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# HITTING HOME:

Quality, Cost, and Access Challenges  
Confronting Higher Education Today



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## Quality, Cost, and Access Challenges Confronting Higher Education Today

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Jobs for the Future

*On behalf of*  
MAKING OPPORTUNITY AFFORDABLE

*Supported by*  
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# HITTING HOME

The United States needs to increase its production of postsecondary education degrees *and* reduce gaps in achievement among racial and socioeconomic groups. Otherwise, the country will not be able to meet workforce needs, maintain international economic competitiveness, and improve the quality of life for all Americans.

If current production patterns in postsecondary education persist, the nation will face a significant “degree gap” that puts it at a disadvantage relative to other leading developed nations. In fact, the size of this gap—the difference between degrees produced in the United States and those produced by nations who are among our top competitors—could reach almost 16 million degrees by 2025, according to new data prepared for the *Making Opportunity Affordable* initiative.

To close the gap, the nation’s colleges and universities will need to increase the annual rate of degree production by more than 37 percent. This estimate—prepared by the National Center for Higher Education Management Systems—focuses on top degree producing nations who are members of the Organisation for Economic Cooperation and Development and does not include India and China, whose degree production is also rising rapidly.

According to the new data, closing the gap will require the nation’s colleges and universities to ensure that minority groups, non-traditional-age college students, and students from low-income backgrounds achieve the same levels of attainment that we see today among white and Asian Americans, traditional-age college students, and wealthier students. Simply reaching the current attainment levels of white students will depend on about 10.6 million more people of color earning postsecondary degrees by 2025 than do so today. Paying for this level of expansion in postsecondary education will demand implementation of a two-fold agenda:

- Introducing a new public investment strategy that includes growth in funding and a much sharper focus on expanding capacity and bolstering productivity in the delivery of higher education;
- Encouraging higher education systems and institutions to be more cost-effective and collaborative with K-12 education in order to enhance student access and success, further contain costs, and introduce additional productivity improvements.

This will require states and institutions to set goals for quality, cost, and access, and to establish metrics for measuring progress. States and institutions also must institute multi-tiered strategies to address these challenges. These strategies include: strengthening inter-institutional collaboration through comprehensive approaches to articulation and transfer; focusing resources on core academic priorities; streamlining student transitions from K-12 to postsecondary education; promoting timely degree completion; and redesigning academic programs to improve student results while reducing cost. While there have been some examples of state and institutional action in these areas, this action has not been comprehensive, coordinated, or sustained. But those states and institutions that have moved forward to adopt these changes have seen promising results.

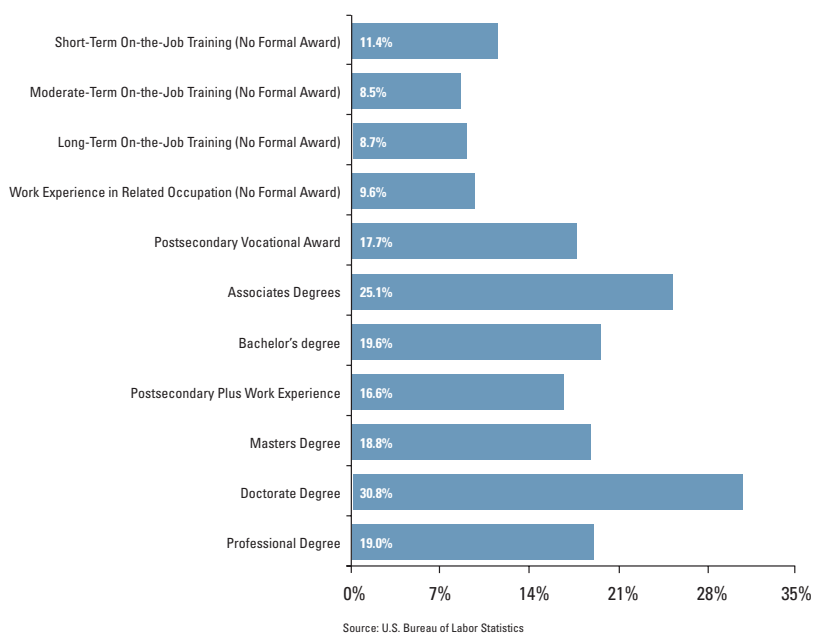
The multi-year *Making Opportunity Affordable* initiative aims to provide research, tools, and support to help states and institutions transform how they deliver postsecondary education to serve more students without reducing quality. By introducing more cost-effective approaches, states and their higher education systems can reinvest in access and quality improvements. Support for the initiative has been provided by Lumina Foundation for Education.

