

# Charting a Necessary Path

The Baseline Report  
of Public Higher Education Systems  
in the Access to Success Initiative





**The following public higher education systems are members of the Access to Success Initiative:**

System	Undergraduate Enrollment
California State University System	361,303
Connecticut State University System	28,564
State University System of Florida	237,899
University of Hawaii System	43,922
Kentucky Council on Postsecondary Education	188,078
Louisiana Board of Regents	175,421
University of Louisiana System <sup>+</sup>	69,848
Southern University A&M College System <sup>+</sup>	11,444
University System of Maryland	99,039
Minnesota State Colleges and Universities	178,147
University of Missouri System	47,864
Mississippi Institutions of Higher Learning	55,793
Montana University System	36,769
University of North Carolina System	165,452
City University of New York	202,821
State University of New York	380,750
University System of Ohio <sup>*</sup>	390,152
Pennsylvania State System of Higher Education <sup>*</sup>	95,707
University of Puerto Rico System	56,551
Rhode Island Board of Higher Education	36,977
South Dakota Board of Regents	26,974
Tennessee Board of Regents	147,517
Vermont State Colleges	12,054
University of Wisconsin System <sup>*</sup>	148,844
<b>Total</b>	<b>3,116,598</b>

Source: IPEDS, Fall 2007 Enrollment

<sup>\*</sup> Denotes systems that joined in Summer 2009

<sup>+</sup> The University of Louisiana and Southern University A&M systems are part of the Louisiana Board of Regents System.

# Charting a Necessary Path

The Baseline Report of Public Higher Education Systems  
in the Access to Success Initiative

## LEADING THE WAY

In fall 2007, the leaders of nearly two dozen public higher education systems—all members of the National Association of System Heads (NASH)—came together to form the Access to Success Initiative (A2S). With support from The Education Trust, the system heads asserted two ambitious and essential goals: to increase the number of college graduates in their states and ensure that those graduates are more broadly representative of their states' high school graduates.

Even before President Obama stated that regaining our status as the best educated people on earth should be a national priority, the A2S leaders were at work on some of the most stubborn issues in American higher education—issues that must be addressed if we are to achieve the president's goal. Their courageous public commitment to promote both excellence and equity is explicit and measurable: By 2015, they have pledged that their systems will halve the gaps in college-going and college success that separate African-American, Latino, and American-Indian students from white and Asian-American students—and low-income students from more affluent students.

The A2S system presidents and chancellors took action without the pressure of government mandates and in the face of strong countervailing pressures, such as declining state investment in higher education and intense pressure to become more selective in admissions to raise their institutions' standing in popular and powerful college rankings. These leaders took this unprecedented step not because it would be easy or make them more popular but because it was the right thing to do—for their students, their states, and our country.

System leaders also asked The Education Trust, as an independent organization, to report regularly to the public

on their progress. Much of the data in this first report has never been shared with the public. Not all of it is good news. The willingness of these system leaders to lay out the facts—even when the story those facts tell is uncomfortable—signals to me a seriousness of purpose all too rarely seen in higher education. We're honored to be partners in this work and more than a little awed by the courage and vision of these leaders.

Access to Success comprises 24 public higher education systems, representing 378 two-year and four-year campuses and more than three million students. Collectively, these systems educate almost 40 percent of undergraduates attending public four-year colleges and universities and almost 20 percent of all undergraduates nationwide. Of particular note, A2S systems enroll 27 percent of low-income students in public higher education and 44 percent of the African-American, Latino, and American-Indian students enrolled in public four-year institutions. What these systems do, in other words, matters a lot to our country.

America cannot afford to fail to develop the talents of young people from low-income and minority families. It's not good for our economy. And it's not good for our democracy.

With their commitment and hard work, the A2S leaders are pointing us in another, better, direction—a direction that will, by educating individuals to the highest levels, enrich not only their lives but the future of our great nation. More than almost anything else I can imagine, their success will protect and expand the American Dream for all of our sons and daughters.

Kati Haycock  
President, The Education Trust  
Washington, D.C.

# Charting a Necessary Path

The Baseline Report of the Access to Success Initiative

BY JENNIFER ENGLE AND MARY LYNCH

In 2007, the presidents and chancellors of nearly two dozen public postsecondary systems created the Access to Success Initiative to pursue two goals: increase the number of college-educated adults in their respective states and ensure that their institutions' graduates included more young people from low-income and minority families by 2015. They did so because they recognized that a college education—now more than ever—is the surest route to a decent job and contributes to the health of our democracy.

The United States continues to lose ground to other countries in educational levels of its young people.<sup>1</sup> President Obama has set a goal of returning the United States to its number one position by 2020, which will mean increasing both college-going and college-completion rates.

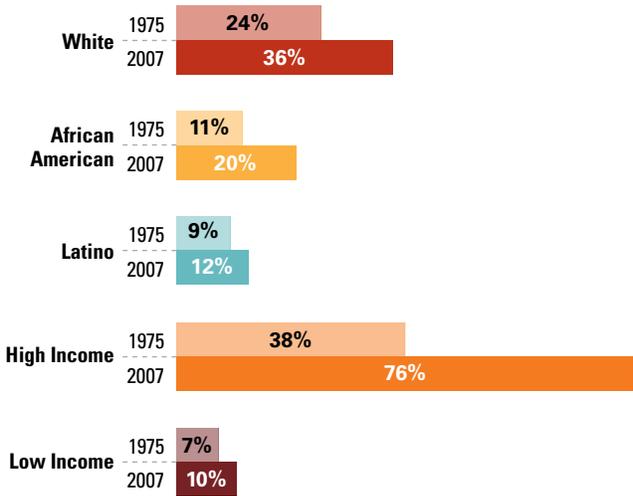
But it's essential to understand something very important: The changing demography of our country demands especially large increases in college access and success

among young people who traditionally have been under-represented on our campuses and even more so at our commencement exercises—low-income students, African-American students, Latino students, and American-Indian students. Unless colleges and universities seriously address these longstanding gaps, Americans can expect the nation's educational attainment level to decline over the coming decade.<sup>2</sup>

In recent years, America's Latino and African-American populations have grown faster than the white population. And those patterns will continue: Over the course of the A2S Initiative, the Latino population is projected to increase by 27 percent and the black population by 9 percent; meanwhile, the white population will grow by just 2 percent.<sup>3</sup> Although the degree-attainment rates of minority and low-income students have improved over the past three decades, these rates have not kept pace with those of other students (see Figure 1). The gaps that separate Latino and African-American students from their white peers actually are wider today than in 1975, and the gap between low-income and high-income students has *doubled*.<sup>4</sup> These degree-attainment gaps are the result of gaps in both enrollment and graduation rates:

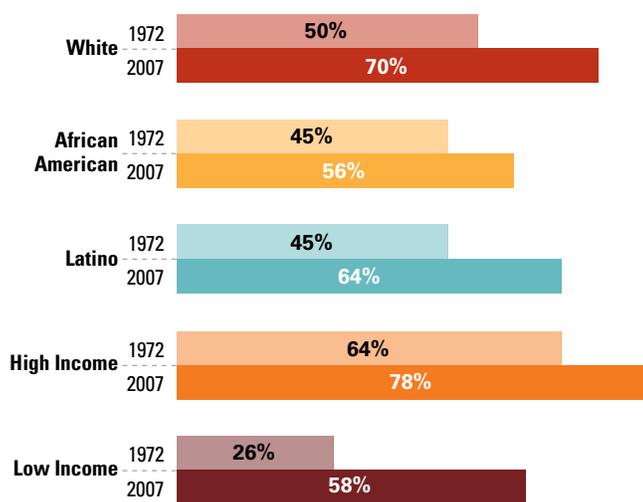
- Despite significant gains in college-going rates for all students, gaps between white and minority students have grown over time. (see Figure 2).
- Though the rate at which low-income students enroll in college immediately after high school has more than doubled since the 1970s, these students have yet to reach the college-going rate of high-income students 35 years ago.
- Once in college, minority students are much less likely than white students to graduate. Nationally, about six in ten white students earn bachelor's degrees within six years, compared with only about four in ten minority students.<sup>5</sup>

Figure 1: Bachelor's Degree Attainment of Young Adults



Source: Race data — "The Condition of Education, 2009." Income data — Postsecondary Education Opportunity.  
Note: Degree attainment by race is for 25-29 year-olds, and attainment by income is for 24 year-olds.

**Figure 2: Percentage of high school graduates immediately enrolling in college, 1972-2007**



Source: Race data — Digest of Education Statistics, 2008. Income data — Condition of Education, 2009.

The National Center for Higher Education Management Systems (NCHEMS) estimates that just closing these access and success gaps will create more than half of the degrees necessary to raise America to first in the world in college-degree attainment.<sup>6</sup> But increasing education levels and closing longstanding gaps between groups isn't just important to our economic competitiveness. It also contributes to other things we hold dear as a nation, including democratic participation, social cohesion, strong families, and healthy behavior.

That's why the Access to Success Initiative is so important.

## CHARTING THE PATH: THE NECESSARY DATA AND METRICS

To produce a better educated and more diverse workforce, colleges and universities need to know where they stand, where they are going, and how to measure progress along the way. That's why analyzing data and setting measurable goals is at the heart of Access to Success.

Currently, most of the data that government agencies and higher education institutions use to report progress on college access and success omit large numbers of students. Transfer students and part-time students, for example, aren't included in the success rates reported in the major national database on postsecondary education, nor does the database flag low-income students in a way that enables the public to track their progress (see the sidebar on the Integrated Postsecondary Education Data System, commonly known as IPEDS).

