



STRATEGIC PLAN
2013 TO 2016

February 3, 2013

In 2009, Lumina Foundation released its first strategic plan, based on the goal that 60% of Americans obtain a high-quality postsecondary degree or credential by 2025—a goal we now call Goal 2025. Much has changed even in the short time since that plan was written, both in the external environment and in what we have learned from our work. This strategic plan—intended to guide our work for the next four years from 2013 through 2016—reflects those changes:

GOAL 2025

To increase the proportion of Americans with high-quality degrees, certificates, and other credentials to 60% by the year 2025

- Throughout the nation, there is a much broader and deeper understanding of the need to increase postsecondary attainment. Some version of Goal 2025 has been adopted by or is a major influence on the federal government, a majority of states, national higher education associations, many individual colleges and universities, and communities around the U.S. including several large metropolitan regions. At the same time, however, the resources available to support new initiatives to increase attainment in traditional ways are severely constrained.
- We have learned much about the challenges in increasing attainment, as well as promising approaches for doing so. We know the factors that influence student success in postsecondary education and how more students could receive the support they need to succeed. We have learned how to help higher education institutions and systems become more productive to serve more students. We have learned the necessity of assuring the quality of degrees and other credentials in terms of student learning and how this might be done. We have also learned a great deal about influencing public policy at the state and federal levels and mobilizing higher education institutions, communities, and regions to increase attainment.

Between 2009 and 2025 lie 16 years. Our first strategic plan covered the first quarter—the first four years—and this strategic plan will take us halfway to 2025. We have set the stage for reaching the goal, but we believe over the next four years we must do two things: develop a clear understanding of what we must do to create a system of higher education that can reach much higher levels of attainment, and make real progress toward the 60% goal.

Progress on Increasing Attainment

In 2009, setting a national goal for higher education attainment was a bold step, even for a national foundation focused on college access and success. In fact, we called it “The Big Goal” and described it as “audacious but attainable” in that first strategic plan. While we now call it Goal 2025, it remains our focus. To Lumina, the goal has always been more than a vision statement—we believe it must be attained, and we believe it can be attained.

Reaching Goal 2025 is a national imperative and will require concerted action on the part of many. While Lumina cannot reach the goal through our actions alone, we hold ourselves accountable for acting strategically to produce the conditions that will lead to much higher levels of attainment and to help mobilize the individuals, organizations, institutions, and governments throughout the U.S. that must act to reach the goal.

Shortly after the release of our first strategic plan, we began reporting on national progress toward the goal in a series of reports called *A Stronger Nation through Higher Education*. In these reports, we set

the metric for measuring progress as the percentage of the U.S. adult, working-age population holding a two- or four-year college degree.

In 2011, the most recent year for which data are available, the percentage of Americans between the ages of 25 and 64 with a two- or four-year college degree was 38.7%. The rate has been increasing slowly but steadily – from 37.9% in 2008, to 38.1% in 2009, to 38.3% in 2010.

In 2011, the higher education attainment rate of young adults (ages 25-34), a good leading indicator of where higher education attainment rates are headed, was 40.1%—almost one-and-a-half percentage points higher than for all adults and two-and-a-half percentage points higher than in 2008.

From the first strategic plan, Lumina's attainment goal has included high-value postsecondary certificates.ⁱ Data on the number of adults holding certificates are not readily available, so it has been impossible to include certificate holders in our reporting on higher education attainment rates. This year, however, the first solid estimates of the number of high-value postsecondary certificates have been produced. They suggest that an additional 5% of the U.S. adult population between the ages of 25 and 64 hold a postsecondary certificate with significant economic value.ⁱⁱ

The recent increase in attainment rates is a step in the right direction, but we must accelerate progress if we hope to reach a national attainment rate of 60%. That task is the focus of this strategic plan and Lumina's work. The goal has not changed, but our understanding of the conditions that are driving the need for increased attainment—both economic and social—is much deeper than it was when the goal was first proposed. Likewise, the need to increase attainment is clearer than ever.

The Economic Need to Increase Attainment

In our first strategic plan, the rationale for increasing higher education attainment was just becoming more widely understood. While it is perhaps inevitable that there has also been a certain push-back to the goal and to the idea of increasing higher education attainment generally (more on that later), most now agree that, as a nation, we desperately need more citizens with postsecondary credentials. We now know that 65% of U.S. jobs—almost two-thirds—will require some form of postsecondary education by 2020.ⁱⁱⁱ

For individual Americans, the consequences of not completing postsecondary education are increasingly dire. For many years, the main reason many people went to college was to gain access to better-paying jobs that allowed them to earn more throughout their lives. But earnings potential is no longer the only driver. In this economy, the issue is whether you even *have* a job.

The Great Recession made this relationship painfully clear. Between the beginning of the recession in December 2007 and its official end in January 2010, the economy lost 5.6 million jobs for Americans with a high school education or less. Jobs requiring an associate degree or some college declined by 1.75 million, while the number of jobs for Americans with a bachelor's degree or above actually grew by 187,000. That's right—the growth in jobs for bachelor's degree holders slowed during the recession but never actually declined, and the economy continued to create jobs for them throughout the recession.

