

# POWERING MARYLAND FORWARD

USM's 2020 Plan for More Degrees, A Stronger Innovation Economy, A Higher Quality of Life



Adopted by the University System of Maryland Board of Regents 12.3.10







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## TABLE OF CONTENTS

### 2 INTRODUCTION

3 Planning Principles

3 Mission

3 Vision

3 Core Values

4 Goals

### 5 ENVIRONMENTAL SCAN

5 Economic Trends

6 Competitiveness Trends

6 Demographic Trends

7 Technological, Operational, and Accountability Trends

### 10 FIVE STRATEGIC THEMES (GOALS, CHALLENGES, STRATEGIES)

10 Access, Affordability, and Attainment

13 Ensuring Maryland's Competitiveness in the Innovation Economy

17 Transforming the Academic Model

20 Identifying New and More Effective Ways to Build Resources

23 Achieving and Sustaining National Eminence

### 27 NEXT STEPS: ACTION AND ACCOUNTABILITY

*Note: Data throughout were current at the time of this plan's adoption in December 2010.*

**Powering Maryland Forward** is the University System of Maryland's (USM's) focused and substantive response to the education, economic, and leadership challenges faced by our state and our nation. Approved unanimously by the USM Board of Regents on December 3, 2010, the 10-year strategic plan lays out the system's goals and strategies to help the State of Maryland maximize its potential to become a national leader in both college completion and economic innovation.

This document presents a new and exciting 10-year strategic plan for the University System of Maryland.

The goals, strategies, and outcomes highlighted in this plan come at a particularly critical time for the system, Maryland, and our nation. Over the next 10 years, we face what many believe will be the most demanding and transformative period in American higher education history. Challenges that are unique in their number, nature, and scale will impact the ability of the system and its institutions to carry out

the core missions of teaching, learning, and research. They will include challenges related to who we teach and employ, and the learning and work styles and expectations they bring to our institutions. They will include challenges related to the role we are expected to play in advancing the economic development and competitiveness of our state and nation, as well as the lives, jobs, and careers of our graduates. Finally, they

will include challenges to the operational models and support systems that we have built and relied upon for generations, and which are under assault from new and emerging competitors. In such an environment, business as usual is neither wise nor tenable. Our only option is to become a leader of these trends, shaping their direction and impact, or face being left behind.

"Powering Maryland Forward" is the system's response to the education, economic, and leadership challenges we face. It begins with a statement of the principles that drove the planning process and which serve as the framework by which the other elements of the plan—mission, vision, values, goals, themes, and activities—were developed, reviewed, revised, and approved. The heart of the plan, however, remains the overarching goals, themes, and strategies.

It is through them that the system lays out not only its vision for what Maryland can and should become over the next decade, but also how the USM as the state's public system of higher education will help get it there.

The USM's plan for Maryland, especially with regard to economic growth and job creation, will require a substantial and sustainable increase in state funding for higher education. A good starting point for the necessary revenues would be both the Higher Education Investment Fund (HEIF) and the Video Lottery Terminals Program. Created in 2008, the HEIF was a landmark legislative achievement of Governor Martin O'Malley and the General Assembly. The HEIF was designed to fund strategic investments in higher education, essentially to build the capacity of the USM's institutions to meet the educational requirements of the 21st century. Current HEIF revenues should be used for their intended purpose as the economy recovers from the devastating recession.

The voter referendum in support of the Video Lottery Terminal Program (VLT or "slots") offers an additional, emerging source of state revenue that was also intended, in part, to support higher education. Slots revenue will be essential to accomplishing the economic development and job creation imperatives for Maryland outlined in this plan. It is the USM's hope that as the economy recovers, some additional general fund revenues would be directed toward the initiatives called for in the plan, with the goal of building Maryland's economic engine. In addition, it will be important for the USM to redouble its efforts under its Effectiveness and Efficiency Initiative (E&E) to maximize potential cost savings, to substantially increase fundraising efforts in support of academic initiatives, and to maintain its credit rating to help support facilities expansion necessary to achieve the strategic plan's goals.

Over the next 10 years, we face what many believe will be the most demanding and transformative period in American higher education history.

## Planning Principles

1. The plan must be a living document that is able to adapt to challenges the USM, Maryland, and the nation are facing, or will face, within the next decade.
2. As with plans for all complex organizations, the plan must address multiple issues, but it must also assess cost and establish priorities in order to maximize what can be achieved over the next decade. In that context, quality is, and must remain, priority one.
3. The plan should be visionary, pointing toward desired long-term outcomes, but also prescriptive enough to help chart a short-term course of action that advances achievement under those outcomes. It must allow for mid-plan assessment and correction.
4. The plan should concentrate on core missions.
5. The planning process must be inclusive, allowing all stakeholders to feel as if they have had a voice in and impact on its development and operation.
6. Finally, and most importantly, the plan must seek to identify and address the critical educational, economic, social, and quality-of-life challenges facing the State of Maryland and its citizens.

## Mission

The mission of the University System of Maryland is to improve the quality of life for the people of Maryland by:

- providing a comprehensive range of high-quality, accessible, and affordable educational opportunities that recognize and address the need for life-long learning and global and environmental awareness.
- engaging in research and creative scholarship that solve today's problems, expand the boundaries of current knowledge, and promote an appreciation of learning in all areas: the arts, humanities, social sciences, natural sciences, and professions.
- preparing graduates with the knowledge, skills, and integrity necessary to be successful leaders and engaged citizens, while providing knowledge-based programs and services that are responsive to needs of the state and the nation.

The USM fulfills its mission through the effective and efficient management of its resources and the focused missions and activities of each of its component institutions.

## Vision

The vision of the USM is to be a preeminent system of public higher education, admired around the world for its leadership in promoting and supporting high-quality education at all levels and life stages, fostering the discovery and dissemination of knowledge for the benefit of the state and nation, preparing graduates who are engaged citizens and have the knowledge, skills, and integrity to effectively lead people and organizations in a highly competitive, global environment, and instilling in all members of its community a respect for learning, diversity, and service to others. The overarching goal of the USM is to build lives and families and educated citizens.

## Core Values\*

The core values of the USM reflect its role as a leading public system of higher education. Briefly summarized, these core values are:

- the intellectual development of its students, including the principles, values, and balanced perspective inherent in a well-rounded, liberal education.
- the advancement of knowledge and the use of that knowledge for the benefit of Maryland's citizens.
- the development of engaged citizens and leaders who have the knowledge, skills, and integrity to effectively transform the lives of people and organizations.
- the professional development of USM faculty and staff.
- diversity and the creation of an environment that both celebrates and is enriched by the multiple perspectives, cultures, and traditions reflected in humankind.
- a respect for—and promotion of—the ideals that are the hallmark of higher education: scholarship, learning, shared governance, freedom of expression, tolerance, and service to others.

(\*See Appendix for a full statement of the USM's core values)

## Goals

- I. USM academic programs will respond to meet the changing educational and leadership needs of our state, our nation, and a growing and increasingly diverse undergraduate and graduate student population.
- II. Throughout its educational, research, and outreach activities, the USM will strive to produce graduates who are knowledgeable of and sensitive to the cultural, environmental, and technological issues facing a global economy; who understand the importance of and the responsibilities inherent in citizenship and community; and who have the knowledge, skills, and integrity to effectively lead the people and organizations they serve.
- III. USM research and scholarship will position Maryland as a national and international leader in science and technology, the arts and humanities, and the professions, creating and disseminating knowledge to ensure the state's continued economic growth, sustainable development, and international competitiveness.
- IV. The USM will achieve national eminence as mandated by the state legislature and will relentlessly pursue its fundamental mission to serve the public good.
- V. The USM will adhere to the highest standards of stewardship in all of its endeavors, and will promote the effective, efficient, and principled use of state and private resources.





## ENVIRONMENTAL SCAN

To be effective, the USM strategic plan, like any long-term plan, must begin with an analysis of the current operating environment, including an assessment of the various economic, demographic, and technology-related trends that will have an impact on the USM and its institutions over the coming decade. In 2010, the University System of Maryland confronts an operating environment much changed from just five years ago, and more importantly, one likely to continue changing faster and more aggressively as the decade advances. The following analysis examines some of the key challenges and trends we face as a system, as a state, and as a nation. By focusing on the economic, demographic, and competitive environments in which we operate, the analysis provides some context for the goals, themes, and strategies laid out in the rest of the plan.

### Economic Trends

It has become *de rigueur* when speaking of the economy to acknowledge that we are facing the most challenging fiscal environment since the Great Depression. During the past two years, the national economy has experienced:

- 8.5 million jobs lost;
- 17 straight months of unemployment rates over 9 percent;
- 2.3 million homes foreclosed on and 11 million others valued at less than the amount owed on them;
- an estimated \$12.5 trillion in household net worth wiped out, and, not surprisingly;
- a 28-year low in consumer confidence.