## 1. CHANGING WORKFORCE DEMANDS

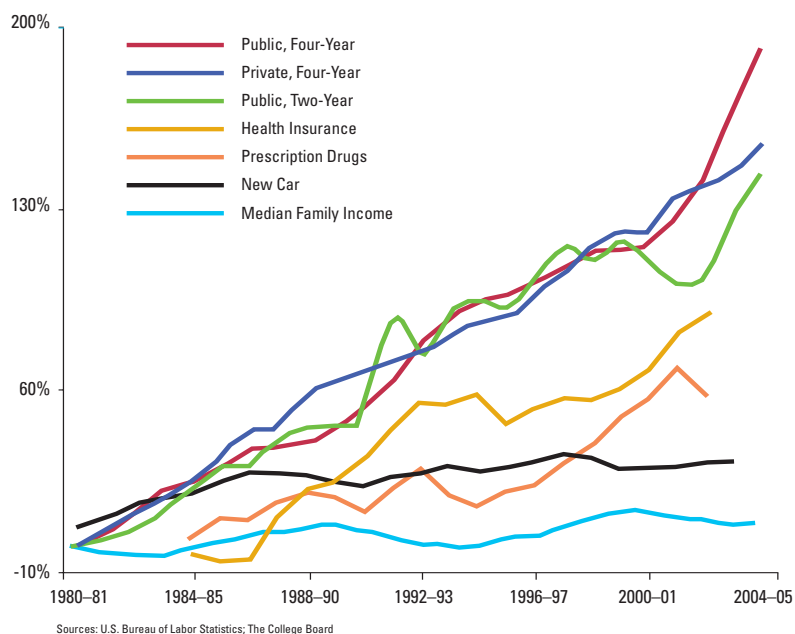
A recent study by the Bureau of Labor Statistics indicates that high-skill jobs that require advanced learning will make up almost half of all job growth in the United States. While low-skill jobs will continue to grow, the rapid expansion of high-skill work is an indication of the nation’s shift from manufacturing and farming toward a more service- and information-based economy. In fact, jobs requiring an Associate’s degree or beyond will increase at faster rates than jobs requiring less than an Associate’s degree between now and 2014 (see Figure 1). The minimum level of education required in high-growth fields is also likely to increase in the years ahead, which could widen the gap.

High educational attainment correlates with state economic strength and high income. A dozen states (California, Connecticut, Colorado, Delaware, Illinois, Maryland, Minnesota, New Hampshire, New Jersey, New York, Virginia, and Washington) have both high levels of personal income per capita and high percentages of working-age adults with four-year degrees. Only three states have high per-capita income and low educational attainment: Alaska, Michigan, and Nevada, all with economies tilted toward high-wage industries requiring lower levels of education.

**Figure 1.**  
**Changing Workforce Needs: The Projected Percentage Employment Growth in the U.S. from 2004 to 2014 by Level of Education Required**



**Figure 2.**  
**Price of College is Going Up, Percent Change over Time**



## 2. UNDERLYING PROBLEMS

In many ways the United States is doing better *and* worse when it comes to higher education. The nation's higher education system has historically been the strongest in the world, and by some measures still is. The number of students pursuing degrees is at an all-time high. Academic preparation for college-level work is improving. College-going rates are holding steady despite double-digit tuition increases.

But these signs of success mask deeper problems. The percentage of our population earning college degrees is stagnating, because a larger proportion of young people are not entering or not progressing through postsecondary education. Low-income and minority students—the segments of the population growing most rapidly—are not succeeding at rates equivalent to their growth. Meanwhile, rising expenditures by students and taxpayers are not resulting in better learning, which points to a dangerous “productivity gap.”

**Changing Demographics.** The number of students attending higher education institutions has grown dramatically recently, but the composition of that population is changing along with that of the population as a whole. According to the U.S. Census Bureau, the percentages of African Americans and Latinos from 18 to 44 years old will rise by about 30 percent between 2000 and 2025, an increase of about 10 million people. Meanwhile, as the white population ages, the percentage of white adults from 18 to 44 will decline by 6.1 percent, a drop of 4.4 million. Among 18- to 24-year-old white young adults, the population will drop 9.6 percent. So the United States must dramatically increase degree production while more effectively serving groups who typically have not succeeded at the same rates as whites.