Since the end of the recession, jobs requiring an associate degree or some college have grown by 1.6 million and almost recovered to pre-recession levels. Jobs for bachelor's degree holders have accelerated their growth—adding 2 million new jobs in the recovery. In contrast, the recovery never

came to those whose highest level of education is a high school diploma or below. Since January 2010, the economy has lost an additional 230,000 jobs in this category.^{iv}

In spite of these numbers, some try to make the case that the value of college degrees is diminishing, citing the unemployment rates of recent college graduates as evidence. But even a cursory look at the actual data shows how spurious these arguments are. As is now well-known, the overall employment rates are much higher for college graduates. But the same is true for recent graduates. In 2010, at the peak of U.S. unemployment rates, around 88% of 23- and 24-year-old college graduates were employed. No one is saying that the job market for college graduates is easy, but the situation for those with less education is far worse. For high school graduates in the same age group, the rate of employment was only 65%; for high school dropouts it was a crushing 42%.^v

As in the past, the wage differential for those with college degrees and certificates remains significant, and lifetime earnings continue to rise for those with postsecondary credentials.^{vi} Again, some suggest that this is somehow meaningless, and that many graduates are underemployed in jobs that don't require postsecondary credentials. Again, the facts speak otherwise. The wage premium—the gap between what employers are willing to pay for graduates vs. those who don't have a postsecondary credential—is actually growing, and has continued to grow throughout the recession and its aftermath. Employers need more college graduates, and they are paying an increasing premium to get them.

Perhaps the clearest evidence about the need to increase higher education attainment comes from the fact that employers cannot find people with the skills they need to fill all of their current job openings, much less those that will be created in the future. A third of employers cited “lack of technical competencies/hard skills” as their main difficulty in filling jobs—up from just 22% in 2011.^{vii} This problem is particularly acute in the manufacturing sector, where advanced manufacturing techniques are dramatically increasing the demand for postsecondary skills. Last year, fully two-thirds of manufacturers reported “moderate to severe” shortages of qualified workers.^{viii}

What happens when employers can't find people with the skills and credentials they need? The answer is that the economy as a whole suffers. Available evidence suggests that our nation's inability to match jobs to people with the right skills is a major factor in explaining why employment rates have not improved as quickly as they should have in the economic recovery.^{ix}

The Social Benefits of Increasing Attainment

Increasing the number of college graduates will not only bolster our economy, it will also strengthen our democracy and communities throughout the nation. These social and cultural reasons for increasing educational attainment are, at times, undervalued. There is a wealth of evidence that increased attainment improves health, lowers crime rates, and yields citizens who are both globally aware and participate more in civic and democratic processes such as voting and volunteering, all of which have enormous implications for our democracy.^x

While the evidence about the social benefits of increasing higher education attainment is as clear as ever, there is a new urgency about it in today's environment. Many factors are contributing to the need to increase attainment, including the increasing complexity of society, the growing role that information and information technology play in people's lives, and the fact that people from different countries and cultures live and work together more than ever. The U.S.—like the rest of the world—

is becoming a knowledge *society*, not just a knowledge economy. The essential skills for success in today's economy are critical thinking skills—abstract reasoning, problem solving, communication, and teamwork. These are precisely the skills that are needed to build strong communities and societies wherever one lives.

The Equity Imperative to Increase Attainment

It is a long-standing reality that educational success is uneven in the U.S. In particular, low-income and first-generation students, racial and ethnic minorities, immigrants, and adults have traditionally been underrepresented among college students and graduates. We must now realize that these Americans are bearing a disproportionate share of the increasingly severe consequences of not completing postsecondary education.

The gaps in attainment have become unacceptable. Given that increasing higher education attainment is critical to a strong economy and a strong society, the fact that educational success is denied to so many in our nation can fairly and accurately be described as a crisis.

Since the first *Stronger Nation* report, Lumina has tracked and reported higher education attainment by race and ethnicity. These data paint an alarming and underappreciated picture. Unless significant progress is made to close gaps in attainment, we cannot reach the 60% goal and will not reap the resulting benefits. A closer look at 25- to 29-year-old Americans tells the story. Their overall higher education attainment rate was 37.8% in 2009. However, the rates vary significantly by race and ethnicity. The highest attainment rate in this young adult population is for Asians, at 65.6%, followed by Non-Hispanic Whites at 44.9%. The attainment rate for African Americans is 24.7%, for Hispanics it is 17.9%, and for American Indians it is 16.9%.^{xi}

As worrisome as these attainment rate differentials are, there is an even more troubling trend in the data. Attainment rates for both Asians and Whites between the ages of 25 and 29 are significantly higher than for the 30-and-above population, but the same is not true for African Americans, Hispanics, and American Indians. Attainment rates for young adult African Americans are actually slightly less than for older African Americans (24.7% vs. 25.0%), and for young American Indian adults they are substantially lower (16.9% vs. 21.6%).

These gaps in higher education attainment are complicated by growing gaps in attainment between women and men. In 2011, 45% of women between the ages of 25 and 64 held a two- or four-year college degree, compared to 40% of men. Among young adults between the ages of 25 and 29, the gap is twice as wide—47% of women compared to 37% of men.^{xii} The attainment rate for Black men aged 25 to 34 (28%) was lower than that for Black women (32%) in 2009, as it was for Hispanic men (16%) compared to Hispanic women (24%).^{xiii} When coupled with the loss of middle-skill jobs in occupations traditionally held by men, closing gender gaps in higher education attainment is increasingly urgent.^{xiv}

A similar pattern emerges when examining the data on educational attainment for first-generation students—those whose parents did not attend or complete college. These students are less likely to attend college and are more likely to drop out prior to completion, in part due to their choices regarding courses, attending part-time, and other academic factors that have been shown to influence degree completion.^{xv} Since first-generation students are an increasing proportion of the pool of

potential students, increasing their success rates is essential to increasing higher education attainment.^{xvi}

The attainment patterns for immigrants and low-income Americans tell the same story. Fifty-four percent of immigrants between the ages of 25 and 34 have completed high school or less as their highest level of education, compared to 36% for young adults whose parents were both born in the U.S.^{xvii} Helping these immigrant Americans to complete postsecondary education would greatly facilitate their full participation in the economy and society, to the benefit of all.

