to Clearinghouse data unless the award date was before the student turned 18 years old (dual enrollment);
4. Had at least one legitimate enrollment status throughout the study period; that is, enrolled for at least one term with full-time, part-time (i.e., half-time or less than half-time), or withdrawal status²;
5. Showed intent to seek a degree or certificate. That is:
 - For students who started at four-year institutions, enrolled at least one term with an intensity of half-time or higher.
 - For students who started at two-year institutions, either:
 - Enrolled full time for at least one term before August 10, 2015, or
 - Enrolled three-quarter time for at least one term or half time for any two terms before December 31, 2015³

²The Clearinghouse receives enrollment status data as full-time, half-time, less-than-half-time, withdrawal, or other statuses from its participating institutions.

³ We excluded 245,165 students who began at two-year institutions as non-degree-seeking students as a result.

Race and Ethnicity

The race and ethnicity categories include Asian, Black (of non-Hispanic origin), Hispanic, White, Other or two or more races. The Other category includes Native American and Native Hawaiian or other Pacific Islander. Seventeen percent of the data are unknown or missing race/ethnicity.

Former Dual Enrollment Students

Beginning in the fall 2011 entering cohort, our definition of first-time student cohort excludes current dual enrollment students, impacting largely two-year institutions. Interpret the trends with caution for two-year starters because removing current dual enrollment students caused the completion rate to decline. The cohort used in this study only includes former dual enrollment students: first-time college students who had previously taken dual enrollment courses. These are the students who enrolled in college courses prior to fall 2014 while still in high school. Students were identified as former dual enrollment students if their enrollment or degree record prior to fall 2014 was before the student turned 18 years old. Former dual enrollment students represent 19.49 percent of the fall 2014 cohort. As a proportion of the sample for each sector, former dual enrollment students represent 23.09 percent of the students who started in four-year public institutions, 16.57 percent of the students who started in two-year public institutions and 17.20 percent of those who started in four-year private nonprofit institutions. Only 6.92 percent of the students who started in four-year private for-profit institutions had prior dual enrollments.

Enrollment Intensity

In this report, enrollment intensity is classified as exclusively full-time, exclusively part-time, or mixed enrollment (including both full-time and part-time enrollments) throughout the study period. Each of the enrollment type is based on students' enrollments across all terms in which the student was enrolled. Hence, the report does not exclude stop-outs through the first completion or, for non-completers, through the entire study period. In establishing students' enrollment intensity in this way, enrollments during summer terms (defined as terms with both the start date and the end date falling between May 1 and August 31 in any given year) and short terms (defined as terms lasting less than 21 days) were excluded from consideration.

For terms in which a student showed concurrent enrollment records (i.e., records that overlapped by 30 days or more), the two highest-intensity enrollments were considered. For example, a student concurrently enrolled

half-time at two institutions was categorized as enrolled full-time for that term. In doing this, we create one single enrollment record from a set of concurrent enrollment records. The enrollment status for the single enrollment record is defined as full-time if (1) for terms with concurrent enrollments, the two highest-status enrollment records included at least one full-time enrollment, or one three quarter-time enrollment and one at least less than half-time enrollment; or (2) for terms with concurrent enrollments, the two highest-status enrollment records both reflected half-time enrollment. The enrollment status for the single enrollment record is defined as half-time, if for terms with concurrent enrollments, the two highest-status enrollment records included some combination of half-time and less than half-time enrollments, but no full-time enrollment, and no more than one half-time enrollment.

Overall, for each term under consideration (i.e., all terms except summer terms and short terms – less than 21 days – up through the first completion, or, if no completion, throughout the entire study period), the “exclusively full-time enrollment” designation was assigned to students whose enrollment showed exclusively full-time enrollment for all terms. The “part-time enrollment” designation was assigned to students whose enrollment for each term under consideration showed exclusively three quarter-time, half-time or less than half-time enrollment.

The category of mixed enrollment was applied to students who showed a combination of full-time and part-time enrollments across the terms under consideration. Finally, students who showed records indicating withdrawal (i.e., students who were enrolled, but withdrew before the term ended) but no full-time or part-time enrollments were randomly assigned to an enrollment intensity category.

Concurrent Completion

For this report, we examined completion by first-time students at either two-year or four-year institutions. We defined completion as having obtained a degree or certificate at any institution within the six-year or eight-year study period (i.e., by June 30, 2020). Clearinghouse data provide a unique headcount of U.S. college enrollments during each term, which allows for the tracking of individuals including those with concurrent completion. In preparing data for this report, a small number of individuals showed more than one completion awarded at multiple institutions on the same day. In these instances, a primary completion record was selected using decision rules specific to the sector of the student's starting institution.

