VISION 2030

FROM EXCELLENCE TO PREEMINENCE
FOR OUR STUDENTS | FOR MARYLAND

UNIVERSITY SYSTEM
of MARYLAND

VISION 2030: FROM EXCELLENCE TO PREEMINENCE
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Transforming Maryland's Public University System to Promote Opportunity,
Fuel the Economy, and Provide All Learners a Chance to Succeed

I. INTRODUCTION

The University System of Maryland (USM) has long been regarded as one of the most successful and diverse public university systems in the nation. The education, research, and service our institutions provide fuel Maryland's top-ranked economy, promote opportunity, advance social mobility, and improve the health, safety, and quality of life enjoyed by all Maryland residents.

Despite our record of achievement, the USM faces a rapidly approaching inflection point. We confront pressures on enrollment at a number of institutions, as well as long-term state and national demographic shifts, technology-empowered disruptions to traditional postsecondary and workplace models, changing expectations among students and faculty on the nature of teaching and learning, growing public skepticism around the value and cost of higher education, and the lingering impacts of the COVID-19 pandemic.

All of this is expected to combine over the remainder of this decade to present challenges—and opportunities—unlike any the System has faced since its creation. How urgently and how successfully the USM addresses these challenges will affect not just the health and prosperity of the System and our institutions, but that of our state and the stakeholders we serve.

The good news is that after more than a decade of close, strategic alignment with the state's postsecondary access, workforce preparation, and economic innovation needs, we approach these challenges from a position of strength. Since 2010, the System has grown by almost 17,000 students, an increase larger than the total student population of Bowie State University and Salisbury University (our second and third largest comprehensive institutions) combined. Nearly three-quarters (72 percent) of the growth in the USM's enrollment over the past decade has come from students who traditionally have been underserved in higher education: Hispanic, African American, and Native American students.

USM institutions now award more than 28,000 bachelor's degrees each year—eight out of 10 bachelor's degrees awarded in Maryland. That's an increase of 41 percent (8,100 degrees) since 2010. We award a total of 43,000 degrees annually. Almost 41 percent of all bachelor's degrees awarded by USM institutions in 2021 were in a workforce-critical STEM or health care field, up from just 25 percent in 2010. Faculty at USM institutions brought in $1.54 billion

in extramural funding in 2020, up nearly 13 percent from the start of the prior decade, and, together with USM staff and students, they helped create more than 600 startup companies in Maryland since 2012.

The USM has become indispensable to Maryland's success, but the existential nature of the challenges facing higher education institutions means we must do more than tweak our education and operating models in the years ahead. Over this decade and into the next, the USM must act boldly, and with a deep sense of urgency, to transform the very essence of our instructional, administrative, and financial systems, while serving the traditional postsecondary access and workforce preparation needs of Maryland and its citizens.

The USM must move from a System whose focus has been on the education of traditional college-age populations (ages 18–24) entering straight out of high school or transferring from a community college to one that—through innovative, flexible education pathways and credentials—provides a "degree plus": the knowledge, skills, and abilities needed to thrive in a changing world. We must move from a System whose relationship with Maryland's preK–12 schools has long been too limited and too passive to one deeply embedded in the development and improvement of the preK–12 education pipeline.

We must move from a System that has been institution-centric and process-bound in our decision-making to one that places the needs of the lifelong learner at the center of our decisions—one whose goal, first to last, is to provide all Marylanders, all learners, the opportunity to succeed. We must find new ways to translate our internationally recognized strength in basic and applied research into the ideas and innovations that change people's lives—in climate and sustainability, health, wellness, technology and security, and racial and social justice.

The "decade of decision" is a term coined in relation to climate change and sustainability, but it could rightfully describe so many of the challenges that lie ahead for the University System. Through the process of developing the strategic priorities, goals, and strategies outlined here, the USM and its leadership, together with stakeholders throughout Maryland, have stated clearly and forcefully that the System has long been excellent—but that's not enough. We must get even better. We must do even more. We must rise to the challenges before us.

II. MISSION, VISION, AND VALUES

The starting point for any successful strategic plan is the organization's mission, vision, and values. The three elements, taken together, serve as the polestar for an institution's operations and decisions. They distill, clarify, and affirm answers to the core questions: Who are we? What do we do? Why do we matter?

The USM's mission, vision, and values statements have been revised to reflect an expanded mission and vision for the System and our institutions as well as our deep and abiding commitment to advancing diversity, equity, inclusion, and social justice for all Marylanders.

OUR MISSION

To educate and serve the people of Maryland; advance equity, justice, and opportunity; and produce the research and scholarship that improve lives.

The USM leverages the strength and diversity of our people and institutions to promote lifelong learning, encourage economic innovation and entrepreneurship, and produce research and scholarship that solve the world's greatest problems.

We instill in students a commitment to diversity, inclusion, and justice; an understanding of the social, economic, and environmental challenges facing our world; and the will and ability to address them.

Through learner-centered academic programs and support services, we prepare students who have the knowledge, skills, creativity, and confidence to succeed and to lead in a global, digital economy.

OUR VISION

To be a preeminent system of public higher education respected around the world for our leadership in developing learner-centered postsecondary education for all levels and life stages; creating knowledge that solves problems, strengthens communities, and makes meaningful change; and relentlessly pursuing equity, opportunity, and justice for all.

OUR VALUES

Our core values reflect the fundamental principles that guide our work. They serve not just as standards for those engaged in the System's day-to-day operations but, to those outside the System, as affirmation of what we stand for.

KNOWLEDGE

The creation and dissemination of knowledge is central to our mission. We give it priority of place in all that we do.

SERVICE

As a public institution, we exist to serve the citizens of our state. We base our decisions and actions ultimately on the benefits they will gain.

DIVERSITY, EQUITY, AND INCLUSION

We are strengthened by the many perspectives, cultures, and traditions that exist within our System. We seek out and engage a diverse range of voices and viewpoints, and we make resources and opportunities equitably available to those we employ and serve.

CIVILITY

Learning cannot thrive in a climate lacking mutual respect and civil engagement. We treat all people with respect and civility, and demonstrate that in our words, our actions, and our demeanor.

INNOVATION

We cannot meet our mission if our work does not evolve. We support innovative, pathbreaking ideas, programs, and processes, and we reward those who bring them forward.

COLLABORATION

We are most effective when we work together. We seek out opportunities to collaborate on the development and deployment of programs and services across offices and institutions.

EXCELLENCE

Our first duty, per the USM's legislative charter, is to "promote excellence at each campus, in accordance with the skills of the faculty, the needs of the region, and the academic programs offered." We support the unique missions, cultures, and strengths that each of our institutions brings to the System, and we provide each institution the resources, people, and programs necessary for excellence.

ACCOUNTABILITY

Achieving and maintaining organizational excellence is not possible without accountability. We take responsibility for our actions at all levels—as individuals, institutions, and a System—and we are transparent in our reporting on them.

III. ENVIRONMENTAL SCAN

The USM has a 30-year track record of success in providing residents of Maryland and the nation with an excellent higher education—a world-class array of academic, research, and service programs. However, we face trends that will challenge our ability to expand and improve our programs. And so it's imperative that we develop and implement a new, expanded education and service model.

Trends expected to challenge the System over the coming decade include the following.

1. A CHANGING STUDENT PROFILE

The number of high school graduates produced annually across the United States will peak in 2025 and then begin a slow decline through 2035–36, when the number is expected to plateau at a level below that of 2015. Not all U.S. states and regions will experience the same level of decline; however, the Northeast region, the largest source of out-of-state students for USM institutions, is projected to experience the greatest drop of any region in the country. Factors unique to Maryland, including its booming high-tech economy and location next to the nation's capital, likely will ameliorate the severity of this decline. However, regardless of the degree to which Maryland escapes the full brunt of the shrinking high school population, the downslope of the overall trend means that the competitive environment for traditional college-age cohorts (18 to 24-year-olds matriculating directly from high school or community college) will become much more challenging throughout the region after 2025.

The "addressable market" of traditional college-age students is expected to reach 3.9 million in the U.S. in 2024–25, before falling to 3.5 million by 2036.

Within Maryland, the number of graduates will ebb and flow until 2035, but will stay 10–20 percent above 2015 levels.

Compounding the drop in high school graduates are other longer-term enrollment challenges for higher education institutions—inside and outside Maryland.