A2S system leaders knew, from the outset, that a more

comprehensive database was essential to fully document what happens to different groups of students as they move into and through colleges and universities.

Better data weren't enough, though. It also was necessary to create metrics for examining student progress and degree completion that would work for different groups of students and different types of institutions and that would be sufficiently sensitive to state context.

Broadly, the metrics created for the A2S Initiative measure the following:

**ACCESS:** Does a higher education system's entering class reflect the socioeconomic and racial/ethnic profile of its state's high school graduates?

**SUCCESS:** How do the success rates of low-income and underrepresented minority students compare with those of other students within the system?

**ACCESS+SUCCESS:** Do the system's graduates reflect the diversity of the state's high school graduates?

As participants in the Initiative, A2S systems have agreed to cut existing access and success gaps for low-income and underrepresented minority students in half by 2015. The goal of the Initiative is for participating systems to improve on the metrics relative to their own baseline—not to compare or rank the systems on their current performance.

## What's Different Here?

The database and metrics developed in concert with senior institutional researchers from A2S systems answer these questions in far more powerful ways than would have been possible by using only existing national data sets. These new metrics are different from other major higher education data systems in at least three important ways. (For a more detailed discussion of the metrics, their definitions, and data sources, please refer to the Technical Appendix).

### What is a System?

NASH defines a public higher education system as a group of two or more colleges or universities that operate under a single governing board, which is served by a system chief executive who is not also the chief executive of any of the system's institutions. Currently, there are 52 public higher education systems in 38 states and Puerto Rico. For more information, visit [www.nashonline.org](http://www.nashonline.org).

## Improving on IPEDS in the A2S Metrics

Some may wonder why the new Access to Success data collection effort is necessary. Don't we already have plenty of data about college enrollment and completion? Yes, the federal government does collect some of this information, but the data are limited, particularly for accountability and improvement purposes. And as A2S system leaders know, they cannot improve what they cannot measure.

The federal government requires all higher education institutions that accept federal financial aid to report data annually, including their students' graduation rates, to the Integrated Postsecondary Education Data System (IPEDS), which is housed in the National Center for Education Statistics (NCES).

However, some informative data—and most importantly, key groups of students—are omitted from the IPEDS database. IPEDS reports graduation rates based only on first-time, full-time, degree-seeking freshmen. In 2007, these “traditional” students represented only 58 percent of all students who entered higher education and an even smaller percentage (40 percent) of those entering public two-year institutions.\* In contrast, the A2S data provide a more accurate and comprehensive summary of student performance that allows participating systems and institutions to better target improvements, particularly for part-time and transfer students, many of whom come from low-income and underrepresented minority backgrounds.

Although IPEDS disaggregates graduation statistics by race, it provides no information about the success rates of students from different economic backgrounds. Research from longitudinal data sets, such as NCES's Beginning Postsecondary Students studies, shows that low-income students nationwide do not graduate at the same rates as their higher income peers. However, we cannot investigate these trends annually or at the institutional, system, or state level using the NCES sample studies. By counting the number of low-income students (identified by Pell Grant recipient status) who both enroll and succeed in participating systems, the A2S metrics allow an unprecedented assessment of how well colleges and universities are serving low-income students, particularly those receiving financial aid. Using Pell Grant receipt as a proxy for income does have its limitations, though, and these are discussed in detail in the Technical Appendix.

The A2S metrics provide four more key data points for system leaders that are unavailable in IPEDS:

1. IPEDS only reports institutional graduation rates, meaning that students who do not graduate at their first institution, but do graduate elsewhere, are not counted as graduates. A2S captures many—but not all—of these students by measuring success systemwide; students who transfer between institutions within the same system and graduate are included in A2S graduation rate calculations. A2S data do not track success outside of the system however.
2. IPEDS only provides first-year retention rates for first-time, full-time students—without breakdowns by race or income. A2S collects and reports yearly retention rates for full-time and part-time students, including the percentage of students still enrolled the year beyond the success-rate measures, disaggregated by race and income.
3. The A2S metrics document more-precise outcomes for associate's degree-seeking students. In particular, the metrics specify whether students have transferred to associate's or bachelor's degree programs, which IPEDS transfer data don't show.
4. The A2S metrics count the number of degrees earned by low-income and underrepresented minority students. Although IPEDS provides disaggregated data on the number of degrees conferred by race and ethnicity, it does not provide these data by income or financial aid status.

A2S provides disaggregated data about the number of degrees awarded to low-income and minority students to help systems monitor progress toward the national goal of raising the number of Americans with college degrees. It also furnishes key indicators of whether the systems are on track to succeed with yearly retention, graduation, and still-enrolled rates for all students—full-time and part-time, first-time and transfer—broken down by race and income status.

Some critics say that retention and graduation rates are too flawed to use for improvement purposes in higher education. They prefer to rely solely on the number of degrees conferred. With more students included in the A2S metrics, they are, in fact, quite relevant and useful for system leaders. However, it is important to note that, despite the flaws in the IPEDS data, their graduation rates still have value. Because research has shown that students who start as first-time, full-time freshmen have the best chance to graduate compared with their peers, figures on this select group of students can tell us much about institutional performance.

By filling gaps in IPEDS data, the Access to Success Initiative has built a vast and important higher education dataset. However, it is not without its own limitations, as noted above. More work is needed to continue efforts already underway to build and link state unit-record databases with robust measures of students' demographics—including actual family income data—and students' pathways into and through college across institutions, systems, and states. In the meantime, the A2S data and metrics provide systems leaders with more of the important information they need to improve student outcomes and to close achievement gaps in their colleges and universities.

\* Ed Trust analysis of IPEDS 2007 data using the Data Analysis System online.

First, the A2S database and metrics include students who are missing from or invisible in current national higher education data systems. They include success rates for all students within a system—including transfer students and part-time students, rather than just first-time full-time freshmen—and they spotlight access and success rates for low-income students.

Together, the “missing” and “invisible” students constitute two-thirds of students in the Initiative and a similar percentage of higher education enrollments nationwide. And yet these students are not counted in other large-scale, public databases, nor included in most higher education performance measures.

Why is including them so important? Because experience suggests that students who are not counted won’t count when decisions are made and priorities are set.

Second, the A2S metrics measure the performance and progress of each system in the context of the state’s population, helping to answer the question: Good enough compared to what?

For example, colleges often report increases over time in the number of low-income or African-American, Latino, and American-Indian students in their entering classes without considering that the proportion of such students among the state’s high school graduates may have increased even faster. In effect, while celebrating “progress,” they actually were falling behind.

The same can be true on the success side: Many institutions report increases in the number of degree recipients from underrepresented groups without reference to their representation in the undergraduate population or their performance relative to other students, giving colleges a false sense of progress.

Context is important because, as A2S system leaders know, improving access and success for underserved students will not represent real progress unless their participation and completion rates increase even faster than their peers’.

Finally, the simultaneous focus on both access and success in the Initiative and its metrics is fundamental to

achieving substantial increases in the number of college-educated residents in A2S states. Otherwise, the temptation for participating systems is to take one of the two routes that thus far have proved to be so unproductive: (1) widen access without focusing on graduating more students or (2) become more exclusive, so graduation rates will improve without any effort. Neither course will produce more citizens with degrees, which is what our country needs to accomplish.

## THE STARTING LINE

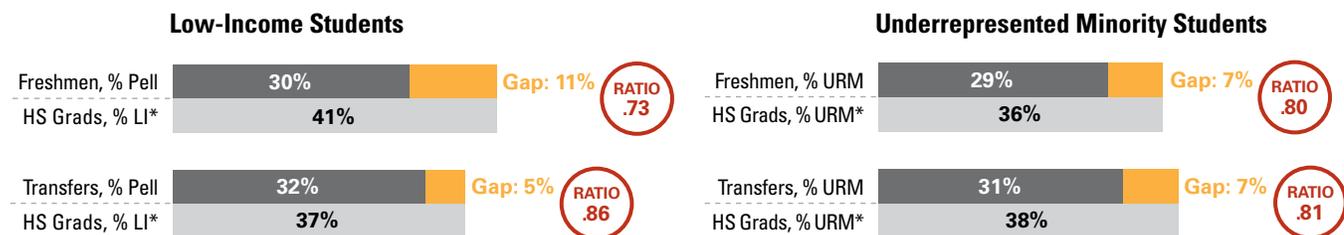
The profiles that accompany this report tell the story that emerges from each system’s data—a story that varies across systems, which themselves differ greatly in terms of size, student profile, and state context. Because of these variations, the systems’ data are presented separately to avoid ranking and direct comparison among them.

But because the A2S systems collectively cover such a broad cross-section of public higher education, their combined data tell a lot about how well low-income and underrepresented minority students fare on their journey into and through public higher education—and where attention is needed most to increase college-going and degree attainment.<sup>7</sup>

## Four-Year Colleges ACCESS: Fewer Low-Income and Minority Students Are Entering

Students entering bachelor’s degree programs in the A2S systems collectively are actually more diverse racially and economically than those entering public four-year institutions nationally.<sup>8</sup> However, low-income and underrepresented minority students are still entering A2S systems’ four-year colleges at lower rates than are other high school graduates in their respective states (see Figure 3).