In 2008, 55% of high school graduates from the lowest income quintile enrolled in college directly from high school, compared to 80% of those from the top quintile.^{xviii} Low-income students are more likely to attend institutions with lower graduation rates and attend part-time.^{xix} As a result of all this and other factors, four out of five 24-year-olds in the upper income quartile hold four-year college degrees compared to only one out of ten in the lowest income quartile.^{xx}

Because people who complete postsecondary education earn more throughout their lives, these gaps in attainment increase income inequality. As in most advanced economies around the world, unequal success rates in postsecondary education are a major contributor to income inequality.^{xxi}

Put bluntly, this is an intolerable situation. Not only will the nation fall short of the attainment levels it needs unless these gaps are closed, the fact that they exist must be rejected on moral grounds given the increasingly severe consequences of not obtaining a postsecondary credential. America's democracy and its economy are ill-served by a system that fails to tap all of our talent. At Lumina, we will redouble our efforts to close these gaps through our work, and we call upon all our partners and stakeholders to do the same.

The Meaning of Quality Credentials

Lumina is calling for 60% of Americans to hold *high-quality* postsecondary credentials by 2025. When we wrote the Foundation's first strategic plan, we were only beginning to understand the importance of clearly defining that deceptively simple term: *high-quality*. In that plan, we offered a definition that has served us well and which we still rely on to focus our work: high-quality credentials have well-defined and transparent learning outcomes that provide clear pathways to further education and employment.^{xxii}

The need for more college graduates is driven by real demand for the skills and knowledge that their credentials represent. Quite frankly, without a sharper focus on the quality of learning, increased attainment could mean very little.

For too long, quality in higher education has been thought of mainly as a characteristic of institutions and programs. It is correlated with things like admissions selectivity, faculty credentials, class size, campus amenities, the size of the endowment – even the price of tuition. Unfortunately, most people still think of higher education quality in terms of these input measures. But inputs are not now—and probably never have been—a true measure of quality. Actual outcomes are what matter, particularly outcomes for students.

As an outcome, high-quality credentials matter. We must increase the number of Americans who complete postsecondary degrees and certificates which represent valuable skills and knowledge, as well as the ability to apply them. A list of credits earned and courses taken does not provide that assurance of quality.

Reaching Goal 2025

What will it take to reach Goal 2025? Lumina's first strategic plan set the goal, but the focus of this strategic plan is on producing the degrees needed to reach it.

To reach an attainment rate of 60% by 2025, the nation must produce 62 million high-quality postsecondary credentials. At current rates, the U.S. will produce around 39 million two- and four-year college degrees between now and 2025, leaving a gap of 23 million. Lumina has developed a roadmap outlining one possible approach for producing those degrees.

The first step is to focus on students who are coming out of the K-12 education system. Currently, about 69% of K-12 students graduate from high school, and 62% of these graduates go directly to college. Increasing these rates to 75% and 70% respectively—significantly higher than current rates but still well below the rates already achieved by the highest-performing states—would produce 3.6 million additional college graduates by 2025.

The next step is to increase the completion rates of students who are already enrolled in college. Increasing completion rates would produce significant numbers of additional graduates. The throughput of colleges and universities can be accurately determined by looking at the ratio of graduates to FTE enrollment.^{xxiii} Raising completion rates in public colleges and universities above their current levels but below those of today's best-performing states would yield an additional 5.3 million associate and baccalaureate degrees.

Roadmap to the Goal

High school graduation and college participation rates	3,631,000
Public college completion rates	5,315,000
Adults, first time in college	1,531,000
Degree completion by returning adults	3,621,000
High-value certificates	10,310,000

Total additional degrees and certificates produced by 2025	24,408,000
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Producing the rest of the 23 million degrees will require innovative efforts not focused on traditional students. First, we can get more college degrees from adults—both those who didn't go to college directly from high school and those who did but left without a degree. Increasing enrollment by first-time adult students could realistically add 1.5 million college graduates to the total. Targeting adults who attended college but never completed a degree would yield even more. Today, 36.2 million Americans between the ages of 25 and 64 fall into this category. If just 10% of them completed a degree or other high-quality credential, 3.6 million degree holders would be added to the total.

The next step is to include individuals who hold high-value certificates. According to recent data,^{xxiv} approximately 5% of adults between the ages of 25 and 64 hold a high-value postsecondary certificate. To meet Lumina's definition of high-quality credentials, these certificates should "provide clear pathways to further education and employment." We propose that certificates meet this standard

The Attainment Gap

Projected 2025 U.S. population, ages 25 to 64	171,837,000
Total credentials needed to reach 60%	103,102,000
Current degrees (two- and four-year) still in workforce in 2025	37,122,000
Degrees by 2025 from immigration of college graduates	4,417,000
New credentials needed by 2025	61,564,000
Degrees produced by 2025 at current rates	38,288,000
Additional credentials needed	23,276,000

when they meet the following criteria: 1. The certificate is the individual's highest level of education (i.e., the student does not also have an associate or bachelor's degree); 2. The certificate holder has earnings equivalent to those of two-year degree holders; and 3. The certificate holder is working in the field in which he or she received the certificate. Lumina will work to assure that all certificates offer clear pathways to further education, which would add 10.3 million to the total.

The cumulative effect of these efforts would be to add 24.4 million degrees and certificates to the national total—enough to reach an attainment rate of 61% by 2025.

Designing and Building a Student-centered Higher Education System

Clearly, we will not produce the necessary 23 million additional degrees simply by doing more of the same. The student population is more diverse than ever, and most students come from groups that have traditionally not been served well by the higher education system. Their needs for skills and knowledge must be better understood and reflected in the design of both instructional and credentialing systems. Likewise, the ways students will participate in higher education will change—probably dramatically—in the future. These shifts are already under way.