**Rising Costs and Prices.** The costs of providing higher education and the prices paid by students and their families have increased substantially. Even when adjusted for inflation, tuition and fees have risen 24 percent at four-year public universities over the past five years and 32 percent over the past decade, according to *Trends in College Pricing 2006*, a study conducted by the College Board. The report reveals that tuition and fees at private institutions have risen 11 percent in the past five years and 25 percent in the past decade in inflation-adjusted dollars. Meanwhile, public two-year institutions have done a better job limiting price increases, but even their tuition and fees have risen 22 percent in the past decade when adjusted for inflation (see Figure 2).

The result has been that lower- and middle-class families are having a harder time paying for college. More poor



students are staying away, and large percentages of students face heavy debt as they enter the workforce. According to the American Association of State Colleges and Universities, today two out of three students who attend public colleges and universities graduate with debt, and the average borrower owes \$17,250 in student loans. Ten years ago, the average student borrower attending a public college or university graduated owing \$8,000 in student loans after adjusting for inflation.

Rising prices are the tip of the iceberg. The amount of money that colleges and universities spend to provide education to their students is rising faster than consumer prices and health care costs. Over the past decade, the Higher Education Price Index has increased significantly faster than the nation's Consumer Price Index, which measures the relative cost of a typical basket of goods and responds to changes in the economy as a whole. According to data from the Commonfund Institute, the past decade has seen the HEPI rise 31 percent, including an 18 percent increase in the last five years alone. Meanwhile, the CPI has risen 22 percent and 12 percent, respectively.

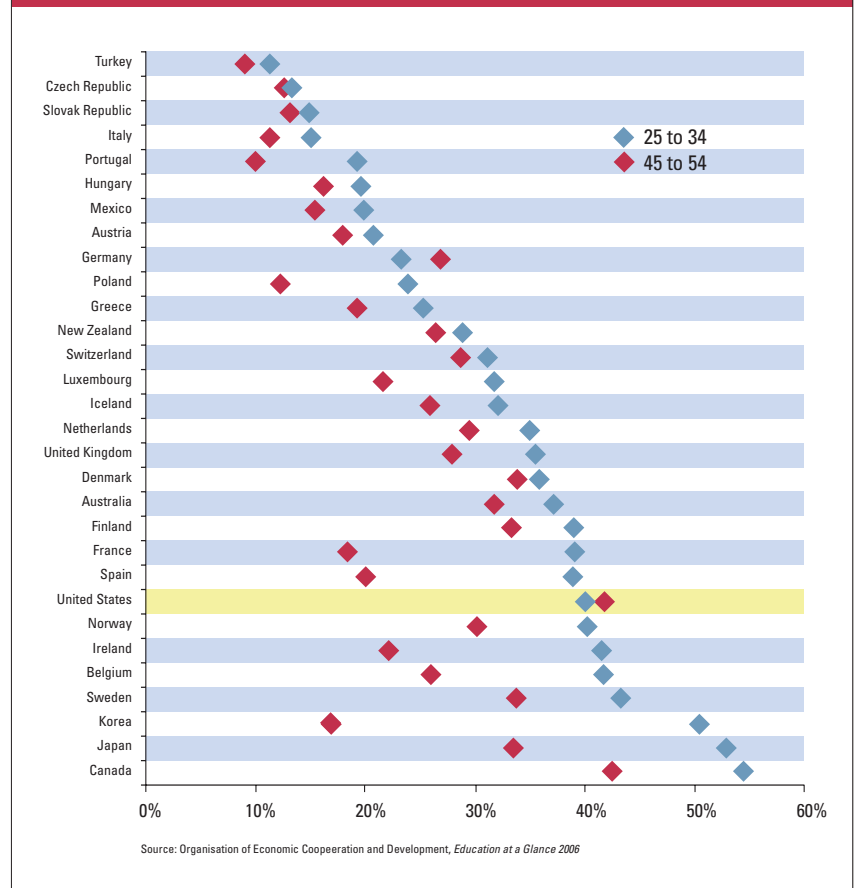
There are disagreements about the causes of these cost increases, and some experts argue that universities cannot control spending growth because funding is always needed to improve quality. The *Making Opportunity Affordable* initiative is investigating the real patterns of spending in higher education and has found evidence that cost increases are *not* inevitable. Institutions can control costs and maintain access and quality if they do a better job of targeting resources to programs that benefit students. A new study to be released by the initiative later this year will provide new information on what is driving up costs.