**Figure 3: ACCESS—Low-Income and Minority Students Enter Four-Year Colleges at Lower Rates Than Other Students in A2S Systems**



\* Data are three-year averages drawn from the “2003-05 American Community Survey.” Freshmen are compared with 18-24 year-old high school graduates without bachelor’s degrees in the state; transfer students are compared with 18-34 year-olds without bachelor’s degrees in the state. Among high school graduates, low-income is defined as family income below 200 percent of the federal poverty level and underrepresented minorities are African Americans, Latinos, and Native Americans.

For instance:

- Although 41 percent of 18-24 year-old high school graduates in A2S states were from low-income families, only 30 percent of freshmen enrolled in A2S systems came from low-income families (identified by having received Pell Grants). (See the sidebar on page 9 on using Pell Grant receipt as a proxy for income status.)
- Underrepresented minorities—African Americans, Hispanics, and American Indians—accounted for 36 percent of 18-24 year-old high school graduates in the A2S states but only 29 percent of freshmen within A2S systems.<sup>9-10</sup>
- Among transfer students,<sup>11</sup> similar but somewhat smaller gaps exist. About 32 percent of entering transfers were low-income students, compared with 37 percent of 18-34 year-old high school graduates; underrepresented minorities accounted for 31 percent of entering transfers, compared with 38 percent of 18-34 year-old high school graduates.

Collectively, then, A2S systems enroll about three-quarters of the low-income and underrepresented minority freshmen (and slightly more than 80 percent of the transfers) they could be serving in their four-year institutions if low-income and minority students entered at the same rates as other students in their states.<sup>12</sup> If their access gaps were already cut in half, the A2S systems would have enrolled nearly 27,000 additional low-income and minority students in the baseline year.

Clearly some of the access problem lies with K-12 preparation. But A2S system leaders believe their institutions have the *responsibility* and the *ability* to do more. And the data back up this belief: Some A2S systems already have entering classes that are as economically and racially diverse as their states—or even more so (see Figure 4). In other words, what colleges do to recruit and enroll low-income and minority students matters.

### What Do Ratios Mean?

A *ratio* is calculated by dividing the performance of the target group (URM or Pell students, for example) by the performance of the reference group (non-URM or non-Pell students) on a given indicator. A ratio below 1 indicates that the target group lags the reference group, and a ratio of 1 indicates equity between the target and the reference group. Ratios are capped at a maximum of 1.

For example, 30 percent of incoming freshmen are low-income compared with 41 percent of 18-24 year-old high school graduates for an access ratio of 30%/41% or .73. The ratio can be interpreted to mean that A2S systems are currently serving only 73 percent of the low-income students they could be if such students enrolled at the same rates as their more affluent peers in A2S states.

RATIO  
.73

### SUCCESS: Fewer Low-Income and Minority Students Earn Degrees

In deciding to look honestly at success rates among all entering students—including part-time and transfer students, rather than just those who entered full-time as freshmen—A2S leaders expected that the picture that emerged might be even more troubling than the one that emerges from national graduation-rate statistics. And indeed, A2S data show that large numbers of students who begin college do not finish—at least not in the expected time frame. Problems are especially acute for low-income and underrepresented minority students. Specifically:

- Within six years of entering college, only 53 percent of freshmen (including both part-time and full-time) across all systems attained the bachelor’s degrees they sought upon entry.
- Among underrepresented minority students who started as freshmen, 44 percent earned bachelor’s degrees within six years; completion rates among low-income students were only slightly higher at 45 percent. Among other students, six-year completion rates were 57 percent.

**Figure 4: A2S Systems With Entering Classes as Diverse as High School Graduates in Their States**

	No Income Gap	No Race Gap
<b>Freshmen</b>	City University of New York	Mississippi Institutions of Higher Learning University of North Carolina System Tennessee Board of Regents Vermont State Colleges
<b>Transfers</b>	City University of New York State University of New York	Kentucky Council of Postsecondary Education Minnesota State Colleges & Universities University of Missouri System Montana University System Vermont State Colleges

## Using Pell Grant Receipt as a Proxy for Income Status in the A2S Metrics

The A2S metrics use students' receipt of Pell Grants as a measure of their family income status. Although this proxy for low-income status has its limitations, it currently is the only income measure widely available across all participating systems and improves on existing information. For a more detailed discussion, please see the Technical Appendix.

**Access:** The Access metrics measure the economic diversity of systems' entering classes by documenting the percentage of students receiving Pell Grants when they first enroll in school. This may *overstate* the size of the access gap in some systems because some low-income students may not receive Pell Grants. Low-income students who attend part-time and/or attend lower cost two-year colleges are less likely to receive the federal grant, and some eligible students may not even apply.

**Success:** The Success metrics track and compare the success of students who received a Pell Grant at entry with those who did not receive one upon entering the system. Using Pell Grant receipt as a proxy for income may actually *understate* the success-rate gap for two reasons. First, some nonrecipients are low-income but do not receive aid. Because these needy students without aid are considered nonrecipients, they may lower the completion rate of the comparison group and understate the gap. Second, there is likely a positive impact for low-income students who receive Pell Grants, because receiving the grant helps them stay in college, which also narrows the graduation gap with nonrecipients.

- Interestingly, low-income transfer students—or at least those who receive financial aid in the form of a Pell Grant—graduated at the same rate (60 percent) as other students. Among underrepresented minority transfer students, however, graduation rates were 55 percent, compared with 61 percent for other students.<sup>13</sup>

Here too, of course, inadequate preparation or difficult family circumstances matter. Nevertheless, some systems and institutions are more successful than others in helping students progress to graduation, both overall and with low-income and minority students.

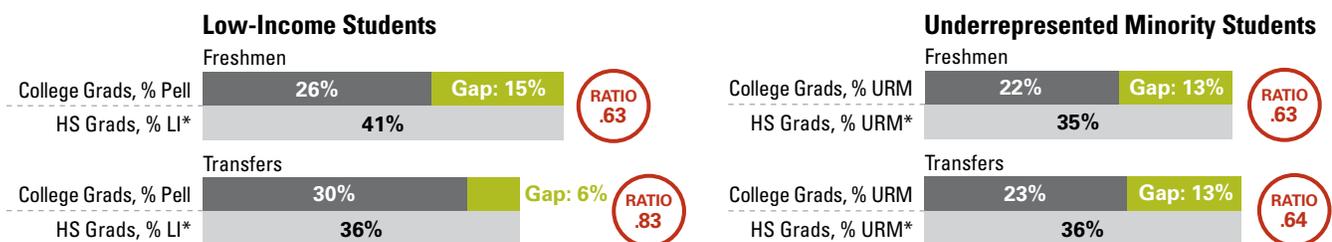
## ACCESS+SUCCESS: Fewer Low-Income and Minority Students Among Graduates

Because of the gaps in both access and success in their institutions, the graduates from A2S systems look significantly different from the high school graduates in their states (see Figure 5). Among students who started as freshmen:

- Only 26 percent of the students who earned bachelor's degrees within six years in A2S systems came from low-income families, compared with 41 percent of 18-24 year-old high school graduates in these states.
- Only 22 percent of students who earned bachelor's degrees within six years were underrepresented minorities, compared with 35 percent of 18-24 year-old high school graduates.
- Among those who started as transfers, 30 percent of graduates were from low-income families (compared with 36 percent of 18-34 year-old high school graduates), and 23 percent were underrepresented minorities (compared with 36 percent of 18-34 year-old high school graduates).

What do all these numbers mean? They mean that bachelor's degree recipients in the systems included only about 60 percent of the low-income and minority students who would have gotten degrees if college-going and college success rates were the same for all groups of students in their states. If the systems' access and success gaps already had been cut in half for the baseline cohorts, more than 15,000 additional low-income and minority students would have enrolled and graduated from their institutions.

**Figure 5: ACCESS+SUCCESS—Four-Year College Graduates in A2S Systems Are Not as Economically and Racially Diverse as High School Graduates in Their States**



\* Data are three-year averages drawn from the "2000-02 American Community Survey" as a proxy for 1999 since earlier data were not available. Freshmen are compared with 18-24 year-old high school graduates without bachelor's degrees in the state; transfer students are compared with 18-34 year-olds without bachelor's degrees. Among high school graduates, low-income is defined as family income below 200 percent of the federal poverty level and underrepresented minorities are African Americans, Latinos, and Native Americans.

Note: This cohort entered in 1999 and does not match the 2005-06 cohort tracked in the Access metric. The metric compares the percentage of students who earned bachelor's degrees within six years who were Pell (or URM) with the percentage of high school graduates who were low-income (or URM) in the state population when the cohort entered the system.

## Two-Year Colleges

### ACCESS: An Open Door for Low-Income and Minority Students...

Some may argue that the underrepresentation of low-income and minority students in four-year institutions isn't a problem, as long as they are finding their way into two-year colleges where they can begin postsecondary education at a lower price and then, if they wish, transfer to a four-year college to complete a bachelor's degree. Indeed, the two-year institutions within A2S systems are serving as important access points to higher education for many

low-income and minority students.<sup>14</sup> These students, in fact, are actually *overrepresented* in A2S systems' two-year colleges. For example:

- Forty-five percent of entering freshmen in A2S two-year colleges were Pell Grant recipients; by contrast, low-income students comprise about 41 percent of 18-34 year-old high school graduates in these states.
- Similarly, the percentage of underrepresented minority students among freshmen, 29 percent, was slightly higher than the representation of such students among 18-34 year-old high school graduates in A2S states, 28 percent.<sup>15</sup>

## SUCCESS STORIES IN A2S FOUR-YEAR INSTITUTIONS

### SUNY's Stony Brook University

The A2S metrics are designed to help systems identify where they need to improve, but the data also offer evidence of systems and institutions that are performing well, providing others in the Initiative with the opportunity to learn about successful policies and practices.