The federal government, despite being hamstrung by defense commitments abroad and rising health and social spending costs at home, has reacted to the crisis by flooding the economy with billions of dollars in stimulus funding. Thanks to those dollars, federal support for non-defense discretionary research and development (R&D) programs—those dollars that go to support basic research in everything from high-energy physics to the physiology of the human brain—has done exceptionally well, surging to the highest level on record. In 2009, \$22 billion in new dollars flowed into R&D programs at the National Institutes of Health (NIH), National Science Foundation (NSF), National Institute of Standards and Technology

(NIST), and the U.S. Department of Energy alone. This, in turn, has greatly benefited the colleges and universities whose research programs depend on these sources.

But there is growing concern that the federal government's attempt to prime the nation's economic engine cannot continue apace. Stimulus spending, in combination with falling tax revenues, caused the budget deficit to soar from 1.5 percent of GDP in March 2008 to more than 10 percent in December 2009. (In comparison, the U.S. began the period from 2000 to 2010 with a positive budget balance equal to 1.5 percent of GDP.) The Obama administration has announced plans to continue the rapid growth in non-defense R&D funding as part of its America COMPETES agenda. Budgets for major research agencies such as NIST, NSF, and the National Oceanic and Atmospheric Administration (NOAA) are projected to climb by an additional \$65 billion in fiscal 2011, with some agencies expected to see increases in the 17-22 percent range. However, more and more political and public leaders, at home and abroad, are questioning the government's ability to maintain the expansion of such spending in the face of massive budget deficits.

At the state level, Maryland has fared better than most states but has still been forced to face tough times and tough choices. Fiscal 2009 saw general fund revenues decline by 5 percent as all major revenue sources, except the lottery, fell. Unemployment shot to 7.3 percent, the highest level since the early 1980s, with construction and finance sectors

### Top Countries in College Attainment

(Rank based on percentage of population with a college degree at the country's typical graduation age)

1. Canada
2. Korea
3. Russian Federation
4. Japan
5. New Zealand
6. Ireland
7. Norway
8. Israel
9. France
10. Belgium
11. Australia
12. **United States** (formerly #1)

Source: Organization for Economic Co-operation and Development Factbook 2010

The U.S. must improve its educational attainment, with particular focus given to those disciplines that help contribute to technological innovation and creativity, if the U.S. wants to continue as a world leader in the new economy.

particularly being hard hit. For fiscal 2010, general fund revenues fell an additional 4 percent forcing the state to go back into the budget and make reductions of \$1.1 billion over and above the cuts already made. Entering the 2011 (fiscal 2012) General Assembly session, the state faced an estimated \$1.1 billion gap between the revenues projected to come in and the dollars needed to run agencies at the level of service equal to 2011.

### Competitiveness Trends

As immediate and woeful as our national and state fiscal situations are, for many people a more threatening concern, though longer in term, is the education-related performance of our nation. After leading the world in high school and college completion rates for most of the 20th century, the U.S. now finds itself in the precarious position of being just 12th among industrialized nations in terms of postsecondary completion, according to the Organization for Economic Co-operation and Development (OECD). And, when high school completion rates are examined, the nation sinks even lower in the ranks.

Further, the challenges of our education system appear even greater when attention is turned to how well we are educating students in those areas that are considered particularly vital to competing in a knowledge economy (math, science, critical thinking). According to the most recent OECD numbers, students in the U.S. ranked just 21st out of 30 OECD countries in “scientific literacy,” 24th in skills necessary to solve complex problems, and 25th in mathematics skills. For many the threat posed by these numbers, and the path forward, has become clear: The U.S. must improve its educational attainment, with particular focus given to those disciplines that help contribute to technological innovation and creativity, if the U.S. wants to continue as a world leader in the new economy.

In Maryland, we have the dual (and related) advantages of both a strong P-20 educational system and a strong, knowledge-based economy, but challenges exist for us as well. More than most of our competitor states (i.e., those states Maryland competes against most closely for businesses and jobs, including Pennsylvania, New York, New Jersey, Virginia, North Carolina, Massachusetts, California, Washington, and Ohio), Maryland struggles with issues related to the success of its “academic

pipeline,” the steady progression of students moving from ninth grade into high school and then directly on to college and a baccalaureate degree. Maryland also depends more than most of its competitors on its ability to attract highly educated workers from other states to satisfy its technical and professional workforce needs.

While this ability to attract well-educated workers has helped make Maryland’s current postsecondary attainment levels among the best in the nation, the demographic characteristics of Maryland’s population are working against the state’s ability to maintain this lead in the future. The fastest-growing segments of Maryland’s population are those groups traditionally less likely to pursue and complete postsecondary education. This means that boosting the domestic educational attainment rate significantly over the coming decade will be more difficult for Maryland than many other states and will require the state’s entire P-20 education system to work together to ensure that all Maryland students have the academic preparation and skills needed to thrive and succeed in higher education.

And finally, in addition to the number of domestically produced degrees, Maryland also faces the problem of the type of degrees produced. In the STEM disciplines—those areas that feed a creative, innovation economy—recent studies have shown that Maryland universities currently produce less than a third of the STEM teachers and less than two-thirds of the STEM graduates projected to be needed by Maryland schools, businesses, and industry at the end of the decade.

### Demographic Trends

Maryland and the nation are also facing challenges related to demographic trends that are forcing higher education to look at new ways of providing access and needed services. Nationally, demand for higher education is still being driven up by the Baby Boom Echo—the tidal wave of students born between 1979 and 1994 that began arriving on our campuses at the end of the last decade. Campuses in Maryland and nationally will continue to feel the effects of demand driven by the “Echo” through at least 2016.

That isn’t the only factor driving demand, however. Thanks to the economy, older workers, many of whom have been laid off, are seeking to return to school to brush up on their skills and training in order to



be more competitive in the market. These returning students are competing not just with new entrants for access but also with those undergraduate and graduate students currently in school who are choosing to extend their stay, rather than enter a depressed job market. Regardless of the reason, the result of these trends is that the country is seeing record enrollments at higher education institutions.

In Maryland the demographic trends foretell continued strong demand for higher education. While the number of high school graduates produced by the state's public schools is projected to shrink by up to 14 percent between 2008 and 2018, the latest Maryland Higher Education Commission (MHEC) projections indicate that demand for postsecondary higher education will continue to rise, growing by almost 60,000 students (or 20 percent) by 2019. That increase is expected to hit Maryland's public two-year and four-year institutions almost equally hard, with 29,455 of the 60,000 increase attending a Maryland public four-year institution (95 percent of those at a USM campus).

In addition to more students, MHEC is projecting greater diversity among students in terms of both race/ethnicity and patterns of attendance. If the traditional relationship between the percentage of students graduating from the state's public high schools and the percentage applying to a postsecondary institution in Maryland holds true, then the state's college and university enrollment will move from minority students making up just over 40 percent of the postsecondary enrollment in 2008 to almost 60 percent by 2020. The number of Hispanic and Asian students, in particular, will increase, doubling as a percentage of the enrollment over that period. At the same time, the number of students attending part-time, whether at a two-year or four-year campus, is projected to increase at almost three times the rate of those attending full-time, making the ratio of part-time to

full-time students on Maryland campuses much more evenly split than at any time in our history.

## Technological, Operational, and Accountability Trends

A final, broad set of challenges facing the system, and all of higher education, involves the trends and changes emerging from the development and adaptation of new technologies, new operating models, and ever-increasing competition. Helping to demonstrate these challenges are just a few facts:

- Technology is reshaping how, when, and where learning takes place on college campuses. According to a 2009 report by the Sloan Consortium, one in four students (or 4.6 million of the 18.2 million students) enrolled at a degree-granting college or university in the U.S. during the fall 2008 term was taking at least one course online. That represents a 17 percent increase over the previous year and a 97 percent increase since fall 2004.

In comparison, the growth in total postsecondary enrollment in the U.S. was about 5 percent over the same time period. Sloan officials have estimated that, based on the current rate of growth, the number of college or university students taking at least one course online should easily surpass 7 million students (or one in three) by 2015 and could be significantly higher. In addition, the research group Eduventures has projected that by 2014, 4 million students in the U.S. will take not just one or two courses online, but all of their courses (currently 2.1 million do so). The projected growth in these online learning numbers promises to have a tremendous impact on not just the teaching and learning that occurs at our campuses but the facilities and services infrastructure as well.

- Driving much of the growth in online learning is the expansion of the for-profit sector, which is dramatically outpacing growth at the traditional, non-profit sector. According to *The Chronicle of Higher Education*, undergraduate enrollment in for-profit, four-year institutions in the U.S. increased 329 percent between 1998 and 2008. In comparison the growth rate in undergraduate enrollment at our nation's non-profit, public four-year colleges and universities was just 20 percent (and 19 percent for non-profit, private institutions). Laureate Education alone now owns 150 campuses in North America, Latin America, and Asia and has plans to





expand further. Apollo Global, the parent corporation of the University of Phoenix, with 300,000-plus students, reportedly just received an \$800 million stake from the private equity firm The Carlyle Group to help finance its own aggressive expansion program.