Producing 23 million additional degrees and certificates will place significant demands on the capacity of the U.S. higher education system. Progressively fewer students will attend college in traditional ways, and innovative approaches are needed in the drive to reach 60% attainment.

Taking advantage of the proliferation of competency-based models and open courseware to create new pathways to degrees is one such approach, as is expanding the availability of prior learning assessment (PLA) and other approaches to accelerate progress toward degrees. These approaches—whether pursued as stand-alone efforts or added to existing institutions and degree structures—could serve much larger numbers of students, particularly adult learners.

Innovative approaches to target populations are also needed. For example, many foreign students graduate each year from American colleges and universities and then leave the U.S., in part because they cannot obtain work visas.^{xxv} Changes in immigration policy could allow these college graduates to remain in the U.S. and contribute to increasing attainment rates. Even more importantly, creating

stronger pathways to postsecondary attainment for immigrants without postsecondary credentials—including immigrant adults—is essential to their full participation in American society, and to reaching the national attainment goal.

Likewise, creating better pathways for new veterans to succeed in postsecondary education—including recognizing the skills and knowledge obtained through military service—is another worthwhile approach.

Undoubtedly, there are other promising ideas for increasing the number of college graduates. Achieving the goal will require a combination of proven and innovative strategies.

Lumina believes the only way to create the higher education system that can produce 23 million additional degrees and reach the level of attainment the nation needs is to design and build it around the needs of students. This is what we mean by creating a student-centered higher education system, which is the strategic objective of Lumina's work.

Lumina's Strategic Approach

As the nation's largest private foundation focused exclusively on getting more Americans into and through higher education, Lumina has a unique leadership opportunity—and responsibility—to act strategically to produce outcomes that will ultimately lead to much higher levels of higher education attainment. Our effectiveness will be determined by our ability to promote action by and through many individuals, organizations, institutions, and governments throughout the U.S.

In most cases, Lumina produces impact by creating the conditions for collective action by others. Reaching the goal will require significant shifts in the priorities and structure of higher education—shifts that will affect a wide range of autonomous stakeholders. We cannot force action. We can, however, act strategically to create the conditions for change and to encourage action on the part of the many individuals and institutions that must act together to increase attainment.

Lumina has defined two high-level imperatives necessary for reaching Goal 2025. While distinct, these imperatives are interrelated and mutually supportive.

The first—*Mobilizing to Reach Goal 2025*—is to mobilize action at the local, state, and national levels and in higher education systems and institutions throughout the nation. To reach the goal, thousands of educators (including faculty and administrators), elected officials, community leaders, business leaders, and other citizens must understand and accept as their own the need to increase attainment. Effective mobilization also depends on these individuals and groups being equipped with the tools and approaches they need to act. Lumina's mobilization work is organized around the creation of a social movement to increase attainment, along with approaches targeted to specific groups that must act if the goal is to be reached.

Lumina's second strategic imperative—*Designing a 21st Century Higher Education System*—is to develop specific approaches to create the fundamental change needed in higher education to reach the attainment goal. This change is really quite simple, but far-reaching in its ramifications. It is that the U.S. move from a system based on time to one based on learning.

As a consequence of this shift, there are specific structures within the U.S. higher education system—particularly finance and credentialing models—that need to be changed for attainment to

increase to the levels called for to reach the goal. The current models were developed in the 1970s or earlier and were designed to address a very different set of needs and priorities than those we face today. Lumina will work to develop new models and to implement them throughout the higher education system.

The First Imperative: Mobilizing to Reach Goal 2025

Strategic Imperative: To focus policy and practice at the local, state and national levels on increasing attainment to reach the goal of 60% higher education attainment.

Rationale: In Lumina's first strategic plan, we intended that what we called the Big Goal would provide focus to our own work and answer the calls for foundations to be more transparent about their strategic objectives. Very quickly, however, we found that Goal 2025 became an important strategic initiative in its own right by helping call national attention to the need to increase higher education attainment.

Arguably, the greatest impact of Goal 2025 has come from its attractiveness to others. We have seen President Obama use a goal for increased higher education attainment to focus federal education policy, and a growing number of states have adopted goals to focus and guide their own efforts. By shifting the national dialogue about higher education toward increasing attainment, the goal has brought urgency and focus to the completion agenda, the need to increase higher education productivity, the critical importance of educational success for underrepresented students, and many other issues.

In this strategic plan, the focus is on creating the conditions that will drive action toward scaling and sustaining the attainment agenda. State and federal policymakers, national and local networks, communities (especially large metropolitan regions), college and university faculty and administrators, K-12 educators, employers, and many others all need to be mobilized to act to increase attainment.

Strategic Approach: Lumina's strategic approach to mobilization is to unite the full range of actors and stakeholders around a common goal—Goal 2025—and to help them work together to increase attainment.

Lumina cannot reach Goal 2025 as a direct result of our own work—no matter how large the project. We can only produce impact at the scale needed to reach the goal by creating the conditions for action by others. Specifically, Lumina must act strategically to mobilize action on the part of the many individuals and institutions that must work together to increase attainment. Of course, mobilization alone is not enough—almost every aspect of higher education policy and practice will be affected by the drive to increase attainment. There is much that will need to change, particularly in the redesign and large-scale expansion of systems of student support, credentials, and delivery. But our success in implementing these approaches depends on creating the demand for solutions to the challenge of increasing attainment.

We believe the first step in creating the conditions for collective action is for groups—states, communities, higher education systems, and others—to adopt their own goal for increased higher education attainment and commit to achieving it. One way Lumina mobilizes people to set these goals is by calling attention to the urgent need to increase higher education attainment.