The first set of decision rules was applied to students with concurrent completions who started at a two-year institution:

1. Concurrent Completions at Two Different Two-Year Institutions
 - Same institution over different institution: Completions at the starting institution were selected over completions at other institutions.
 - Random selection: If the first decision rule did not result in a single completion record being selected, then a completion record was selected at random.
2. Concurrent Completions at a Two-Year Institution and a Four-Year Institution
 - Two-year then four-year: The two-year degree completion was considered the first completion and the four-year degree completion was considered a subsequent completion.
3. Concurrent Completions at Two or More Four-Year Institutions
 - Random selection: If a student started at a two-year institution but later completed at two or more four-year institutions concurrently, then a completion record was selected at random.

The second set of decision rules was applied to students who started at four-year institutions and later showed concurrent completion records:

1. Same institution over different institution: Completions at the starting institution were selected over completions at other institutions.
2. Four-year over two-year: If the first decision rule did not result in the selection of a single completion record, then completions at four-year institutions were selected over those at two-year institutions.
3. Random selection: If neither of the first two decision rules resulted in the selection of a single completion record, then a completion record was selected at random.

Imputation of Values for Gender

The Clearinghouse's coverage of student gender has increased dramatically for enrollments occurring in recent years. However, imputation of gender for the majority of enrollment records is still necessary in order to use the

data for research studies using older cohorts. To meet this need, the Research Center developed an imputation process based on first names. Previously submitted name gender pairs throughout the Clearinghouse database are used to determine the probability of any first name being associated with either gender. To increase the accuracy of the imputation process, the Research Center also draws on name-gender data from the Social Security Administration (SSA) and the U.S. Census Bureau.

Because the Clearinghouse collects transactional data, its data contain many more unique first names than other sources. The imputation used only those pairs in which the name occurred in at least two instances and was associated with a single gender in at least 95 percent of the instances.

The SSA and Census data sets were used to ensure that name-gender pairs were consistent across every data set in which they occurred and to enhance the imputation process by contributing name-gender pairs that did not occur in the Clearinghouse data. The imputation process that yielded additional gender codes produced a total gender coverage rate of 94 percent.

Imputation of Missing DegreeVerify Graduation Data

The Clearinghouse collects graduation information from its participating institutions via two data reporting services: Enrollment Reporting and DegreeVerify. Enrollment Reporting has higher data coverage rates, but includes only basic completion information such as graduation indicator and the date of graduation. For the fall 2014 cohort, Enrollment Reporting covered 96 percent of all the students in Title IV degree-granting institutions listed in IPEDS (including 99 percent of the students in public institutions, 95 percent in private nonprofit institutions, and 70 percent in private for-profit institutions). DegreeVerify includes enhanced information on completions, including degree title, major, level, and CIP code, but covered only 94 percent of enrollments in 2014. Institutions may participate either in Enrollment Reporting alone or in both services. Completions data for this report included information drawn from either service.

An analysis conducted by the Clearinghouse on the 2014 cohort found that graduation data for the institutions that participated in DegreeVerify were relatively more complete for some of the years covered in this study than those for institutions that participated only in Enrollment Reporting, biasing completion rates slightly downwards for institutional sectors with lower participation rates in DegreeVerify.

To correct for this bias, the Research Center conducted a randomized imputation procedure for missing graduation data among students at non-DegreeVerify institutions who were no longer enrolled but for whom outcome data were missing (that is, for whom the institution had reported neither a graduation nor a withdrawal status in their Enrollment Reporting). This involved comparing the Enrollment Reporting and DegreeVerify records for institutions that participated in both services and estimating, for each institution type, the average percentage of students with missing outcomes in the enrollment data who had a reported graduation in the DegreeVerify data. We further specified these underreporting rates by taking into account student age and the academic year. We then used random assignment of graduation outcomes to students with missing data at the institutions that did not participate in DegreeVerify to match each institution's underreporting rate for each student age group and for every year of the study to the average rate for similar students at institutions of the same type that did participate in DegreeVerify.