The State University of New York (SUNY) system, for example, has the highest six-year graduation rate in the Initiative, 56 percent, for first-time students who receive Pell Grants. Despite a system-wide gap in graduation rates between low-income and other students, several SUNY campuses, including New Paltz and Stony Brook University, are serving low-income and minority students exceptionally well.

Stony Brook University has approximately 16,000 undergraduates and is located on Long Island, about 60 miles east of New York City. Thirty-six percent of freshmen entering in 2005 received Pell Grants, and 22 percent were underrepresented minorities—making Stony Brook's freshman class more economically and racially diverse than New York state's high school graduates.

Stony Brook is not only committed to enrolling a diverse student body, but it is also helping its low-income and minority students succeed. Such students graduate at higher rates than their peers: 64 percent of Pell Grant recipients and 60 percent of minority students receive diplomas within six years, compared with 54 percent of nonrecipients and 59 nonminority students. In fact, Stony Brook graduates are more economically and racially diverse than the state's population.

Stony Brook's success looms larger when compared with other institutions. Recently ranked as one of *U.S. News and World Report's* "Top 100 National Universities," it is one of only nine institutions among this group without a graduation rate gap between minority and nonminority students. Among its peer institutions, Stony Brook is the *only* one that consistently graduates underrepresented minority students at rates similar to or higher than other students.<sup>\*</sup> Thus, the Stony Brook example shows that it is possible to achieve both educational excellence and equity, providing a high-quality education for a diverse student body.

### Tennessee Board of Regents

The Tennessee Board of Regents (TBR) serves minority students well, while also striving to boost overall retention and graduation rates. The system consists of six institutions, including two—the flagship University of Memphis and Tennessee State University, an HBCU—with large proportions of underrepresented minority students. Together, these universities serve 67 percent of the system's minority students.

Overall, the system's entering students are more racially diverse than the state's high school graduates. Twenty-eight percent of freshmen and 26 percent of transfer students are underrepresented minorities, in contrast to roughly 22 percent of the state's high school graduates. Further, for students who enroll as freshmen, the system's minority and nonminority students graduate at approximately the same rates, 39 percent and 40 percent, respectively.

As a result of its strong record on access, and no gaps in success, graduates of the TBR system schools are more racially diverse than the state's high school graduates.

Although the system's graduation rates are lower than the Initiative-wide average, the Tennessee Board of Regents is working hard to fix a major leak in its educational pipeline: First-year dropout rates are too high. Across the system, 26 percent of all students do not return after their freshman year, which clearly affects graduation rates. To help address the problem, TBR recently completed a pilot project to redesign the elementary and intermediate algebra developmental math courses at Austin Peay State and several community colleges. It also has instituted an ongoing "Academic Audit" to improve educational quality systemwide.

To build on the course redesign at Austin Peay, the board plans to participate in an "Institute on Developmental and Entry-Level Courses in Mathematics" along with several other A2S systems. These reform efforts indicate a clear commitment to student success—not through increased selectivity but through dedicated service to all students, including those with poor academic preparation.

<sup>\*</sup> Ed Trust analysis of IPEDS 2007 data using the Data Analysis System online.

## SUCCESS: ...But Losing Their Way Toward the Exit

Although two-year colleges clearly provide a pathway into higher education for low-income and minority students, alarming numbers of these students do not transfer or complete a credential—much less the bachelor’s degree that about 80 percent of today’s associate’s degree-seeking students say they want.<sup>16</sup> Note the patterns among students entering two-year colleges as freshmen:

- Within four years, fewer than one-third of all students entering two-year institutions in the A2S systems complete either a certificate or an associate’s degree or transfer to a four-year college within the system.
- For low-income families there is good news: Students who receive Pell Grants succeed at the same rate as other students—32 percent. For underrepresented minorities, however, the success rate is lower (24 percent) than for other students (38 percent).
- For underrepresented minorities, gaps exist on all measures of success. Minority students are less likely than other students to earn certificates, associate’s degrees, and transfer to baccalaureate-granting institutions (see Figure 6).<sup>17</sup>
- Pell Grant recipients, on the other hand, transfer into bachelor’s programs at higher rates than nonrecipients, 17 percent versus 14 percent.

The higher rates of success among students receiving Pell Grants suggest that these grants really make a difference in reducing obstacles to graduation. Because some students who do not receive Pell Grants in two-year colleges are actually from low-income families, these data suggest that A2S systems can increase their success rates by helping

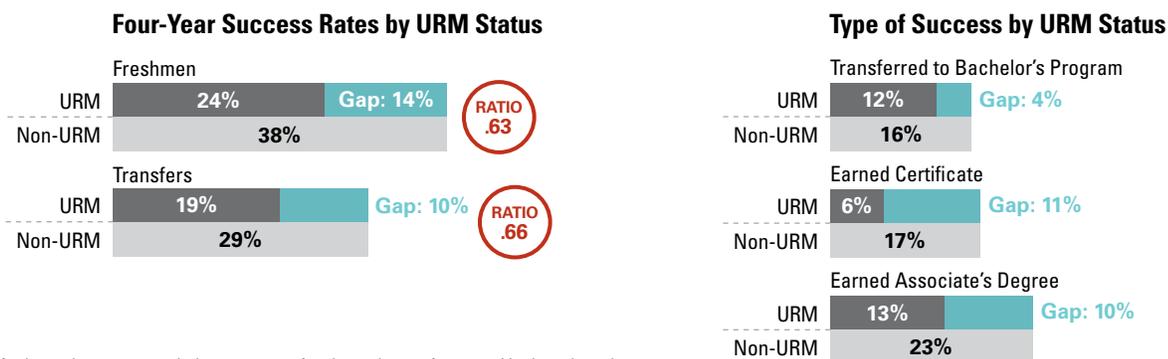
more of these students maximize their eligibility for federal aid—for example, by filling out the FAFSA form or by enrolling full-time.

Low transfer rates, especially among underrepresented minorities, are of particular concern to A2S leaders, though. Certainly, some of the students who originally were aiming at a bachelor’s degree may have refocused their energies on a certificate or a terminal associate’s degree program. Others may have completed their lower division work and transferred to a four-year college outside of an A2S system. But considering how few students are transferring and then looking at their success rates after they transfer, the results are worrisome. For instance:

- Only 12 percent of underrepresented minority students—and 16 percent of whites and Asians—transfer from two-year colleges into bachelor’s degree programs in the system within four years.
- Among minority students who transfer into bachelor’s programs, 55 percent earn degrees within six years of entry—compared with 61 percent of other transfers.<sup>18</sup>
- Taken together, we can roughly estimate that only 7 percent of minority students who enter two-year colleges in A2S systems earn bachelor’s degrees from system institutions within ten years of entering higher education.<sup>19</sup>

Unfortunately, the success rates are only slightly better for other students. That is why A2S leaders made increasing transfer rates in their systems one of the priorities in the A2S work plan. If students are counseled to start their path to the bachelor’s degree in two-year colleges, such an outcome indeed must be possible for more than a few.

**Figure 6: SUCCESS—Underrepresented Minority (URM) Students Succeed at Lower Rates Than Other Students in Two-Year Colleges in A2S Systems**



Note: For freshmen, the success rate is the percentage of students who transfer or transition into a baccalaureate program, earn a certificate, or earn an associate’s degree within the system (unduplicated). For transfer students, the success rate is the percentage who received an associate’s degree within the system.

## A Transfer Success Story: California State University System

Despite low transfer rates among community colleges nationwide, one system—the California State University (CSU)—is ensuring that students who begin at community colleges intending to earn a bachelor’s degree succeed in that goal. Eighty-four percent of CSU’s entering transfer students come from California Community Colleges (CCC),<sup>1</sup> and 66 percent graduate within six years, the second highest in the Initiative. Further, low-income and minority transfer students graduate at approximately the same rates as other students.

The high performance of CSU transfer students results from the system’s success in developing effective transfer policies through collaboration with CCC. In 2003, the CSU Board of Trustees launched the Campus Actions to Facilitate Graduation initiative and identified “improving the transfer process” as one of three primary ways to help students complete their bachelor’s degrees. As a result, CSU developed the Lower Division Transfer Pattern (LDTP), which defines statewide and campus-specific requirements for various majors. The program provides flexibility for CCC students who have not decided which CSU institution they would like to attend or chosen a field of study. A memorandum of understanding between CSU and CCC assures that any CSU institution will accept courses completed at a California Community College within an LDTP discipline.<sup>2</sup>

Clearly, CSU recognizes the essential role of community colleges in helping students complete lower level courses in convenient and low-cost ways. The LDTP policy, in conjunction with other statewide efforts to smooth the transfer process, has proved effective in California and offers potential solutions for other systems working to improve graduation rates for transfer students.

<sup>1</sup> “2009 Facts About CSU.” The California State University. May 5, 2009. [www.calstate.edu/PA/2009Facts/students.shtml](http://www.calstate.edu/PA/2009Facts/students.shtml).

<sup>2</sup> “The Lower Division Transfer Pattern, Academic Affairs.” California State University. October 17, 2008. [www.calstate.edu/acadaff/ldtp/index.shtml](http://www.calstate.edu/acadaff/ldtp/index.shtml).

