Fulfilling the potential of US higher education

Postsecondary education leads to better jobs, greater economic mobility, and more. Can higher ed institutions extend that promise to millions more people?

This report is a collaborative effort by Diana Gonzalez, Jonathan Law, Fiyinfolu Oladiran, Ted Rounsaville, Saurabh Sanghvi, and Doug Scott, representing views from McKinsey’s Education Practice.
The US higher education system faces crises on multiple fronts. Enrollment growth is slowing, student debt is at an all-time high, the sector is not delivering on its promise of greater equity, and its reputation is declining in the opinion of many Americans. We believe there is a challenging but clear solution. Higher ed must remain focused on its core mission of educating learners but evolve its practices to expand services to more Americans. Our analysis suggests that the sector should aspire to a bold goal: graduate ten million more students than currently projected over the next 20 years. This goal is ambitious, but the data show there is a pathway to achieving it in a way that successfully addresses the sector’s challenges rather than exacerbating them.

Higher education in the United States remains a powerful enabler of economic mobility and individual empowerment. The sector consists of more than 6,400 institutions, which annually serve 16 million undergraduate students and award three million bachelor’s and associate’s degrees. Postsecondary education leads to better employment outcomes, greater socioeconomic mobility, and nonmonetary benefits including improved health and increased civic engagement. How might institutions extend that promise to millions more people over the next two decades?

The US higher education system is facing increased scrutiny. College costs are at an all-time high, and Americans collectively owe an unprecedented $1.7 trillion in student loans as of August 2022. At the same time, public confidence in the value of a college education is declining. Only half of Americans say the economic benefits of a college degree outweigh the costs, according to a 2022 survey from the nonpartisan research organization Public Agenda. Nearly two in five college graduates regret their major. In a recent survey from the think tank New America, only 36 percent of Gen Zers (born after 1996) and 45 percent of millennials (born 1981 to 1996) agree that a high-quality higher education is affordable. Just 37 percent of Americans think higher education is fine as it is.

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2 Jennifer Ma, Matea Pender, and Meredith Welch, Education pays 2019: The benefits for individuals and society, College Board, January 2020.
3 “Student loans owned and securitized,” Board of Governors of the Federal Reserve System (US), retrieved from Federal Reserve Bank of St. Louis (FRED), August 15, 2022.
4 “America’s hidden common ground on public higher education: What’s wrong and how to fix it,” Public Agenda, July 11, 2022.
Negative perceptions are not the only trends the sector must confront. Following a slow decline in birth rates, the total number of high school graduates pursuing postsecondary studies is projected to drop by 11 to 15 percent between 2025 and 2029. And many higher-education institutions continue to fall short in delivering equitable outcomes—particularly for underrepresented populations—and have not sufficiently reckoned with the pervasive racial, ethnic, and socioeconomic inequities on their campuses.

The US higher education sector is endeavoring to address value and equity challenges. And thousands of faculty members, counselors, staff, and administrators work tirelessly to help their students succeed. But the nation may need a faster, more fundamental transformation to substantially change the sector’s trajectory. The US economy is facing national skills shortages that pose risks to national security, public health, and economic competitiveness. Last year alone, 375,000 cybersecurity jobs and 202,000 nursing jobs went unfilled. And demand for skilled labor is expected to grow.

How can US higher education overcome these challenges? Currently, 52.5 million US adults between 18 and 54—the age range during which the median return on investment for a postsecondary degree is positive—have just a high school diploma or GED and are earning less than the median income of those in their communities with college degrees. This population is largely over 25 years old, with a higher percentage of Black and Hispanic adults than the general population. While college may not be the right answer for everyone, getting more of these potential learners to a postsecondary degree could have a major impact on improving lives, reducing equity gaps, and filling the nation’s skills shortages. Our analysis suggests that the sector could support ten million more graduates over the next 20 years and, in so doing, lift 2.2 million Americans and their households out of poverty, increase lifetime GDP by $16 trillion (nearly $2 million per graduate), and close the racial attainment gap by 31 percent.

Achieving this ambitious goal would require significant changes. Many institutions would need to increase affordability, expand access, and provide more and better student support to ensure completion and postgraduation success. Not taking these actions would only worsen the deep challenges facing the sector. However, by deploying proven interventions, institutions can support more individuals on their collegiate journeys and prepare them for better jobs, higher earnings, and greater societal engagement. In doing so, they could also begin to mitigate the impact of the anticipated demographic cliff and increase equity and inclusion.

In this report, we explore higher education’s opportunity to serve more students and become an even more powerful force for equity and inclusion. We also outline the realistic potential for expanding access to higher education, what it could take to meet the needs of the millions more students who might benefit from earning degrees, and how it could affect both prospective students and society. Finally, we outline some key actions institutions should consider in order to launch this effort.

The broad benefits of higher education

The data are clear: a postsecondary education in the United States is a catalyst for great opportunity. Graduates gain valuable technical and socio-emotional skills that enable them to have better employment outcomes, higher lifetime earnings, and a greater likelihood of getting and keeping a job.
Graduating from college also boosts socioeconomic mobility, dramatically increasing the likelihood of jumping from a low-income household into the top 20 percent of income earners.\(^\text{13}\) And it corresponds to noneconomic benefits in health and civic engagement; those with at least a bachelor’s degree are more likely to exercise, volunteer, vote, and engage their children in educational activities than those with only a high school diploma or equivalent (Exhibit 1).\(^\text{15}\)

Exhibit 1

**A postsecondary education can be transformative.**

<table>
<thead>
<tr>
<th>Better employment outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>75% higher lifetime earnings, on average, for bachelor’s degree holders compared with high school diploma holders</td>
</tr>
<tr>
<td>3.5 percentage points lower unemployment rates for bachelor’s degree holders (5.5%, compared with 9.0% for high school graduates)</td>
</tr>
<tr>
<td>1/4 the risk of being employed in a role with a high chance of being automated in the future for bachelor’s degree holders compared with high school diploma holders</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Improved socioeconomic mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>4× improved likelihood of moving from the bottom to the top income quintile; for those whose parents are in the bottom income quintile, having a college degree increases the likelihood of jumping to the top quintile to 19%, up from 5% of those without a college degree</td>
</tr>
<tr>
<td>80% probability of leaving the bottom income quintile for college graduates from low-income families</td>
</tr>
<tr>
<td>2.5× more likely to have children who attend college</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Greater well-being and civic engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>47% higher probability of vigorous weekly exercise for bachelor’s degree holders aged 25–34 compared with high school diploma holders</td>
</tr>
<tr>
<td>2× greater rates of volunteering for those with a bachelor’s degree compared with those with a high school diploma</td>
</tr>
<tr>
<td>1.8× voter participation for US citizens aged 25–44 with at least a bachelor’s degree compared with high school graduates</td>
</tr>
</tbody>
</table>

