

METHODOLOGICAL NOTES

Panel Construction, Coverage, and Key Population Variables

INSTITUTION PANEL SELECTION

To accurately assess longitudinal trends in transfer enrollment and control institutional submission variability, the analyses focused on a fixed panel of institutions that submitted data to the Clearinghouse during the same time frame across all comparison years.

Only institutions that submitted fall term enrollment data within the data submission window (specified in Term Definitions below) in 2020, 2021, 2022, 2023, and 2024 were included in the analyses. Institutions that discontinued or only started submitting enrollments at any point within these years were excluded.

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 2024 due to unusual file submission patterns. Our investigations suggest that such data noise is minor.

Term Definition

Fall Term: 7/1 – 12/31

Submission Window: 8/1 – 1/23 (following calendar year)

DATA COVERAGE

The final institution panel represents 83.4 percent of the Clearinghouse universe of institutions and 80.0 percent of fall 2024 undergraduate enrollment reported to the Clearinghouse as of January 23, 2025. See the following table for institution and enrollment coverage by sector:

Current Sector	Institution Coverage	Enrollment Coverage
Public Four-Year	87.5%	85.5%
Private Nonprofit Four-Year	85.6%	82.8%
Private For-profit Four-Year	67.3%	76.1%
Community Colleges	80.1%	76.5%
Public PAB	75.7%	68.2%
Public Two-Year	80.7%	78.2%
Total	83.4%	80.0%

Note that as of fall 2023, institutions actively submitting enrollment data to the Clearinghouse account for 97 percent of all enrollments at Title IV, degree-granting institutions in the U.S.

UNDERGRADUATE STUDENT POPULATION

This study includes undergraduate students who were enrolled at an institution in the U.S. in the fall of the applicable year, reported as of January 23, 2025. This definition excludes students who have previously earned a baccalaureate or higher degree as well as current dual enrollees. It includes

students that have previously earned an associates or undergraduate certificate and those who were dual enrolled prior to beginning their postsecondary career. Please note that this is a narrower definition of undergraduate students compared to the Current Term Enrollment Estimates report, which includes dual enrollees and does not limit by prior credential.

Student Groups

We then look at students' enrollment history to classify students into the following three subgroups: 1) continuing students, 2) returning students, and 3) first-time students:

1. *Continuing students* are non-first-time students who had an enrollment in the previous spring or summer term prior to their fall enrollment.
2. *Returning students* are non-first-time students who returned after a stopout of at least one semester prior to their fall enrollment.
3. *First-time students*, or freshmen, are those who had no enrollments at age 18 or higher older prior to the fall of the applicable year. Freshmen are not included in the analysis of student transfer and mobility for this report.

Transfer Status

Transfer Students: We define students as transfer students if they previously were enrolled at one institution and subsequently enrolled in another institution. A student is only counted as a transfer student in the term they transferred to a different institution and not in any subsequent term, unless they switch institutions again. Note that we only consider the change of institution a student is enrolled in, regardless of whether academic credits are recognized between institutions. For more in-depth analysis of transfer patterns, we group all transfer students into two categories:

1. Continuing transfer students are those who had at least one valid enrollment record in the spring or summer term and enrolled in the fall term at an institution different than their last enrolled institution.
2. Returning transfer students are those who had stopped out until the fall term and re-enrolled in the fall at an institution different than their last enrolled institution.

Non-transfer students are either continuing or returning students defined as above who enrolled in the fall at the same institution as their last enrolled institution. These students may have transferred in previous or future years but not in the year being referenced.

Transfer Pathways

This report also investigates differences in types of student mobility by looking at the following pathways:

- Two-to-four-year transfer: Students who transfer from a two-year to a four-year institution, with or without first receiving an award (either a certificate or associate degree). This is also known as vertical or upward transfer.
- Lateral transfer: Students who either transfer from a two-year to another two-year institution or from a four-year to another four-year institution.

- Four-to-two-year transfer: Students who transfer from a four-year to a two-year institution. This is also known as reverse transfer.