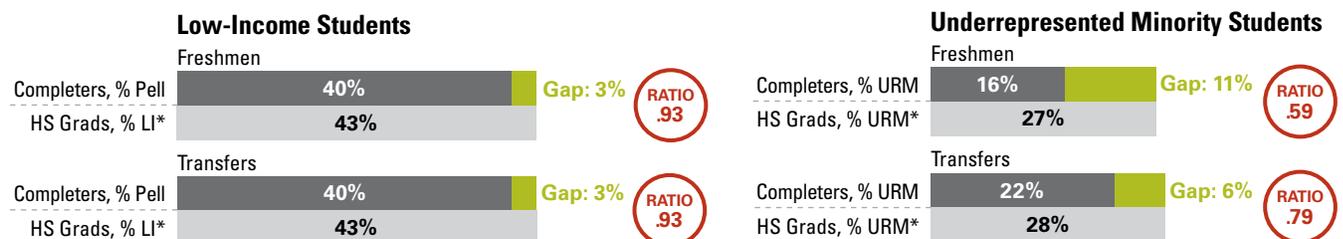
## ACCESS+SUCCESS: Losing the Access Advantage to Gaps in Success

In the end, any advantage for minority students in entrance rates to two-year colleges is lost to low success rates and to large success gaps compared with other students. As a result, the pool of transfers and graduates produced collectively by A2S systems is not as diverse as their states’ high school graduates (see Figure 7).

- Among completers who entered two-year colleges as freshmen, 16 percent were underrepresented minorities, compared with 27 percent of 18-34 year-old high school graduates.
- The gap for students from low-income families was smaller: 40 percent among completers, compared with 43 percent in the relevant high school graduate population.

Once again, it is clear that what institutions do matters. In several A2S systems—such as the community colleges in the University of Hawaii system—completers meet or even exceed the racial diversity of their states’ high school graduates, providing powerful examples of how to better serve this growing population.

**Figure 7: ACCESS+SUCCESS—Students Who Succeed in Two-Year Colleges in A2S Systems Are Not as Economically and Racially Diverse as High School Graduates in Their States**



\*Data are three-year averages drawn from the “2000-02 American Community Survey.” Freshmen and transfer students are compared with 18-34 year-old high school graduates without associate’s degrees in the state. Among high school graduates, low-income is defined as family income below 200 percent of the federal poverty level, and underrepresented minorities are African Americans, Latinos, and Native Americans.

Note: This cohort entered in 2001 and does not match the 2005-06 cohort tracked in the Access metric. The metric compares the percentage of students who succeeded within four years who were Pell (or URM) with the percentage of high school graduates who were low-income (or URM) in the state population when the cohort entered the system.

## THE ROAD AHEAD

Taken as a whole, the A2S baseline data provide a detailed look at what happens to different groups of young people in public higher education. The picture that emerges is far richer than is possible using existing national databases. On the whole, though, these data reinforce what system leaders already know: (1) that overall college-completion rates are stagnating and (2) that far too few low-income and minority students are entering and completing college.

In fact, if A2S systems already had succeeded in cutting their access and success gaps in half for students who entered in the baseline cohorts, their institutions would have enrolled and graduated an additional 16,500 low-income and minority students—an increase of 20 percent. Conservatively, the A2S systems would graduate approximately 250,000 more low-income and minority students by 2015 if their access and success gaps already were cut in half—more if they also increased the number of students they enrolled overall and improved graduation rates for all students.<sup>20</sup>

That would mean a lot of new graduates with all of the opportunities and possibilities inherent in a college degree. Considering that the A2S systems confer about 20 percent of bachelor's and 10 percent of associate's degrees nationally each year, that also means that A2S systems not only have the power to make a significant difference in the lives of many young Americans but also a significant difference in our country's future.

Reaching goals like this can seem daunting. And the challenge of the hard, focused work that meeting these goals will entail certainly should not be underestimated. That said, if responsibility is spread among the more than 300 campuses involved in this Initiative, the workload seems far more manageable. To reach Initiative goals with the baseline cohort, for example, each participating campus only would have needed to enroll and graduate about 50 more low-income and minority students.

To reach President Obama's goal of regaining our position as the most educated workforce in the world, America's colleges and universities will have to do all this and more. They will have to increase enrollments, narrow their access and success gaps, and improve success rates for *all* of their students.

But higher education cannot do this alone. Leaders in public higher education, in particular, need predictable financial support from the federal and state governments—support that has eroded over the past decade and plummeted as a result of the current economic crisis. Without significant reinvestment in higher education, institutions

will continue to have to both increase tuition and cut core programs, much to the detriment of students. College was important enough to justify public investments for previous generations; it is even more important now. But other spending imperatives are crowding out spending for higher education—a downward spiral that policymakers must address even as system and institutional leaders get on with the hard work of closing attainment gaps.

So while colleges and universities cannot close the gaps alone, the Access to Success systems are prepared to take the lead and chart the necessary path for others to follow. It will not be easy, but these system leaders have taken on the challenge because the cost of not doing so is too high—for all of us.

## What Next for A2S?

A2S systems are drafting their own plans to cut achievement gaps and increase degree production through strategies attuned to the needs of their campuses and students. For 2009-10, A2S systems are joining forces with NASH and The Education Trust to pursue eight lines of work to (1) build system capacity to lead change and (2) engage and mobilize campuses around critical issues. The systems-change work focuses on assessing and building capacity, managing and leveraging costs and resources, and using data at the system level to move campuses toward A2S goals. The campus-change work focuses on key issue areas, such as using enrollment management to increase campus diversity, redesigning developmental math courses, and improving degree completion. Thus, systems engage with experts in these fields and share promising practices with one another. Future reports of the A2S Initiative will share stories from successful change work taking place in state systems.

---

**Authors:** Jennifer Engle is assistant director of higher education, and Mary Lynch is research and policy analyst at The Education Trust.

**Education Trust Staff:** Kati Haycock, Margarita Benitez, Christina Theokas, Dan Levin, Kajal Nayyar, Dina Faticone, Sally Chan, Griselda Macias

**A2S Technical Advisory Committee:** Marsha Hirano-Nakanishi, John Porter, David Crook, Gayle Fink, Craig Schoenecker, Dan Cohen-Vogel

## ENDNOTES

- 1 "Measuring Up." San Jose: National Center for Public Policy and Higher Education, 2008. <http://measuringup2008.highereducation.org/print/NCPPEMUNationalRpt.pdf>.
- 2 Kelly, Patrick. "As America Becomes More Diverse: The Impact of State Higher Education Inequality." National Center for Higher Education Management Systems, November 2005. Available at [www.nchems.org/pubs/detail.php?id=86](http://www.nchems.org/pubs/detail.php?id=86).
- 3 KewalRamani, Angelina, Lauren Gilbertson, Mary Ann Fox, and Stephen Provasnik. "Status and Trends in the Education of Racial and Ethnic Minorities" (NCES 2007-039). Washington, D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, 2007. [http://nces.ed.gov/pubs2007/2007039\\_1.pdf](http://nces.ed.gov/pubs2007/2007039_1.pdf).
- 4 "Current Population Survey, October Supplement, 1972-2006." Washington, D.C.: U.S. Census Bureau, 2006. <http://www.census.gov/cps>.
- 5 Knapp, Laura G., Janice E. Kelly-Reid, and Scott A. Ginder. "Enrollment in Postsecondary Institutions, Fall 2007; Graduation Rates, 2001 and 2004 Cohorts; and Financial Statistics, Fiscal Year 2007" (NCES 2009-155). Washington, D.C.: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, 2009. <http://nces.ed.gov/pubs2009/2009155.pdf>.
- 6 "Adding It Up: State Challenges for Increasing College Access and Success." Boston: National Center for Higher Education Management Systems and Jobs for the Future for Making Opportunity Affordable, 2007. [http://makingopportunityaffordable.org/files/Adding\\_It\\_Up.pdf](http://makingopportunityaffordable.org/files/Adding_It_Up.pdf).
- 7 The numbers presented in this report are Initiative-wide averages, which represent the average access and success rates and ratios across all students in the Initiative. In effect, the entire Initiative is treated as one system. For example, the Initiative-wide graduation rate is calculated by dividing the total number of students across all systems who graduated within six years by the total number of students who entered across all systems in fall 1999. Further, because systems joined the A2S Initiative at various points between 2007 and the publication of this report, the averages reported here include only systems that submitted complete datasets before June 2009. As a result, the University System of Ohio, Pennsylvania State System of Higher Education, Rhode Island Board of Governors for Higher Education, South Dakota Board of Regents, Southern University A&M System, and University of Wisconsin System are not included in the average numbers in this baseline report. Also, the Louisiana Board of Regents is part of the Initiative but does not submit data for its systems; the systems submit independently. Baseline data for systems that have submitted data since June 2009 are available in system briefs, and these systems will be included in future Initiative-wide analyses.
- 8 Based on Ed Trust analysis of BPS:96/01, BPS:04/06, and NPSAS:08.
- 9 Here, and throughout this report, the University of Puerto Rico System is omitted from the Initiative-wide averages for underrepresented minority (URM) Access and Success because they do not have an appropriate non-URM comparison group.
- 10 All calculations for underrepresented minority students exclude students whose race is unknown or "other" as well as nonresident aliens because they cannot be appropriately assigned as URMs or non-URMs. Nonresident aliens also are excluded from all calculations for low-income students because they are not eligible for Pell Grants, our proxy for income status.
- 11 Transfers are students who previously attended a postsecondary institution outside the system from which their current institution accepted college credits as well as students who transitioned from an associate-level program to a baccalaureate-level program anywhere within the system.
- 12 Refer to the Technical Appendix for a more detailed discussion on the use of ratios in the A2S metrics.
- 13 While the six-year graduation rates of students who enter as transfers are higher than those of freshmen across the Initiative, it is important to note that students who enter as freshmen and persist to their junior year (a more comparable group to transfers) are 10 percent to 20 percent more likely to graduate than students who enter as transfers, which signals a major loss of potential graduates for systems via the transfer process.
- 14 The metrics for two-year colleges in A2S analyze a cohort of students pursuing associate's degrees. A large majority of these students attend two-year community colleges in A2S systems, but some are enrolled in associate's-level programs at four-year institutions. For simplicity, this report discusses access and success in terms of four-year and two-year colleges.
- 15 Freshmen and transfer students are compared with 18-34 year-old high school graduates without associate's degrees in A2S states.
- 16 Based on Ed Trust analysis of the National Center for Education Statistics (NCES) "Beginning Postsecondary Education Study" (BPS:96/01 and BPS:04/06).
- 17 The rates for each type of success do not sum to the overall success rates because the overall success rates represent unduplicated counts. For example, if a student earned an associate's degree and transferred to a bachelor's program, that student would be counted once in the overall success rate calculation in the left chart in Figure 6 but would be part of both the associate's degree and the transfer to bachelor's program success categories in the right chart in Figure 6.
- 18 The students who transfer into bachelor's programs referred to here include students who transfer from two-year colleges within the system, students who transition from associate's to bachelor's degree programs in the same institution within the system, and students who transfer in from two-year and four-year colleges outside of the system. As a result, the graduation rate for students who transfer into bachelor's programs used here is only an estimate of the graduation rates of students who start in associate's degree programs in the system since they cannot be separated from other transfer students in the A2S data.
- 19 The 7 percent of students who enter associate's programs and eventually earn bachelor's degrees in the system is an *estimate only*. It is calculated by multiplying the percentage of freshman students who transfer out of associate's and into bachelor's programs in the system within four years by the percentage of students who transfer into bachelor's programs and graduate within six years. The A2S data do not longitudinally track the progress of individual students who transfer out of associate's programs in the systems.
- 20 Using the baseline cohort data, we estimated that A2S systems would increase the number of Pell graduates by 17 percent and the number of URM graduates by 23 percent if they closed both their Access and Success gaps. If we apply these growth rates to the number of degrees conferred by our systems to these populations, they would have awarded approximately 23,400 more Pell and 19,210 URM associate's and bachelor's degrees—or about 32,000 more in total given the overlap between the populations. Conservatively, that would total about 250,000 more low-income and URM degree recipients over the course of the Initiative through 2015, assuming no enrollment growth or overall improvement in completion rates.