Source: National Center for Health Statistics; National Center for Education Statistics Digest of Education Statistics; National Health Interview Survey; Panel Study of Income Dynamics; US Census Bureau American Community Survey; US Census Bureau voting and registration tables; US Department of Labor Current Population Survey

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\(^\text{15}\) Brookings Institution tabulations of Panel Study of Income Dynamics data.
Increasing the number of graduates by ten million over the next two decades could enable an additional 4.3 million people from underrepresented populations to obtain postsecondary degrees, closing 31 percent of the attainment gap. It could also lift 2.2 million Americans out of poverty, which would have a cascading impact on their households, descendants, and local communities.  

At the college and university level, institutions would benefit from a student population that’s more diverse in race, age, and socioeconomic status. The benefits to society could also be significant. Greater degree attainment and increased earnings have compounding effects on the economy, and ten million extra graduates could add $16 trillion in lifetime GDP to the economy, with each individual with a bachelor’s degree contributing an average of $800,000 in additional direct government revenue. These graduates could also lead to 1.6 million newly employed over the next 20 years—a half-percentage-point increase in labor force participation—helping to fill critical labor shortages in high-growth fields.

A call to boost equity and inclusion

Many Americans miss out on the benefits of a college education simply through the circumstances of their birth. Hispanic, Native American, and Black Americans have the lowest rates of educational attainment; only 21, 24, and 29 percent, respectively, have a bachelor’s degree or higher, compared with 44 percent of non-Hispanic Whites and 61 percent of Asian Americans. Existing equity gaps not only in race and ethnicity but also in income level, able-bodiedness, gender and sexual orientation, and other demographic traits suggest the country is leaving a wealth of potential untapped. Addressing these challenges will require decisive action. K–12 educators, employers, funders, policy makers, and colleges will need to collaborate to ensure that anyone who wishes to pursue a postsecondary degree can enroll and succeed.

Racial and ethnic equity gaps are among the most pervasive in postsecondary education. McKinsey research has shown that only 44 percent of not-for-profit institutions have representative student populations (see sidebar “Toward a more equitable

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16 Analysis based on data from the College Board, IPEDS, National Student Clearinghouse, NCES, TICAS, US Census Bureau, and US Department of Education.
18 Analysis based on data from the College Board, IPEDS, National Student Clearinghouse, NCES, TICAS, US Census Bureau, and US Department of Education.
future"). At the current pace of change, it would take seven decades to achieve fully representative incoming student populations. Moreover, only 39 percent of Native American students, 40 percent of Black students, and 54 percent of Hispanic students who enroll in college earn their bachelor’s degree within six years, compared with 64 percent of White and 74 percent of Asian students (Exhibit 2).

Colleges and universities also need to navigate various socioeconomic, regional, and political factors to maintain their reputation as the bridge to middle-class prosperity. Geographical gaps in postsecondary educational attainment are striking, with the largest concentrations of degree attainment in metropolitan and affluent areas. Many states have education deserts, where residents live far from colleges and universities. Other low-income and rural Americans cannot access online learning opportunities because high-speed internet access has not yet come to their areas or they cannot afford it—a digital divide highlighted during the pandemic. Expanding higher education access to residents of geographies with struggling economies may be a pivotal component to combating job displacement and spurring greater innovation.

Exhibit 2

Higher education faces pervasive racial- and ethnic-equity gaps in access and completion.

<table>
<thead>
<tr>
<th>% of those aged 18–24 enrolled in college by race or ethnicity, 1996–2020</th>
<th>6-year graduation rate by race or ethnicity, 1996–2010, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Black</td>
</tr>
<tr>
<td>64+10</td>
<td>54+9</td>
</tr>
<tr>
<td>36+16</td>
<td>27+1</td>
</tr>
<tr>
<td>20</td>
<td>22</td>
</tr>
</tbody>
</table>

1Includes 2-year and 4-year institutions.
2Includes 4-year institutions only.
Source: National Center for Education Statistics

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22 Status and trends in the education of racial and ethnic groups, February 2019.
24 Adam Harris, “The education deserts of rural America: The college-completion gap between rural and urban residents is widening,” Atlantic, July 1, 2019.
With the total number of US high school graduates declining and more than 35 percent of college students 26 or older, \(^{26}\) higher education could also turn its attention to older adults, who often need different support structures, tailored instructional modalities, and affordable financing pathways that will require sectorwide innovation.

### On the edge of a demographic cliff

Today, only four in ten Americans 25 or older have bachelor’s degrees. While the proportion of college graduates has increased over the past decade, this trend is not likely to continue in the future.\(^ {27}\)

Starting in 2025, college enrollment may drop by as much as 15 percent, a decline driven primarily by reduced birth rates that began during the 2008 recession and have only recently started to recover.\(^ {28}\)

Over the past two years, enrollment rates have already begun slowing down, largely because of COVID-19.\(^ {29}\) From the fall of 2019 to the fall of 2021, undergraduate enrollment declined by 6.6 percent, or 1.2 million students. As the pandemic progressed, students increasingly began to doubt the value of a college education: in May 2021, 65 percent of students surveyed agreed that higher education is no longer worth the cost, up from 57 percent in December 2020 and 49 percent in August 2020, partly because they said the quality of online instruction was not as good as in person.\(^ {30}\)

The pandemic and its fallout only exacerbated the effects of the demographic cliff that higher education leaders have long been anticipating.

### The economic competitiveness imperative

This decline in college enrollment is coming just as the nation is facing an increase in the number of jobs requiring critical skills that need to be filled across industries. And though employers are

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\(^ {27}\) Katherine Schaeffer, “10 facts about today’s college graduates,” Pew Research Center, April 12, 2022.