Additional Report Terms and Definitions

IN-STATE AND OUT-OF-STATE TRANSFER

Transfers are considered in-state if the institution of current enrollment and the institution of previous enrollment are both located in the same state. They are considered out-of-state if both institutions are in different states. These designations apply regardless of the student's state of residence. Transfers to or from a multi-state institution (with campuses in more than one state) or a primarily online institution (any institution that reports more than 90 percent of its students enrolled exclusively in distance education courses) are excluded from state analyses.

RACE AND ETHNICITY

The report focuses on seven racial/ethnic categories: White, Hispanic, Black, Asian, Native American, Other, and Unknown/Missing. The 'Other' category includes Native Hawaiian/Pacific Islander, International, and Multiracial. Not all institutions report race and ethnicity data to the Clearinghouse. Missing data (for institutions that do not report to the Clearinghouse) and unknown data (for students that do not report to their institution) account for between 11.9 and 15.1 percent of all non-freshman undergraduates and between 7.9 and 10.8 percent of all transfer enrollments reflected in the report, depending on the year.

ADMISSIONS SELECTIVITY

Admissions selectivity is measured using the 2016 Barron's Selectivity Index, which evaluates the competitiveness of an institution based on several undergraduate admissions factors such as an institution's acceptance rate, as well as the college admissions test scores, high school GPAs, and high school rankings of its admitted students.

We report on this measure for public and private nonprofit four-year institutions only. Utilizing the 2016 Barron's selectivity list, the ranking categories are as follows:

Highly Selective: Institutions identified as either "Most Competitive" or "Highly Competitive" according to the Barron's Selectivity Index. Their definitions are as follows:

- *Most Competitive*: Institutions that generally admit less than a third of their total applicant pool. Students that are admitted generally have a high school class rank in the top 10-20 percent of their graduating class, and high school grade averages from A to B+. SAT/ACT scores are in the top 80th percentile.
- *Highly Competitive*: Institutions that generally admit between a third to half of their applicant pool. Students that are admitted generally are in the top 20-35 percent of their high school graduating class, with high school grade averages from B+ to B. SAT and ACT scores are in the top 75th percentile.

Very Competitive: Institutions that generally admit between 50-75 percent of their applicant pool. Students that are admitted generally are in the top 35-50 percent of their graduating class and have high school grade averages of a B- or better. SAT and ACT scores are in the top 67th percentile.

Competitive: Institutions that generally admit between 75-85 percent of their applicant pool. Students that are admitted are generally in the top 50-65 percent of their high school graduating class and have a high school grade average of a B- or better. SAT and ACT scores are in the top 60th percentile.

Less Selective: Institutions identified as either “Less Competitive,” “Noncompetitive,” or “Unranked,” according to the Barron’s Selectivity Index. Their definitions are as follows:

- *Less Competitive:* Institutions that generally admit more than 85 percent of their applicant pool. Students that are admitted generally rank in the top 65 percent of their graduating class and have high school grade averages below a C. SAT and ACT scores are below the top 60th percentile.
- *Noncompetitive:* Institutions that either admit more than 98 percent of their applicant pool, admit all in-state residents, but have some requirements for out-of-state students, or require evidence of a high school diploma from an accredited school.
- *Unranked:* All institutions not otherwise categorized in the Barron’s selectivity index.

The Barron’s Selectivity Index also includes a category called Special Focus which are institutions that are specialized, such as professional schools of art, music, or other disciplines. Schools oriented towards adult learners are also sometimes in this category. Given the Special Focus category includes institutions that span the admissions selectivity range (e.g., highly selective music schools, less competitive institutions of art), they were not included in the admissions selectivity analysis.

PRIMARYLY ONLINE INSTITUTIONS (POIs)

POIs were identified based on the distance education survey items in the IPEDS fall enrollment survey. To reduce the impact of changes in institutional characteristics on estimated changes in transfer enrollment pathways for students, we used data from the fall 2022 IPEDS data year across all years in this report. An institution that reports more than 90 percent of its students enrolled exclusively in distance education courses is considered a POI. This applies as long as the entire institution—rather than a single branch campus—meets this enrollment threshold. Using this method, there were 31 primarily online institutions identified in the overall transfer enrollment analysis panel, representing about 66% of POIs in the Clearinghouse universe.