- Finally, the forces of globalization, in combination with the development of information technologies that allow real-time communication and data sharing across vast distances, are driving American institutions to increase the number and scope of collaborative research activities and other education programs they conduct overseas. According to Ben Wildavsky, senior fellow in research and policy at the Kauffman Foundation, “cross-border research collaborations have more than doubled in the last 20 years,” while the number of American branch campuses operating overseas has grown from just a handful 20 years ago to 160 today.

These same forces, however, are also helping to boost the emergence of competitor higher education institutions and systems. Fueled by advanced technology, large budget surpluses, and the emergence of a booming middle class, countries like China, India, Korea, and Singapore are hitching their economic competitiveness strategies to the creation of “world-class universities” that, at least in terms of facilities, financial support, and the creative development and use of new technologies, are quickly setting up to rival the best universities in the U.S. and Europe.

So what do these challenges mean for our nation, our state, and our system in the context of a 10-year strategic plan? First, and at the highest level, they mean that as a nation we must recognize in our financial, R&D, and education-related policies the

connection that exists between education, research, and competitiveness and innovation. As a first step in doing this, President Obama’s administration has set as a national goal that by 2020 the United States will once more lead the world in college degree attainment. Further, through its stimulus investment and targeted legislation, such as the reauthorization of the Higher Education Act and the America COMPETES Act, the administration has begun the process of reinvesting in our nation’s higher education institutions, including their research and teaching facilities and programs.

Second, as a state it means we must recognize the essential role Maryland’s colleges and universities play in securing the state’s position as a powerhouse in the knowledge economy. Proper investment in our people—faculty, staff, and students—our facilities, and our programs is critical if we are to produce the knowledge, jobs, and well-educated workforce that keep Maryland competitive. This includes looking at policies and programs that inhibit institutions from efficiently and effectively responding to state workforce needs.

Finally, as a system it means, first and foremost, that we must build and sustain universities of the highest quality, which are populated with talented faculty, staff, and students working in learning and research environments that produce graduates prepared for leadership in our nation and the world, and that advance knowledge that can impact the quality of life for humankind.

To achieve these lofty aims, we must bring a new intensity of focus to the education of our students so that they can be productive, informed citizens and leaders. This will require changing many of our current practices and policies so that the educational success achieved by our students, as measured by degree attainment in high-quality programs, becomes our ultimate measure of success, rather than simply the number of students who enter our institutions. It will require eliminating gaps in student success that keep certain students or groups of students from reaching their full educational and economic potential. It will require building and investing in our research infrastructure and, at the same time, building a culture of innovation that takes the ideas produced in our labs and classrooms and puts them to work in the business world. It will require ensuring that there is a continuing and sustained focus on stewardship, and using the resources given to us wisely and effectively. Finally and most importantly, it will require investing in and taking care of the most important assets we have as a higher education system: our people, our programs, and our facilities.







## FIVE STRATEGIC THEMES OF THE 2020 PLAN

The following themes establish the strategic focus of the USM and its institutions through 2020. Like most public university systems, the USM has a broad and multifaceted mission, which ranges from meeting the diverse education, health-care, service, and workforce training needs of our citizens; to promoting the quality of life and the advancement of knowledge in, and the economic development of, our state and its complex economy through our faculty and staff expertise in research and development; to nurturing, promoting, and protecting the natural and cultural resources of our state and region. Accomplishing these goals will require the USM to utilize the varied and unique array of resources and mission-aligned services that are

represented among its 12 institutions and two regional centers.

The goals and strategies highlighted within the five themes of the USM 2020 plan reflect the system's combined

response to the multiple needs and responsibilities given to it by its stakeholders. Each theme, and the strategies and activities contained within that theme, are designed to be complementary to the others. Thus the system believes that strategies designed to provide greater access to our institutions and increase the number of students succeeding in their degree programs, as proposed under Theme 1, will not only help the system achieve the goal of boosting degree attainment in Maryland, but will also contribute to success under the other strategic plan themes: competitiveness, transformation, stewardship, and, most importantly, national eminence.

By leveraging the combined strengths and unique missions of each of its institutions, the USM will be able to effectively address multiple goals, strategies, and commitments under the plan, and carry out its mandate to serve the best interests of the state. That is the advantage of having a multi-campus public system of higher education and one of the core strengths of Maryland.

In advancing the aims of these five themes, the USM will relentlessly pursue the highest standards of quality in all that we do, endeavoring to set a standard of performance that is a model for higher education institutions around the world.

### Theme 1: Access, Affordability, and

**Attainment**—Helping the State of Maryland Achieve Its Goal of 55 Percent College Completion (Associate's Degree Through the Baccalaureate) While Maintaining Quality

#### *Rationale for Theme 1*

The ability of our state and our nation to compete in a global, knowledge-based economy is directly linked to the educational attainment of our citizens. According to a 2010 report by the Center on Education and the Workforce at Georgetown University, 63 percent of the jobs in the U.S. by 2018 will require a postsecondary education, with growth in those jobs demanding the highest education levels (bachelor's and beyond) being strongest in our region of the country.

For Maryland, which is among the nation's leaders in the new "knowledge economy," the percentage of jobs demanding a postsecondary education will be even higher (66 percent). Further, the state will rank among the nation's top three states in jobs demanding education preparation beyond the baccalaureate.

In recognition of this trend, Maryland's leadership has set a goal of having at least 55 percent of its adult population, age 25 and older, attain a college degree—either a two-year associate's or a four-year baccalaureate (currently just 44 percent of its population has any type of college degree, while just over 35 percent holds a bachelor's or higher). The population dynamics of Maryland, which has a comparatively well-educated but older population, mean, however, that meeting this ambitious goal will not be easy. Success will be achievable only if all segments of Maryland's P-20 education system—beginning with the USM and its institutions but including the K-12 schools, community colleges, and private institutions—work together.

Achieving the state's attainment goal, and meeting the needs highlighted by the Center on Education and the Workforce's report, means that the USM's "share" of the statewide increase in degree production required to hit the 55 percent goal would come to an additional 10,000 baccalaureate degrees produced per year by 2020. In total, the USM would have to move from producing approximately 18,000 baccalaureate degrees per year in 2009, to 28,000 baccalaureate degrees per year by 2020, a 55 percent increase. At the same time, the system would have to maintain current levels of growth in the production of graduate and first-professional degrees.

A degree production increase of this magnitude will be possible only if the USM and its institutions move strategically, and soon. This will mean not only expanding access but also reaching out to areas of the state that have traditionally been underserved by higher education. The USM estimates that we must add approximately 30,000 students (primarily undergraduate but also including graduate) over the

Maryland's leadership has set a goal of having at least 55 percent of its adult population, age 25 and older, attain a college degree—either a two-year associate's or a four-year baccalaureate.

next five years, plus an additional 15,000 by 2020. Expanding access at this rate will require creating new or expanded programs and centers. It will require carefully monitoring the cost of education at our institutions to ensure that they remain affordable and supported at the levels required to sustain quality. And finally, it will require ensuring that all USM students are provided with the types and levels of support—financial aid, advising, mentoring, or other student services-related—needed to help them persist and graduate.

Over the past five years the USM has developed and implemented a number of new or continuing initiatives that have established the conditions for success under such an agenda. These have included programs or initiatives designed to:

- strategically fund enrollment growth;
- reduce and eventually eliminate the gap in education success rates between various student populations at our campuses;
- improve affordability by holding down tuition costs and expanding need-based aid;
- increase access to high-demand degree programs through expansion or enhancement of our regional centers, partnerships with community colleges, and targeted, high-need programs at our traditional USM institutions, like pharmacy and nursing;
- improve educational outcomes by identifying and redesigning “gatekeeper” courses that serve as a barrier to student progress.

For the coming decade, however, such initiatives will need to be expanded and augmented by additional programs aimed at allowing the USM—and the entire P-20 system in Maryland—to grow bigger, better, and more focused not just on the goal of expanded access, but student success and degree attainment. To this end, the USM will focus much of its energy and resources on three areas of activity judged to be critical for the success of the state’s attainment goal: 1) expanding access, 2) improving affordability, and 3) achieving greater student success, as measured by degree attainment. Goals and strategies for these follow. It is worthy of note that if the system is successful in these activities, a likely outcome will be a USM that in 2020 looks quite different from today. Transfer, first-generation, and minority students will make up a much larger proportion of the student population, while the percentage of traditional students—those 18- to 24-year-olds who move directly from high school through college with few detours or challenges to their progress—will be much smaller.