OUTSIZED ENROLLMENT DECLINES AT PUBLIC TWO-YEAR COLLEGES

Students enrolled at public two-year colleges are historically one of the largest sources of the USM's transfer population. According to the National Student Clearing House, the public community college sector declined by 10.1 percent (544,000 students) between fall 2019 and fall 2020, the greatest drop of any segment of higher education institutions. In comparison, enrollment at public four-year institutions actually increased

by 0.2 percent nationally, and enrollment for all sectors—comprising public two-year, public and private four-year, and private for-profit institutions—declined by just 2.5 percent The double-digit slide marked the fourth-straight year that the public two-year sector experienced enrollment declines. Data published by the Maryland Higher Education Commission (MHEC) show total enrollment in the state's two-year sector has fallen every year since 2014, with an overall drop of 20,400 students (–15.4 percent) between fall 2014 and fall 2019, the latest year for which data are available.

THE GROWING IMPACT OF "NONTRADITIONAL" STUDENTS

Defined as those age 25 and older, nontraditional students now make up an estimated 40 percent of all U.S. undergraduates, and 75–80 percent of all enrolled students. Higher education scholars have long noted that the heterogeneity of nontraditional students and their varied patterns of attendance make meeting their needs in terms of education and services a particular challenge.

MHEC data show that students age 25 and older accounted for about one-third of all undergraduates enrolled in the state's public two-year and four-year institutions in FY20—a percentage that has held relatively steady over the past four years despite variation in overall enrollment numbers. MHEC also provides insight into the complexity of that market within Maryland, and the particular impact that the University of Maryland Global Campus (UMGC) has on the market for those undergraduates attending a four-year institution. Per MHEC, undergraduate students age 25 and older in Maryland are less than half as likely to attend full time compared with the undergraduate population as a whole—16 percent versus 32 percent among public two-year students, and 30 percent versus 66 percent among public four-year students. Such findings are consistent with nontraditional student attendance patterns in other areas of the country.

In 2019, UMGC accounted for 75 percent of all undergraduates age 25 and older enrolled at a Maryland public four-year university, and 71 percent of all nontraditional undergraduates enrolled at any four-year institution in the state—public or private.

Unique to Maryland, however, is the dominant role that UMGC plays in the undergraduate part-time and adult education market among four-year institutions. MHEC data show that nontraditional students account for roughly one-third of the total undergraduate enrollment at Maryland's public two-year and four-year institutions. However, among the latter group of institutions, UMGC accounts for almost

three-quarters of all nontraditional students. And UMGC's position in the market jumps to 80 percent if we look at only those four-year nontraditional students who are attending part-time. (In 2019, this share accounted for 71 percent of the nontraditional student market.) Such data suggest that while Maryland's nontraditional student market will continue to play a key role in institutional plans for growing enrollment, aspects of that market—and the institutions serving it—are unique and should be taken into account.

MARYLAND'S GROWING DIVERSITY

The number of high school graduates is not projected to drop as steeply or as quickly in Maryland as in other states in the region over the next decade. However, Maryland will face a greater and more rapidly occurring set of changes to its overall population than almost any other state in the Northeast.

The 2020 census figures released in August 2021 show that Maryland is now the most diverse state on the East Coast, and one of only two states in the nation to flip from majority White to majority non-White since 2010. (The other is Nevada.) Maryland's level of diversity, as measured by the Census Bureau, places the state at No. 4 in the U.S., behind only California, Nevada, and Hawaii.

The greatest single factor driving the increase in Maryland's diversity, and one expected to disproportionately impact the state in the long term, is the growth in Maryland's Hispanic or Latino population. Maryland has the 17th largest Latino population in the U.S. The percentage of Marylanders who identify as Hispanic or Latino grew to 11.8 percent in the 2020 census, up from 8.2 percent in 2010. (In Montgomery County, the Latino population increased from 17 to 21 percent. Similar increases were seen in Prince George's County, up six points to 21 percent, and Baltimore City, up four points to 8 percent.)

More pertinent to USM enrollment numbers is that Hispanic/Latino students are the fastest growing population of preK–12 students in the state, accounting for 15 percent of all Maryland students in 2019. And while Maryland's Hispanic/Latino population outperforms that population nationally in terms of degree completion, Hispanic/Latino adults in Maryland (ages 18 to 34) are 44 percent less likely to enroll in postsecondary education than White, non-Hispanic Marylanders, and 53 percent less likely to have attained a college degree (associate or higher) by the time they reach age 25.

By 2035, Hispanic graduates are projected to constitute 30 percent of all public high school graduates in Maryland, up from 14 percent in 2019.

Looked at as whole, the projected decline in the number of high school graduates produced between 2025 and 2035—in Maryland and the Northeast region—will put pressure on the ability of some USM institutions to attract traditional college-age cohorts (ages 18–24) at levels achieved over the past decade. At the same time, UMGC's strength in Maryland's sizeable nontraditional student market (age 25 and older) likely means that institutions not already active in one or more niches of that market may have difficulty pivoting to a focus on nontraditional students.

Finally, Maryland's fast-changing racial and socioeconomic demographics will mean that more USM students will be first-generation and/or come from groups traditionally underrepresented in higher education. Combined, these trends likely mean expanded competition for students, particularly those within the shrinking pool of traditional students, and the need for more financial aid and institutional support services. While each of these trends is expected to impact the operating model of every USM institution, for those institutions currently struggling to balance declining enrollments with rising resource needs, the trends are particularly ominous.

2. LINGERING AND LONG-TERM ENROLLMENT IMPACTS OF COVID-19

The full impact of COVID-19 on higher education is simply too large—and our understanding of its many implications still too incomplete—to be dissected here. But any discussion of higher education trends and enrollment patterns, whether national or Maryland-specific, is incomplete without some acknowledgment of the potential long-term impacts of the pandemic on students, families, and institutions. Two years into the pandemic, the outlines of its impact on higher education enrollment, together with the economic downturn that accompanied it, are becoming clearer.

In the near term, the pandemic took what was already a national trend of annual college enrollment declines (1.4 percent over the previous four years) and supercharged it. The annual decline in total enrollment jumped to 2.6 percent from 2019 to 2020, and a similar jump is expected between 2020 and 2021.

Though not all institutional sectors or student groups have been affected in the same way—public four-year enrollment, for instance, actually increased slightly (+0.2 percent) from 2019 to 2020—the pandemic has had a particularly significant impact on public community colleges. Enrollment dropped a reported 10.1 percent from 2019 to 2020 for the two-year sector, and it's projected to fall another 5–6 percent in the

current year. At the same time, first-time freshmen at four-year colleges are down 13.1 percent from 2019 to 2020, and an additional loss of up to 3.1 percent is projected for fall 2021.

National Student Clearinghouse data suggest that, within those sectors and population groups, Native American, Black, and White undergraduate populations have been the most significantly affected by the pandemic. Enrollment for those three groups has fallen by an estimated 12.7 percent, 11.1 percent, and 10.6 percent, respectively, between 2019 and 2021. Meanwhile, the greatest drops in terms of age have come from undergraduates aged 25–29 whose decline (11.8 percent) was roughly double the rate among traditional college-age undergraduates.

National data indicate that significantly more parents now prefer their child attend a college closer to home due to effects of the COVID-19 pandemic.

Putting all the pieces together, the National Clearinghouse suggests that the impact of the pandemic to date has fallen disproportionately on the most disadvantaged students—those from low-income, high-poverty, and urban areas—and the institutions (particularly community colleges) that serve them.

Finally, seeking to understand the potential impacts of COVID-19 not just on college enrollment but on education more generally, McKinsey & Company says, "The cumulative effects of the pandemic could have a long-term impact on an entire generation of students." The company's analysts speculate that the broader impacts won't be contained to lower education attainment and lower lifetime earnings for students affected directly, but decreased innovation and economic productivity for America as a whole. In "The 'Long Covid' of American Higher Education," sociologist Laura Adler notes, "As some activities drift back to normalcy, others will see lasting impacts. In the context of declining revenues and shifting dynamics of demand, universities will have to reckon with how COVID-19 has disproportionately impacted populations that were already disadvantaged, including low-income students, adjunct faculty, and women."

3. PUBLIC SKEPTICISM ABOUT THE RETURN ON INVESTMENT OF A COLLEGE DEGREE AND CHANGING EXPECTATIONS ABOUT LEARNING AND WORK

Separate from the enrollment challenges resulting from demographic and pandemic-influenced trends, a more indirect challenge presents something closer to an existential threat for higher education moving forward. There exists growing public skepticism, particularly among young adults, about the value of a college diploma in a world where expectations around learning and work are not just changing but changing rapidly.