PRIMARYLY ASSOCIATE DEGREE GRANTING BACCALAUREATE INSTITUTIONS (PABs)

As more and more associate colleges have begun to offer bachelor's degree programs, there has been a growing number of sector reclassifications by IPEDS, where two- and four-year colleges are determined based on program offerings. However, these reclassified four-year institutions often educate and award degrees primarily at the associate-degree level. When this is the case, we consider these institutions Primarily Associate Degree Granting Baccalaureate Institutions (PABs). We identify PABs using the institution’s Carnegie Classification, which relies on program offering

(there must be one bachelor's-level program offered) and degrees awarded. PABs carry Carnegie Classifications of either 14 (Baccalaureate/Associate Colleges: Associate Dominant) or 23 (Baccalaureate/Associate College: Mixed Baccalaureate/Associate). Institutions with a 14 designation award 90 percent or more of degrees at the associate level while those with a 23 designation award more than 50 percent but less than 90 percent of degrees at the this level. To keep the panel methodology consistent across the years, the 2021 Carnegie designations were applied across all years analyzed in this report.

In this report, community colleges are broadly defined to be inclusive of public PABs and public two-year institutions and are reported in a single category. PABs of all control types are considered two-year institutions for the purpose of assessing transfer pathways. For example, a student enrolled at a four-year institution in fall 2024 who was last enrolled at a PAB in spring 2024 would be considered a continuing two-to-four-year transfer student in this report. Likewise, a student who was enrolled at a PAB in fall 2024 and whose prior enrollment was at a two-year institution in fall 2023 would be considered a returning lateral two-year transfer student.

MAJOR FIELD OF STUDY AND MAJOR CHANGE

Major fields of study across all years have been harmonized to reflect the 2020 NCES Classification of Instructional Programs (CIP). To determine major changes, we compare a student's reported major in each fall term to their major at their last reported enrollment (see major groups below). Majors for prior enrollments are evaluated at the six-digit level and major changes are determined at the CIP family (two-digit) level. Majors are grouped into three categories:

- Liberal Arts and Science, General studies and Humanities (CIP: 24)
- Science, Technology, Engineering, and Math (STEM): The STEM major group is based on a listing of six-digit CIP codes used by the National Science Foundation which includes the following: Biological and Agricultural Sciences, Computer Sciences, Earth, Atmospheric, and Ocean Sciences, Engineering, Mathematics, Physical Sciences, Psychology, Social Sciences. Please note that because major change is determined at the two-digit level, some students with a prior STEM major who are classified as having maintained their major may have moved to a non-STEM six-digit major in the same CIP family.
- Other Majors: All other CIP codes that are not Liberal Arts or STEM, as defined above.

URBANICITY (CAMPUS SETTING)

Urbanicity refers to the geographic location of a college categorized on a continuum ranging from urban to rural, as defined by IPEDS. The IPEDS codes incorporate the population size and distance from an urbanized area, resulting in 12 distinct codes, grouped into the following four categories:

- *Urban*: Territory inside an urbanized area and inside a principal city.
- *Suburban*: Territory outside a principal city and inside an urbanized area.
- *Rural & Town (combined)*:
 - *Town*: Territory inside an urban cluster and outside an urbanized area.
 - *Rural*: Territory outside of an urban cluster and outside an urbanized area.

COMMUNITY COLLEGE PROGRAM FOCUS

The program focus of a community college is classified in the following four categories based on the 2021 Carnegie Classification for Associate Colleges:

- *High Transfer* – Institutions where 35.7 percent or fewer of their awards were in career and technical disciplines.
- *Mixed Transfer/Vocational* – Institutions where between 35.7 and 53.8 percent of their awards were in career and technical disciplines.
- *High Vocational* – Institutions where at least 53.8 percent of their awards were considered high career and technical program mix.
- *Other/Missing* – Includes institutions classified either as “special-focus two-year institutions” or those without a basic Carnegie classification.