#### **Key Goals/Targets Under Theme 1**

The following represent proposed goals or targets to be addressed in achieving the system’s goals under Theme 1 of the plan.

1. Increase enrollment to approximately 195,000 students (headcount) by 2020, or an additional 45,000 over 2009 levels, without reducing quality.
2. Expand enrollment at USM’s regional higher education centers or other off-campus sites by 5,000 students (headcount).
3. Expand baccalaureate degree production by an additional 10,000 degrees by 2020.
4. Close the gap in educational achievement among students at USM institutions by 2020.



5. Increase degree production in the high-need areas of science, technology, engineering, and mathematics (STEM) by 40 percent by 2020.
6. Work with other segments of higher education in the state, including the Governor's P-20 Leadership Council, to increase the number of degrees of all types earned statewide by approximately 40 percent.
7. Work to facilitate the program approval process in Maryland to better serve the needs of the state.

#### **Key Challenges Under Theme 1**

The following represent key challenges that will need to be addressed if the goals and targets under Theme 1 of the plan are to be achieved.

1. Responding to the needed growth and production targets without sacrificing quality.
2. Developing, implementing, and sustaining a funding model that adequately supports the level of enrollment growth and degree production needed in a timely fashion and in the areas designed to support a knowledge-based economy.
3. Ensuring continued progress in overcoming the achievement gap among students who are our most educationally challenged.
4. Ensuring the appropriate kinds and level of support are available for transfer populations.
5. Working with the other education segments in the state to ensure that goals for those segments, and the state as a whole, are coordinated and met.

6. Expanding development of online and nontraditional learning opportunities.

#### **Proposed Strategies**

The following represent suggested strategies for addressing the goals and challenges highlighted under Theme 1.

- 1.a. Expand access to USM institutions and programs.
  - 1.a.1. Develop, implement, and secure an enrollment and success funding model that is sustainable and appropriate to achieving the degree-production outcomes needed.
  - 1.a.2. Expand outreach to new or underserved areas/populations of Maryland through USM traditional campuses, regional centers, and other outreach programs or activities.
  - 1.a.3. Expand and promote the effective use of online learning, related technologies, and other nontraditional learning opportunities.
  - 1.a.4. Work with Maryland community colleges and other segments of Maryland's P-20 system to improve program articulation and transfer of students between various institutions and segments within the state, as well as identify and "reclaim" stalled students where appropriate.
- 1.b. Increase affordability of USM institutions and programs.





1.b.1. Per the recommendations of the Commission to Develop the Maryland Model for Funding Higher Education (the Bohanan Commission), align USM tuition policies and practices with state general fund support and financial aid practices in order to remain competitive with funding levels at systems and institutions in peer states.

1.b.2. Continue to implement and monitor progress on USM financial aid policies.

1.b.3. Examine levels of institution financial aid support for transfer and nontraditional populations and encourage development of aid programs designed to support these populations, including increased private support.

1.c. Promote increased levels of success for all USM students, as measured by degree completion.

1.c.1. Support new or ongoing initiatives designed to overcome the achievement gap at USM institutions.

1.c.2. Continue to monitor and enhance the undergraduate, graduate, and professional educational experience at all USM institutions, including implementation of the recommendations of the graduate student task force as appropriate.

1.c.3. In line with the recommendations of the Bohanan Commission, boost the success of the USM's Historically Black Institutions (HBIs) by identifying and providing the level of resources and support necessary to ensure student outcomes at a level equal to those at non-HBI institutions with the same general mission.

1.c.4. In coordination with the Governor's P-20 Leadership Council, develop, improve, or implement strategies designed to improve student success and degree attainment through such strategies as college readiness, early college, and bridge programs.



## Theme 2: Maryland's Economic Development and the Health and Quality of Life of Its Citizens—Ensuring Maryland's Competitiveness in the New Economy

### *Rationale for Theme 2*

Maryland has historically ranked among the elite states in economic strength and competitiveness. The most recent (2008) State New Economy Index ranked Maryland fifth in innovation capacity, fourth in knowledge jobs and economic dynamism, and third overall in terms of how well the state stacks up against other states on the new economy measures. Helping to drive the state's success has been its higher education institutions, and the strong relationships between those institutions and their faculty, staff, and students, and the numerous federal research labs and agencies located in Maryland.

With seven research universities or institutions—five in the USM (University of Maryland, Baltimore; University of Maryland, College Park; University of Maryland, Baltimore County; University of Maryland Center for Environmental Science; and University of Maryland Eastern Shore)—plus Morgan State University and the Johns Hopkins University—12 federal agencies, and more than 70 labs and centers helping to attract over \$12 billion in R&D funding, Maryland has built a knowledge-driven economy that is the envy of most states. Deciding how best to utilize the system's strength in research, development, and innovation to help Maryland maximize its advantages, build its economy, and ensure a high quality of life for its citizens has been the focus of much planning by the system and its institutions over the past year.

The role higher education institutions, particularly research institutions, can play in economic



development is well documented. Scholars such as University of California President Richard Atkinson, for instance, have posited that top research universities, through their basic research and commercialization efforts, have transformed themselves into critical drivers of state and national economies responsible for the development of as much as 80 percent of “new, leading industries.” At the same time, comprehensive universities help contribute to economic development through the education and preparation of the workforce (particularly in critical-need areas such as education, nursing, and information technology) and conduct useful, applied research to solve today’s problems in business and government.

USM research institutions historically have performed extremely well in attracting basic research funding but have lagged behind top performers in the arena of technology transfer and commercialization. Therefore, a major area of focus going into the 2020 plan has been how to go beyond attracting research dollars and make sure that those dollars—and the new knowledge, ideas, and products that they lead to—are translated into products and services that fuel innovation and contribute to the growth of innovative companies and jobs.

At the same time, USM activity under Theme 2 is not exclusively focused on research, development, and commercialization. Responding to the state’s workforce training and job development needs is also a major focus, as is the role our institutions play in promoting a high quality of life in Maryland through the scholarship and creative endeavors of USM faculty in the social sciences, humanities, and the fine and performing arts. Finally, ensuring that Maryland citizens have access to high-quality health-care programs and a strong system of public education remains part of the core mission of the university system.

Over the past three years, the USM has created, or played a major role in, a series of task forces designed to examine strategies for ensuring the

continued economic development and improvement in the quality of life for Maryland citizens. These have included the USM Task Force on STEM Workforce, led by Towson University President Robert Caret; the USM Task Force on Research and Economic Competitiveness, led by then-UMCP President Dan Mote; the Governor’s Task Force on STEM, co-chaired by Chancellor Brit Kirwan and June Streckfus, executive director of the Maryland Business Roundtable for Education; and, finally, BioMaryland 2020, a three-year strategic planning effort designed to promote the biosciences in the state.

More recently, the USM Board of Regents heightened the focus on economic development within the system by creating a Regents Work Group (now a board committee) on Economic Development and Technology Commercialization charged with determining how the system can secure and utilize the needed resources to promote Maryland’s economic development. The work of these groups, in turn, has served to lay out a “road map” for the 2020 plan, outlining how the USM, and Maryland, can continue to build on its strong economic lead. The road map includes goals and strategies that go beyond any one area (research, technology transfer, workforce development, health care, etc.) in order to influence the state’s competitiveness as a whole.

### **Key Goals/Targets Under Theme 2**

The following represent proposed goals or targets to be addressed in achieving the system’s objectives under Theme 2 of the plan.

1. Double USM’s externally sponsored R&D funding by 2020 from approximately \$1.2 billion in fiscal 2010.
2. Increase USM’s research space by 1 million net assignable square feet (NASF) by 2020.
3. Create 325 new companies and five internationally recognized research centers of excellence by 2020.
4. Instill a culture of innovation and entrepreneurship throughout the USM and its institutions.
5. Triple the number of STEM teachers graduating from USM institutions by 2020.
6. By 2020, increase by 40 percent the number of STEM graduates produced by USM institutions.

### **Key Challenges Under Theme 2**

The following represent key challenges that will need to be addressed if the USM’s goals under Theme 2 are to be achieved.

