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StriveTogether®

Cradle-to-Career Outcomes Data Guides: *Postsecondary Enrollment*

Developed in partnership with URBAN INSTITUTE

Postsecondary Enrollment

StriveTogether's recommended indicator for postsecondary enrollment is based on the local high school to postsecondary institution enrollment rate. This guide provides information on why postsecondary enrollment matters, recommended indicators, data sources for indicators, detailed data specifications, how to calculate this outcome, data disaggregation, frequently asked questions, learning resources and data sharing. This guide also recommends data collection strategies, sources and methods for building data practices that can be used to better serve communities.

Why this outcome matters

Key takeaways:

- **Postsecondary enrollment is necessary for postsecondary completion and is a strong predictor of economic and social advancement.**
- **Students experiencing poverty, and Black and Latine students have a lower postsecondary enrollment rate.**
- **When students from diverse and low-income backgrounds do enroll, they are more likely to enroll in community college and less likely to enroll in more selective institutions.**

Postsecondary enrollment is a vital step in the pipeline toward postsecondary degree completion (**StriveTogether**), and is a strong predictor of economic and social advancement among cradle-to-career outcomes. A large and growing share of future jobs will require college-educated workers (**CBPP**), and, nationally, the workforce is pivoting away from traditional labor-intensive careers toward careers requiring a strong technical knowledge foundation — the type of knowledge that students acquire from four-year universities, two-year programs and technical certifications. Once enrolled, there are several indicators of students' postsecondary success, such as GPA, adequate credit load and passing general education courses without the need for remediation (**AIR**).

There are several factors that affect student enrollment in postsecondary education, such as primary and secondary preparation, social contexts and institutional factors such as tuition (**USDHHS**). Students from different backgrounds enroll at different rates. For example, students experiencing poverty, as well as Black and Latine students, are less likely to pursue postsecondary education (**NCES 2020**).

Students experiencing poverty, even those with high levels of academic performance, are less likely to enroll in college compared to their more affluent peers, more likely to attend two-year colleges when they do enroll, and less likely to apply to more selective institutions compared to their more affluent peers with similar academic preparation (**National Student Clearinghouse**). Even after increases in need-based grant aid to offset rising tuition costs, eligibility requirements such as high school academic achievement and time since high school graduation can have differential impacts by race and ethnicity (**Urban).** As students select pathways that include postsecondary education, it is critical to support their access to postsecondary program options as well as information on eligibility requirements and financial aid.

Recommended indicators

Postsecondary enrollment can be operationalized as a **local high school to postsecondary institution enrollment rate** or the number of students that graduated from high schools in the school districts that have enrolled either part-time or full-time in a postsecondary institution (including four-year, two-year and trade or certification institutions), divided by the total number of students that graduated from high schools in the school districts. It is based on a data match between individual high school graduate data and postsecondary enrollment data.

This indicator is designed to measure whether K-12 education systems have adequately prepared high school graduates for enrollment in a postsecondary institution. It can also shed light on how well communities are supporting graduates. Place-based initiatives like Harlem Children's Zone and the U.S. Department of Education's Promise Neighborhoods grant program have used this indicator to understand the performance or impact of their geographically-defined programs and supports. Similarly, place-based scholarship models like Kalamazoo Promise have used this indicator to understand the impact of geographically-defined college scholarship programs on the students who graduate from high schools within those geographic areas (**Brookings**).

Students' beliefs about postsecondary education, as well as their efforts in applying to and graduating from postsecondary institutions, affect their enrollment decisions. Therefore, it is crucial to prepare students with the resources necessary to navigate tuition costs, scholarships and potential debt (**USDHHS**). Examining this indicator by specific student demographics can demonstrate for which students the community can provide more targeted support. Moreover, encouraging students to enroll in postsecondary institutions without adequately preparing them academically, socially or monetarily to reach completion can have negative impacts on students. For example, college dropouts are more likely to participate in criminal activity than their peers who graduate (**Dennison 2022**).