Note that the community college program focus analysis only includes public two-year colleges and not public PABs because Carnegie does not consider PABs to be community colleges. Public two-year institutions account for 88.4 percent of all community colleges included in this report and 84.7 percent of all community college students included in this report for fall 2024.

NEIGHBORHOOD INCOME

The neighborhood income measure provides information about the relative socioeconomic level of students’ pre-college neighborhoods for students originating from the 50 U.S. states and Washington, D.C. Neighborhood income is highly correlated with other indicators of neighborhood socioeconomic status (SES) such as home ownership, educational attainment, employment, and poverty. Research suggests that [students hailing from higher SES neighborhoods have better outcomes](#) in terms of college attendance and lifetime earnings, likely due to factors such as [access to high-quality schools, high-achieving peer groups, healthier natural environments, and limited exposure to violence and the criminal justice system](#). It is important to note that this is **not** a measure of family or individual income. Not all students who come from high-income neighborhoods come from high-income families and the same is true of students from low-income neighborhoods.

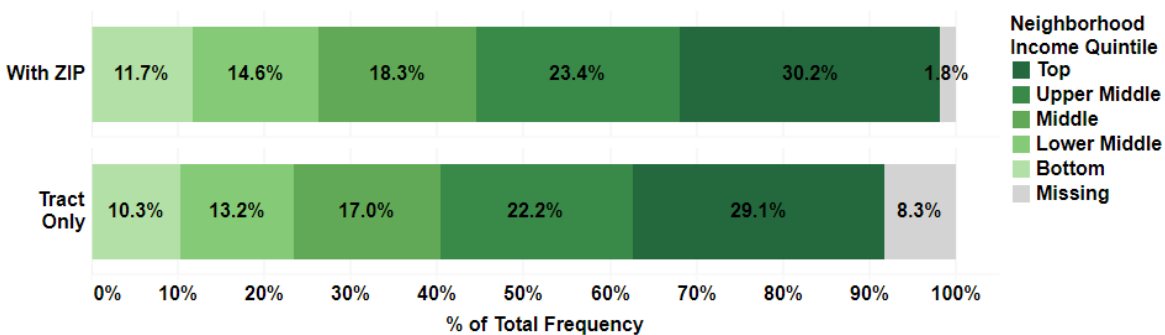
The measure utilizes street addresses reported to the Clearinghouse with each enrollment submission to locate students’ homes in a particular census tract through geocoding. To best approximate socioeconomic origins, we use the first permanent address reported to the Clearinghouse for each student and apply the measure only to undergraduate students 24 and younger whose first higher education enrollment (including dual enrollment) occurred at age 19 or younger. Additionally, a small number of students, whose first enrollment predates 2010, are excluded due to the availability of external data sources needed to construct the measure. After these three restrictions—location of the first address, age at first enrollment, and data year of the first address—are taken into account, we are able to include between 93 and 94 percent of all non-freshman undergraduates 24 and younger and nearly 96 percent of transfer students across years included in the report.

Income data for each tract are sourced from the U.S. Census Bureau’s American Community Survey (ACS) five-year estimates. These are adjusted using Regional Price Parity values from the Bureau of Economic Analysis to account for price level differences by state and metropolitan area. The quintiles referenced in this report are of tract median household income adjusted for household size. Quintiles are based on the national distribution of median household income, adjusted for household size, among all census tracts in the 50 states and D.C.

The vast majority (about 92%) of students included in the neighborhood income analyses in this report are successfully geocoded to a census tract. We also include an additional 6.2 to 6.9 percent (depending on the year) of students who match to ZIP codes but not tracts.¹ ZIP codes are generally larger than tracts, providing less granular measures of a student’s pre-college neighborhood. To apply our tract-based neighborhood income measure to these students, we link ZIP codes to Census tracts using crosswalks produced by the US Department of Housing and Urban Development (HUD). A student matching to a ZIP code is assigned weights equal to the share of all residential addresses within the ZIP code lying in tracts of each neighborhood income quintile. For each ZIP-code matched student, the sum of these weights equals 1. Specifically, a student matched to a ZIP code that overlaps with two tracts: one in the lower middle quintile and the other in the middle neighborhood income quintile, with each tract encompassing half the residential addresses in that ZIP code, would be assigned quintile values for each of those quintiles with weights equal to 0.5 for each.