Gallup survey data collected between 2013 and 2019 show that the percentage of young Americans expressing faith in the importance of a college degree is cratering. Young Americans age 18 to 29 who rated a college education as "very important" fell from 74 percent in 2013 to just 41 percent in 2019—a drop of 33 percentage points in six years. And while the Gallup data show that faith in higher education is more widespread among Americans of all ages (51 percent of the total survey population rated college "very important"), Gallup and other organizations report that a majority of Americans, regardless of age or political affiliation, are concerned about the rising cost of higher education (up 250 percent since 1974), excessive student loan debt loads, and the return on investment that higher education provides.

Interestingly, and somewhat counterintuitively given the community college enrollment woes noted earlier, survey data published in 2019 by the politically center-left think tank Third Way suggest that Americans' support for public community colleges and trade schools is higher than it is for public four-year colleges (84 vs. 69 percent). Some analysts have interpreted this as evidence of a growing preference among many Americans for an "education-for-life" model of higher education, which they argue is more central to the mission and ethos of community colleges. The analysts link this same preference to a rise in popularity of non-collegiate, alternative higher education models, such as coding boot camps, that have sprung up to connect postsecondary education and training more directly to work.

McKinsey & Company estimates America's GDP loss from pandemic-related learning interruptions will range between $128 billion and $188 billion annually.

4. TECHNOLOGY AND THE RISE OF POSTSECONDARY COMPETITORS AND INDUSTRY DISRUPTORS

The trend with the greatest potential to reshape the dominant model of American higher education involves a host of new or revamped competitors that are challenging how traditional higher education is structured, focused, and financed. Higher education scholars Arthur Levine and Scott Van Pelt argue that we're living in a time of profound change as the college model itself transforms from one created to serve an older "national, analog, industrial economy" to one able to serve our modern "global, digital, knowledge economy." The result, built largely on the back of advances in information technology, has been an explosion of innovative models offered by a range of competitors, from traditional higher education providers like Purdue University and Penn State University to a variety of for-profit and not-for-profit organizations.

In the past, higher education would have regarded this "hodgepodge" of actors, together with the range of missions and strategies they follow, as outside its core mission/model. But Levine and Van Pelt argue that this emerging sector instead should be regarded as a preview of the future—a future against which the USM and other higher education systems and institutions must be compared and in which they must compete. The dominant characteristics of this model are likely to include:

The pandemic helped accelerate the digital transformation around teaching and learning.

1) Greater competition that will drive higher education consumer choices up and prices down. The rising competition, Levine and Van Pelt argue, will result from "cheaper" and more agile competitors that "emphasize digital technologies, reject time- and place-based education, create low-cost degrees, offer competency or outcomes-based education, and award nontraditional credentials."

2) Less institutional control over the time, place, and content of higher education. Advances in information technology will give this control to higher education consumers instead of institutions. This will likely yield a rejection of higher education's traditional "bundled" model of services in favor of a more personalized education that better fits students' needs and circumstances.

3) A shift from process-focused to outcomes-focused education. The process-oriented model of education, with its emphasis on seat-time as the yardstick for learning, will diminish, as will the emphasis on a traditional college degree itself. Students and employers will focus more on whether education outcomes meet stated needs. This focus on outcomes, Levine and Van Pelt argue, in combination with the imperative to rapidly learn or update skills to advance in a career, will shift consumer preferences toward shorter-length credentials or micro-credentials.

The good news for the USM is that we are well-positioned to meet the future of higher education. Not only do we have one of the nation's premier distance learning institutions in UMGC—skilled in the type of digital, learner-driven experience envisioned—but for more than a decade our William E. Kirwan Center for Academic Innovation has served as a national model for higher education transformation. Finally, we have benefited from the lessons learned at each of our universities as the pandemic accelerated the digital transformation in teaching and learning.

IV. STRATEGIC PLAN PRIORITY AREAS

Through an extensive process of stakeholder engagement, data analysis, and discussion with System and institutional leadership, the USM Board of Regents has identified five priority areas we will focus on over the remainder of this decade. Within each of these strategic plan priority areas, the board and USM leaders have established a set of short-term, mid-term, and long-term goals to move the System toward the transformative vision laid out in our Mission, Vision, and Values.

Following the goals in each priority area is a set of potential strategies, included as illustrative of the types of strategies the System and our institutions may adopt. These strategies may be revised or adjusted as new challenges appear and existing challenges evolve. Final strategies will be developed in conjunction with our universities as part of the implementation planning process. That process will begin following adoption of the plan and will be monitored and adjusted as needed throughout the plan's duration.

PRIORITY 1
ACADEMIC EXCELLENCE AND INNOVATION
We will invest in our people, our ideas, and our institutions.

RATIONALE

The University System of Maryland has a deep and abiding commitment to achieving and sustaining excellence in all of our endeavors. This commitment is grounded in the Maryland State Charter for Higher Education, which stipulates that the first duty of the System is "to promote excellence at each campus, in accordance with the skills of the faculty, the needs of the region, and the academic programs offered."

The USM will achieve this mandate for excellence through strong support of our people—the diverse students, faculty, and staff who are the heart of our System. We will develop and maintain innovative programs and world-class facilities. We will engage and partner with alumni, businesses, government, and other critical community stakeholders. We will effectively steward the resources entrusted to us.

But as a leading public university system and a nationally lauded model for academic innovation, we also recognize that our success in delivering excellence increasingly depends on our ability to continuously innovate in all areas of our

operations. Through a deep and sustained commitment to innovation, and the investment that must accompany it, the USM and our universities will not just to meet the state's mandate but also more effectively and efficiently address the learning and professional development needs of Marylanders; reach new audiences; improve academic, research, and service outcomes; and demonstrate our return on investment to the citizens of Maryland and the nation.

CHALLENGES, OPPORTUNITIES, AND NEXT STEPS

ADEQUACY OF RESOURCES
Over the last 40 years, a nationwide shift has required students to bear a greater share of the costs of their postsecondary education through higher tuition and fees. And yet resources provided by state and municipal governments remain the dominant source of funding for public colleges and universities in half of all states.

Tuition and fees almost certainly will continue to be the fastest growing source of revenue for all colleges and universities, public and private, over the next decade, and they will continue to function as critical budget stabilizers in times of falling state revenues—even in states where they're not the dominant source of public higher education funding. However, the level of support supplied by state and local governments

remains a primary determinant of the education access that colleges and universities provide, the quality of that education, and the institutions' ability to attract and retain the best students, faculty, and staff.

Within Maryland, government support for higher education has been stronger than in most states, with a 16.9 percent increase in public higher education appropriations between 2010 and 2020 (on a per FTE or full-time student basis). That's good enough to place Maryland 12th among all states in percentage increase.

But that support still isn't sufficient to overcome the impact of serving more students, including those needing greater financial aid and support services. The last decade has seen fluctuating state budgets and steadily rising higher education costs. (The higher education price index has risen, on average, 2.3 percent per year over the past decade.) The result is that while our State General Fund appropriation has increased by 42 percent since 2010 (not adjusted for inflation), much of that increase has gone toward maintaining the level of access and services needed to accommodate the 14.1 percent climb in enrollment we've absorbed since 2010. This enrollment increase (16,088 FTE students) occurred at the same time we actively sought to hold down resident undergraduate tuition and fee increases to support the state's commitment to higher education affordability. (The USM's average tuition and fee increases since 2010 have been below 3 percent for in-state undergraduates.)

The challenges associated with our ongoing struggle to balance competing priorities—expanding access; holding down tuition costs; maintaining quality—can perhaps be best seen in the two "downstream" measures we frequently use as a proxy for measuring quality: 1) attainment under the Maryland Funding Guideline, and 2) average USM faculty salary compared against peer institutions.

Under the Funding Guideline, a vehicle created by the Maryland General Assembly to compare the adequacy of Maryland's state-funded higher education resources against those provided in competitor states, our Systemwide attainment is now at the 65th percentile among USM peers, nine places below the attainment level we achieved in 2014 (76th), and well below the state-established benchmark of 100 percent attainment.

While the most recent data on faculty salaries project a modest improvement for 2021, similar downward trends are indicative of the resource challenges we face. After hitting a high of 81 percent compared against our peers' salary average in 2015, our Systemwide average fell to a multiyear low of 65 percent in 2019, before bouncing up slightly to 71 percent in 2021. While the projected improvement in 2021 was a welcome sign of progress on this critical indicator, our faculty salary average still remains well below the 85 percent benchmark established by the Board of Regents.