The next step is for all the relevant stakeholders to jointly develop plans for collective action to increase attainment. Lumina can help by responding to the demand from those mobilized to take action to know how they can act to increase attainment. This guidance can take the form of “play-books” of proven, effective approaches targeted to the needs of employers, metropolitan region leaders and community organizations, state and federal policymakers, higher education institutions, and others. Of course, our ability to offer effective and credible guidance depends on having evidence of what works in different settings to increase attainment. Much of this knowledge is available, but it’s not always in forms that make it actionable to different stakeholders. Developing the evidence and knowledge base for effective approaches—particularly regarding innovative approaches or the expansion of successful, small-scale approaches—must be a focus of all of Lumina’s strategic work.

Lumina has found that strong metrics are the next step in effective mobilization. Metrics help organize the work and keep it on track, document progress to help motivate the participants and generate public support, and provide valuable feedback to help adjust and modify strategies and approaches. We are working with many organizations to develop stronger approaches to metrics, including improving data on postsecondary pathways and outcomes. We are also committed to using metrics more effectively to guide our own work toward Goal 2025.

As a consequence of this change model, our strategic approach to mobilization is built on Lumina’s roles as a goal setter, thought leader, and honest broker—roles that have become increasingly important as awareness has grown of the integral relationship between attainment and urgent national priorities such as job growth and economic recovery. Success in mobilizing action requires increasingly sophisticated approaches to strategic communication, Lumina’s convening authority, and thought leadership at the national level. To build and sustain Lumina’s role in mobilization efforts to increase attainment, we will continue to develop high-quality resource materials on the economic and social impact of higher education attainment. Through a wide range of dissemination approaches, including public speaking, op-eds, and direct outreach to opinion leaders, Lumina will work to frame the national discussion of higher education issues and to drive public and leadership opinion in the direction of increasing attainment. We will also continue to develop and report data and metrics on progress toward Goal 2025.

Strategy 1: Build a Goal 2025 Social Movement

Expected Outcome by 2016: An increased number of target audiences and populations actively support policies and practices that increase attainment to reach Goal 2025.

Rationale: Lumina will work to build a Goal 2025 social movement for target audiences by creating a call to action, building partnerships among stakeholder groups, and developing a common language and plan of action around the need to significantly increase attainment

Lumina's promotion of Goal 2025 has proven attractive to a wide range of organizations focused on college access and success. Because of Goal 2025's national prominence and reach, states, institutions and national organizations have found it more productive to align their efforts to it than to create a competing message. Organizations focused on the needs of underrepresented students have found Goal 2025 particularly attractive in this regard. Providing an even more substantive opportunity to engage in a social movement supporting the goal will lead more organizations to adopt—and achieve—a goal for increased attainment. A well-defined movement can create a rallying cry and a call to action, build bridges among stakeholder groups, and lead to the development of action plans supporting increased attainment. Social movements have often framed important issues and acted as catalysts for action, and a Goal 2025 social movement can do the same.

Lumina is in a particularly strong position to link messages with on-the-ground programs. We have already enjoyed considerable success with these techniques through a variety of limited, but effective, messaging efforts. In each of these efforts, the combination of approaches was vital to success.

Priority Work: In 2013, primary work will be to establish the infrastructure to support a Goal 2025 social movement, with an initial focus on mobilizing metropolitan regions under Strategy 2. The lessons learned and the needs of the participants will define the parameters of future Lumina work in this area, including expanding engagement by other audiences and stakeholders.

Strategy 2: Mobilize Employers, Metropolitan Areas, and Regions to Increase Attainment

Expected Outcome by 2016: Active partnerships involving employers, K-12 education, postsecondary education, local and state government, community-based organizations, business, media, and other stakeholders commit to Goal 2025 and act to increase attainment.

Rationale: Lumina will work side by side with employers, metro areas, and regions to encourage broader adoption of Goal 2025 and create and strengthen the collaborative partnerships needed to increase attainment and more closely align postsecondary education with workforce and civic needs.

Regions, particularly large metropolitan areas, are well suited to efforts to mobilize action to increase attainment. Many of the stakeholders who need to take action can be engaged successfully at the regional level, including higher education institutions, K-12 schools and districts, employers and business, community-based and advocacy organizations, media, and local governments. Lumina can help create and strengthen effective partnerships of these actors within regions to take coordinated and collaborative action to set aggressive goals and develop and implement plans for increased attainment. Lumina can also support these efforts through a robust platform of best practices, models, and technical assistance. All of this work is framed by a model of collective action to ensure an integrated approach to regional mobilization.

Increasing the skills and knowledge of the workforce is a critical issue for all employers, and they must also play a central role in both making the case for increasing attainment and developing approaches that will more closely align postsecondary education with labor market needs. This role is particularly important in establishing and strengthening metropolitan and regional partnerships that can focus the efforts of all parties with a stake in increasing attainment.

Priority Work: Lumina will work to establish metropolitan regional partnerships based on active engagement and collaboration of political leadership, employers and business, higher education institutions, K-12 education, youth-serving organizations, local foundations and funders, college access networks, and faith-based and other community organizations. This work in metropolitan regions will be based on the adoption of a goal for attainment and the development and implementation of a plan with defined roles and expectations to which the partners can commit.

Strategy 3: Mobilize Higher Education to Increase Student Success

Expected Outcome by 2016: Higher education systems and institutions adopt data- and evidence-based policies, partnerships, and practices that close attainment gaps for underserved students and improve overall completion rates.

Rationale: Research has conclusively documented that students who receive comprehensive financial, academic, psychological, and social supports can and will succeed in postsecondary education. The challenge we face is assuring that these supports are made available to the much larger number of students who need them. That cannot be accomplished by scaling up a few programs, no matter how successful they have been with limited numbers of students. What is needed is a fundamental shift in higher education institutions and systems to make them more supportive of student access and success. Student-centered, attainment-focused systems and institutions must engage in re-designing and upgrading infrastructure, programs and services across the board.