Enrollment can be part-time or full-time. There are several tradeoffs between full- and part-time enrollment (**BestColleges**). Full-time enrollment leads to a higher likelihood of completion (**Inside Higher Ed**), and part-time enrollment provides students the flexibility to work while going to school (**CAP**).

Data sources for indicators

The 2008 reauthorization of the Higher Education Opportunity Act (HEOA) prohibits a federal database of personally identifiable information tracking students over time, thus making state governments and nonprofit stakeholders responsible for the collection of longitudinal student-level data (**Promise Neighborhoods**).

There are two primary data sources for tracking community-specific enrollment rates and each one will indicate slightly different information about the community's enrollment of students in postsecondary institutions. Which of the two sources to use will depend on whether your

cradle-to-career partnership can leverage state-level data via a state longitudinal data system (SLDS) or use National Student Clearinghouse's student tracking system. NSC data is the preferred source because they offer the opportunity to track students across state lines, but there may be benefits to working with SLDS that compensate for this limitation. Both sources provide useful information.

An important limitation to both sources is that they do not capture some postsecondary opportunities like military service or apprenticeships, which can contribute to future success. Data sources for participation in these opportunities may be available through other district data sources.

State data

Statewide Longitudinal Data Systems (SLDS) are a potential source of data for postsecondary enrollment. The purpose of SLDS is to integrate the data systems that track educational attainment for students from early learning programs through the workforce by integrating preschool, K-12 and postsecondary data systems into one P-20 data system. These data systems include individual student records.

The postsecondary enrollment data available in SLDS provides information on students from that particular state and whether they attended a postsecondary institution in the same state. Identify the high schools located in your school districts and use SLDS to determine which of those students enrolled in a postsecondary institution within the same state. These data systems include enrollment in in-state postsecondary institutions but tend to have lower coverage rates for private institutions. As of 2021, 27 states link their SLDS to workforce data (ECS).

Availability: A list of states with SLDS in 2021 is available through this Education Commission of the States **50-state comparison**. The timeliness of this data will depend on the state and their system. StriveTogether also maintains a list of states with SLDS that can be found **here**.

National Student Clearinghouse

Another data source for this indicator is the National Student Clearinghouse (NSC), a privately operated postsecondary tracking service. NSC tracks high school seniors who matriculated from participating high schools and identifies whether they enrolled in public or private two- and four-year colleges and universities as well as trade and vocational programs. This data source includes enrollment in participating postsecondary institutions nationally. Before using this data, verify whether your school districts participate in NSC. You can refer to **this NSC site** to determine if the two- and four-year colleges and universities where the majority of your community's students continue for their postsecondary education participate as well.

Availability: You should work with your local school districts to submit a roster of graduates to the National Student Clearinghouse **StudentTracker** and receive a report with data on initial enrollment, among other information, of the cohort you are attempting to track. Data is generally kept current and can be available in as little as 30 days in some cases.

Detailed data specifications

Definitions

Local high school to postsecondary institution enrollment rate

Using SLDS data, this is the percentage of high school graduates in the district that attend public, postsecondary institutions within state by the fall following high school graduation. The rate using National Student Clearinghouse data is the percentage of high school graduates in the district that attend any postsecondary institution by the fall following high school graduation.

Target population

The target population for this metric includes high school graduates from your school districts. For some, the target population will be all of the high school graduates in the school district. If, however, your geographic focus is different from the school district, it may be necessary to collect this data at the school level. We note that this indicator only reflects student enrollment among high school graduates. Therefore, students that have not graduated high school but are concurrently taking college-level courses (e.g., dual enrollment in associate degree programs) will not be included in this indicator.

Timing

High school graduates should be tracked until October 31 following their high school graduation in order to calculate immediate enrollment rates in community colleges, associate degree programs, four-year colleges or universities. Students that immediately enroll in postsecondary institutions are more likely to graduate. Therefore, the ideal timeframe for enrollment would be until October 31 (**Bozick and Deluca 2005**).