Over the coming decade, the distance that continues to exist—and in the case of the Funding Guideline, continues to grow—between the financial resources available to us and those available to our peers in other states will remain one of our primary challenges. This challenge must be overcome if we are to maintain and build on our academic excellence and innovation, while maintaining the access and affordability that the Board of Regents and our state demand.

EVOLVING FACILITY CHALLENGES

Obtaining a more competitive level of operating funds is not the only challenge the USM faces in the coming decade. Facilities planners at our universities are considering how the System might best adapt our capital program to meet the state's changing education and research needs. While much is not yet known in terms of how buildings will need to be designed and used in the post-pandemic environment to maximize efficiency and effectiveness, we are increasingly convinced that a key characteristic of campus planning post-COVID must be flexibility in building configuration, capacity, and quality of systems. Attention to these indicators will help us pivot quickly to meet any unforeseen emergency. At the same time, facilities renewal (rebuilding and replacing existing facilities) will become even more important and will comprise most of our recommended projects, as will accommodations for improved IT capabilities related to the delivery of education.

Finally, a critical challenge to the USM's capital program will be the trend toward higher construction costs. While pre-pandemic costs were already trending up due to a significant shortage of skilled trades, building pressures of inflation and cost escalation are expected to further erode the buying power of each capital dollar. As an initial response to this issue, the Board of Regents has convened a task force to review current practices, policies, and procedures surrounding construction project delivery and related procurements—particularly those that impact project costs and schedules—and will discuss recommendations for improvements to those processes. Implementing the recommendations of that task force will be critical to the success of our capital program moving forward.

Short-Term Goals: 2022–2025

Over the next three years, the USM will achieve the following:

1.1 Attract, retain, and graduate more aspiring Maryland students, at the undergraduate and graduate levels.

1.2 Implement hiring and retention practices that lead to greater quality and diversity among faculty and staff.

1.3 Recruit, retain, and develop exceptional faculty and staff, and nurture a dynamic environment in which they thrive.

1.4 Build and maintain world-class facilities and technology infrastructure, with greater emphasis given to maximizing our flexibility to expand access into new markets in Maryland and worldwide.

1.5 Work closely with our universities to engage alumni, enhance donor pipelines, and expand fundraising capacity.

Mid-Term Goals: 2025–2027

Building on the success achieved under our short-term goals, the USM will have planned, developed, and begun working on the following:

1.6 We will have leveraged our investment in digital technologies to increase program flexibility, enhance learner personalization, and improve administrative and student support.

1.7 We will have piloted innovative pathways for working professionals that respond to workforce   demands.

1.8 Our alumni outreach and involvement will have been expanded through the adoption of new technologies.

1.9 Our influence and impact as a System will have been amplified through deeper cross-functional collaboration among USM institutions, academically and administratively.

1.10 Our marketing and storytelling to donors and stakeholders will have been enhanced.

Long-Term Goals: 2027–2030 and Beyond

Building on the success of our short-term and mid-term goals, the USM will have positioned itself to achieve the following by the end of the decade:

1.11 The USM will be nationally recognized for our commitment to excellence and the greater good, including for the support provided to our people, programs, and facilities.

1.12 We will be seen as a premier leader in academic innovation, with a commitment to student success and continuous improvement that is deeply embedded in our culture and decision-making structures.

POTENTIAL STRATEGIES

1. Attract, retain, and graduate more of Maryland's aspiring students and enrich the human capital of the state by focusing on the following:

   a. Support a fair, effective, flexible, and affordable tuition system that contributes to student access, retention, and success—while also providing USM institutions the level of support necessary to achieve and sustain the state's mandate to "promote excellence at each campus in accordance with the skills of the faculty, the needs of the region, and the academic programs offered."

   b. Monitor progress under the Board of Regent's policy on institution-based financial aid (VIII-2.41) and work with USM institutional leaders, the state's executive office and legislative leaders, the USM Foundation and institutional foundations, and other public/private organizations to increase the amount of need-based financial aid available for USM students and strategically deploy that aid in ways that promote and enhance student success. (See strategies under Priority 2: Access, Affordability, and Achievement.)

   c. Recognize and support ongoing learner-centered initiatives and strategies developed by USM institutions to improve student retention, graduation, and satisfaction—including programs designed to reduce and eventually eliminate existing achievement gaps.

   d. Through the adoption of an evidence-based, "continuous improvement mindset," monitor and support the development and 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 institutions. (See strategies under Priority 2: Access, Affordability, and Achievement.)

   e. Work with USM institutions and their graduate/first professional degree programs and offices to enhance the quality of life of our graduate and first professional degree students, and improve the programs and services offered to them.

   f. Prioritize the recruitment and education of the state's preK–12 teacher corps, thereby ensuring that the next generation of students entering our institutions and Maryland's workforce has the best and brightest teachers.

2. Attract, retain, and support a high-quality, diverse faculty through the following:

   a. Develop and secure competitive salaries and benefits for USM faculty at all ranks in line with the policy and benchmarks established by the Board of Regents.

   b. Focus on the development and implementation of hiring and retention practices that lead to greater quality and diversity among faculty.

   c. Support the use of best practices in faculty professional development, including effective faculty orientation and development programs, faculty mentoring programs, and programs that recognize our universities' most distinguished teachers and enable them to share their expertise with other faculty.

   d. Secure professional development funding and opportunities for all categories of faculty.

   e. Encourage and support faculty participation in shared governance and service.

3. Attract, retain, and support a high-quality, diverse staff through the following:

   a. Develop and secure competitive salaries and benefits for USM staff.

   b. Work with the Council of University System Staff to identify concerns and promote appropriate policies and practices related to staff training, professional development, and shared governance.

   c. Identify best practices for staff development and training employed at peer institutions and university systems, with particular attention to practices that can be implemented and shared across USM institutions.

   d. Support and monitor at the System and university levels the effectiveness of ongoing staff professional development programs, including staff orientation and development programs, staff mentoring programs, and programs that recognize the institutions' most distinguished staff.

4. Build, maintain, and leverage world-class facilities and technology infrastructure through the following:

   a. Seek investments in capital support under the governor's Capital Improvement Program, while maximizing the flexibility of our capital program to adapt to meet the state's evolving education and research needs.

   b. Coordinate capital planning and programming with Systemwide strategies for using technology to support and boost academic innovation.

   c. Develop and regularly update facilities master plans that are aligned with institutional and USM strategic plans.

   d. Enhance capital funding for building renovation, infrastructure, and facilities renewal to protect the state's investment in our physical assets.

   e. Maintain our focus on effective project management and stewardship of our capital and technology infrastructure resources.

   f. Work with Maryland's executive agencies and the legislature to ensure sufficient resources are available to cover the operating costs associated with bringing new capital facilities online.

   g. Seek out opportunities for sharing resources and best practices and collaborating across System institutions to maximize effectiveness and efficiency and leverage the power that accrues to Maryland from having a preeminent university system.

PRIORITY 2
ACCESS, AFFORDABILITY, AND ACHIEVEMENT
We will give every learner the chance to succeed.

RATIONALE

Higher education is essential to fixing most of our greatest problems, including poverty, health disparities, inequity, and injustice, as well as crises around the environment and civic engagement. Democratizing higher education helps address these problems at the individual and societal level. While Maryland is a highly educated state, higher education access for all citizens will redress the many inequities that still exist. "Access for all" means those just graduating from high school, those with some college but no degree, adults who decide to attend college later in life, and members of immigrant and underserved populations.

Matriculation at a university—on campus or through remote access—requires resources to attend, including payment for tuition and fees and other education expenses, making affordability for all a high priority. We will achieve this goal only if efficiency is a constant focus of our universities—only if we design effective education pathways and expand and enhance financial aid options.

Measuring "achievement" in higher education has traditionally meant counting the undergraduate and graduate degrees awarded. As the landscape changes, earning degrees along with a variety of other credentials—including certificates and badges that better communicate what a graduate knows

and is able to do—will be the desired outcomes for many students and prospective employers. While our institutions strive to provide the content and environment that produce well-rounded, educated citizens, there will be more focus on programs designed specifically to keep an educated workforce up to date in a fast-changing economy.

Furthermore, success for students will require more attention to services that address the needs of those who are challenged, together with more intense and timely support to eliminate new and long-standing barriers to achievement.