Lumina's approach to mobilizing higher education institutions and systems to make this shift is based on the use of data and other evidence to guide institutional improvement efforts and mission definition. Based on our experience, we believe multi-campus and system-wide collaboration and information-sharing partnerships are particularly valuable. Lumina has also supported other approaches to signaling the need for and characteristics of this shift, including public recognition of successful efforts and improvement of reporting of data on higher education outcomes.

Priority Work: Lumina will support efforts to engage higher education systems and institutions in increasing completion rates and closing gaps in attainment by underrepresented students to increase overall degree production. These efforts will focus on systemic change in higher education systems and institutions through strategic partnerships, strong leadership, evidence-based approaches, and data-driven decision-making. A particular focus of this work will be on significant scaling of proven approaches to increasing degree completion by adult students.

Strategy 4: Advance State Policy for Increased Attainment

Expected Outcome by 2016: States adopt formal goals and commit to implementation plans for increasing attainment that are challenging, quantifiable, long-term and address attainment gaps for underrepresented populations.

Rationale: The dramatic increases in postsecondary attainment that Lumina seeks will require concerted action across the entire education system. Since most students obtain postsecondary education through state-supported public higher education systems, this action will not be possible unless public policy at the state level keeps pace.

Lumina's work on strengthening state policy has demonstrated that the act of setting specific goals for increased attainment plays a key role in driving action, just as it has for Lumina. Goals, however, must be challenging and address the gaps in attainment that exist in all states. Even then, goals alone are not enough. States must monitor and report progress toward their attainment goals and align their incentives and accountability systems to them. Most importantly, states must develop strong, comprehensive plans for increasing attainment and focus decision-making regarding resource allocation and other critical issues on their implementation.

To date, 36 states have set goals for postsecondary attainment; 15 of these have set challenging and specific goals and are committed to ongoing measurement of progress. More states need to set attainment goals or strengthen the ones they have, and all need to develop and implement plans for reaching their goals. Over the 2013-16 timeframe, Lumina's role needs to shift to mobilizing states to monitor and report progress in increasing attainment and to take stronger action through a coherent and integrated policy and practice framework.

Priority Work: As a strong advocate for policies that increase attainment, Lumina will support the development of clear strategies for increasing attainment in states, including approaches to track state progress in meeting attainment goals, coordination of efforts among grantees, partners, and contractors, and integration of state policy action across Lumina strategies. Lumina will support this work with an expanded network of Strategy Labs that will provide technical assistance and support services to policymakers in the areas of strategic communications, policy and strategy development, and metrics.

Strategy 5: Advance Federal Policy for Increased Attainment

Expected Outcome by 2016: Policy proposals that support progress toward the goal of increased higher education attainment are developed and advanced through federal legislation and the programs and policies of the Department of Education, Department of Labor, and other federal agencies and departments.

Rationale: Federal policy can help or hinder national efforts to increase higher education attainment. In particular, federal financial aid programs play a central role in helping low- and middle-income students obtain the financial resources they need to attend college. A wide range of categorical funding programs also provide critical resources for student support and college access programs.

Unfortunately, federal policy has not kept up with the sweeping changes in postsecondary education. Federal student aid programs are focused almost exclusively on access and do not give students or institutions sufficient incentives to ensure completion of programs.

Less obvious, but equally important, is the role played by federal policy in regulating and defining the structure and quality of college degrees and academic programs. Such core attributes as the credit hour and quality assurance are directly or indirectly regulated through federal policy. Here, federal credit hour definitions and quality assurance approaches inhibit the development of innovative delivery systems, including competency-based approaches, which could serve more students, reduce time to degree, improve quality, and reduce cost.

Likewise, the role of the federal government in postsecondary workforce development is central, both as a funder and regulator. However, federal workforce policy remains stubbornly disconnected from higher education policy in spite of the growing realization among policymakers that the two systems must be more tightly integrated.

Priority Work: Lumina will increase its staff capacity in Washington, D.C., to enhance its presence in national and federal-level policy discussions under the direction of Lumina's policy leadership staff. Lumina will work to engage federal policymakers through direct outreach, staff networks, testimony, and briefings for relevant committees and individual members of Congress. This work will support the development of a stronger federal policy agenda, leading to new models for student financial support, stronger quality assurance mechanisms, an expansion of innovative delivery and credentialing models, greater alignment of workforce development and higher education systems, and improvement of federal data to better meet the needs of students, families, educators, and policymakers.

The Second Imperative: Building a 21st Century Higher Education System

Strategic Imperative: To develop specific models leading to the creation of a learning-based system of higher education in three key areas:

1. New national models of student financial support
2. New higher education business and finance models
3. New systems of postsecondary credentials and credits

Rationale: While there is a great deal that can be done now to increase higher education attainment, reaching the much higher levels needed to achieve the 60% goal requires new approaches in three key areas: student financial support, higher education business and finance models, and credentialing systems.

Current models in these areas were developed in the 1970s or earlier, and they were designed to address a very different set of needs and priorities than those we now face. All must undergo change if they are to deliver high-quality higher education to a much larger—and growing—number of Americans while simultaneously addressing a changed fiscal environment, radically different and rapidly changing modes of delivery, and new ways to think about learning and the meaning of credentials.

Strategic Approach: Developing each of these models requires fresh thinking and new approaches—a “big idea” that can produce a breakthrough that leads to dramatically improved results. While each model has unique issues and must be addressed independently, the three models are in fact closely related, and a breakthrough in any can help lead to new approaches in the others.