This imputation was performed only for students with missing outcomes data at institutions that did not participate in DegreeVerify. It is based on the typical underreporting of graduation outcomes from similar institutions that participate in both Enrollment Reporting and DegreeVerify. The table below shows, for each institution type, the percentage of the starting cohort for whom graduation data were imputed:

Institutional Sector	Percentage of the Starting Cohort With an Imputed Completion
Private For-Profit Two-Year	0.60%
Private Nonprofit Two-Year	0.75%
Public Two-Year	0.35%
Private For-Profit Four-Year	0.41%
Private Nonprofit Four-Year	0.40%
Public Four-Year	0.16%
Total	0.28%

Adjusting Noncoverage through Weighting by State and Institution Type

The institutions participating in the Clearinghouse Enrollment Reporting service do not cover 100 percent of all Title IV, degree-granting institutions in the U.S. To account for possibilities of not capturing a student's

enrollment outcome because of non-coverage of Clearinghouse data, weights were calculated using the 2019 coverage rate of the sector, control, and state of the institution where a student was enrolled for the last enrollment record.

Our data covers three different groups of students: First, students who completed a degree at the starting institution or were still enrolled at the starting institution by the end of the study period. Second, students who completed a degree or were still enrolled at a different institution by the end of the study period. And third, students who stopped out by the end of the study period. However, the number of students who stopped out is likely overestimated due to under coverage. Specifically, students that show up as no longer enrolled may have potentially transferred to an institution that does not submit data to the Clearinghouse. Therefore, the number of stop-outs in the U.S. is likely lower than observed in our data, and the number of transfer students is likely higher. To take this into account, we overcount transfer students and undercount stop-outs ("missings").

For students who completed a degree or were still enrolled at a different institution by the end of the study period, a "transfer" weight > 1 was applied. This transfer weight is based on the coverage of the sector, control, and state of the institution in which the student was enrolled for the last enrollment record, as calculated by the formula provided below:

$$\text{Transfer Weight} = \frac{\text{Transfer Counts} + [\text{Missing Counts} \cdot \text{Noncoverage Rate} \cdot \frac{\text{Transfer Counts}}{\text{Nonmissing Counts}}]}{\text{Transfer Counts}} > 1$$

For students who stopped out by the end of the study period and for whom any further observations are missing, a "missing" weight < 1 was applied. This missing weight is based on the coverage of the sector, control, and state of the institution in which the student was enrolled for the last enrollment record, as calculated by the formula provided below:

$$\text{Missing Weight} = \frac{\text{Transfer Counts} - [\text{Missing Counts} \cdot \text{Noncoverage Rate} \cdot \frac{\text{Transfer Counts}}{\text{Nonmissing Counts}}]}{\text{Transfer Counts}} < 1$$

Note for completeness that we assign a weight of one to the first group of students who completed a degree at the starting institution or were still enrolled at the starting institution by the end of the study period.

Data Limitations

The data limitations in this report center mainly on the data coverage, the methods used for cohort identification, and the definition of key constructs (as outlined above). The representation of private for-profit institutions in the Clearinghouse data is lower than that of other institution types, with 80 percent coverage for four-year private for-profit institutions in fall 2014 compared to 95 percent and 99 percent respectively for four-year private nonprofit institutions and four-year public institutions. Despite the challenges presented by low participation in the early years covered in this report, current Clearinghouse data nevertheless offer near-census national coverage, representing 97 percent of U.S. postsecondary enrollments. In an effort to correct for coverage gaps in this study, data were weighted (as explained above).

Data limitations resulting from the cohort identification methods used in preparing this report should also be noted. Because the Clearinghouse data on designations for class year are incomplete, the researchers identified first-time undergraduate students via two indirect measures:

- No previous college enrollments recorded in the Clearinghouse data, and
- No previous degree awarded in the Clearinghouse's historical DegreeVerify database.

Given these selection criteria, the sample for this report may include students who had more than 30 Advanced Placement (AP) or International Baccalaureate (IB) credits. It is also possible that a small number of graduate students are included in the study cohort because of inconsistencies in the historical depth of DegreeVerify database records.

Finally, although Clearinghouse data contain some demographic information on students, historical coverage rates for the demographic data elements are uneven. Consequently, results on gender are based partially on imputed values, as described above and one in five students in the cohort had the race/ethnicity value unknown or missing. No imputation was attempted for missing race/ethnicity data.

Suggested Citation

Causey, J., Huie, F., Lang, R., Ryu, M., & Shapiro, D. (December 2020), *Completing College 2020: A National View of Student Completion Rates for 2014 Entering Cohort* (Signature Report 19), Herndon, VA: National Student Clearinghouse Research Center.