In the past, colleges have avoided coming to terms with cost management by seeking new revenues—in the form of private fundraising and student tuition increases—rather than changing practices. This promotes what Charles Miller, chairman of the U.S. Secretary of Education's Commission on the Future of Higher Education, has called "a top-line structure with no real bottom line." The revenue chase cannot continue. State appropriations for higher education are failing to keep pace with enrollment increases and inflation. Legislatures have increased funding for higher education by an average of 3 percent annually in recent years, but have many competing priorities. States also are facing large structural deficits—service demands in excess of available revenues—that could limit resources available to address these challenges. Private giving is highly variable and cannot be relied on by higher education as a budget balancer.

The public is beginning to push back against constant tuition hikes, raising questions about whether college is worth it and whether colleges are doing the best they can to enable students to attend. More than two-thirds of Americans (68 percent) believe that colleges and universities could reduce their costs without hurting the quality of the institutions, according to a 2004 *Chronicle of Higher Education* poll.

**Quality.** How well are students doing? Our understanding of student knowledge and skills comes from national studies, which indicate that the mathematical proficiency and document/prose literacy of college graduates have not improved and, in some cases, actually have declined over the past decade. Adults with college degrees dropped 11 points in prose literacy and 14 points in document literacy between 1992 and 2003, according to the National Assessment of Adult Literacy. A 2005 study by American Institutes for Research revealed that 20 per-

**Figure 3.**  
Differences in College Attainment (Associate's Degree and Higher) Between the OECD Countries and the U.S. and Between Young and Older Adults, 2004



cent of U.S. college students completing four-year degrees—and 30 percent of students earning two-year degrees—have only basic quantitative literacy skills. According to the study, more than 75 percent of students at two-year colleges and more than 50 percent of students at four-year colleges score below the literacy proficiency level. They lack the skills to perform complex literacy tasks, such as comparing credit card offers with different interest rates or summarizing the arguments of newspaper editorials.

In addition, structural forces make it difficult for states and institutions to focus on these issues in a sustained way. State funding cycles promote reactivity and crisis

management rather than thoughtful planning. Also, many states and institutions do not fully understand why costs are rising, in what areas they are rising, and what tools or knowledge will help them determine what to do.

As a result of changing demographics, rising costs and prices, the erosion of quality, and these structural forces, we are losing ground in helping to ensure that all Americans can attend college at a cost the nation and its families can afford.

### 3. THE DEGREE GAP

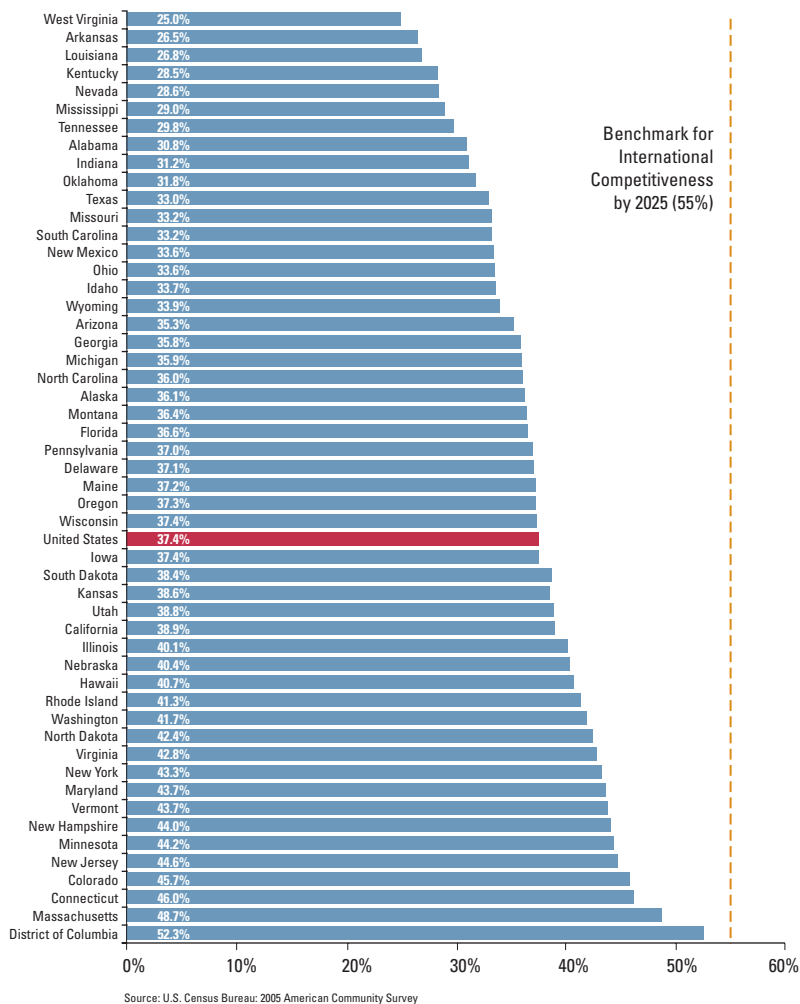
According to the analysis of OECD data, the U.S. deficit in degree attainment poses a serious threat to the nation's economic well-being. Other highly competitive nations are improving the quality of the education they provide their young people, while also radically increasing the capacity of the systems that serve them. These nations have overtaken the United States' long-time position as the world leader in degree production relative to population as a whole.