CHALLENGES, OPPORTUNITIES, AND NEXT STEPS

It will be challenging to secure the resources needed to keep pace with a fast-changing higher education landscape. Recruiting adult students, creating a comprehensive and smooth transfer process from community colleges and other institutions, expanding pathways into college (including diverse dual enrollment and early middle college pipelines), and developing lifelong learning opportunities will require improved partnerships, central coordination, better administrative systems, and more money.

Achieving true equity and an inclusive culture will require energy and expertise in leadership. Addressing the lack of diversity in our faculty and senior leaders and confronting a difficult history of racial inequity and injustice will remain a challenge. Finding appropriate ways to capitalize on the great value of our three HBCUs will require continuous focus.

Sharing a region with federal agencies and multiple research and service organizations with highly educated employees creates opportunities to partner with these organizations and open up for graduates fulfilling, well-paid careers. In addition, the in-state location of the National Institutes of Health and Maryland's high density of biomedical and technology companies provide a rich environment for workforce preparation. With the diversity and quality of our institutions, programs, and pathways, we can provide opportunities for all Marylanders.

Short-Term Goals: 2022–2025
Over the next three years, the USM will achieve the following:

2.1 Increase enrollment.

2.2 Improve transfer pathways.

2.3 Develop innovative education programs resulting in new credentials.

2.4 Create innovation hubs at the USM's regional higher education centers, starting with the Universities at Shady Grove and expanding to the USM at Hagerstown and the USM at Southern Maryland as they grow and mature.

2.5 Embed in existing programs innovative strategies to improve learner outcomes and enhance program effectiveness and relevance.

2.6 Infuse civic engagement into our curricula.

2.7 II.7. Provide support for continuous improvement of student support services to increase retention and graduation, with an initial focus on our HBCUs.

2.8 Building on model programs in the Baltimore region, invest in long-term signature pipeline programs that create pathways to college beginning in elementary and middle school.

Mid-Term Goals: 2025–2027
Building on the success achieved under our short-term goals, the USM will have planned, developed, and begun working on the following:

2.9 Strengthen the connection between learning experiences and the knowledge, skills, and abilities needed to succeed by making programs, concentrations, and certificates more relevant to workforce and societal needs.

2.10 Improve our focus on student-centered programming and outcomes-based assessments.

2.11 Design financial and business models that address changes in programmatic focus as student needs change (e.g., credential, online, and high-flex programming; industry partnerships).

2.12 Expand signature pipeline programs connecting USM universities with Maryland preK–12 schools.

Long-Term Goals: 2027–2030 and Beyond
Building on the success of our short-term and mid-term goals, the USM will have positioned itself to achieve the following by the end of the decade:

2.13 We will be recognized as a system of institutions that clearly reflects the diversity of the state's population and thrives with a culture of equity and inclusiveness.

2.14 We will offer a variety of programs and credentials that are in high demand and well understood by Marylanders.

2.15 With our institutions, we will have developed a rich set of relationships with agencies, organizations, and industries to provide abundant experiential and work-based learning opportunities for our students.

2.16 With our institutions, we will lead higher education innovation in traditional degrees/curricula and in new flexible and relevant credentialing opportunities.

2.17 We will be actively engaged with and invested in partnerships with local schools.

POTENTIAL STRATEGIES

Short-Term Strategies

Over the near term (2022–2025), the USM and our institutions should seek to:

1. Exploit the advantages of "Systemness" to maximize access, affordability, and achievement by increasing collaborative programs and the use of our regional centers.

2. Support current initiatives and strategies developed and tailored by our institutions to address the unique needs of their student populations.

3. Work with our institutions to promulgate best practices in enrollment management and student success, as identified by the Board of Regents Enrollment Work Group.

4. Expand institutional outreach to the state's underserved, underrepresented populations through our regional centers, Minority-Serving Institutions, and focused Systemwide initiatives, including signature pipeline and partnership programs in preK–12 schools.

5. Work with our institutional leaders, the state's executive office and legislative leaders, the USM Foundation and institutional foundations, and other public/private organizations to increase the need-based financial aid available for USM students and strategically deploy that aid in ways that promote student success. At the same time, support innovative practices and technologies that reduce higher education costs for Maryland students and families.

6. Work with our institutions to establish ambitious yet achievable undergraduate retention targets as part of the System's annual enrollment projection process. Progress toward the targets should be monitored by the USM and reviewed annually as part of the Board of Regents' enrollment projection approval process.

7. Expand academic pathways available through our regional centers, in collaboration with community colleges and local school districts, to address the education access needs of the regions served by the centers, test innovations, and take advantage of the state's investment in the centers' facilities and technology.

8. Engage in a comprehensive brand strategy campaign with the goal of emphasizing to the state— and to the students, families, and employers we serve—messages like the following:

   a. The USM provides all learners access to high-quality, affordable college opportunities.

   b. The USM provides a range of degrees and credentials designed to fit the needs of almost any learner.

   c. The USM provides an extraordinary return on investment—for individuals seeking to advance personally and professionally, and for the state seeking to provide greater and more equitable opportunities for its citizens.

Mid- and Long-Term Strategies

Between 2025 and the end of the decade, the USM and our institutions should seek to:

9. Undertake a Systemwide feasibility study to identify emerging markets in Maryland and across the region for higher education services, and determine how the USM and our institutions can best prepare—organizationally, financially, and technologically—to fill those needs.

10. Inculcate and demonstrate a "continuous improvement" mindset by investing in and embracing the disciplined collection and use of data and technology systems. This includes using improvement science to identify and solve problems for USM students and other internal and external stakeholders.

11. Develop a coordinated and sustained communication strategy to inform internal and external stakeholders about the reasons for leadership decisions under a new, student-centered education model, and to help them understand what such changes will require from them professionally and personally, and why their continued support of the USM is critical.

12. Undertake a comprehensive assessment of institutional, board, state, and federal policies and practices that may work against innovation and student-centered decision-making, and develop a plan and timeline for working with stakeholders to advance—or in cases of limited control, advocate for—the elimination or amelioration of those policies/practices.

13. Develop and offer a broad—and growing—portfolio of new and expanded academic programs, credentials, and delivery models that are more responsive to market demand, more equity-conscious, and designed to strengthen the connection between learning experiences and the critical knowledge, skills, abilities, and dispositions required to live, work, and contribute in society.

14. Begin a purposeful and sustained implementation of the operational, governance, and data collection and communication changes necessary to place students and their success at the center of USM decision-making.

15. Evaluate and restructure our financial and operational models to adapt to changing demographic and market forces/trends, encourage more entrepreneurial approaches, and support exploration of alternate revenue streams that are consistent with the missions and values of the USM and the unique identities of our institutions.

PRIORITY 3
WORKFORCE AND
ECONOMIC DEVELOPMENT
We will drive Maryland's prosperity.

RATIONALE

One of the great strengths of Maryland's economy, and a critical determinant of the state's overall prosperity, is the level of education achieved by its people, particularly those working in the fields of science, engineering, and technology. According to the most recent (2020) rankings of the State New Economy Index, published by the Information Technology & Innovation Foundation (ITIF), and the Milken Institute's State Technology and Science Index, Maryland again captured top marks among all states for the education attainment of its working-age population (No. 1 per ITIF), and the "intensity" of its science and technology workforce—i.e., the prevalence of jobs in those fields relative to the state's total workforce (No. 1 per Milken). Similarly, ITIF scored Maryland No. 2 (just below Virginia) in the percentage of scientists and engineers employed in the private sector.

Such scores, in combination with other features of Maryland's workforce and economy—including our robust representation of IT jobs in the private market (No. 1 per ITIF) and our concentration of life and physical scientists (No. 2 per Milken)—were enough for both organizations to rank Maryland fourth among all states in how well our economy and workforce structure align with the needs of innovation-based, knowledge economies.

In recognition of the vital role that a highly educated workforce plays in creating and sustaining the state's economic success—particularly one led by a large and growing supply STEM and health care graduates—Maryland has codified in law a long-standing goal that at least 55 percent of Maryland adults aged 25 to 64 will hold a college degree (associate or higher) by 2025. And though none have the same official imprimatur as the state's 55 percent goal, Maryland chief executives and blue ribbon commissions have recommended similar statewide targets, aimed at high-need areas such as STEM, cyber, and health care.

The USM's contributions to the education and workforce goals established by the state has been one of our major success stories for much of the last decade. Since 2010, when the first college attainment goals were discussed at the state level, we have boosted our bachelor's degree output by 40 percent—the largest 10-year increase in baccalaureate growth in Maryland history. Even more impressive is how we've stepped up production in critical STEM, cyber, and health care professions. Since 2010, the USM has increased undergraduate STEM degrees by more than 5,000 (up 131 percent), health professions degrees by more than 1,400 (up 131 percent), and cyber degrees by 3,950 (up 239 percent).