## **ABOUT THE NATIONAL ASSOCIATION OF SYSTEM HEADS**

The National Association of System Heads (NASH) is a membership organization of chief executive officers of the 52 public higher education systems in 38 states and Puerto Rico that works to improve the governance of public higher education systems. Its member systems enroll the lion's share of college students nationwide—about 70 percent of all four-year college undergraduates.

## **ABOUT THE EDUCATION TRUST**

The Education Trust promotes high academic achievement for all students at all levels—pre-kindergarten through college. We work alongside parents, educators, and community and business leaders across the country in transforming schools and colleges into institutions that serve all students well. Lessons learned in these efforts, together with unflinching data analyses, shape our state and national policy agendas. Our goal is to close the gaps in opportunity and achievement that consign far too many young people—especially those who are black, Latino, American Indian, or from low-income families—to lives on the margins of the American mainstream.

NASH and The Education Trust are grateful to the Bill & Melinda Gates Foundation and Lumina Foundation for Education for their generous support of the Access to Success Initiative. The views expressed in this report do not necessarily represent those of either organization, its officers, or its employees.



# Access to Success Data Metrics

Technical Appendix



# Access to Success Data Metrics Technical Appendix

## ACCESS METRICS

The Access metrics compare the economic and racial diversity of the systems' entering student population with that of their state. These metrics are calculated separately for (1) associate's degree-seeking cohorts and bachelor's degree-seeking cohorts<sup>1</sup> and (2) freshman and transfer students.<sup>2</sup> Full-time and part-time students are combined in all Access metrics.

% of Entering Undergraduates Who Are Pell Recipients  
% of High School Graduates in State Who Are Low-Income

% of Entering Undergraduates Who Are URMs  
% of High School Graduates in State Who are URMs

For the income metrics, the economic diversity of the entering class is measured by the percentage of students who were Pell Grant recipients at entry in 2005-06. While

using Pell Grant receipt as a proxy for low-income status has its limitations, which we'll discuss later, it is the only income measure that is widely available across all participating systems at this time and represents an improvement over existing information since most institutions and systems do not currently report any Access or Success data by income or financial-aid status.

The economic diversity of the state population is measured by the percentage of high school graduates who were low-income—or below 200 percent of the federal poverty level—in 2005. In 2005, a family of four living at 200 percent of the poverty level had an annual income of about \$40,000; an individual at 200 percent of the poverty level had an annual income of about \$20,000.<sup>3</sup> These figures are the approximate cut-offs for Pell eligibility for dependent and independent students. The Access metric compares the percentage of entering students who were low-income in

	BACHELOR'S COHORTS		ASSOCIATE'S COHORTS	
	Low-Income	URM	Low-Income	URM
<b>Freshmen</b>	High school graduates ages 18-24 without bachelor's degrees in the state who were low-income (below 200% of the poverty level), 2005	High school graduates ages 18-24 without bachelor's degrees in the state who were URM, 2005	High school graduates ages 18-34 without associate's degrees in the state who were low-income (below 200% of the poverty level), 2005	High school graduates ages 18-34 without associate's degrees in the state who were URM, 2005
<b>Transfer</b>	High school graduates ages 18-34 without bachelor's degrees in the state who were low-income (below 200% of the poverty level), 2005	High school graduates ages 18-34 without bachelor's degrees in the state who were URM, 2005	High school graduates ages 18-34 without associate's degrees in the state who were low-income (below 200% of the poverty level), 2005	High school graduates ages 18-34 without associate's degrees in the state who were URM, 2005

Note: Data are three-year averages drawn from the U.S. Census Bureau's "2003-05 American Community Survey."

2005-06 with the percentage of high school graduates in the state who were low-income in 2005.

For the race metrics, the percentage of entering students who were underrepresented minorities (URMs) in 2005-06 is compared with the percentage of high school graduates in the state who were URMs. In our metrics, URMs include African American, Latino, and American Indian populations.<sup>4</sup> Students with “race unknown/other” are excluded from all race metrics because they cannot be classified as

URM or non-URM. Students who are nonresident aliens are excluded from all metrics because they cannot be classified accurately in terms of race and are not eligible for federal financial aid.

We use data from the Census Bureau’s “2000 Census” and the “American Community Survey” for our comparison data—or as the denominator—for the Access metrics. We use an age range of 18-24 year-olds for first-time bachelor’s degree-seeking students and 18-34 year-olds for all associ-

## Selecting Appropriate Comparisons for the Access and Access+Success Metrics

One of the most useful aspects of the A2S metrics—comparing the diversity of the systems’ incoming students and completers to state demographics—is also one of the most challenging in terms of quality data. Here we offer a brief description of the process we used to select the most appropriate comparisons—or denominators—for the Access and Access+Success metrics, including our choices among imperfect data sources and definitions. While limitations with the data remain, this is our best attempt to make use of existing sources for the important purpose of setting goals to improve access to and through higher education for low-income and underrepresented minority students.

1. Our parameters for choosing appropriate data sources and definitions from participating systems included (a) only using the demographics of high school graduates as the basis for comparison so as not to hold systems responsible for low high school graduation rates in their state, particularly among low-income and minority populations, and (b) using an expanded age range for students entering as transfers and students entering associate’s degree programs in order to reflect the wider pool from which these groups draw.
2. First, we considered using the NCES Common Core of Data, which provides data on a state’s high school graduating class each year, for the Access metrics for freshmen. This source is limited in several ways, however: It (a) does not include the income level of high school graduates, (b) does not include “race unknown/other” category as do IPEDS/A2S data, (c) includes limited information about GED recipients, (d) does not include private school students, and (e) does not account for students who do not immediately enroll in postsecondary education.
3. With our other available option, the “American Community Survey” data from the U.S. Census Bureau, we considered using High School Graduates With No College for the Access metric for freshmen. While this appears to better match IPEDS definitions for freshmen (no prior college), we concluded that this is not the fairest comparison for systems. To use High School Graduates With No College would penalize systems by comparing the demographics of the population that did get access to the population that did not get access—rather than

to the population that was available for access, particularly since we are estimating the diversity of the young adult population within an age range.