The core issue underlying all three models is the shift from a higher education system built around instruction—measured by time—to one based on learning—measured by demonstration of skills and knowledge. However, the current models of credentialing (particularly degrees), finance, and student aid are all time-based. Indeed, all three are built around the credit hour.

Lumina’s work on these three strategies will be at the design and pilot stage. As new models are developed and tested, they will be moved into wider-scale implementation at the scaling and sustaining stages through Lumina’s work to mobilize higher education and state and federal policymakers.

Strategy 6: Design New Models of Student Financial Support

Expected Outcome by 2016: New national models of student financial support are developed and advanced through federal and state policy advocacy that make college more affordable for low-income students, make the cost of college more predictable and transparent, align and simplify federal, state and institutional policies and programs, and provide incentives to students and institutions to increase completion.

Rationale: The nation's models of student financial support—the frameworks for how students and families pay for postsecondary education—have not kept up with dramatic changes in both the student population and educational systems. In effect, the models are broken, and that has contributed to making higher education unaffordable for too many potential students. In particular, federal student aid systems were designed in prior decades (mostly the 1970s) for conditions that are dramatically different than they are now. It is time to fundamentally rethink our approaches to student finance to assure that resources can be used to support the success of the much larger number of students who need postsecondary degrees.

Priority Work: Through a combination of convenings, research, and strategic grantmaking, Lumina will help support the design of new student finance models to assure that low-income students have access to and succeed in postsecondary education. New models should assure that students have strong incentives to complete programs and to do so as rapidly as possible, and that institutions have the proper incentives to support them in doing so. They should also align tuition and financial aid policy at the state and campus levels, increase employer support of postsecondary attainment, and simplify and clarify eligibility and application processes at all levels to help students and families make more informed choices about their education.

Strategy 7: Design New Higher Education Business and Finance Models

Expected Outcome by 2016:

1. New higher education business models, supported by stronger public finance and regulatory policies, expand capacity through greater use of innovative, high-quality, and lower-cost academic delivery.
2. More productive higher education systems and institutions affordably educate more students.

Rationale: The nation needs new higher education business and finance models that significantly expand capacity to deliver affordable, high-quality education and which are supported by public finance and regulatory policies that create incentives for, and remove barriers to, innovation.

The need to expand the availability of high-quality postsecondary education is greater than ever. Without an expanded array of affordable higher education options, it will be impossible for the nation to substantially increase higher education attainment. Because traditional ways of providing postsecondary education cannot be scaled affordably to meet the growing demand, we cannot increase educational attainment to the levels needed without serving increasing numbers of students in new and different ways. Since current financial models were built around traditional approaches to delivery, new and more productive business models that rely on affordable, lower-cost academic delivery are needed to expand the nation's capacity to deliver high-quality education. These models must be supported by public finance and regulatory policies that create incentives and remove barriers to change.

Priority Work: Lumina will support the development of new performance-based business and financial models for states, systems, and institutions—systems that include strong incentives for affordability and completion, increase attainment of underrepresented students, expand capacity to deliver high-quality, low-cost educational programs, reduce time- and credits-to-degree, address workforce shortages and needs in high-demand fields, and improve productivity. These new models will align both financial incentives and fiscal and regulatory policies to encourage lower-cost academic delivery.

Strategy 8: Design New Systems of Quality Credentials

Expected Outcome by 2016:

1. A national framework for defining the learning outcomes of postsecondary credentials—including degrees, certificates, and certifications—is developed and becomes a widely recognized system for aligning credentials and facilitating student progression.
2. Innovative, learning-based approaches—including competency-based courses and degrees, open or low-cost courseware, accelerated learning models, credit and degree aggregation, course redesign, and assessment of prior learning—are developed to expand capacity and improve student outcomes.

Rationale: The nation needs to create new systems of quality credentials and credits defined by learning and competencies rather than time, to offer clear and transparent pathways to students, assure high-quality learning, and align with workforce needs and trends.

Adding 23 million credentials to the totals expected from the current system between now and 2025 will require much more flexible and transparent national systems of credentials and credits based on learning rather than time. These new systems are needed for several reasons:

- To assure that learning is recognized no matter how or where it is obtained.
- To adequately recognize the value of workforce-relevant postsecondary certificates.
- To create new opportunities for lifelong learning through “stackable” credentials that open multiple, flexible pathways for individuals as their needs and interests change.
- To permit veterans, displaced workers, and other Americans to obtain credit and credentials for the skills and knowledge they have already obtained through work experience and training.
- To encourage and support employers to better define their workforce needs in terms of skills and knowledge, leading to better alignment between employment and the postsecondary education system.
- To award appropriate credit for learning that is obtained through new delivery systems.

Learning-based national credential systems would also contribute to the long-needed alignment of K-12 and postsecondary education standards and assessments. Clear expectations for college readiness aligned with postsecondary education admissions and placement standards would improve the quality of preparation that students receive and help more of them succeed in earning postsecondary credentials.

One major challenge in moving to learning-based systems of credentials is the credit hour. The shortcomings of the traditional student credit hour are painfully clear. Unfortunately, while the need to move to a learning-based unit is well understood, no one has proposed a viable alternative.

Priority Work: Lumina will develop a learning-based approach to postsecondary credentials based on transparent recognition of skills and knowledge, including those required by employers. This approach will contribute to the creation of an aligned system for delivering high-value credentials to millions more learners. To promote creation of a learning-based credentialing system aligned with 21st century demands, Lumina will develop a second-generation Degree Qualifications Profile (DQP). This DQP will incorporate a new framework to define the learning outcomes of postsecondary certificates and be aligned with the Common Core State Standards. Lumina will also support the development of transparent, learning-based pathways for students based on this framework.