But increasing the number of graduates ready to enter the workforce with a USM degree or credential has been only one of the strategies by which we have leveraged the innovative and entrepreneurial strengths of our institutions to power Maryland's economy. Since 2010, our institutions have launched or nurtured more than 600 startups; revised faculty appointment and promotion policies to encourage greater faculty entrepreneurship; advocated for statewide programs, like the RISE Zone and E-Nnovation Initiative, that spur development and innovation and make Maryland more attractive to researchers; and used the Maryland Momentum Fund, a $10 million early-stage investment fund established by the Board of Regents, to move more of their ideas and products into the market.

CHALLENGES, OPPORTUNITIES, AND NEXT STEPS

If Maryland's economy is to continue to thrive and provide even greater economic opportunity, then neither the USM nor the state can afford to rest on past success. While Maryland is among national leaders in college completion, the state remains almost 5 percentage points shy of its 2025 goal of 55 percent college degree attainment. Addressing this gap becomes even more urgent when more than half (54 percent) of all new jobs created in Maryland between 2018 and 2028 will require some postsecondary education or postsecondary credential, and 75 percent of those will require at least a bachelor's degree.

Workforce projections by the Maryland Department of Labor indicate that the total number of job openings in Maryland requiring at least a bachelor's degree will average just under 70,000 per year through 2028 (the last year for which projections are available). This will include, on average, at least 15,300 baccalaureate-level job openings in STEM fields per year; 11,400 openings in education; 5,500 openings in health care; and 29,500 openings (combined) in business, management, and finance. Meanwhile, the USM awards at the baccalaureate level an average of 8,500 STEM degrees per year

(a little over half the projected need), 1,750 teacher education degrees (15 percent of the need), 2,500 nursing and other health care degrees (45 percent of the need), and 4,500 business, finance, and management degrees (15 percent of the need).

Further, within some broad categories, such as STEM, the gap between supply and demand can be even larger. For instance, the number of new jobs requiring a bachelor's degree or higher in the field of information security is projected to grow by as much as 40 percent between 2018 and 2028, requiring a production increase of 160-plus additional graduates per year just to stay even with state growth. That number doesn't include an additional 350 bachelor's level graduates the state needs each year to replace those retiring from or transferring out of the information security field. Similar demand levels are projected for baccalaureate-level software application developers (26 percent increase projected between 2018 and 2028) and operations research analysts (29 increase). These statistics argue not just for our sustained emphasis on helping the state meet its 55 percent degree attainment goal but for an aggressive push to produce graduates in STEM, cyber, health care, and other critical workforce fields.

Looking at the workforce more broadly, a key challenge through this decade and beyond is the expectation that graduates will have the knowledge, skills, and abilities—and the appropriate credentials guaranteeing them—to succeed at work. As noted earlier, greater competition within the higher education sector will function in tandem with workers needing to quickly learn new skills to tilt the balance toward shorter-length credentials or micro-credentials.

While this trend is still in the nascent stages in most states, including Maryland, we have already seen climbing demand for a variety of non-degree credentials offered by our institutions (e.g., certificates at the lower, upper, and post-graduate level). Such credentials, though faster to complete and more adaptable than traditional degrees to changing workforce needs, are still not equal to the speed and flexibility envisioned by micro-credential advocates.

Micro-credentials awarded by the USM increased 82 percent between 2006 and 2019, an average annual growth rate nearly one-third higher than that for traditional degrees. Going forward, the pipeline of graduates prepared by our institutions, and the knowledge, skills, and abilities they hold, will be central not just to powering Maryland's economy but shaping what it looks like.

Short-Term Goals: 2022–2025
Between 2022 and 2025, the USM will achieve the following:

3.1 Meet and exceed the MHEC bachelor's degree production targets established for the USM under Maryland's 55 percent degree attainment goal.

3.2 Expand the number of graduates in fields critical to Maryland's economy—STEM, cyber, health care, etc.

3.3 Diversify and strengthen Maryland's knowledge workforce by expanding the pipeline of underrepresented minority students entering and graduating from fields critical to Maryland's economic strength—STEM, cyber, health care, education, etc.

3.4 Grow the number of startups developed through USM venture support.

3.5 Increase investments in teacher preparation to support new and flexible programs to address short- and long-term preK–12 teacher shortages.

3.6 Create a USM Industry Advisory Task Force to advise on how to increase System-level interaction with Maryland business and industry and promote more effective partnership.

Mid-Term Goals: 2025–2027
Building on the success achieved under our short-term goals, the USM will have planned, developed, and begun working on the following:

3.7 We will have developed a broad, data-informed academic portfolio reflecting the needs of students and employers.

3.8 We will have worked with our P20 partners to make it easier for students who want to become teachers to become teachers.

3.9 Our programs will deliver graduates with the well-rounded backgrounds and credentials needed to enter the workforce.

3.10 We will have partnered with business and community leaders to better understand and address local and regional economic development needs.

Long-Term Goals: 2027–2030 and Beyond
Building on the success of our short-term and mid-term goals, the USM will have positioned itself to achieve the following by the end of the decade:

3.11 Despite increased competition in the postsecondary education market, the USM will continue to be the dominant producer of graduates, from all populations, prepared to enter and support Maryland's knowledge economy.

3.12 We will be recognized as the primary source for reskilling and upskilling the state's workforce.

3.13 We will have a strong and deep relationship with the state's preK–12 schools focused on improving student outcomes and education pathways.

3.14 We will be recognized for preK–12 engagement and teacher preparation in a way that no other university system has been before.

POTENTIAL STRATEGIES

Short-Term Strategies
Over the near term (2022–2025), the USM and our institutions should seek to:

1. Refine and employ strategies for improving student recruitment, retention, and academic success—including best practices identified by the Board of Regents Enrollment Work Group—to meet and exceed MHEC's annual degree production targets.

2. With support from Maryland's Workforce Development Initiative and through institution-specific strategies—including expanded access at our regional higher education centers—increase the number of baccalaureate-level graduates we produce in STEM, health care, cyber, education, and other fields identified as critical to Maryland's economic growth.

3. Diversify and strengthen Maryland's workforce in high-tech, high-demand fields by increasing the number of underrepresented minority graduates produced in STEM, health care, cyber, education, and other fields identified as critical to Maryland's economic growth.

4. Expand programs at our regional higher education centers that specifically address regional workforce needs.

5. Invest in new and flexible programs for preparing teachers and educators for Maryland schools.

6. Develop a comprehensive brand strategy campaign, targeting multiple stakeholder groups, that conveys to the state and its citizens the USM's significant return on investment.

7. In close coordination with Maryland's business and industry leaders, explore the advantages and options for developing a System-level Industry Advisory Council(s) whose role is to advise the USM and our institutions on the state's industry and workforce development needs and how we can more effectively partner to shape and grow Maryland's economy.

Mid-Term and Long-Term Strategies
Between 2025 and the end of the decade, the USM and our institutions should seek to:

8. Embrace and invest in data and technology systems designed to help institutions identify and address workforce-related learning needs and opportunities.

9. In coordination with our institutional leaders (particularly those at our colleges of education) and other Maryland preK–12 stakeholders, develop, advocate for, implement, and support an initiative that: 1) Removes known barriers to college students entering teacher education; and 2) Engages our institutions and faculty more broadly in preK–12 schools to improve student outcomes and shape Maryland's future workforce.

PRIORITY 4
RESEARCH
We will develop the ideas that change the world.

RATIONALE

With more than 60 federal agencies, 70 federal research labs, four world-class research universities, and an internationally recognized center dedicated to environmental sciences located within its borders, Maryland is unique among states in the impact research and development (R&D)—particularly federally supported R&D—has on its economy. The $18 billion-plus in R&D funding that flows annually to Maryland-based agencies, labs, and academic institutions shapes key sectors of Maryland's economy, helps the state attract and retain its highly skilled workforce, and promotes—through income and taxes generated, and innovations and services produced—a better quality of life for Maryland's residents.

The result of Maryland's unique concentration of R&D generators is that the state, though relatively small in population and geographic size, ranks first among all states in federal R&D obligations, fifth in academic R&D performance ($4.6 billion), and seventh in total R&D performance. Fueling and sustaining Maryland's outsized R&D power is a reservoir of highly educated science and technology talent that, on a per capita basis, is unsurpassed in the nation.