Today seven nations (Belgium, Canada, Ireland, Japan, Norway, South Korea, and Sweden) lead the United States in degree attainment (see Figure 3). More than half of Japanese and Canadian 25- to 34-year-olds, for example, have a Bachelor's or Associate's degree, while only 4 in 10 Americans in this age group have earned postsecondary degrees.

We are losing ground to other nations largely because of relatively low college completion rates. Although the United States still ranks in the top five in the proportion of young people who attend college, it ranks 16<sup>th</sup> in the proportion who actually finish, according to the National Center on Public Policy and Higher Education's *Measuring Up 2006* report. While estimates vary, American universities award about 18 degrees for every 100 full-time students enrolled. The leading nations (Japan, Portugal, and the United Kingdom) award about 25 degrees. So these nations are experiencing more positive returns on their investments in higher education

As other countries ratchet up access and attainment, American Baby Boomers, the best-educated workers in history, are retiring and being replaced in the workforce by young people who possess less knowledge and weaker skills than the current generation. In fact, the United States and Germany are alone among OECD nations in this respect: The percentage of their workers ages 25-34 who have a postsecondary degree is actually smaller than the percentage of Baby Boom workers ages 45-54 with such a degree.

**Figure 4. The Degree Gap**  
Percent of Adults with an Associate's Degree or Higher (2005) Compared with Benchmark for International Competitiveness (2025)



For the first time, researchers have examined the extent of the gap in degree attainment between the United States and the rest of the world and its consequences. A new report, based on data analysis conducted for *Making Opportunity Affordable* by NCHEMS, will be released in May. This report, *The Degree Gap*, estimates that the United States will need to produce 15.6 million more Bachelor's and Associate's degrees beyond currently expected levels if the nation is to keep up with its best-performing peers—781,000 additional degrees per year between now and 2025, an increase of 37 percent over the current pace of degree production. According to the report, only eight states and the District of Columbia are on pace to meet this ambitious goal. But even states on course to close the gap will do so only by more effectively serving a growing population of historically underrepresented racial and ethnic groups. Some states will have to more than double the numbers of young people who obtain college degrees by 2025. This could have severe fiscal consequences, but states that take on the challenge could see tremendous economic benefit (see Figure 4).

However one looks at the problem, the United States has miles to go to eliminate racial and ethnic disparities in degree production, strengthen the domestic workforce to meet demand for higher skills and knowledge, and remain internationally competitive. Colleges and universities will have to ensure that minority groups achieve at the same levels as white and Asian Americans, and earn about 10.6 million more postsecondary degrees by 2025 than would be the case given current circumstances (see Figure 5).

#### 4. WHAT NEEDS TO BE DONE

The magnitude of the challenge indicates that business as usual is unacceptable. The solution combines two approaches: a) sustained investment in higher education; and b) redesigned institutional practice and public policy to promote greater cost-effectiveness, informed by new knowledge and metrics.