\(^ {28}\) Jill Barshay, “College students predicted to fall by more than 15% after the year 2025,” Hechinger Report, September 10, 2018.

\(^ {29}\) “Stay informed with the latest enrollment information,” National Student Clearinghouse Research Center, October 20, 2022.

beginning to shift to skills-based hiring methods that focus less on applicants’ academic credentials; these trajectories need not conflict. Institutions can partner with employers to ensure curriculums align with future workforce needs, supporting the shift to skills-based hiring (see sidebar “College or bust?”). Ultimately, higher education’s most important role is to provide students with the valuable technical and interpersonal work skills nearly all employers desire.

Our analysis indicates that 86 percent of new jobs created through 2030 will require postsecondary education.33 Job growth is projected to be highest in

College or bust?

**The impact** that expanding higher education could have on individual lives and society is significant. But it’s important to note that college may not be the right path for everyone. Whether to pursue postsecondary education is a personal choice, and 45 percent of Americans say they believe they need only a high school diploma, GED, or technical certificate to ensure financial security.1

Many organizations have analyzed the population of adults without a college degree and the opportunities to improve their economic mobility without obtaining a bachelor’s degree. One of these organizations’ core recommendations is to take advantage of the talents of workers who have decided to forgo higher education. Employers could consider skills-based hiring practices rather than overrelying on credentials.2 A systematic change in this direction is already under way; the Burning Glass Institute, which advances data-driven research on the future of work and workers, notes that some employers are eliminating degree requirements in many medium-skill and some higher-skill roles, and predicts that over the next five years, 1.4 million additional jobs will become available to candidates without college degrees.3 Almost 50 national organizations, including McKinsey, have signed a pledge to “tear the paper ceiling” by recognizing the untapped potential of workers without a college degree.4

In 2020, McKinsey joined the Rework America Alliance,5 a coalition of organizations focused on helping millions of workers build successful careers in today’s digital economy regardless of formal education. Together with public-, private-, and social-sector institutions, including the Federal Reserve Bank of Atlanta, Google, the NAACP, and Walmart, we helped design scalable capabilities to allow unemployed workers to identify credible job trajectories and reskilling opportunities. Our initial analysis suggests that these trajectories will be relevant to many of the Americans who are currently unemployed, allowing them to meaningfully improve their career outcomes without returning to school.

Certificates and technical education are options, too. Certificate programs, which are the fastest-growing portion of the higher education sector, on average lead to 20 percent higher earnings than a high school diploma.6 Apprenticeships and bootcamps on technical skills such as coding are other options for gaining desirable job skills.

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1 Rachel Fishman, Sophie Nguyen, and Louisa Woodhouse, Varying degrees 2022: New America’s sixth annual survey on higher education, July 26, 2022.
3 Joseph B. Fuller et al., The emerging degree reset: How the shift to skills-based hiring holds the keys to growing the US workforce at a time of talent shortage, Burning Glass Institute, 2022.
4 “Meet our partners,” Tear the Paper Ceiling Campaign, Opportunity@Work, accessed March 8, 2023.
6 Anthony P. Carnevale, Andrew R. Hanson, and Stephen J. Rose, “Certificates: Gateway to gainful employment and college degrees,” Georgetown University Center on Education and the Workforce, June 2021.

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roles that today require a bachelor’s degree or higher (see sidebar “Mapping postsecondary job growth”). Labor market experts project major talent deficits in critical fields by 2025, including 200,000 unfilled positions in nursing, 250,000 in primary and secondary teaching, and 375,000 in cybersecurity. Such a talent shortage represents a significant risk to the nation’s public health, education, security, and global competitiveness. Educating more people with the skills to fill these jobs could improve their employability and help the country thrive.

Empowering ten million more graduates in 20 years

Currently, 52.5 million US adults between 18 and 54 have only a high school diploma or GED and are earning less than the median income of those in their communities who have college degrees (Exhibit 3). Who are these 52.5 million people who might benefit from a postsecondary credential?

— Black, Hispanic, and Native American populations are overrepresented among this cohort,

Exhibit 3

The higher-education sector has the potential to graduate millions of additional students over the next 20 years.

Total population of the United States

330 million

Ages 18–54: the age range for which obtaining a postsecondary degree delivers a positive ROI from increased earnings

160 million

High school graduates who have not enrolled in college or who have completed some college

80 million

Earning potential: those whose income is below the median of others in their communities who have a college degree

52.5 million

What if we could graduate 20% of this population?

Source: College Board; Common App; National Center for Education Statistics; National Student Clearinghouse; New America; The Institute for College Access and Success; US Census Bureau Public Use Microdata Areas data; US Department of Education

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34 Analysis based on data from American Association of Colleges of Nursing, BLS, College Board, IPEDS, (ISC)², Lightcast, National Student Clearinghouse, NCES, NSI Nursing Solutions, TICAS, US Census Bureau, and US Department of Education.

Mapping postsecondary job growth

Graduating an additional ten million learners could go a long way toward meeting projected growth in job needs across the country. At the national level, the number of US jobs requiring a postsecondary education is expected to grow 12 percent from 2018 to 2028—four times faster than jobs requiring a high school diploma or less. More than 85 percent of the nearly 15 million additional jobs will require a postsecondary education. However, this growth is not evenly distributed across the nation. Almost half of it is expected to take place in the six states with the greatest projected increase: Texas, California, Florida, New York, Washington, and Arizona (exhibit). In some of these states, such as Texas, projected growth will significantly outstrip the existing supply of in-state college graduates, pointing to a need to either produce more in-state graduates or attract more graduates to the state.

Exhibit

Jobs requiring a postsecondary education are projected to grow by 12 percent but are predominantly clustered in a handful of states.