STRATEGIES FOR 2013 TO 2016

Lumina’s specific strategies for 2013 to 2016 and their outcomes, organized around the two strategic initiatives that will drive our work

Mobilizing to Reach Goal 2025

Mobilize action at the local, state, and national levels and in higher education institutions and other organizations throughout the nation

1	2	3	4	5
<p>Build a Goal 2025 Social Movement</p> <p>An increased number of target audiences and populations actively support policies and practices to reach Goal 2025</p>	<p>Mobilize Employers, Metro Areas and Regions to Increase Attainment</p> <p>Active partnerships adopt Goal 2025 and act to increase attainment</p>	<p>Mobilize Higher Education to Increase Student Success</p> <p>Higher education institutions and systems adopt data- and evidence-based policies, partnerships, and practices that increase attainment and close attainment gaps for underserved students</p>	<p>Advance State Policy for Increased Attainment</p> <p>States adopt formal goals and implementation plans for increasing attainment that are specific, challenging, and address attainment gaps for underrepresented populations</p>	<p>Advance Federal Policy for Increased Attainment</p> <p>Federal policy proposals reflecting Lumina priorities to increase attainment are developed and advanced</p>

Creating a 21st Century Higher Education System

Contribute to the development and implementation of new models needed to move from a time-based system of higher education to an affordable and high-quality system based on student learning to help meet changing individual, societal, and workforce needs

6	7	8
<p>Design New Models of Student Financial Support</p> <p>New national student finance models make college more affordable, make the cost of college more predictable and transparent, align federal, state and institutional policies and programs, and provide incentives to students and institutions to increase completion</p>	<p>Design New Higher Education Business and Financial Models</p> <p>New models significantly expand the nation’s capacity to deliver affordable, high-quality education and are supported by public finance and regulatory policies that create incentives for and remove barriers to innovation</p>	<p>Design New Systems of Quality Credentials</p> <p>New systems of quality credentials and credits are defined by learning and competencies rather than time, offer clear and transparent pathways to students, assure high-quality learning, and align with workforce needs and trends</p>

Endnotes

- ⁱ All forms of high-quality postsecondary credentials, including degrees and certificates, have value and should count. Often, we refer to all these credentials as “degrees” and the public and private institutions and other organizations that produce them as “college.” Likewise, the distinction between “postsecondary education” and “higher education” is of little value, especially if used to suggest a hierarchy of institutions and programs. We use the terms interchangeably.
- ⁱⁱ Certificates: Gateway to Gainful Employment and College Degrees. Georgetown University Center on Education and the Workforce, 2012. The study estimates the number of Americans who hold a postsecondary certificate with “clear and demonstrable economic value” as their highest credential.
- ⁱⁱⁱ *A Decade Behind*. Georgetown University Center on Education and the Workforce, 2012
- ^{iv} Georgetown University Center on Education and the Workforce, 2012
- ^v Hamilton Project at the Brookings Institution, 2011
- ^{vi} Median salaries for 2012 graduates are up 4.5%, well above inflation (National Association of Colleges and Employers).
- ^{vii} 2012 Talent Shortage Survey Research Results, Manpower Group
- ^{viii} Boiling point? The skills gap in U.S. manufacturing. Deloitte and the Manufacturing Institute, 2011.
- ^{ix} Federal Reserve Bank of Atlanta (<http://macroblog.typepad.com/macroblog/2010/07/a-curious-unemployment-picture-gets-more-curious.html>), 2011.
- ^x In the 2008 elections, among adults between the ages of 25 and 44, there was a stunning 32 percentage point gap between the voting rates of four-year college graduates and high school graduates. College Board, *Education Pays*, 2011.
- ^{xi} Minorities in Higher Education, American Council on Education, 2011
- ^{xii} U.S. Census Bureau, Current Population Survey (CPS), March 2011. Attainment rates reported by the CPS are generally slightly higher than those derived from the American Community Survey (ACS), as used in Lumina’s *Stronger Nation* reports.
- ^{xiii} The Educational Experience of Young Men of Color: A Review of Research, Pathways and Progress, Lee and Ransom. The College Board, 2011.
- ^{xiv} The Polarization of Job Opportunities in the U.S. Labor Market: Implications for Employment and Earnings. Autor, David, Community Investments, Volume 23, Issue 2, Fall 2011
- ^{xv} First Generation Students in Postsecondary Education: A Look at their College Transcripts, Xianglei Chen, National Center for Educational Statistics, 2005.
- ^{xvi} Ibid.
- ^{xvii} U.S. Census Bureau, Current Population Survey, 2009.
- ^{xviii} National Center for Education Statistics, 2010
- ^{xix} Education Pays 2010, The College Board
- ^{xx} Postsecondary Education Opportunity, Bachelor’s Degree Attainment by Age 24 by Family Income Quartiles, 1970 to 2008.
- ^{xxi} The Race between Education and Technology, Claudia Goldin and Lawrence F. Katz, 2008
- ^{xxii} In the first strategic plan, the definition of quality was included in a footnote – and since then we have referred to it as *Footnote 1*. We are pleased that the definition has reached the body of the text in this strategic plan!
- ^{xxiii} According to the most recent available IPEDS data, these ratios are 12.5% in Public Two-Year, 21.3% in Public Research, 18.8% in Public Bachelors and Masters, and 21.2% in Private Four-Year institutions.
- ^{xxiv} Certificates: Gateway to Gainful Employment and College Degrees, Georgetown University Center for Education and the Workforce, 2012
- ^{xxv} According to a report funded and published by the Kauffman Foundation (*Losing the World’s Best and Brightest*), 58% of Indian students and 54% of Chinese students would like to remain in the U.S. after graduation if given the chance. However, 85% of these students are concerned about being able to obtain a work visa upon graduation.