The contributions the USM makes to Maryland's R&D success, and the broader impacts of that success on Maryland's economic competitiveness, are profound. Our institutions serve as the primary workforce feeder for the state's R&D sector, contributing, for instance, 93 percent of all bachelor's degrees and 64 percent of all doctoral degrees awarded in Maryland in computer science. Our institutions directly account for $1.1 billion in extramural research expenditures. And through university-based technology transfer activity, they

translate that research into commercial and entrepreneurial activity that yields new companies, high-quality jobs, and innovations that improve health, wellness, and well-being.

Over the next four years, as federal R&D priorities come into greater focus and manifest themselves in increased federal spending in such areas as climate and environmental research, clean and sustainable energy, and health care, it will be critical to the state's continued success that our institutions, their faculty, and their programs align with these emerging opportunities, leveraging existing areas of USM strength where possible, and developing new areas of strength where warranted.

But the success of our research portfolio means much more to Maryland than just the R&D dollars brought in, or even the patents, licenses, and other commercializable products and processes that flow from them. The basic and applied research done on USM campuses—whether in medicine, engineering, the social sciences, public policy, or indeed any other field hosting research faculty—quite literally saves lives, creates greater and more equitable opportunity, and protects and preserves the environment in which we live, work, and play.

Over the next decade, as our institutions, our state, and our nation emerge from the COVID-19 pandemic to confront even greater and longer term problems—from the interrelated crises of climate change and decreased biodiversity to the pernicious effects of systemic racism and inequality—we must leverage the research and scholarship generated by our faculty to confront our grand challenges, improve our quality of life, and fuel economic growth.

Short-Term Goals: 2022–2025
Between 2022 and 2025, the USM will achieve the following:

4.1 Leverage our proximity to the nation's capital and federal research agencies and laboratories to enhance our R&D success.

4.2 Align areas of USM research strength with emerging national research priorities.

4.3 Advance the state's leadership in environmental sciences and its reputation in sustainability research.

4.4 Promote technology transfer and commercialization of the USM's intellectual property.

4.5 Expand community-based research to strengthen the neighborhoods, towns, and cities where our institutions are based.

4.6 Building off the MPower model, grow the number of cross-institutional, interdisciplinary, and interprofessional

research collaborations between our institutions and centers.

4.7 Grow the number of research partnerships with industry, agencies, NGOs, and academic institutions, domestically and internationally.

Mid-Term Goals: 2025–2027
Building on the success achieved under our short-term goals, the USM will have planned, developed, and begun working on the following:

4.8 We will have diversified and expanded our R&D portfolio and, leveraging our strength in basic and applied research, we will have secured more basic research funding from the business sector.

4.9 Drawing on the expertise of our faculty, staff, and students, we will have developed and implemented a special research initiative on diversity, equity, and justice; globalization; and sustainability that includes an examination of the role that race, identity, and systemic racism may play in those areas. (See goals under Priority 5: Diversity, Equity, and Inclusion.)

4.10 We will have expanded research initiatives focused on strengthening the communities where our institutions are located.

4.11 We will have leveraged the USM's institutional resources and expertise and collaborated with stakeholders such as the Chesapeake Bay Foundation to increase contributions to climate change research and education.

Long-Term Goals: 2027–2030 and Beyond
Building on the success of our short-term and mid-term goals, the USM will have positioned itself to achieve the following by the end of the decade:

4.12 Maryland will rank among the nation's most competitive states in R&D performance.

4.13 Our institutions will have achieved greater diversity in their sources of R&D support.

4.14 We will be regarded nationally and internationally as a leader in research on climate change and sustainability, including the protection of Maryland's unique natural resource: the Chesapeake Bay.

4.15 We will be recognized for the quality and impact of our research and scholarship on topics related to diversity, equity, and justice; globalization; and sustainability, and our examination of the role that race, identity, and systemic racism may play in those areas. (See goals under Priority 5: Diversity, Equity, and Inclusion.)

4.16 Research carried out on our campuses will contribute to a stronger Maryland economy, better quality of life for Maryland residents, and healthier, more equitable, more resilient communities.

POTENTIAL STRATEGIES

Short-term Strategies
Over the near term (2022–2025), the USM and our institutions should seek to:

1. Build on the USM's advantageous location and our long-established relationships with federal research agencies in the region—e.g., FDA, NSA, NASA, NIST, NIH—to grow R&D opportunities for our institutions, faculty, and students.

2. Track and disseminate information on federal research priorities to identify new or expanded opportunities to pursue R&D funding.

3. Expand our data collection and reporting to include updates to the Board of Regents Committee on Economic Development and Commercialization and other groups concerning institutional initiatives designed to respond to federal priorities/opportunities.

4. Building on the environmental research strengths at our institutions, Maryland's focus on the Chesapeake Bay, and the trust the University of Maryland Center for Environmental Science has developed in Annapolis and elsewhere, establish a "Chesapeake Cyber Collaboratory" to serve as a critical global node for environmental intelligence.

5. Design and launch a partnership program with the state of Maryland and other stakeholders (federal, state, and private) focused on integrating socioeconomic considerations and the viewpoints of impacted communities into our research, and break down the silos that inhibit the sharing of information and data between these groups.

6. Through the Office of the Vice Chancellor for Sustainability, convene an annual USM Sustainability Report and Open Summit to shape public opinion on the System's sustainability leadership and establish a shared agenda for moving forward.

7. With the continued support of our faculty and institutions, and the work of their tech transfer operations—including collaborative efforts like UMVentures, the Center for Maryland Advanced Ventures (CMAV), and the Maryland Momentum Fund—increase the USM's number of licenses and options executed and our number of new patents filed annually.

Mid- and Long-Term Strategies
Between 2025 and the end of the decade, the USM and our institutions should seek to:

8. Build off the lessons learned from the development of IBBR, IMET, MPower, UMVentures, CMAV, and other joint initiatives to identify and foster new opportunities for cross-institutional collaborations on research projects and proposals.

9. Employ creative new strategies to partner with business and industry in support of basic and applied USM research.

10. Explore mechanisms to create and support a Board of Regents special research initiative on topics associated with diversity, equity, and justice; globalization; and sustainability. Identify corporate/private sponsors to underwrite grants and raise public awareness of the project and its findings. (See strategies under Priority 5: Diversity, Equity, and Inclusion.)

PRIORITY 5
DIVERSITY, EQUITY, AND INCLUSION
We will achieve equity and justice within the System and advance them in the communities we serve.

RATIONALE

The University System of Maryland is committed to promoting diversity, equity, and inclusion (DEI) in all of our policies, practices, and endeavors, and instilling in our students appreciation and support for fairness, open-mindedness, civic engagement, and service to others. We are committed to contributing to a civic culture that values civility and respect for all people.

With 12 institutions—including three prominent HBCUs and one of the nation's largest online universities—three regional centers, 165,000 students, 40,000 faculty and staff, and nearly 1 million living alumni, the USM is one of the country's largest public university systems and one of its most diverse. Our mix of institutions—each with its own unique history, culture, and mission—together with our location in a region that's diverse and that boasts a robust economy, means we have unique advantages in attracting and retaining students, faculty, and staff of different backgrounds, talents, life experiences, and aspirations. A testament to our recruitment success is the sustained representational progress we've made over the past decade in increasing diversity and inclusion.

Between 2010 and 2020, our institutions increased their share of underrepresented minority (URM) students—i.e., African American, Hispanic, and Native American students—from just

under 31 percent of all enrolled students to 35 percent. The share of degrees earned by URM students climbed from 23 percent to 31 percent. URM faculty teaching or conducting research at our institutions grew from 12 percent to 17 percent. And our URM staff—already more diverse than our faculty and student populations—increased slightly, from 34.5 percent in 2010 to 34.8 percent in 2020. It is the closest of any of our populations to mirroring overall diversity within the state, whose estimated URM population was 42 percent in 2020.

But the representational progress we've made toward our goal of creating a university system that's more reflective of the state we serve does not absolve us, our institutions, or our leadership of a responsibility to do even more in the arena of diversity, equity, and inclusion. Indeed, if anything, the ability we've shown to make sustained DEI progress means we must double down on our commitment to pursuing DEI goals, strategies, and tactics that promise to be transformative. Our committed leadership in this area ultimately will benefit not just the state and its citizens, but our nation as a whole.