Projected job growth, 2022–30

<table>
<thead>
<tr>
<th>Degree attainment required</th>
<th>Jobs added, millions</th>
<th>Jobs added, % growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than high school</td>
<td>0.6</td>
<td>4</td>
</tr>
<tr>
<td>High school diploma</td>
<td>1.3</td>
<td>3</td>
</tr>
<tr>
<td>Some college or associate’s degree</td>
<td>3.8</td>
<td>7</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>5.0</td>
<td>15</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>3.9</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>14.6</td>
<td>9</td>
</tr>
</tbody>
</table>

Increase in jobs requiring a postsecondary degree by state, total = 12.7 million

Increase in postsecondary roles

- > 1.4M (TX)
- > 1.1M (CA)
- > 0.7M (FL)
- > 0.3M (WA, AZ, OH, NY, VA, GA, NC)
- < 0.3M (all others)

Source: College Board; Common App; National Center for Education Statistics; National Student Clearinghouse; New America; The Institute for College Access and Success; US Census Bureau; US Department of Education

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1 Analysis based on data from the American Association of Colleges of Nursing, [ISC]², Lightcast, NSI Nursing Solutions, and US Bureau of Labor Statistics.
with 22.5 million out of the 52.5 million. The share of these groups in the potential learner population is twice as large as their share in the college-educated population (Exhibit 4).

— Adults aged 25 to 54 represent 40.4 million, or 77 percent, of the 52.5 million.

— Many have already made progress toward a degree. Almost 19.0 million (more than 35 percent of this population) already have some college credit, and 1.8 million already have two or more years of college credit.

— Surveys suggest that many of them would like to continue their education: 44 percent of adults

### Exhibit 4

**Additional potential graduates are disproportionately members of underrepresented populations.**

<table>
<thead>
<tr>
<th>Population with postsecondary degree, %</th>
<th>Population in the total achievable potential, %</th>
<th>Addressable population vs college-educated population, ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native American</td>
<td>17</td>
<td>2.4x</td>
</tr>
<tr>
<td>Black</td>
<td>9</td>
<td>2.0x</td>
</tr>
<tr>
<td>Hispanic</td>
<td>9</td>
<td>2.5x</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>1.3x</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>0.5x</td>
</tr>
<tr>
<td>White</td>
<td>71</td>
<td>0.7x</td>
</tr>
</tbody>
</table>

Note: Figures do not sum to 100%, because of rounding.
1 52.5 million Americans who would benefit from a degree but aren’t on a path to get one.
2 Population identifying as “other” or as multiracial.

Source: College Board; Common App; National Center for Education Statistics; National Student Clearinghouse; New America; The Institute for College Access and Success; US Census Bureau American Community Survey; US Department of Education

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not currently enrolled in degree or certificate programs are considering enrolling but have been held back by issues including cost and family responsibilities.\textsuperscript{36}

— These prospective future learners are everywhere in the United States, though half of the 52.5 million are clustered in only nine states—California, Florida, Georgia, Illinois, New York, North Carolina, Ohio, Pennsylvania, and Texas (Exhibit 5).

— Existing need is greater in rural areas, where 41 percent of adults—compared with 34 percent in urban areas—would benefit from a post-secondary degree.\textsuperscript{37}

Exhibit 5

Fifty percent of the 52.5 million potential degree earners are clustered in nine states.

Note: The states with the highest concentration of potential degree earners are California, Florida, Georgia, Illinois, New York, North Carolina, Ohio, Pennsylvania, and Texas.

Source: College Board; National Center for Education Statistics; National Student Clearinghouse; New America; The Institute for College Access and Success; US Census Bureau; US Department of Education

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\textsuperscript{36} The state of higher education 2022 report, Gallup and Lumina Foundation, April 2022.

\textsuperscript{37} Analysis based on data from the College Board, IPEDS, National Student Clearinghouse, NCES, TICAS, US Census Bureau, and US Department of Education.
Establishing a goal of ten million additional graduates from this group over the next 20 years may be seen as a moonshot for higher education. But if the sector can pull it off and enroll and matriculate these additional individuals, it could flip the projected 0.4 percent annual declines in enrollment through 2037 to nearly 3.0 percent annual growth. The demand exists: over the next decade, employers in nearly every state will face significant labor shortages.

Getting smarter about capacity and completion

Graduating ten million additional students over the next 20 years is an ambitious goal, and some colleges and universities may question whether they can create the capacity to contribute meaningfully toward it.

In 2021, 10.5 million full-time and 6.5 million part-time students were enrolled, part of a steady decline in enrollment rates that is expected to continue. Adding ten million graduates over the next 20 years would entail accommodating as many as 21 million students during a given year, or four million more than the current enrollee base.

There is excess capacity in the system today. By evaluating each institution’s peak enrollment in the past ten years and comparing it with 2019 enrollment, we estimated the number of additional students each institution could reasonably support in the near term without any interventions.

Online learning can be another powerful tool for increasing capacity, and postpandemic growth in this area appears promising. Online enrollment reached record levels in 2020, and 47 percent of Americans surveyed in 2022 agreed that the quality of online education is about the same as in-person instruction. Innovative schools are continuing to experiment with expanding scale. Arizona State University’s Thunderbird School of Global Management, for example, recently announced its goal to serve 100 million learners in more than 40 languages through online channels, while schools such as Western Governors University and Southern New Hampshire University continue to grow enrollment quickly. However, expansion of online and hybrid learning will likely need to be combined with robust student support and community building to avoid outcomes that have left many online students with significant debt but no degrees.

Completion is another challenge. How can we ensure that the ten million additional adults entering the higher education system actually graduate?

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38 Ibid.
40 “Undergraduate enrollment,” NCES, May 2022.
41 “Colleges face reckoning,” May 22, 2021; Sara Gagnon et al., Quantifying the impact of excess capacity in higher education, EY–Parthenon, October 2020.
43 Data from IPEDS, accessed March 2022.
44 Varying degrees 2022, July 2002.
45 "100 million learners," Thunderbird School of Global Management and Arizona State University, January 20, 2022.
Our analysis showed that completion rates—the percentage of students at an institution who earn a degree or credential within a given time frame—differ widely between top- and bottom-quartile two- and four-year institutions (Exhibit 6). A 49-percentage-point gap in six-year completion rates separates high- and low-performing four-year institutions, and a 47-percentage-point gap in three-year completion rates separates high- and low-performing two-year institutions. A significant portion of two-year students transfer to other two- or four-year institutions without completing a degree at their first school, which, along with other factors, deflates two-year completion rates. Some have argued that the traditional success metrics used by four-year colleges and universities, such as completion rate, fail to fully account for the multiple missions and diverse student bodies of community colleges. However, since there are currently no viable alternatives, community college completion rates still provide valuable insight on institution performance, especially when comparing colleges. Even when adjusting for institution peer group by Carnegie Classification—a framework for

Exhibit 6

There is a more than 45-percentage-point gap in completion rates between top- and bottom-quartile two- and four-year institutions.