1. Ensuring the adequacy of research facilities, faculty, staff, and graduate students needed to attract additional sponsored research and development.
  2. Enhancing support for USM technology transfer and commercialization efforts.
  3. Developing appropriate support mechanisms and reward systems to help develop and sustain a culture of innovation and entrepreneurship across system institutions.
  4. Developing and securing adequate funding for the expansion and enhancement of programs that are key to the state's competitive success (STEM, education, health care, cybersecurity, etc.).
  5. Ensuring the success and productivity of programs designed to build and maintain the state's workforce in competitiveness-related areas.
  6. Working with the Governor's P-20 Leadership Council, as well as the other segments of higher education in the state, to strengthen the academic preparation of K-12 students entering our institutions.
- 2.a. Improve Maryland's ability to develop or recruit new companies.
    - 2.a.1. Implement the Maryland 325 Initiative (over a 10-year period create or recruit 325 new companies to Maryland) highlighted in the report of the USM Presidential Task Force on Research and Competitiveness (the Mote Report).
  - 2.b. Enhance the USM's ability to compete for R&D funding at the national and international levels.
    - 2.b.1. Create and support five International Centers of Excellence at USM institutions over the next decade.
    - 2.b.2. Increase the amount of research space available at USM institutions by 1 million net assignable square feet (NASF) over the next 10 years.
    - 2.b.3. Increase support for the recruitment, support, and retention of USM faculty and staff, including support for those working in basic and applied areas of research critical to the state's economy.
    - 2.b.4. Implement final recommendations of the ongoing USM graduate student work group, as appropriate.
    - 2.b.5. Promote research programs focused on sustainability, climate change, and development of alternative energy systems.
  - 2.c. Strengthen technology transfer and research commercialization at USM institutions.
    - 2.c.1. Make innovation and entrepreneurship a part of the culture of each USM institution, as appropriate with institutional mission and focus, by:
      - 2.c.1.a. Ensuring that economic development is present in each institution's mission statement.
      - 2.c.1.b. Incorporating, as appropriate, commercialization of research results into the formal faculty and staff reward structure.
      - 2.c.1.c. Using top-performing institutions or systems of institutions as national models for identifying best practices, setting goals, and assessing progress.

### **Proposed Strategies**

The following represent strategies put forward for Theme 2 that will need to be addressed if the system's goals under the theme are to be achieved. They can be broken down into three primary areas of focus: creating jobs, building the research enterprise, and ensuring that the state provides the workforce and services needed to fuel a competitive economy and sustain a high quality of life for its citizens.







- 2.c.2. Eliminate deficiencies in Maryland's economic development infrastructure by:
  - 2.c.2.a. Addressing staffing deficiencies in USM technology transfer offices.
  - 2.c.2.b. Expanding the Maryland Industrial Partnerships (MIPS) program to enhance its ability to support university faculty and staff in the commercialization of industrial products.
  - 2.c.2.c. Expanding Innovate Maryland to a level sufficient to support venture capital, legal, and entrepreneurial resource centers across USM campuses.
  - 2.c.2.d. Advocating for proof-of-concept funding and early-stage funding.
  - 2.c.2.e. Increasing funding for highly effective programs including Mtech and the Dingman Center for Entrepreneurship at UMCP and the Maryland Intellectual Property Legal Resource Center at UMB.
- 2.d. Fuel Maryland's knowledge-based economy and enhance the quality of life of its citizens by increasing the number of graduates produced in workforce areas that are key to the state's ability to thrive and compete (including STEM, education, nursing, health care, cybersecurity, and other disciplines) and promoting improved health care and other critical services:
  - 2.d.1. Support the recommendations of the USM Presidential Task Force on STEM Workforce (the Caret Report), including:
    - 2.d.1.a. Funding STEM programs on a premium basis to incentivize development of critical-need programs.
    - 2.d.1.b. Advocating for state-supported scholarships, tuition waivers, tuition discounts, and loan forgiveness programs for targeted STEM majors.
    - 2.d.1.c. Developing strong partnerships between STEM departments in universities and local secondary schools.
    - 2.d.1.d. Expanding professional teacher development programs and pathways to certification and enhance options for career changers into all STEM fields.
    - 2.d.1.e. Continuing to work with the Maryland State Department of Education to develop programs to reduce remediation needs and align high school graduation with college entrance requirements for math and other STEM fields.
    - 2.d.1.f. Expanding availability of online STEM programs.
    - 2.d.1.g. Providing enhancement funding to increase retention and graduation rates in the STEM fields among more diverse populations.
    - 2.d.1.h. Continuing to develop statewide associate's degrees and seamless articulation and transfer agreements.

- 2.d.2. Strengthen and promote programs designed to alleviate key workforce shortages and boost training and research in such vital health-care fields as medicine, nursing, pharmacy, allied health, public health, and the emerging area of cybersecurity.
- 2.d.3. Explicitly recognize the opportunities and challenges of the state's public academic health center (AHC) at UMB by working to establish policies and procedures for personnel, budget development and review, and performance accountability that are responsive to the special circumstances of the center.
- 2.d.4. Continue to work to increase the number of highly qualified teacher candidates who graduate from USM programs of teacher education.

### Theme 3: Transforming the Academic Model to Meet the Higher Education and Leadership Needs of Maryland's 21st Century Students, Citizens, and Businesses

#### *Rationale for Theme 3*

Most of the students, and many of the faculty and staff, who will enter USM institutions to study, teach, and work over the next 10 years will have been raised in the digital age, one in which information technology—along with the interdisciplinary nature of knowledge creation and research—is radically reshaping the ways in which these groups learn, teach, conduct research, and carry out their work.

At the same time, financial, technological, and demographic forces that are affecting higher education in this country mean that many elements of the academic model under which we have been operating for the last century are becoming unsustainable financially, outdated pedagogically, and obsolete technologically. Not least among these forces is growing public demand that our institutions be more forthright and accountable for what they expect graduates to learn and be prepared to do.

Over the next decade, if the USM and its institutions are to be most effective in carrying out our core mission of teaching, research, and service—and meet the Board of Regents' commitment to quality in all that we do—we must be prepared to not just participate in the changes that are sweeping across higher

education, but be leaders in the process. We must be willing to transform all areas of our operations, whether in the classroom, the research laboratory, the business office, or student support services. And finally, we must be prepared to be held accountable by our stakeholders—including our students and their families, our alumni, and the citizens of Maryland—for the quality and appropriateness of the education our graduates receive, and their ethical and leadership training.

The challenge of planning for technology-based transformation is daunting, particularly given the speed with which technology is progressing, the disruption that it can create in our lives and livelihoods, and, perhaps most importantly, the inherent difficulty involved in predicting with any accuracy those changes that will have the greatest impact. But the USM is not without experience or success in attempting transformational initiatives. Over the past five years we have become a recognized national leader in the transformation effort, particularly in the areas of academic reform. Through our Course Redesign Initiative, the first such systemwide initiative in the country, our institutions have been able to test and validate a series of pedagogical approaches designed to turn around success rates in certain “gatekeeper” courses—those dreaded, large-enrollment, multisection courses that are widely considered to be a chief impediment to student success.

At the same time, through our systemwide initiatives focused on effectiveness and efficiency (including time-to-degree and faculty workload) and overcoming the achievement gap, we have sought to ensure that the resources entrusted to us are effectively and efficiently used and the opportunities for successful, high-quality educational outcomes are not limited to just a few. For the coming decade, USM planning in the transformation area has focused on ways to build on our success in course redesign and other transformational activities in order to broaden and expand their potential impact on the system. Specific strategies include:









- Using technology as evidenced in the Course Redesign Initiative to expand current transformational efforts and enhance student learning and success;
- Exploring ways to broaden our understanding of transformation options, including a comprehensive planning process designed to elicit new ideas, and the development of a formal structure within the USM to support and sustain transformational ideas as they emerge; and
- Establishing a framework for the systemwide development, articulation, and promotion of a core set of learning goals, leadership development, and civic engagement outcomes.

### **Key Goals/Targets Under Theme 3**

The following represent proposed goals or targets to be addressed under Theme 3 of the plan.

1. Continue to support course transformation at USM institutions by tripling the number of courses that have been reconceived via the USM's "Course Redesign Initiatives" and implemented.
2. Establish a systemwide planning and/or implementation framework for identifying and supporting new or early-stage transformation projects and initiatives.
3. Develop and implement a "Maryland Compact for Student Learning, Leadership Development, and Civic Engagement" specifying what the Board of Regents and institutions expect all USM graduates to know and be able to do and perform.

### **Key Challenges Under Theme 3**

The following represent key challenges that will need to be addressed if the system's goals and targets under Theme 3 are to be achieved.

1. How to most effectively expand and sustain, throughout the system, ongoing initiatives in the area of course redesign.
2. Beyond course redesign, how to identify and support new or emerging areas within the system that show high potential for significant success and transformational impact.
3. Articulating appropriate, systemwide expectations for learning outcomes, leadership development, and civic engagement that are meaningful to the system's stakeholders yet also respect the unique missions and characteristics of each USM institution, the concept of faculty control of the curriculum, and the learning outcomes and expectations that institutions have already developed as part of

their general education planning and accreditation-related processes.

### **Proposed Strategies**

The following represent suggested strategies that have been put forward for addressing the goals and challenges under Theme 3.