A national agenda for redesigning the higher education system should include several crucial elements. Consumers and the federal government must continue to advocate broader access, improved productivity, and better quality in postsecondary education. Much of the heavy lifting, however, needs to come from state policy-makers and higher education decision-makers to:

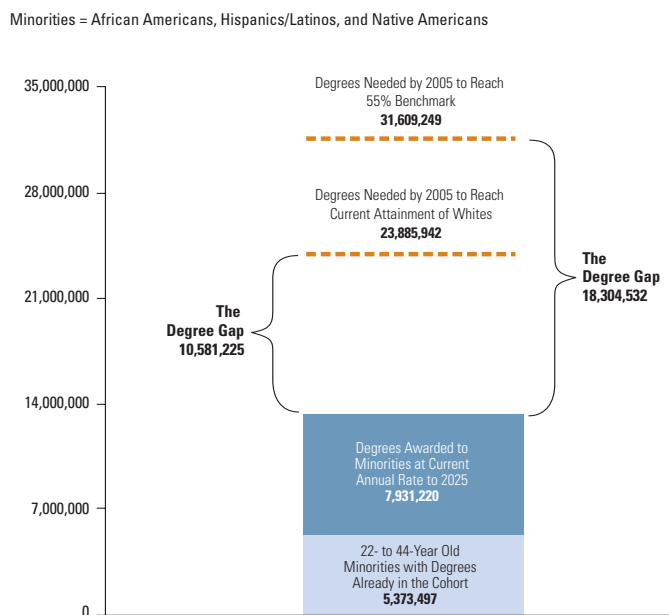
**Set goals for quality, cost, and access, and establish metrics for measuring progress.** Development of strategic plans and public agendas at the campus, system, and state levels demands goals and metrics that address resource use

in relation to student results. Because much of the data and information essential to this work are not currently available or widely used, the *Making Opportunity Affordable* initiative will make significant investments in creating and testing these tools.

**Pursue multiple strategies for meeting these goals, including: Strengthening inter-institutional collaboration through comprehensive approaches to articulation and transfer to reduce repeat course-taking and student attrition.**

Florida has taken the lead in addressing these concerns by ensuring that most community college graduates will be deemed to have met all general education requirements and will be guaranteed admission into the upper division (junior status) of a state university. State institu-

**Figure 5. The Degree Gap**  
Achieving Racial/Ethnic Parity Relative to Current Attainment Rates for Whites and Benchmark for International Competitiveness



Source: U.S. Census Bureau 2005 ACS, Population Projections, NCES, IPEDS Completions Survey (2004-05)

#### How We Measured the Degree Gap

NCHEMS estimates that by 2025, the proportion of the population with an Associate's or Bachelor's degree will be 55 percent in the three top-performing countries (Canada, Japan, and South Korea) compared to 40 percent in the United States today.

To stay even with these countries, the United States will need to have a total of 94 million working-age adults with Associate's or Bachelor's degrees. Of those, about 31 million current degree-holders will still be in the workforce in 2025, leaving the United States about 63 million degrees short.

At the current pace of production, the United States will produce about 41 million degrees by 2025, leaving a gap of 22 million. When adjusted for net gains from immigrants with degrees (i.e., those entering the United States with postsecondary degrees minus degree-holders leaving the United States), the "degree gap" will amount to about 15.6 million degrees.

tions also abide by a uniform system of course numbering, and the state offers a Web site that provides unbiased advising about postsecondary opportunities. Some states have initiated joint degree programs to fully utilize existing investments. North Dakota offers a joint program in nursing in which course delivery moves from campus to campus, with many institutions participating, allowing a needed program to be offered on a periodic basis in sparsely populated areas without the typical inefficiencies associated with providing expensive programs in rural communities.

#### **Focusing resources on core academic priorities.**

A few states, such as Ohio and Virginia, have instituted productivity reviews that identify undersubscribed majors at all public institutions and reallocate public funds away from those majors if they fall below a designated threshold. The Illinois Priorities Quality and Productivity initiative in the mid-1990s pursued this goal by providing a common set of data about individual program performance to institutions. After providing the data, the Illinois Board of Higher Education left the decision about which programs to eliminate up to the institutions so long as they improved institutional performance within established guidelines.

#### **Streamlining student transitions to reduce rework and attrition.**

This includes offering accelerated learning options (e.g., Advanced Placement/International Baccalaureate, dual/concurrent enrollment, Early College High Schools) and early intervention programs to boost student preparation. In California, the 11<sup>th</sup> grade standards test serves as a barometer of readiness for courses in the California State University system, giving students early warning about their college preparation. Washington's Running Start program reaches about 10 percent of high school juniors and seniors in the state. Running Start students who transfer their credits to four-year institutions complete Bachelor's degrees with an average of 33 fewer state-supported credits than other students, resulting in lower net costs for both the student and the state. Once in college, Running Start students also appear to perform as well as, and in some cases better than, their peers.