![Completion rate chart for 4-year institutions and 2-year institutions](chart.jpg)

Note: Each of the 6,400 institutions in the United States is represented as a single bar.

1 Students who transferred to a 4-year school before completing an associate’s degree.
2 Defined as being eligible for a Pell Grant.

Source: Carnegie Foundation; Integrated Postsecondary Education Data System

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describing institutional diversity in US higher ed—the average gap in completion rates between high- and low-performing two-year and four-year institutions remains 30 percentage points.49

In addition, there is a strong negative correlation among four-year institutions between completion rate and the proportion of students who are eligible for Pell Grants. Pell Grants—need-based federal financial aid that typically needn’t be repaid—are essential to narrowing the postsecondary-degree attainment gap for low-income and underrepresented populations. Four-year institutions in the top 25 percent by completion rate have only half as many Pell Grant–eligible students as those in the bottom 25 percent. Interestingly, this trend does not extend to two-year institutions, where the top quartile performs better than more than 75 percent of four-year institutions and maintains higher proportions of Pell Grant–eligible students than any other quartile of two- or four-year institutions. While this is promising, these top-performing two-year institutions enroll only 2 percent of the total student population.

The Carnegie Classifications have another anomaly: wide completion-rate gaps exist even when there is minimal difference in the share of Pell Grant–eligible students between high- and low-performing institutions, suggesting that other factors are at play. Currently, 8.7 million students attend institutions with a variability in Pell Grant–eligible student shares of less than ten percentage points but a completion-rate difference of more than 20 percentage points (Exhibit 7).

These dire statistics show that the sector needs to radically rethink how it defines student success and support. The path forward is steep but clear: individual institutions have shown remarkable success at expanding access and making major improvements in completion rates. If others follow, these goals will be within reach.

Universities with the highest completion rates are well-resourced, predominantly White institutions that have historically accepted fewer low-income students and underrepresented minorities. But many institutions are challenging the status quo by demonstrating what is possible with more inclusive pathways. Some examples of schools that are in the top quartile of completion for their Carnegie Classification but have general acceptance rates above 50 percent include Dillard University, Eastern Florida State College, North Carolina Agricultural and Technical State University, and Pittsburgh Technical College. These institutions consistently produce college graduates without being highly selective or taking financial need into consideration. Another subset of schools that have demonstrated strong completion rates have begun focusing on expanding access; the University of California system recently announced it would add 33,000 students over the next eight years.50 In 2019, the University of Illinois Urbana—Champaign committed to providing

49 Based on 2018 “basic” Carnegie Classification.
50 “Presentation of the UC 2030 capacity plan,” University of California Office of the President, July 21, 2022.
Exhibit 7a

Completion rate and the share of students who are Pell-eligible are highly variable in four-year Carnegie Classifications.

<table>
<thead>
<tr>
<th>Carnegie Classification¹</th>
<th>Enrollment, 2019, million</th>
<th>Difference in share of Pell-eligible students</th>
<th>Gap in completion rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baccalaureate colleges: Arts and sciences focus</td>
<td>0.3</td>
<td>15 → 26 p.p. &lt;br&gt;41</td>
<td>45 ← 44 p.p.</td>
</tr>
<tr>
<td>Doctoral universities: High research activity (low Pell)</td>
<td>0.5</td>
<td>14 → 13 p.p. &lt;br&gt;27</td>
<td>52 ← 32 p.p.</td>
</tr>
<tr>
<td>Doctoral or professional universities (low Pell)</td>
<td>0.3</td>
<td>21 → 10 p.p. &lt;br&gt;31</td>
<td>50 ← 28 p.p.</td>
</tr>
<tr>
<td>Master’s colleges and universities: Larger programs (low Pell)</td>
<td>0.7</td>
<td>23 → 9 p.p. &lt;br&gt;32</td>
<td>41 ← 36 p.p.</td>
</tr>
<tr>
<td>Special-focus four-year institutions</td>
<td>0.2</td>
<td>38 → 15 p.p. &lt;br&gt;53</td>
<td>24 ← 51 p.p.</td>
</tr>
<tr>
<td>Master’s colleges and universities: Small programs (low Pell)</td>
<td>0.2</td>
<td>24 → 9 p.p. &lt;br&gt;33</td>
<td>37 ← 37 p.p.</td>
</tr>
<tr>
<td>Master’s colleges and universities: Medium programs (low Pell)</td>
<td>0.2</td>
<td>26 → 8 p.p. &lt;br&gt;34</td>
<td>46 ← 27 p.p.</td>
</tr>
<tr>
<td>Doctoral universities: High research activity (high Pell)</td>
<td>0.7</td>
<td>40 → 3 p.p. &lt;br&gt;43</td>
<td>68 ← 24 p.p.</td>
</tr>
</tbody>
</table>

¹Low and high Pell designations are based on whether the institution had an above- or below-average share of Pell-eligible students for its Carnegie Classification.