- 3.a. Move to address the realities of 21st century learning and teaching needs through course redesign and other strategies.
  - 3.a.1. Continue implementation of the Phase 2 USM Carnegie Award Course Redesign Initiative and the related statewide Lumina Foundation-funded Course Redesign Initiative.
  - 3.a.2. Establish systemwide best practices in various disciplines for redesigned courses and processes for sharing these best practices among faculty teaching similar courses in system institutions.
  - 3.a.3. Increase private fundraising related to support for course redesign efforts.
- 3.b. Beyond course redesign, establish a process for identifying, assessing, and systemically supporting new or early-stage transformation projects and initiatives.
  - 3.b.1. In coordination with provosts, CIOs, deans, and students, as well as technology, curriculum and assessment specialists, implement a comprehensive planning effort on academic transformation that may include, but is not limited to, course redesign, open courseware, intelligent/learning tutoring systems, Towson University's trimester, and competency-based programs.
  - 3.b.2. Carry out a systemic review of institutional technology fluency programs, including their relevancy to current academic trends and student use and learning patterns, their appropriate use, and the ethical and social implications of their use.
  - 3.b.3. Explore ways to recognize and reward through the Board of Regents' workload policy the additional time and effort required to design, teach, and support a "reconceived" course.
  - 3.b.4. Ensure that support is available at each institution for instructional personnel in

learning how to use new teaching and learning tools and how to be effective in new teaching/learning environments.

- 3.b.5. Make sure that each institution, as part of its IT planning process, commits to sustaining these environments through a reasonable life cycle, and has a succession plan for the conclusion of that life cycle.
- 3.b.6. As part of the USM's capital planning process, create greater emphasis on flexible learning environments that are pervasively electronically accessible. In addition, design academic and administrative support services to be electronically accessible to students and employees who may or may not be physically present on the campus.
- 3.b.7. Finally, explore the development of a USM-run faculty fellowship or grant program that could be used to identify and support new or emerging areas within the system that show high potential for significant success and transformational impact.
- 3.c. Articulate and monitor systemwide expectations for student learning and leadership development through the "Maryland Compact on Student Learning, Leadership Development, and Civic Engagement."
  - 3.c.1. In close cooperation with USM councils, faculty, staff, and student leaders, develop and implement the "Maryland Compact for Student Learning, Leadership Development, and Civic Engagement." This will build on general education and related student development program outcomes already established at USM campuses in order to articulate and monitor what the Board of Regents and institutions expect all USM graduates to know and be able to do and perform.

## Theme 4: Identifying New and More Effective Ways to Build and Leverage the Resources Available to the USM for the Benefit of Maryland and Its Citizens

### *Rationale for Theme 4*

As Maryland's public system of higher education, and a recognized leader in national efforts to enhance higher education effectiveness, environmental sustainability, and accountability, the USM has an ongoing commitment—as well as a responsibility—to maintain the highest possible standards of stewardship and accountability. This commitment is particularly critical at a time when the financial resources of states, students, and their families are constrained, yet the importance of higher education to their future economic and social prosperity has never been greater. On issues ranging from improvements in operational efficiency to environmental sustainability to fundraising and accountability, the USM must be prepared to develop and adopt new strategies to manage, build, and leverage the resources entrusted to it if it is to accomplish its goals.

To carry out its stewardship commitment under the 2020 strategic plan, the USM will focus on four major areas:

- 1) Identifying and implementing "the next generation" of initiatives under the system's Effectiveness and Efficiency (E&E) Initiative.
- 2) Advancing the USM's role and responsibilities as a public corporation.
- 3) Assuring the system's commitment to environmental sustainability.
- 4) Building a vibrant culture of philanthropy across USM institutions and in partnership with its affiliated foundations.

Following is a short discussion of the challenges and issues associated with each of these areas, including possible strategies to be explored.

Perhaps no action by the system over the past decade has garnered greater national attention or statewide support than its Effectiveness and Efficiency (E&E) Initiative.

### **E&E: The Next Generation**

Perhaps no action by the system over the past decade has garnered greater national attention or statewide support than its Effectiveness and Efficiency (E&E) Initiative, a board-led effort to bring a total quality management (TQM) perspective and discipline to the system's operations. Since the beginning of the initiative in 2004, the USM has been able to:

- Expand enrollment in cost-effective ways by strategically growing enrollment at the USM's lower-cost comprehensive institutions, regional centers, and other off-campus sites (resulting in the overall addition of enrollment equivalent to an institution the size of UMBC to the system over the past five years alone).
- Leverage the system's size and economic clout to achieve greater savings and avoid costs.
- Shorten time to degree through revamped academic policies and stricter policy enforcement.
- Identify and remove barriers to academic progress for students through course redesign and other initiatives.
- Create and implement a "dashboard" accountability process for monitoring progress toward board, system, and institution-specific priorities.

Moving forward, the USM and the Board of Regents have reaffirmed their commitment to E&E under the 2020 plan. As such, the system expects to use the initiative as one of its primary vehicles for identifying and exploiting new or emerging technologies and operating processes that show promise of increasing the system's productivity and effectiveness.

**Proposed E&E strategies** will include (in addition to the course redesign, Towson University trimester, and other academic transformation initiatives already discussed):

- 4.1.a. Undertaking a comprehensive review of strategies previously identified for possible E&E savings, with particular attention given to those areas in which new technologies or business process changes may have occurred since 2004, opening the possibility of new efficiencies or savings.
- 4.1.b. Implementing an annual system E&E suggestion and award process, by which those who are closest to the day-to-day operations—faculty and staff—have an ongoing opportunity to spotlight areas ripe for improvement and/or cost savings.



### **The USM as a Public Corporation**

Closely allied to the E&E commitment under the new plan will be an effort to re-evaluate the rights, responsibilities, and opportunities available to the USM as a public corporation. Granted to the USM in 1999, public corporation status was designed to foster the system's ability to carry out its dual mission of educating Maryland's young people and conducting research and service programs that advance knowledge and respond to the economic, environmental, health, and security needs of the state. USM activities in support of this dual mission were considered essential enough a decade ago—and the climate in which it operated different enough from that of traditional public agencies—that the General Assembly gave the system unique financial and management flexibility in order to allow it to operate effectively and accomplish its mission.

Since the 1999 legislation was put in place, however, the role that the USM plays as an economic engine for the state, and the unique challenges it faces in operating in a world that is dominated by private and global interests, have grown tremendously. The USM is now confronted by competition from the private sector on many fronts: from private industry in its efforts in technology transfer and innovation; from the world's most heavily endowed private research universities in its effort to secure external funding for its research enterprise; from





private, for-profit universities in meeting its mission to effectively prepare the workforce required for the 21st century job market.

It is also required to forge close and quickly evolving relationships with the private sector to succeed in creating needed new business development in the state and translating its research efforts into products that improve health, safety, and a sustainable environment for Maryland's citizens. Finally, the USM must operate in the global community, dealing effectively with multinational corporations and foreign governments and adapting efficiently to constantly evolving technologies.

In recognition of these changes, the USM plans to undertake a re-evaluation of the 1999 public corporation law as part of the 2020 plan. This evaluation will examine how effectively the USM has performed as a public corporation since the law was developed and explore new approaches—both within the USM and in relation to state government and the private sector—that will help the system keep pace with its expanding mission and expectations. Areas expected to be looked at in the assessment include:

- State approval processes impacting the USM that could be streamlined and redundant processes eliminated.
- Duplicative and conflicting personnel reporting requirements, which cut across state agencies and can impede the USM's ability to recruit or retain faculty and staff critical to the system's ability to promote economic development and enhance Maryland's economic standing.
- Modifications to the collective bargaining statutes that could enhance their effectiveness in the context of higher education institutions.

#### ***Proposed strategies include:***

- 4.2.a. Working with the USM institutions to complete the assessment of performance under the public corporation designation.
- 4.2.b. Based on the findings of the assessment, developing a proposal to enhance the system's ability to operate more effectively and efficiently as a public corporation in support of its mission.

#### ***Sustainability***

Environmental stewardship is an area of critical importance to the system, as well as our state and nation, that has emerged since the last USM strategic plan was released in 2004. In a global competition to develop new, clean, sustainable technologies and practices, environmental stewardship is now seen as a precondition for not just the long-term, cost-effective operation of the USM's campuses, but also for the ability of Maryland and its citizens to compete economically. The role the university system can play in preparing Maryland and its citizens for such a competition and the impact of climate change and related environmental concerns is significant. They include education, research, outreach, and best practice modeling. No entity in our state is in a better position to exhibit leadership on the complex issues associated with climate change and sustainability than the USM.

Because of the work already done on this issue, the system is well advanced in its sustainability-related planning and activity. The presidents at all USM institutions have signed the American College and University Presidents Climate Commitment, which requires continual and publicly reported progress toward the ultimate goal of "climate neutrality." All USM institutions are now working on finalizing or implementing their Climate Action Plans with

recommended steps like percentage reductions in energy use that are intended to be taken along the way. And all of these efforts are being coordinated with the state's own energy reduction and sustainability goals.