#### **Promoting timely degree completion to create increased capacity for new enrollment.**

New York's Bundy Aid program, for example, rewards private institutions for graduating New York State residents, providing strong incentives for ensuring degree completion. Western Governors University uses test-out provisions and other institutions use College Level

Examination Program scores to allow qualified students to advance faster.

#### **Redesigning academic programs to improve student results while reducing cost.**

Institutions don't need to tie up several faculty members to teach introductory courses in high-demand subject areas. A recent pilot study by the National Center for Academic Transformation found that 25 of 30 institutions that redesigned a popular course by making smart use of technology and engaging professors as tutors, rather than lecturers, improved learning outcomes, while reducing cost by an average of 37 percent.

Later in 2007, the National Center for Public Policy and Higher Education will release a detailed report for the initiative on effective practices to promote lower cost, equitable access, and higher quality and productivity among states and institutions.

**W**e are at a crucial turning point. The U.S. economy is still strong, and has the potential to remain strong into the future. The nation's workforce is one of the most highly skilled and productive in the world, and can stay that way. But this will happen only if the country makes strategic choices about how we prepare today's workforce—and the workforce of 20 years from today.

The structural changes necessary to put the system on track to meet the attainment benchmark will require breaking with tradition, on many levels, and recentering institutions on their core missions.

Higher education in the United States successfully addressed the economic, demographic, and technological challenges of the 19<sup>th</sup> and 20<sup>th</sup> centuries, educating new Americans in the Industrial Age, educating the "greatest generation" in the post-WWII era, and opening doors to women and minorities in more recent times. The development of land grant colleges, the expansion of higher education made possible by the GI Bill, and the establishment of community colleges reduced disparities in opportunity created a workforce able to satisfy the demands of the state and local economies, and they drove innovation that resulted in continuous economic growth and improvements in the quality of life and standard of living for almost all Americans. States, institutions, and the nation must make no less a commitment to confront the new global challenges of the 21<sup>st</sup> century, acting boldly to expand opportunity and produce the talent the nation needs at a cost taxpayers and students can afford.





REINVESTING IN COLLEGE ACCESS AND SUCCESS

#### About Making Opportunity Affordable

Lumina Foundation for Education's multi-year *Making Opportunity Affordable* initiative seeks to help states and institutions move forward with the best information, significant support, and new tools and strategies to address key problems. The initiative will:

- **Spark a national dialogue about cost, quality, and access.**
- **Mobilize and support leaders eager to take action.**
- **Unite courageous innovators in a national network to share ideas and strategies.**
- **Produce research** to answer key questions in the field, including the magnitude of the challenge, the causes of skyrocketing costs, and the changes in policy and practice likely to be most potent.
- **Develop tools and information** to help colleges, policymakers, and the public understand what is at stake and how to evaluate the productivity of their postsecondary systems.
- **Fund model programs in states and institutions.** The initiative will award multi-year Opportunity Grants to up to five states and their higher education systems. These grants will help states audit current campus practices and system/state policies related to quality, cost, and access to identify priority areas that need redesign. The process will yield ways to strengthen core academic functions, streamline student transitions into college, promote accelerated degree completion, and encourage systemic approaches that carefully integrate long-term efforts to lower cost, increase quality, and bolster access.
- **Identify, document, and disseminate** analyses of existing models and new ideas to encourage broader implementation. The conclusions the initiative reaches can serve as the basis for engaging additional states, their higher education systems, and public and private institutions in the quest.

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**Lumina Foundation for Education**, an Indianapolis-based, private, independent foundation, strives to help people achieve their potential by expanding access and success in education beyond high school. Through grants for research, innovation, communication, and evaluation, as well as policy education and leadership development, Lumina Foundation addresses issues that affect access and educational attainment among all students, particularly underserved student groups, including adult learners. The Foundation bases its mission on the belief that postsecondary education remains one of the most beneficial investments that individuals can make in themselves and that society can make in its people.

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**Jobs for the Future** believes that all young people should have a quality high school and postsecondary education, and that all adults should have the skills needed to hold jobs that pay enough to support a family. As a nonprofit research, consulting, and advocacy organization, JFF works to strengthen our society by creating educational and economic opportunity for those who need it most.

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