Source: Carnegie Foundation; Integrated Postsecondary Education Data System

Fulfilling the potential of US higher education
### Exhibit 7b

**Completion rate and the share of students who are Pell-eligible are highly variable in four-year Carnegie Classifications.**

<table>
<thead>
<tr>
<th>Carnegie Classification</th>
<th>Enrollment, 2019, million</th>
<th>Difference in share of Pell-eligible students</th>
<th>Gap in completion rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baccalaureate colleges: Diverse fields</strong></td>
<td>0.2</td>
<td>12 p.p.</td>
<td>64 35 p.p.</td>
</tr>
<tr>
<td><strong>Master’s colleges and universities: Larger programs (high Pell)</strong></td>
<td>0.7</td>
<td>2 p.p.</td>
<td>64 34 p.p.</td>
</tr>
<tr>
<td><strong>Doctoral/professional universities (high Pell)</strong></td>
<td>0.3</td>
<td>4 p.p.</td>
<td>63 27 p.p.</td>
</tr>
<tr>
<td><strong>Master’s colleges and universities: Medium programs (high Pell)</strong></td>
<td>0.1</td>
<td>6 p.p.</td>
<td>62 32 p.p.</td>
</tr>
<tr>
<td><strong>Baccalaureate/associate colleges</strong></td>
<td>0.3</td>
<td>9 p.p.</td>
<td>61 41 p.p.</td>
</tr>
<tr>
<td><strong>Master’s colleges and universities: Small programs (high Pell)</strong></td>
<td>0.1</td>
<td>5 p.p.</td>
<td>56 28 p.p.</td>
</tr>
<tr>
<td><strong>Baccalaureate or associate colleges (associate-dominant)</strong></td>
<td>0.6</td>
<td>0 p.p.</td>
<td>51 31 p.p.</td>
</tr>
<tr>
<td><strong>Historically Black colleges and universities</strong></td>
<td>0.2</td>
<td>12 p.p.</td>
<td>51 34 p.p.</td>
</tr>
<tr>
<td><strong>Tribal colleges</strong></td>
<td>&lt; 0.01</td>
<td>4 p.p.</td>
<td>40 33 p.p.</td>
</tr>
</tbody>
</table>

1 Low and High Pell designations are based on whether the institution had an above- or below-average share of Pell-eligible students for its Carnegie Classification.

Source: Carnegie Foundation; Integrated Postsecondary Education Data System

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### Exhibit 7c

**Completion rate and the share of students who are Pell-eligible are highly variable in two-year Carnegie Classifications.**

<table>
<thead>
<tr>
<th>Carnegie Classification</th>
<th>Enrollment, 2019, million</th>
<th>Average transfer rate, %</th>
<th>Difference in share of Pell-eligible students</th>
<th>Gap in completion rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special-focus two-year institutions</td>
<td>0.2</td>
<td>2</td>
<td>55 → 10 p.p.</td>
<td>80</td>
</tr>
<tr>
<td>Associate colleges: High vocational and technical—high traditional</td>
<td>0.2</td>
<td>8</td>
<td>62</td>
<td>73</td>
</tr>
<tr>
<td>Associate colleges: High vocational and technical—high nontraditional</td>
<td>0.2</td>
<td>13</td>
<td>37</td>
<td>61</td>
</tr>
<tr>
<td>Associate colleges: High vocational and technical—mixed traditional and nontraditional</td>
<td>0.2</td>
<td>11</td>
<td>39</td>
<td>61</td>
</tr>
<tr>
<td>Associate colleges: Mixed transfer and vocational and technical—high nontraditional</td>
<td>0.3</td>
<td>17</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Associate colleges: High transfer—high traditional</td>
<td>0.8</td>
<td>17</td>
<td>34</td>
<td>43</td>
</tr>
<tr>
<td>Associate colleges: Mixed transfer and vocational and technical—mixed traditional and nontraditional</td>
<td>0.4</td>
<td>16</td>
<td>36</td>
<td>43</td>
</tr>
<tr>
<td>Associate colleges: High transfer—high nontraditional</td>
<td>0.2</td>
<td>20</td>
<td>27</td>
<td>41</td>
</tr>
<tr>
<td>Associate colleges: Mixed transfer and vocational and technical—high traditional</td>
<td>0.6</td>
<td>17</td>
<td>42</td>
<td>39</td>
</tr>
<tr>
<td>Associate colleges: High transfer—mixed traditional and nontraditional</td>
<td>0.6</td>
<td>19</td>
<td>25</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: Carnegie Foundation; Integrated Postsecondary Education Data System

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free tuition for all in-state students with a family income of $67,000 or less.  

These schools and others illustrate what is possible and offer paths toward creating the type of systemic change required to enroll and graduate an additional ten million students over the next 20 years.

Before expanding access, institutions must prioritize completion strategies to increase graduation rates for their existing student bodies. Currently, institutions in the bottom two completion-rate quartiles have 5.6 million open student positions, representing approximately 60 percent of available capacity (Exhibit 8). Improving completion rates at these institutions is imperative to creating a skilled and educated workforce.

Significant improvements can be achieved. A literature review of completion initiatives deployed by a broad range of institutions found that the best interventions improved completion rates by up to ten percentage points. Assuming that each school could improve its completion rate by one percentage point every year on average, three-quarters of schools would achieve the rates of today’s top-performing schools within 20 years. That would boost average completion rates to 80 percent for students pursuing bachelor’s degrees and 46 percent for students pursuing associate’s degrees—a major improvement. Focusing first on improving completion rates would substantially mitigate the potential debt burden accrued by students who do not graduate.

For institutions that already have high completion rates, expanding enrollment and the Pell Grant–eligible student population could be the next priority. Historically, enrollment across the sector has grown 2.3 percent a year. If schools expand enrollment faster—by 2 to 3 percent a year—together with improvements to their completion rates, they could create the capacity for ten million additional students to graduate over the next 20 years. However, only 11 percent of current two- and four-year available capacity is at institutions with above-average performance on both completion rate and share of Pell Grant–eligible students. Expanding the Pell Grant population,

Assuming that each school could improve its completion rate by one percentage point every year on average, three-quarters of schools would achieve the rates of today’s top-performing schools within 20 years.

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52 Top-performing schools determined within categories according to the Carnegie Classification of Institutions of Higher Education, “basic” classification 2018 update.
Only 11 percent of available two- and four-year capacity is at institutions with an above-average completion rate and Pell-eligible student share.