For the 2020 plan, the overall sustainability goal is to move the system to the next level in terms of climate-related activities. Activities will be focused in three distinct areas: mitigation, adaptation, and leadership. Strategies likely to be considered at the board and system levels over the near term include:

- Establishing minimum performance targets for greenhouse gas reduction.
- Establishing a formal energy policy and guidelines for promoting environmentally conscious business practices that can be used as a model practice by other agencies.
- Making adaptation an equal partner in the sustainability effort.
- Adding water management to the list of critical sustainability concerns.

#### **Philanthropy**

Finally, the importance of using private, philanthropic support to aid public institutions of higher education in their education, research, and service missions cannot be overstated. In an era of limited state and federal budgets, private funds can mean the difference between a good university or university system and a great one. The USM's advancement offices are committed to the careful, responsible, and accountable stewardship of resources, particularly with regard to the use of private funds, in support of the plan's strategic goals. As such, one of the system's objectives under Theme 4 is to build a vibrant culture of philanthropy across USM institutions and in partnership with affiliated foundations. This will be done by providing advancement offices across the system with the staff and resources needed to develop and maintain strong and productive advancement programs.

#### **Proposed philanthropic strategies include:**

- 4.3.a. Increasing staffing—both front-line and support—that will enable advancement offices to reach their potential.
- 4.3.b. Examining funding mechanisms beyond state support that will provide the flexibility and stability to foster ongoing growth.
- 4.3.c. Facilitating planning for a multibillion-dollar

systemwide federated capital campaign that will focus on building long-term endowment resources for all institutions.

- 4.3.d. Refine benchmarks and accountability measures for fundraising activities that demonstrate return on investment and ongoing improvements to development operations.
- 4.3.e. Ensure that professional development opportunities and best practices are shared with campuses, from entry-level advancement staff to deans and presidents.
- 4.3.f. Continue to provide leadership through a pooled asset portfolio managed by the USM Foundation with an objective to generate returns so that distributions can be made, and to preserve capital adjusted for inflation.

## **Theme 5: Most Importantly, Achieving and Sustaining National Eminence Through the Quality of Our People, Our Programs, and Our Facilities**

### **Rationale for Theme 5**

Achieving and sustaining national eminence within the distinct and complementary mission of each institution is the overarching goal of the USM and its institutions. The importance that the citizens of Maryland and the stakeholders of the University System of Maryland place on the goal is evidenced by the fact that it is the first and only goal expressly given to the university system in the 1988 Maryland Higher Education Charter. To meet this mandate—and provide Marylanders with the quality of higher education that they demand and deserve—the USM must focus on two of the most critical aspects of the academic enterprise: people and facilities.

While all of the goals and strategies laid out in the strategic plan are expected to contribute in some



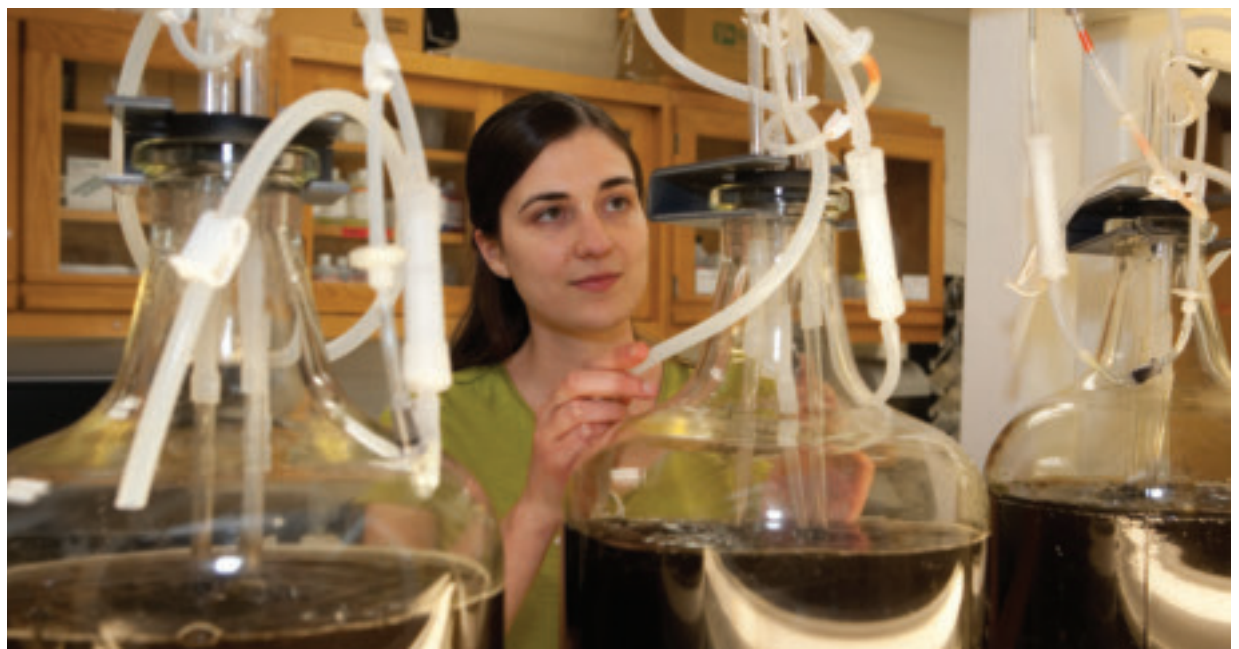


measure to this overarching goal, nothing will be more critical to success under it—and the plan in general—than the USM’s ability to invest in and support its people and facilities. Great universities, and great university systems, are built and sustained by attracting, retaining, and developing the best faculty, staff, and students possible and then providing them with the quality of facilities and related services they need to effectively learn, teach, and carry out their work and/or research. That simple formula, easy to identify yet difficult to achieve, lies at the heart of any successful academic enterprise.

#### **Key Challenges Under Theme 5**

The economic, demographic, and political conditions that the system and most of higher education face make success under Theme 5 seem particularly challenging at the current time. These include:

- A national decline in state financial support for higher education that is likely to continue in the near term. (Since 2008, financial support for public higher education has fallen by 1.6 percent nationally, a number that would be closer to 7 percent if it were not for the federal government’s stimulus funds shoring up state support. Higher education analysts project that that downward trend will not begin to reverse itself until 2013 at the earliest, and may not return to pre-recession levels for several years after that.)
- State-imposed fiscal austerity measures that have hindered the ability of institutions to retain key personnel, fill vacancies, or invest in professional development activities. Thanks to the support of Maryland’s political leaders, the state’s higher education sector has fared better than those in all but a few states over the past two years (the percentage change in higher education appropriations for Maryland is actually up by more than 7 percent over that time, including the federal stimulus funding). At the same time, however, public higher education institutions in Maryland have been adversely affected by freezes in hiring, salaries, and benefits, cuts in funding for professional development activities, and state-mandated furloughs. The combined effect of these actions has been deleterious to faculty and staff morale and the ability of institutions to retain many of their best and brightest faculty and staff. The need for fiscal austerity has also hindered the state’s ability to invest in enhanced capital spending.
- Changing demographics that portend not just greater demand for higher education access in Maryland but also a pronounced shift in the kinds of students who will be coming to our institutions, their level of educational preparation, and service needs. Between now and the end of the next decade, enrollments at Maryland’s public higher education institutions are expected to increase by 20 percent. That is more than twice the 8 percent growth rate in college enrollment projected for the nation as a whole. At the same time, Maryland will have moved from being a state where nearly 60 percent of all high school graduates were white in 1998 to one in which almost 60 percent of all high school graduates are students of color by 2020. Over the next 10 years USM institutions will increasingly be educating students who come from population groups that traditionally have been underrepresented in higher education. Ensuring that these students gain not just educational access but educational success as well—as defined by degree attainment—will be critical not just to their own economic futures but those of the state and the system as well.
- Finally, the instructional delivery and staffing models developed by traditional not-for-profit higher education institutions over the last century are facing rising pressure from competitor





models—particularly those being put forward by for-profit corporations. The models utilized by such competitors tend to feature easily replicated, highly scripted courses taught by contract faculty teaching part-time in “no-frills” degree programs. Traditional higher education institutions, including the USM institutions, must be prepared to address this challenge or face the weakening of public support for higher education.

#### **Key Goals/Targets Under Theme 5**

1. Achieve and sustain national eminence by attracting, supporting, and retaining high-quality students, faculty, and staff.
2. Build, support, and maintain world-class teaching, research, and living and learning facilities.
3. Collaborate and share best practices across the USM to support the recruitment and retention of minority students, faculty, and staff.