4. With the Census data, we also considered using all high school graduates regardless of educational attainment level to get a population estimate of race and income levels in the state population within our age ranges. This definition presented two major problems: (a) for the low-income Access metrics and (b) for the associate’s degree and transfer metrics.
  - a. For the low-income metrics,<sup>8</sup> we recognized that income levels increase as a result of degree attainment. Therefore, using all high school graduates, including those who had already attained degrees, would inaccurately lower the estimate of the college-eligible low-income population in the state.
  - b. For the associate’s and transfer metrics, we are using an 18-34 year-old age range at the request of the A2S two-year colleges. In this age range, we concluded that the demographics of the entire high school graduate population did not accurately reflect the target population of the two-year colleges, which is more narrowly focused on the young adult population that has not yet gained access to postsecondary education and/or earned a degree.
5. In order to be consistent across the different categories of students (e.g. freshmen/transfer, minority/low-income) and institutions (e.g. two-year and four-year), we defined our comparison groups as follows:
  - a. For freshmen in bachelor’s programs, we use 18-24 year-olds who have not yet earned bachelor’s degrees.
  - b. For transfers in bachelor’s programs, we use 18-34 year-olds who have not yet earned bachelor’s degrees.
  - c. For freshmen and transfers in associate’s programs, we use 18-34 year-olds who have not yet earned associate’s degrees.

The Census data definitions we used for the Access metrics are intended to be estimates of the racial and economic diversity of the population in a state that is eligible to gain access to the degree being sought (e.g. associate’s or bachelor’s degrees), not the actual pool of potential applicants. In short, our metrics are a refined population estimate, not an applicant pool.

ate's degree-seeking and transfer students to reflect the different populations from which these entering classes draw.<sup>5</sup> We limit our comparison to high school graduates only so as not to hold university systems accountable for low high school graduation rates in their states.

An Access ratio below 1 means that the system's entering class is not as economically or racially diverse as its state's high school graduates. For example, a system with an access ratio of .5 for underrepresented students is only enrolling 50 percent of the URMs it could be serving if its entering class was as racially diverse as the state's population. A ratio of 1 indicates equity, meaning the diversity of the entering student population either matches or exceeds the diversity of the state population. All ratios are capped at 1.

Expressing the Access metric as a ratio puts the size of the gap in context. For instance, a -4 percent Access gap in a state such as Minnesota, where 9 percent of 18-24 year-old high school graduates are URMs, is much more challenging to close (ratio = .44) than a -4 percent gap in a state such as California where 48 percent of high school graduates are URMs (ratio = .92). Using an Access ratio also accounts for the rapid growth in the low-income and minority populations in many states by ensuring that systems are setting goals to enroll more underserved students not only to close current access gaps but to keep up with changing demographics in their states as well.

### Using Ratios and Ratio Goals in the A2S Metrics

Drawing on the work of Estela Bensimon and her colleagues as well as others,<sup>6</sup> we calculate systems' access and success gaps and goals as ratios for purposes of tracking their improvement over the course of the Initiative. In general terms:

**RATIO** =  $\frac{\text{Representation or performance of target group}}{\text{Representation or performance of reference group}}$

A ratio below 1 indicates that the target group is lagging behind the reference group. A ratio of 1 indicates equity between the target and the reference group. All ratios are capped at 1 in the A2S metrics.

**RATIO GOAL** =  $\text{Ratio} + \frac{(1 - \text{Ratio})}{2}$

The ratio goal is (1) the difference between a system's current ratio and 1, which would indicate equity, (2) divided by 2 to cut the gap in half, and (3) added to the system's current ratio to indicate the goal for 2015.

## SUCCESS METRICS

The Success metrics aim to measure how the success outcomes of low-income and minority students compare with their peers' in the A2S systems. These metrics are calculated separately for (1) associate's degree cohorts and bachelor's degree cohorts and (2) freshman and transfer students. Full-time and part-time students are combined in all Success metrics. All Success metrics measure success anywhere within the system, not at the initial institution of entry only.

For **bachelor's degree cohorts**, the metrics compare the percentage of Pell (or URM) at entry students from the fall 1999 cohort who obtained bachelor's degrees in the system within six years (by summer 2005) with the percentage of non-Pell (or non-URM) at entry students who obtained bachelor's degrees within six years.<sup>7</sup>

$$\frac{\% \text{ of Pell Recipients (at Entry) From Cohort Who Earn Bachelor's Degrees Within Six Years}}{\% \text{ of Non-Pell Recipients (at Entry) From Cohort Who Earn Bachelor's Degrees Within Six Years}}$$

$$\frac{\% \text{ of URM Students From Cohort Who Earn Bachelor's Degrees Within Six Years}}{\% \text{ of Non-URM Students From Cohort Who Earn Bachelor's Degrees Within Six Years}}$$

For **associate's degree cohorts**, the metrics compare the percentage of Pell (or URM) at entry students from the fall 2001 cohort who were successful in the system within four years (by summer 2005) with the percentage of non-Pell (or non-URM) at entry students who were successful within four years.

$$\frac{\% \text{ of Pell Recipients (at Entry) Who Are Successful Within Four Years}}{\% \text{ of Non-Pell Recipients (at Entry) Who Are Successful Within Four Years}}$$

$$\frac{\% \text{ of URM Students Who Are Successful Within Four Years}}{\% \text{ of Non-URM Students Who Are Successful Within Four Years}}$$

For freshmen, the success rate is an unduplicated count of the percentage of students who transfer/transition into bachelor's programs within the system, earn certificates, or earn associate's degrees within the system. For transfer stu-

## Using Pell Grant Receipt as a Proxy for Income Status in the A2S Metrics

The Access to Success Initiative is committed to closing enrollment and achievement gaps for underrepresented minority and low-income students in public higher education. Although data on enrollment and success rates now are regularly published by race and ethnicity, no such data currently are widely published by income status. In our metrics, we use whether students receive Pell Grants as our indicator of income status because it is the only income measure that is widely available across all participating systems. It does, however, have its limitations, which are discussed here.

### Access

In our Access metrics, we measure the economic diversity of our systems' entering classes by comparing the percentage of students who receive Pell Grants at entry to the percentage of high school graduates living below 200 percent of the federal poverty level in the state. Using Pell as a proxy in the Access metrics may overstate the size of the access gap in some systems because of factors that affect students' eligibility for Pell Grants. For instance, Pell Grant eligibility is based in part on cost of attendance, which is lower in less expensive institutions such as community colleges and is lower for students attending part-time.

Further, a number of Pell-eligible students do not apply for financial aid because they lack information about and/or experience with the complicated financial aid application process. In fact, in 2003-04 only 59 percent of students filed a Free Application for Federal Student Aid (FAFSA), the form required for Pell Grant eligibility. Even among students most in need of aid, the rates of FAFSA completion are low, with more than 20 percent of lowest income students not applying for financial aid. The American Council on Education estimates that an additional 1.5 million students likely would have received a Pell Grant in 2003-04 had they applied for financial aid.<sup>9</sup>

Using 2008 National Postsecondary Student Aid Study data, however, we found that the percentage of entering students with Pell Grants was the same as the percentage of students with incomes under 200 percent of the federal poverty level among bachelor's degree-seeking students—about 26 percent. We chose 200 percent poverty level as our cut-off because it equates to about \$40,000 for a family of four, which is the approximate cut-off for Pell eligibility. Among associate's degree-seeking students nationally, we found that the percentage of entering students who were Pell recipients was about 29 percent, compared with 43 percent of students who were below 200 percent of the poverty level, undercounting by 14 percent the proportion of low-income students enrolled.

### Success

In our Success metrics, we track and compare the success of students who received Pell Grants at entry to students who did not receive Pell Grants when they entered the system. Unlike with the Access metrics, using Pell status as a proxy for income in the Success metrics may actually understate the success rate gap for two reasons. First, some nonrecipients are low-income but don't receive aid as noted above. Because these needy students without aid are considered nonrecipients, they may lower the completion rate of the comparison group and understate the gap. Second, there is likely a positive impact for low-income students who receive Pell Grants, because getting the grant helps them stay in college, which also narrows the graduation gap with nonrecipients.

In fact, we found in our transfer and associate's cohorts that Pell students often have higher completion rates than nonrecipients. However, to the extent that a number of the nonrecipients are low-income, the data showing higher success rates for Pell recipients here might be evidence that our systems can increase their success rates overall by helping more of their low-income students maximize their eligibility for federal aid by filling out the FAFSA and/or by enrolling full-time.

Despite the limitations, the success rates for Pell recipients reported in our metrics are the first set of national benchmarks on the performance of low-income students at public two-year and four-year colleges that will be available annually. To date, the only nationally representative data on the success rates of low-income students comes from sample studies conducted by the National Center for Education Statistics (NCES) such as the Beginning Postsecondary Students (BPS) study and the National Education Longitudinal Study (NELS). While this information has been invaluable in understanding the gaps in success between low-income students and their peers, the studies are not conducted annually and are not available at the institution, system, or state level. It is our hope that the data generated here will move the colleges and universities in our systems—and elsewhere—forward and faster in terms of closing achievement gaps for low-income students.

### Degrees Conferred

In the A2S data, we use whether students received Pell Grants at any time during their undergraduate tenure as an indication of low-income status in the degrees-conferred measure. This definition allows systems to earn additional credit for serving low-income students who might not be counted if using Pell receipt at entry or exit only. Due to data-quality issues regarding tracking Pell Grant recipients over time, we only report this number descriptively and do not construct a metric because there is not an appropriate denominator with which to compare the number.

dents, the success rate only measures whether students earn associate’s degrees within the system.

A success ratio below 1 means that Pell (or URM) students are lagging behind their peers in terms of achieving successful outcomes in the system. For example, a ratio of .70 indicates that Pell (or URM) students are succeeding at 70 percent the rate of non-Pell (or non-URM) students. A ratio of 1 indicates equity—that Pell (or URM) students are succeeding at the same or higher rates than their peers.