4- and 2-year institutions, 9 million total capacity

Source: Carnegie Foundation; Integrated Postsecondary Education Data System

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combined with career counseling and student support services, could increase college affordability and improve access to higher education and all its ensuing benefits.\textsuperscript{54}

We’ve seen similar growth in the past. At the height of the expansion in higher education spurred by the post–World War II GI Bill, enrollment grew at 5.6 percent annually. The sector saw 3.5 percent annual growth in capacity during the 1970s. The most recent prolonged period of growth was from 2000 to 2010, when enrollment grew 3.2 percent annually.\textsuperscript{55}

Overcoming the barriers to access and completion

Producing ten million additional graduates would require making bold investments rather than incremental changes. The total cost would be roughly $1.2 trillion across all stakeholders, including students, federal and state governments, and philanthropic organizations and individuals (see sidebar “Calculating the investment and returns”). This number includes approximately $1 trillion for instructional and operational costs and an additional $200 billion for interventions to increase access and completion, such as childcare, books and supplies, and other student support services. Other costs may need to be considered, including opportunity costs from lost wages, unproductive debt from students who do not complete their degrees, and interest from student loans. Costs could be reduced if higher-education institutions increased affordability and reduced barriers to education, for example through online and hybrid programs and tuition-payment installment plans. Higher education funders will need to collaborate to help finance this effort and ensure that potential students both graduate and find gainful employment.

Leaders in the sector could start by identifying high-priority populations and their barriers to access and completion, so that schools can invest specifically in interventions proven to make a difference for the types of students at their institutions. The literature suggests that learners face four types of barriers to access and completion: information accessibility, financial resources, mindset and preparedness, and support services and networks. Schools are deploying a wide range of levers to address these barriers.

A review of more than 100 evidence-based interventions in these categories demonstrates that schools have shown improvement across a wide variety of student populations, ranging from parents to underrepresented populations to low-income students. Many of these interventions are directly applicable to the adult learner population; others can help ensure that more traditional student populations do not become working adults with some college but no degree. These interventions include the following examples:

— **Affordability and financial resources.** The affordability of applying for and attending college and the availability of wraparound and support services are of particular concern to many of the targeted student populations. Institutions need to continue to improve the affordability of programs and track projected salaries to ensure that the cost of education aligns with expected earnings to help graduates maintain a sustainable debt-to-income ratio. We have identified 18 interventions in this area that could have a significant impact on access and completion, even if they stop well short of providing free tuition. For example, several institutions, including a group of technical colleges in Wisconsin, have made small ad hoc grants averaging $900 to $1,000 to students in need. Nearly three-quarters of the recipients graduated or remained enrolled during the program’s pilot period.\textsuperscript{56} On an even smaller scale, commuter students at Rio Hondo College in Los Angeles who received a deeply discounted public transportation pass were 17 percent more

\textsuperscript{54} Karen Grigsby Bates et al., “In 50 years, the Pell Grant has helped over 80 million people go to college,” NPR, September 7, 2022.

\textsuperscript{55} NCES, accessed March 9, 2023.

\textsuperscript{56} Kim Clark and Mark Schneider, “Completion reforms that work: How leading colleges are improving the attainment of high-value degrees,” Third Way, May 28, 2018.
Calculating the investment and returns

The benefits of adding ten million more graduates by 2042 are clear. But what would it take to get there? This population is harder to reach and requires different types of support than most current students, so the amount of new spending and activity is significant. Serving an additional ten million graduates over the next 20 years will require $1.2 trillion in added investment, although potential cost efficiencies and innovative financing models could reduce the total. Even if costs could not be reduced, analyses have shown that a postsecondary degree is, on average, well worth both the money (through increased lifetime income, reduced need for social services, lower healthcare spending, and so forth) and effort (because of greater community engagement, volunteer work, and civic engagement).  

The largest investment is in instructional and operational costs, which average $115,000 for a bachelor’s degree and $30,000 for an associate’s. These costs are the baseline for serving students, but given the unique nature of the target student population, additional investment may be needed. Graduating a higher percentage of adult learners, who have different needs than the traditional students schools are accustomed to enrolling, will require new initiatives in areas such as childcare and transportation.

We compared the cost expenditures of top-performing and average schools by completion rate to quantify the difference in cost per student for student services, grants, financial aid, and other categories that affect student access and completion outside of formal instructional and administrative costs. Our analysis estimates an additional cost of $1,300 for each two-year student and $22,000 for each four-year student to implement access and completion interventions. These funds

Exhibit

Median lifetime earnings consistently increase with each additional level of attained education.

<table>
<thead>
<tr>
<th>US lifetime earnings by highest educational attainment, 1 $ million</th>
<th>Average cost of attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>25th percentile earnings Mediane 75th percentile earnings</td>
<td>$35K in tuition, fees, and room and board annually</td>
</tr>
<tr>
<td>Less than high school</td>
<td></td>
</tr>
<tr>
<td>High school diploma</td>
<td>$50K–$90K in opportunity costs and other expenses (eg, forgone wages and transportation)</td>
</tr>
<tr>
<td>Some college or associate’s degree</td>
<td>$1.9K in debt interest per year; average borrower spends 20 years paying off loans that total about $38K</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td></td>
</tr>
<tr>
<td>Graduate degree</td>
<td></td>
</tr>
</tbody>
</table>

1 Based on data for people aged 25–64 working full-time, full-year.  
Source: Georgetown University Center on Education and the Workforce analysis of the US Census Bureau’s American Community Survey, 2009–2019; Melanie Hanson, “Average cost of college & tuition,” Education Data Initiative, updated October 24, 2022

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would go toward initiatives such as expanded mental health services, on-site childcare, and student activities and cultural events to build campus community and students’ sense of belonging.

Additional costs, such as opportunity costs from forgone wages, childcare and transportation, and student loan debt, must also be considered. Individuals who start a degree program but do not complete it will also accrue significant debt. These costs can be reduced as higher-education institutions move toward improving completion, increasing flexibility, and reducing barriers through online and hybrid programs and tuition installment plans.