#### **Proposed Strategies**

- 5.1. Attract, retain, and graduate Maryland’s best and brightest students through the following:

*For undergraduate students:*

- 5.1.a. Continue to support a fair, effective, and affordable tuition system that contributes to and promotes student access, retention, and success, but also provides to institutions the level of support necessary to achieve their institutional missions and contribute to the systemwide mandate of national eminence.
- 5.1.b. Continue to implement the board’s policy on institution-based financial aid, and, as appropriate, advocate before the executive and legislative offices for increases in the amount of financial aid awarded on the basis of need.
- 5.1.c. Continue to identify, implement, and support effective campus-based programs that improve retention, graduation, and student satisfaction—including programs designed to eliminate the achievement gap on USM campuses.
- 5.1.d. Continue to support and monitor the progress of campus-based programs, services, and facilities designed to enhance the quality of undergraduate learning experiences and strengthen student and alumni ties to our campuses by using strategies appropriate for the



unique missions and student needs of the USM campuses.

- 5.1.e. In collaboration with the members of the Governor’s P-20 Leadership Council and other segments of higher education in the state, continue the development of collaborative and well-articulated programs and services that expand the range of educational opportunities and programs to students throughout Maryland.

- 5.1.f. Implement methods that foster an environment that supports the recruitment and retention of faculty and support staff who are essential to the quality and success of undergraduate programs.

*For graduate and first-professional students:*

- 5.1.g. Work with the campuses and their respective graduate/first-professional programs and offices to enhance the quality of life, programs, and services offered on our campuses.
- 5.1.h. Implement methods that foster an environment that supports the recruitment and retention of faculty and support staff who are essential to the quality and success of graduate/first-professional programs.
- 5.1.i. Implement, as appropriate, the recommendations of the legislative and system work groups on graduate assistants, including:
  - 5.1.i.1. Providing timely information to newly admitted graduate students on the length and terms of their appointment.



- 5.1.i.2. Establishing and abiding by due process procedures and policies for resolving grievance concerns.
- 5.1.i.3. Establishing and implementing appropriate professional development opportunities for graduate assistants and training for graduate supervisors.
- 5.1.i.4. Establishing graduate stipends at levels that are competitive with peer institutions, to the extent allowed by available fiscal resources, and including other benefits, as appropriate.
- 5.1.i.5. Providing the opportunity to participate in shared governance.
- 5.1.i.6. And finally, monitoring and refining policies and practices to provide continuous improvement in meeting the needs of USM graduate assistants.
- 5.2. Attract, retain, and support a high-quality, diverse faculty through the following:
  - 5.2.a. Develop, implement, and secure competitive salaries and benefits for system faculty, including a continued focus on achieving and maintaining the 85th percentile for mean faculty salaries at all ranks.
  - 5.2.b. Continue to focus on the development and implementation of hiring and retention practices that lead to greater quality and diversity among faculty, including the ongoing systemwide development program for program chairs, which focuses, among other issues, on successful faculty recruitment and retention strategies.
  - 5.2.c. Continue to support the use of best practices in faculty professional development, including effective faculty orientation and development programs, faculty mentoring programs, and programs designed to recognize the universities' most distinguished teachers and enable them to share their expertise with other faculty.
  - 5.2.d. Include professional development funding and opportunities for all categories of faculty.
  - 5.2.e. Encourage and support faculty participation in shared governance and service.
  - 5.2.f. Increase the number of endowed chairs to recruit and retain distinguished faculty.
  - 5.2.g. Implement, as appropriate, the recommendations of the legislative and system work groups on adjunct faculty, including:
    - 5.2. g.1. Provide compensation at levels that are competitive with peer institutions, to the extent allowed by available fiscal resources.
    - 5.2. g.2. Enhance the ability of adjunct faculty to plan for future teaching appointments and assignments.
    - 5.2. g.3. Recognize the particularly important contributions of adjunct faculty who demonstrate a consistent record of high-quality instruction at an institution.
    - 5.2. g.4. Make available to adjunct faculty needed space, equipment and other tools to promote high-quality teaching.

- 5.2. g.5. Establish adequate due process protections for adjunct faculty.
- 5.2. g.6. Provide the opportunity to participate in shared governance.
- 5.2. g.7. And finally, monitor and refine policies and practices to provide continuous improvement in meeting the needs of USM adjunct faculty.
- 5.3. Attract, develop, retain, and support high-quality staff through the following:
  - 5.3.a. Develop, implement, and secure competitive salaries and benefits for system staff.
  - 5.3.b. Work with the USM Council of System Staff (CUSS) to encourage and promote appropriate policies and practices related to staff training, professional development, and participation in shared governance.
  - 5.3.c. Work to identify best practices and resources for staff development and training at peer institutions and systems, with particular attention to identifying practices that can be implemented and shared.
  - 5.3.d. Continue to support and monitor both at the system and campus levels the effectiveness of ongoing staff professional development programs, including staff orientation and development programs, staff mentoring programs, and programs designed to recognize the universities' most distinguished staff.
  - 5.3.e. Support the development and implementation of hiring and retention practices that lead to greater quality and diversity among staff.
- 5.4. Build and maintain world-class facilities through the following:
  - 5.4.a. Increase capital spending under the Governor's Capital Improvement Program by up to \$600 million over the next five years, with the primary goal of using this increase to address critical shortages in laboratory space essential for maintaining Maryland's competitive edge in sponsored research, and the infrastructure to support the state's innovation economy.
  - 5.4.b. Coordinate capital planning and programming with systemwide goals and strategies for expanding access and degree attainment, particularly in critical economic and workforce areas (i.e., STEM, health care, education, cybersecurity).
  - 5.4.c. Continue to develop and update regularly facilities master plans that are integrated with the institutional and USM strategic plans.
  - 5.4.d. Continue to enhance capital funding for building renovation, infrastructure, and facilities renewal to protect the state's investment in physical assets.
  - 5.4.e. Coordinate capital planning and programming with systemwide strategies for the use of technology to boost transformation of the academic model.
  - 5.4.f. Plan, staff, and launch a multibillion-dollar capital campaign that will support implementation of key elements of the strategic plan ranging from capital facilities to those focused on access, attainment, competitiveness, and transformation.
  - 5.4.g. Maintain the system's focus on effective project management and stewardship of its capital resources.

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## NEXT STEPS FOR THE 2020 PLAN: ACTION AND ACCOUNTABILITY

The USM and its institutions will work together to develop a business plan around each of the major themes. These plans will lay out not just the action steps necessary to achieve the goals of the plan but also the resources required as well. Accountability under the plan will be ensured by yearly progress reports that are included under the Board of Regents' Dashboard Indicator process. The information in these reports, along with the data and information produced in other system strategic accountability reports (such as Managing for Results), will provide the public and system stakeholders with valuable information showing the benefits of their continued investment in the University System of Maryland.



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## \*Appendix

### USM's core values are as follows:

1. We value the intellectual development of our students, and we are dedicated to providing them with an education that is of the highest quality and that fully meets their professional and personal needs.
  2. We value the creation and dissemination of knowledge, and we are dedicated to using the knowledge developed in our institutions to advance the state's economy and to improve the quality of life for Maryland's citizens.
  3. We value integrity, and we are dedicated to the highest ethical standards in all our endeavors and to creating a culture that promotes civility and probity in the daily conduct of all faculty, staff, and students.
  4. We value the free and open exchange of ideas, and we are dedicated to producing graduates who are well prepared to be contributing members of a democratic, pluralistic society and the larger global community.
  5. We value diversity and are dedicated to creating an environment that both celebrates and is enriched by the multiple perspectives, cultures, and traditions reflected in humankind.
  6. We value the talents and contributions of our faculty and staff, as well as their participation in the shared governance of our institutions and the system, and we are dedicated to recruiting and retaining exceptional people and providing them with the resources and professional development opportunities to ensure their success.
  7. We value the natural and cultural resources of Maryland, and we are dedicated to using our knowledge and talent to preserve, protect, and promote these irreplaceable assets.
  8. We value our historic role of serving the public good and we are dedicated to using our considerable human and physical resources for the benefit of our state and nation.
  9. We value our role as the state's leader in higher education and we are dedicated to serving as an exemplar of academic quality and of principled, effective, and efficient use of resources.
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## UNIVERSITY SYSTEM OF MARYLAND

### INSTITUTIONS

Bowie State University  
Coppin State University  
Frostburg State University  
Salisbury University  
Towson University  
University of Baltimore  
University of Maryland, Baltimore  
University of Maryland, Baltimore County  
University of Maryland, College Park  
University of Maryland Eastern Shore  
University of Maryland University College  
University of Maryland Center for Environmental Science

### REGIONAL CENTERS

Universities at Shady Grove  
University System of Maryland at Hagerstown

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**University System of Maryland**

Office of the Chancellor  
3300 Metzgerott Road  
Adelphi, MD 20783  
301.445.1901

301.445.2740  
800.477.8437

[webnotes@usmd.edu](mailto:webnotes@usmd.edu)  
[www.usmd.edu](http://www.usmd.edu)

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