Again, using ratios puts the size of the systems’ success gaps in context. For instance, a -10 percent gap is more challenging in a system with a 20 percent overall completion rate than a system with a 60 percent completion rate. Using ratios to measure systems’ progress also ensures that the success rates of their low-income and minority students track along with their peers. This means that the success rates of Pell and URM students must increase faster than any improvement among their peers in order to close achievement gaps.

## ACCESS+SUCCESS METRICS

The Access+Success metrics are an indicator of how well the systems’ completers reflect the diversity of their states’ high school graduate populations. These metrics are calculated separately for (1) associate’s degree cohorts and bachelor’s degree cohorts and (2) freshman and transfer students. Full-time and part-time students are combined in all Access+Success metrics.

For **bachelor’s degree cohorts**, the metrics compare the percentage of students who earned bachelor’s degrees in the system within six years from the fall 1999 cohort who were Pell (or URM) at entry with the percentage of high school

graduates who were low-income (or URM) in 1999 when the cohort entered the system.

$$\frac{\% \text{ of Students Who Earned Bachelor's Degrees From the Cohort Within Six Years Who Were Pell Recipients (at Entry)}}{\% \text{ of High School Graduates in the State Who Were Low-Income Six Years Prior}}$$

$$\frac{\% \text{ of Students Who Earned Bachelor's Degrees From the Cohort Within Six Years Who Were URM Students}}{\% \text{ of High School Graduates in the State Who Were URM Six Years Prior}}$$

For **associate’s degree cohorts**, the metrics compare the percentage of students who were successful in the system from the fall 2001 cohort within four years who were Pell (or URM) at entry with the percentage of high school graduates who were low-income (or URM) in 2001 when the cohort entered the system.

$$\frac{\% \text{ of Students Who Succeeded from the Cohort Within Four Years Who Were Pell Recipients (at Entry)}}{\% \text{ of High School Graduates in the State Who Were Low-Income Four Years Prior}}$$

$$\frac{\% \text{ of Students Who Succeeded from the Cohort Within Four Years Who Were URM Students}}{\% \text{ of High School Graduates in the State Who Were URM Four Years Prior}}$$

For first-time associate’s students, the success rate is an unduplicated count of the percentage of students who transfer/transition into bachelor’s programs within the sys-

	BACHELOR'S COHORTS		ASSOCIATE'S COHORTS	
	Low-Income	URM	Low-Income	URM
<b>Freshmen</b>	High school graduates ages 18-24 without bachelor's degrees in the state who were low-income (below 200% of the poverty level), 1999	High school graduates ages 18-24 without bachelor's degrees in the state who were URM, 1999	High school graduates ages 18-34 without associate's degrees in the state who were low-income (below 200% of the poverty level), 2001	High school graduates ages 18-34 without associate's degrees in the state who were URM, 2001
<b>Transfer</b>	High school graduates ages 18-34 without bachelor's degrees in the state who were low-income (below 200% of the poverty level), 1999	High school graduates ages 18-34 without bachelor's degrees in the state who were URM, 1999	High school graduates ages 18-34 without associate's degrees in the state who were low-income (below 200% of the poverty level), 2001	High school graduates ages 18-34 without associate's degrees in the state who were URM, 2001

Note: Data are three-year averages drawn from the U.S. Census Bureau's 2000-2002 "American Community Survey." These data were used as a proxy for the 1999 data because data were not available before 2000.

tem, earn certificates, or earn associate's degrees within the system. For transfer students, the success rate only measures whether students earn associate's degrees within the system.

As with the Access metrics, we use data from the Census Bureau's 2000 Census and the "American Community Survey" for our comparison data—or as the denominator—for the Access+Success metrics.

An Access+Success ratio below 1 means that a system's completers (graduates and/or transfers) do not adequately reflect the economic or racial diversity of the states' high school graduates. A ratio of 1 indicates equity, meaning the diversity of the system's completers either matches or exceeds the diversity of the state's population. For instance, a system with an Access+Success ratio of .25 is only graduating one-quarter of the Pell (or URM) students it could be if it closed both its Access and Success gaps.

## ENDNOTES

- <sup>1</sup> Our metrics focus on cohorts of associate's degree-seeking students and bachelor's degree-seeking students within the systems rather than two-year and four-year institutions since some of the institutions in our initiative serve both associate's and bachelor's cohorts. However, in most cases, associate's degree-seeking students are attending two-year institutions and all bachelor's degree-seeking students are attending public four-year institutions.
- <sup>2</sup> Freshmen were not previously enrolled in a postsecondary institution inside or outside of the system (with the exception of dual enrollment high school students). Transfer students include those who previously attended a postsecondary institution outside of the system from which the current institution accepted college credits as well as those who moved from a baccalaureate-level to an associate-level program (or vice versa) anywhere within the system.
- <sup>3</sup> U.S. Census Bureau (2005). Poverty Thresholds, 2005. <http://www.census.gov/hhes/www/poverty/threshld/thresh05.html>
- <sup>4</sup> In Hawaii, Native Hawaiians and Filipinos are also included as URM's.
- <sup>5</sup> The age ranges were selected because they cover about 90 percent of entering students in their respective categories (e.g. 92 percent of bachelor's degree-seeking students began postsecondary education between the ages of 18 and 24, and 92 percent of associate's degree-seeking students began postsecondary education between the ages of 18 and 34) according to EdTrust analysis of NPSAS:08.
- <sup>6</sup> Bensimon, E., Hao, L., Bustillos, L.T. (2003). Measuring the State of Equity in Higher Education. Paper presented at the Harvard Civil Rights and UC Conference on Expanding Opportunity in Higher Education: California and the Nation. Price, D. V. and Wohlford, J.K. (2005). Equity in Educational Attainment: Racial, Ethnic and Gender Inequality in the Fifty States. In Higher Education and the Color Line: College Access, Racial Equity, and Social Change, Eds. Gary Orfield, Patricia Marin and Catherine L. Horn. Harvard University.
- <sup>7</sup> The success metrics track outcomes for both freshman and transfer students to the same number of years, six for bachelor's cohorts and four for associate's cohorts, because there was no minimum credit amount at entry for transfer students that was appropriate to set across all systems. Because the metrics include both students who transfer into the cohort with no or few credits and students who transfer in with a degree, transfer students are tracked for the same amount of time as freshmen from their entry into the system. As a

result, transfer success rates tend to be higher than first-time success rates due to the longer timeframe from initial entry to postsecondary education elsewhere through their completion in the system. However, freshmen who persist beyond the first year generally have higher success rates than transfer students.

- <sup>8</sup> We recognize that there are several limitations to the Census poverty data, particularly with regards to estimated poverty levels among young adult populations. In brief, there are two issues of concern: (1) Some populations are excluded from poverty estimates, including most students living in college dorms, and (2) some dependent college students (meaning financially dependent on their parents) may be considered independent for purposes of Census sampling (meaning their income is counted separately from the parents) if they do not live at home. Because higher income students may be more likely to live in college dorms and less likely to live at home than lower income students, it is possible that the percentage of young adults living in poverty may be inflated due to these sampling problems. We chose to use the Census data despite these limitations because the percentage of young adults living below 200 percent of the federal poverty level is (1) within three percentage points of the percentage of children living below 200 percent poverty in more than half of the A2S states, indicating that the sampling error is not a major problem in these states; (2) is slightly lower than the percentage of children below 200 percent poverty in most of the rest of the states, which was expected since the former excludes young adults who did not graduate from high school while the latter does not; and (3) was higher in only three states, which could be an indication of sampling error since some of these states are small but could also be explained by other factors such as low median incomes in those states or in-migration among lower income populations. We also chose to use the young-adult estimates because more than half of Pell Grant recipients are financially independent from their parents, and a considerable number of dependent Pell Grant recipients live at home with their parents, which means they would not be affected by the sampling issues. Finally, we would not have been able to accommodate the systems' parameters for using only high school graduates and different age ranges in the comparison data if we had used the percentage of children living below 200 percent poverty instead of the percentage of young adults.
- <sup>9</sup> "Missed Opportunities Revisited: New Information on Students Who Do Not Apply for Financial Aid." ACE Center for Policy Analysis. American Council on Education. February 2006. Available at [www.acenet.edu/AM/Template.cfm?Section=Search&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=14244](http://www.acenet.edu/AM/Template.cfm?Section=Search&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=14244).

## **ABOUT THE NATIONAL ASSOCIATION OF SYSTEM HEADS**

The National Association of System Heads (NASH) is a membership organization of chief executive officers of the 52 public higher education systems in 38 states and Puerto Rico that works to improve the governance of public higher education systems. Its member systems enroll the lion's share of college students nationwide—about 70 percent of all four-year college undergraduates.

## **ABOUT THE EDUCATION TRUST**

The Education Trust promotes high academic achievement for all students at all levels—pre-kindergarten through college. We work alongside parents, educators, and community and business leaders across the country in transforming schools and colleges into institutions that serve all students well. Lessons learned in these efforts, together with unflinching data analyses, shape our state and national policy agendas. Our goal is to close the gaps in opportunity and achievement that consign far too many young people—especially those who are black, Latino, American Indian, or from low-income families—to lives on the margins of the American mainstream.

**NASH**  
NATIONAL ASSOCIATION OF SYSTEM HEADS



---

**The Education Trust**

1814 FRANKLIN ST., SUITE 220 OAKLAND, CALIF. 94612  
T 510/465-6444 F 510/465-0589 WWW.EDTRUST.ORG