Ensuring that most students earn a degree, in conjunction with increasing access to affordable education, will accelerate economic mobility (exhibit). However, careful consideration is essential to ensure that potential students are not saddled with high debt they are unable to pay off. Providing supplemental resources such as college advisers, student loan and financial aid education, and career counseling can help guide students toward the degree programs and institutions most likely to lead to success. Additionally, bridging the gap between academic programs and postgraduate jobs—through experiential learning, career services, and job training programs—is an important step toward ensuring that students are gainfully employed after graduation. Together with interventions to improve access and completion, these initiatives will allow higher ed to graduate ten million new learners—with all the associated benefits to individuals, the economy, and society.

likely to earn a credential and 27 percent more likely to earn an associate’s degree.\(^{57}\)

— Information accessibility. We have identified 14 interventions to improve access to information, ranging from helping students submit the Free Application for Federal Student Aid (FAFSA) to providing simplified curricular pathways and course advising. Ensuring that students graduate with successful careers and manageable debt also requires comprehensive and transparent financial literacy and career resources. Georgia State University recently implemented a data-driven initiative that allows students to visualize their future employment progression through data on professional degree programs, job titles, salary information, and alumni career outcomes.\(^{58}\) Another approach to improving information accessibility and simplifying the path to graduation is the use of broad course tracks, also known as meta-majors or career clusters, for a group of related programs.\(^ {59}\) New students choose a track and then take a wide array of classes within the track, allowing them to explore possible career options before they decide which major fits them best.

— Mindset and preparedness. Being prepared not just academically but also in terms of mindset is a key factor in successful student outcomes. Many first-generation, underrepresented-minority, and low-income students may find the campus experience daunting and alienating. The University of Texas at Austin addresses this by delivering a 45-minute pre-orientation message about the “UT mindset” to all incoming students. In a controlled experiment, participation in the training halved the credit completion gap between low- and high-risk students.\(^{60}\)

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59 Chloe Goldberg, “Colleges across the country are moving toward ‘meta major’ tracks for freshmen,” *Diamondback*, University of Maryland, December 9, 2019.
Support services and networks. Academic, family, and social support systems; career support and mentoring; and inclusive environments make a difference. The City University of New York has piloted and expanded a comprehensive program of wraparound assistance, including academic, financial, and social tools, to support timely degree completion. To date, 70,000 students have gone through the program, seeing a 53 percent three-year graduation rate for associate’s degrees—more than double the 24 percent rate of their peers.61 The State of Mississippi has implemented the Complete 2 Compete (C2C) program, which is designed to help adult learners with some college credits but no degree graduate from one of the state’s community colleges or public universities. C2C provides individual coaching, which research suggests is particularly valuable for adult learners and students from underrepresented minorities.62 Other institutions are adapting interventions to promote a sense of belonging and inclusivity on campus. A sense of belonging—the extent to which students feel included, accepted, and valued—is positively associated with completion, retention, and engagement, especially for underrepresented populations and women.63 A survey of more than 1,000 students at 22 tribal community colleges found that grade point averages were positively correlated with perceptions of belonging and support for Indigenous culture.64

Actions to begin
Reaching ten million additional students in 20 years will require significant investment and action across the interventions described above. How can the sector start on this path? It will require collective action by all institutions. And based on our assessment, the following five actions are crucial to facilitating the journey:

1. **Commit to the 52.5 million adult learners as a priority student population** through creative support structures, more-flexible class schedules, and tailored instructional modalities. As the needs of employers and students evolve, so too should educational approaches. Encouraging a culture of innovation will allow institutions to develop novel solutions to improve access and completion, provide the flexibility and specialized instruction adult learners need, and better prepare graduates for the future of work.

2. **Fill excess capacity**, starting with the 1.65 million open seats in top-performing schools by completion rate. Many high-performing schools can enroll additional students in the near term without major changes or investments. Pivoting to serve nontraditional adult learners can quickly fill empty seats with diverse, passionate students and deliver graduates prepared for the future of work.

3. **Deploy student-specific, data-driven interventions** to improve access and close the 45-percentage-point gap in completion rates, supporting students from enrollment to employment. Students who start but do not complete a certificate or degree program face high debt burdens, dramatically reduced earning potential, and fewer employment prospects. Many factors contribute

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61 “What is CUNY ASAP?,” CUNY Accelerated Study in Associate Programs, accessed March 8, 2023.
to low completion rates, including inadequate academic preparation, lack of financial resources, and unclear program requirements and pathways. Delivering on the promise of higher education requires counseling students toward institutions where they are most likely to succeed and novel solutions for overcoming barriers to completion. A large body of well-established interventions can be implemented at little to no cost per student to begin creating a more accessible and supportive environment for adult learners.

4. **Guide students toward high-employment pathways** through enrollment in the 64 percent of postsecondary programs that offer positive ROI within ten years. Postgraduation regret regarding academic program or institution is strongly correlated with low income.\(^{65}\) To ensure that students graduate with manageable debt and sustainable career trajectories, higher education professionals need to counsel them toward brighter prospects and promote greater transparency about program outcomes and alumni salaries.

5. **Explore options to improve college affordability** through cost efficiency and new financing mechanisms for the $1.2 trillion cost of educating these students. Funders should step up their investment in underresourced minority-serving institutions and schools that serve adult learners and other nontraditional students. There may be ways to encourage greater investment, such as public-agency support, private philanthropy, and new financing models. Institutions with excess capacity could increase resource utilization and realize potential cost efficiencies by building capabilities to attract and graduate adult learners. In addition, long-term reduction in institutional costs may help alleviate the constant upward pressure on tuition and fees for all students.

Beyond the work of individual institutions, some sectorwide actions could improve access and completion rates. These include greater transparency about outcomes (particularly regarding equity gaps, completion rates, and employment), stronger transfer pathways, dual-enrollment programs between two- and four-year institutions, and greater standardization and streamlining of credit-transfer processes between institutions. The sector could also benefit from more systemwide initiatives to support new learners, such as student readiness and wraparound programs, universal college savings accounts, new technologies and learning modalities, and national or state programs to recruit and support adults who were close to graduating but did not earn their degrees.

The time to act is now. The United States needs more graduates to fill skilled jobs, increase civic engagement, improve health outcomes and national security, and drive greater economic growth, mobility, and competitiveness. And hanging in the balance are individuals—ten million of them—on whom the future of the nation, and its promise, may well rest.

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Diana Gonzalez is an associate partner in McKinsey’s Washington, DC, office, where Fiyinfolu Oladiran is a partner and Ted Rounsaville is a senior expert. Jonathan Law is a senior partner in the Southern California office, Saurabh Sanghvi is a partner in the Bay Area office, and Doug Scott is a senior expert in the Chicago office.

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\(^{65}\) Andrew Van Dam, “The most-regretted (and lowest-paying) college majors,” Washington Post, September 2, 2022.