Because our method assumes an equal probability of college-going from tracts of differing neighborhood income levels within the same ZIP code, we are likely slightly overestimating the share of students from lower-income neighborhoods using this method. However, as shown in figure M1, given the relatively small share of students assigned to income quintiles using ZIP code matches, the distribution of students by neighborhood income quintile does not differ greatly between an approach that includes only those students who are geocoded to census tracts and the one used here incorporating ZIP code matches. The inclusion of ZIP code matches also allows us to provide information on neighborhood income background for student groups for whom tract-level geocoding is substantially less successful, such as students from rural areas.

Figure M1. Comparison of Neighborhood Income Quintile Distribution for Undergraduates Using ZIP Code Matches and Tract-Only Matches, Fall 2024

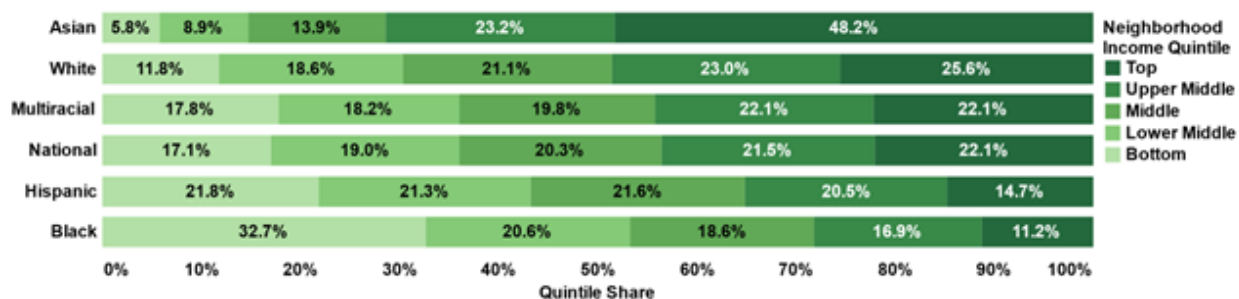


¹ An additional small share of students (1.3% to 1.8% depending on the year) match to a ZIP code. However, we exclude these students because their address indicates a PO Box. Since PO Boxes are delivery addresses and not necessarily residential addresses, these students appear as Missing in our neighborhood income analyses.

In this report, students with missing neighborhood income quintile values are those who have met the sample restrictions described above, but that (1) we were unable to geocode to either a tract or a ZIP code (including all PO Box addresses) or (2) were geocoded to a tract (or a ZIP code which overlaps such a tract) for which ACS does not publicly publish income data. These missing rates range from 1.8 percent to 2.4 percent depending on the year and transfer status (i.e. transfer versus non-transfer students). The inability to geocode (rather than geocoding to a tract or ZIP code without income data) accounts for nearly all these missing cases. Geocoding non-matches typically arise from issues relating to the quality of address data such as PO Box addresses and incomplete street addresses. Address quality may be correlated with both neighborhood and household income.

For neighborhood income results by students' race/ethnicity, it is important to note that ethnoracial groups are not uniformly distributed across neighborhood income quintiles. To aid in interpreting these data, we provide a baseline estimate of the population of all 15–17-year-olds in the U.S. residing in tracts of each neighborhood income quintile for each of the race/ethnicity groups we report on, as well as for the Nation overall in figure M2.

Figure M2. National Distribution of 15–17-year-olds by Race/Ethnicity and Neighborhood Income Quintile



Source: U.S. Census Bureau American Community Survey, 2018–2022 5-year Estimates. NOTE: Age 15–17 selected to approximate high school-age and to avoid the undercounting of 18–24-year-olds living away from home while enrolled in postsecondary education. These individuals are not included in home census tract estimates.

SUGGESTED CITATION

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