National Student Clearinghouse details

The National Student Clearinghouse Research Center is a 501(c)(3) nonprofit organization whose mission is to conduct and support objective research related to educational enrollment, progression and completion for the benefit of students, institutions and the public. The Research Center provides StudentTracker reports that use data held by the National Student Clearinghouse, a nonprofit organization that serves the education community by facilitating the exchange and understanding of student enrollment, performance and related information. These reports show results at aggregated levels, preventing students and institutions from being individually identified (**NSC 2016**). Users can select specific types of programs or students, such as Carnegie classifications or student characteristics. However, in order to comply with FERPA and institutional agreements, results from these queries have to be aggregated to a level of at least three institutions and at least ten (ideally 30) students.

The NSC does not survey students. Instead, it obtains student data directly from registrars — the college and university officers responsible for keeping track of enrollments and degrees. Postsecondary institutions participate with the Clearinghouse voluntarily, pay low or no fees for participating and receive valuable services that the Clearinghouse provides based on the data. The institutions typically send to NSC their complete student enrollment list every month, sometimes more often, so the data is current. NSC also contains over two decades of historical data.

NSC data includes all students who are enrolled in credit-bearing courses at participating institutions. These include:

- Students who are enrolled full-time and part-time
- Students who are receiving financial aid and those who are not receiving financial aid
- Students who attend on campus and virtually
- Students who are concurrently enrolled in more than one institution
- In most cases, students who are dual-enrolled in college courses while still in high school
- Undergraduate and graduate students
- Degree-seeking, certificate-seeking and non-degree-seeking students
- Students who are enrolled during all terms, including the summer, and those in campus-based study-abroad programs

NSC data also keeps track of students when they transfer among institutions, even out of state, and when they stop-out and return, even years later.

The following students are not included:

- Students attending most of the U.S. military academies
- Students attending most tribal colleges
- Students attending very small institutions
- International students and undocumented students (non-U.S. citizens) are often not reported to the Clearinghouse, even when they are enrolled at participating U.S. institutions. In those cases when they are reported (NSC estimates it to be less than half), these students are also more difficult to track if they change institutions.

NSC has some limitations in matching and reporting data. Even though nearly all college students are in the NSC database, they may not all be visible in the StudentTracker report that the NSC Research Center sends to a high school or district. There are limitations in the ability to match the students in your graduating cohort to those in the NSC dataset. There are also limitations on what student data can be released once it is found. In order to better understand these potential data limitations, we recommend communicating with your school districts to learn more about where students typically go after high school graduation.

Example

SLDS source

1. Obtain the list of students who graduated from the target high schools in each graduating cohort, likely sourcing this data from high schools. This is the denominator.
2. Obtain the number of students from the list above (students who graduated from the target high schools) that enroll in in-state postsecondary institutions by October 31 from state's respective SLDS. This is the numerator.
3. Divide the numerator calculated in step 2 by the denominator from step 2.
4. Multiply by 100.

$$\frac{\text{Number of students who enrolled in in-state postsecondary institutions}}{\text{Number of students in graduation cohort}} \times 100$$

NSC source

1. Obtain the list of students who graduated from the target high schools in each graduating cohort, likely sourcing this data from high schools. This is the denominator.
2. Submit this list to NSC to obtain the total number of students enrolled in any and all postsecondary institutions and programs. This is the numerator.
3. Divide the numerator calculated in step 2 by the denominator calculated in step 1.
4. Multiply by 100.

$$\frac{\text{Number of students who enrolled in postsecondary institutions}}{\text{Number of students in graduation cohort}} \times 100$$

Data disaggregation

The availability of postsecondary enrollment data disaggregated by demographics will depend on the specific data source used (i.e., NSC or SLDS). In National Student Clearinghouse data, demographic data such as gender, race/ethnicity, enrollment major, etc. are considered optional data elements. While providing this data to NSC enhances NSC's ability to provide additional services, they are not part of mandatory compliance reporting, and therefore coverage rates vary. You can encourage your districts to submit demographic data to NSC when they participate so that they can disaggregate the data. In state's SLDS systems, availability of demographic data will depend on each state's SLDS system and demographic data availability.

Example of calculation for female students:

$$\frac{\text{Number of female students who enrolled in postsecondary institutions}}{\text{Number of female students in graduation cohort}} \times 100$$

Full-time or part-time enrollment

You can learn even more about your students' enrollment patterns by examining full-time versus part-time enrollment rates. Disaggregation of enrollment rates by full-time and part-time enrollment will also depend on availability of data using each data source (i.e., NSC vs SLDS). Full-time and part-time identifiers are readily available in NSC data. Availability of full-time and part-time data will depend on each state's SLDS system and data availability.

Frequently asked questions

How does NSC match data?
When a high school, district or state education authority sends a cohort of graduates to StudentTracker, NSC attempts to match personally identifying information for each student in the file to the information in the enrollment records in the database. Like any data match, the results depend on the quality of the data provided and the quality of the data stored. The vast majority of the matches, typically over 95 percent for high school request files, are exact, unique matches based on the student's name and date of birth. For the small portion that requires some additional attention, NSC may use other factors, including information about the student's high school, graduation date and enrollment history. Each data element falls within a hierarchy that impacts the overall match confidence. For example, if presented with more than one student with the same name and date of birth, they use other elements as additional sources of information to narrow the possible match pool.

Name variations account for the largest number of inexact matches encountered, and NSC researchers have developed robust algorithms to handle most of them with very high levels of confidence. For example, common misspellings, hyphenated names and shortened names are all taken into account in their proprietary logic. Their algorithm allows matches when names differ within a small tolerance level, or by common nicknames and Anglicizations of foreign names, provided that other data elements support the match.

How much does it cost to obtain NSC data?
For high schools and districts, the cost is $595 per high school per year (**NSC 2022**). Postsecondary institutions may be able to participate in data sharing with NSC for free if they participate in particular NSC services (**NSC 2023**).

How should we deal with challenges related to data integration?
Linking student records across various variables or time periods can be challenging, particularly with limited or no high-quality data on student name, date of birth and high school name.

Potential solutions:

- Develop annual data quality process to flag missing or discrepant student data, especially prior to high school students graduating.
- Develop strategies to stay in contact with graduating high school seniors to identify and document name changes.

Learning resources

National data on postsecondary enrollment from National Student Clearinghouse:
https://nscresearchcenter.org/current-term-enrollment-estimates/

Nudging Students Toward Holistic Supports and Secondary Success:
https://www.jff.org/points-of-view/nudging-students-toward-holistic-supports-and-postsecondary-success/

How to 'De-Risk' Postsecondary Education in a Recession:
https://www.jff.org/what-we-do/impact-stories/financing-future/how-to-de-risk-postsecondary-education-in-a-recession/

Part-Time Students Must be a Full-Time Priority:
https://www.luminafoundation.org/resource/part-time-students-must-be-a-full-time-priority/

Explore how postsecondary enrollment and completion are collected in Promise Neighborhood communities, including data sources discussed in this guide and the potential role of alumni surveys:
Expanding Data Use to Support More Effective Post-High School Transitions: Measuring Postsecondary Success in Promise Neighborhoods

Data sharing

The StriveTogether **Guide to data sharing** provides important information about requesting, storing and working with data. It is important that cradle-to-career partnerships work with local school districts to obtain achievement and assessment participation data. This may involve entering into a data-sharing agreement with local schools, districts or the state. In some cases, cradle-to-career partnerships may access student-level data for high school graduates as part of a request for NSC or SLDS data. The data sharing guide provides important information for doing that responsibly.

StriveTogether®

StriveTogether is a national movement with a clear purpose: help every child succeed in school and in life from cradle to career, regardless of race, ethnicity, zip code or circumstance. In partnership with nearly 70 communities across the country, StriveTogether provides resources, best practices and processes to give every child every chance for success. The StriveTogether Cradle to Career Network reaches more than 14 million students, including more than 7 million children of color and over 7 million children experiencing poverty. The network spans 29 states and Washington, D.C.

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