As a first step toward developing an ambitious set of DEI goals and strategies, the Board of Regents has charged the chancellor and USM leaders with implementing a framework to help identify and dismantle structural racism within the System and our institutions; elevate issues of race and racism in our teaching, research, and scholarship; and redress racial inequities and advance social justice within the USM and in the communities we serve.

Guided by this framework, and building on the strength of our people and institutions, we must infuse DEI and civic engagement into our teaching, research, scholarship, and service. We must move relentlessly toward our goal of becoming truly reflective of our state and its people, and applying our expertise, influence, and assets to improving their lives.

Short-Term Goals: 2022–2025
Between 2022 and 2025, the USM will achieve the following:

5.1   Increase the diversity of our students, faculty, and staff.

5.2   Seek out and promote best practices to enhance inclusion and promote equity.

5.3   Increase the visibility of our HBCUs, highlighting their missions and contributions to the System's strength.

5.4   Educate our students to be informed and engaged citizens and social change agents in our democracy.

Mid-Term Goals: 2025–2027
Building on the success achieved under our short-term goals, the USM will have planned, developed, and begun working on the following:

5.5   We will have created a special research initiative on diversity, equity, and justice; globalization; and sustainability that includes an examination of the role that race, identity, and systemic racism may play in those areas. (See goals and strategies under Priority 4: Research.)

5.6   Our HBCUs will have designed and implemented an ambitious set of enrollment management and student success strategies.

5.7   We will have enhanced global engagement by expanding study abroad programs, supporting international students, and emphasizing international research efforts.

5.8   We will have integrated civic education into our general education curricula, and implemented an array of new programs designed to foster an ethos of civic engagement and participation.

Long-Term Goals: 2027–2030 and Beyond
Building on the success of our short-term and mid-term goals, the USM will have positioned itself to achieve the following by the end of the decade:

5.9   In the diversity of our students, faculty, and staff, the USM will be reflective of the state we serve.

5.10 The USM will be recognized as a national thought leader on the topics of diversity, equity, and justice; globalization; and sustainability, and the role that race, identity, and systemic racism may play in those areas. (See goals and strategies under Priority 4: Research.)

5.11 Our HBCUs will lead the System in increased student achievement and will be widely recognized for their success.

5.12 All USM graduates will be civically literate, prepared to accept their responsibilities as citizens in a complex and globally interdependent world.

POTENTIAL STRATEGIES

Short-Term Strategies
Over the near term (2022–2025), the USM and our institutions should seek to:

1.   Increase the percentage of URM undergraduates enrolled in the USM, as well as our percentages of URM faculty and staff.

2. Support the wide range of strategies developed and tailored by USM institutions to address the unique needs of their student populations. (See strategies under Priority 2: Access, Affordability, and Achievement.)

3. Promulgate among our institutions best practices in enrollment management and student success as identified by the Board of Regents Enrollment Work Group. (See strategies under Priority 2: Access, Affordability, and Achievement.)

4. Work with our institutional leaders, the state's executive office and legislative leaders, the USM Foundation and institutional foundations, and other public/private organizations to increase the need-based financial aid available to USM students and strategically deploy that aid in ways that promote student success. At the same time, support practices and technologies that reduce higher education costs for Maryland students and families.

5. Support at the System level mechanisms that promote student retention and success, particularly for URM and low-income students.

6. Support our institutions in identifying, recruiting, retaining, developing, and promoting URM faculty. Include in those strategies expansion of bachelor's-to-PhD pipelines for URM students pursuing faculty careers.

7. Through the USM Diversity and Inclusion Council and other groups, develop proactive measures to communicate to students, faculty, staff, and our external communities the value of diversity and inclusion, and monitor campus climate in support of our broader DEI commitment.

8. As part of a comprehensive USM brand strategy campaign, spotlight the unique value proposition offered by each of our HBCUs, together with the return on investment they provide Maryland in cultural richness, economic strength, and the health and well-being of its people. (See strategies under Priority 2: Access, Affordability, and Achievement.)

9. Per the strategies outlined in Access, Affordability, and Achievement, work with our HBCUs to establish appropriately ambitious yet achievable undergraduate retention targets.

10. Increase the number of USM institutions participating in the American Democracy Project and those recognized with the Carnegie Foundation's Community Engagement Classification.

11. Establish the Board of Regents Civic Education/ Civic Engagement Workgroup as a standing workgroup to monitor the implementation of our civic education recommendations.

12. In collaboration with the USM Student Council, establish the Student Civic Leaders Committee as a standing USM student committee.

13. Establish the Student Voting Coordinator Council to facilitate comprehensive voting access and engagement across the System.

14. Define and promote civic learning goals for all teacher candidates across all programs. Convene colleges of education and preK–12 partners in an annual conference to expand and enrich civic learning P20.

15. Expand undergraduate service learning opportunities across all majors.

16. Establish a USM Civic Engagement fund to incentivize faculty to integrate civic learning outcomes into courses across all disciplines.

Mid- and Long-Term Strategies
Between 2025 and the end of the decade, the USM and our institutions should seek to:

17. Explore a senior-level DEI position within the USM Office, similar to that of the vice chancellor for environmental sustainability, charged with identifying, coordinating, and supporting DEI opportunities and activities spanning the System, and reaching across institutions to bring together USM students, faculty, staff, and communities in DEI programs and activities. The position, reporting to the chancellor and serving as the Board of Regents' envoy to external stakeholders, would promote and support effective DEI practices, oversee special research initiatives on diversity, equity, and justice, and establish reporting mechanisms that hold the USM accountable for progress on our DEI goals.

18. Develop and publish a Systemwide accountability report, allowing the public to learn more about the USM, and allowing leadership to identify areas of strength, challenges, and progress.

19. Explore mechanisms to create and support a Board of Regents special research initiative on diversity, equity, and justice; globalization; and sustainability, together with an examination of the role that race, identity, and systemic racism may play in those areas. Identify corporate/private sponsors to underwrite grants and raise public awareness of the project and its findings. (See strategies under Priority 4: Research.)

20. Use the data and best practices generated by the special research initiative to model effective leadership in addressing issues associated with diversity, equity, and justice.

21. Using the National Study of Learning, Voting and Engagement, measure and report on student voter participation at each USM institution.

22. Develop badges or micro-credentials to designate student-level competencies in civic learning and democratic engagement.

23. Implement the new Langenberg Legacy elements, including faculty fellows and student awardees.

24. Foster collaboration across institutions and monitor civic learning outcomes. To aggregate information, institutions should report on:

    a. Availability and amount of service learning embedded in courses, and opportunities for all students to engage in service learning for credit;

    b. Student-earned civic engagement micro-credentials across all institutions;

    c. Langenberg Legacy Fellows' projects;

    d. Number and diversity of civic engagement community partners;

    e. Civic competencies for all teacher candidates.

V. NEXT STEPS—ACTION AND ACCOUNTABILITY

The USM and our institutions will work together to further develop and refine the priorities, goals, and potential strategies outlined in this plan. Under the leadership of the chancellor and the Board of Regents, the USM Office will take the lead in developing an implementation plan: assigning action-item responsibility, timelines, accountability benchmarks, and a process for measuring plan activity and progress. Through a USM Strategic Plan Scorecard, the USM Office will report annually on the progress made toward our goals.

GLOSSARY

Addressable market—Total market demand for a product or service. Also "total addressable market."

American Democracy Project (ADP)—A nonpartisan initiative founded by the American Association of State Colleges and Universities, ADP is a network of nearly 300 state colleges and universities exploring public higher education's role in preparing the next generation to be informed and engaged in an equitable civil society.

Badges—Conferred by colleges and universities to acknowledge achievement or skill acquisition at a level more granular than a degree. "Badges" and "digital badges" are used interchangeably, together with "micro-credentials."

Bundled model of services—An operational or financial system in which a series of discrete goods or services is grouped together or consolidated and offered under a unitary purchase price.

Carnegie Foundation Community Engagement Classification—An elective classification granted by the Carnegie Foundation for the Advancement of Teaching to colleges and universities that have institutionalized community engagement. Colleges and universities must reapply for designation every two years.

Center for Maryland Advanced Ventures (CMAV)—Located at the University of Maryland, Baltimore, CMAV was created in 2016 as a Systemwide effort to promote commercialization of high-potential, university-based discoveries. CMAV initiatives are integrated with UMVentures (see UMVentures), and CMAV staff manage the Maryland Momentum Fund (see MMF).

Cyber Collaboratory—An immersive learning space where students, faculty, government, and industry partners use technology to collaborate on research and policy-related projects/simulations.

Four-year institution—Also "four-year college or university." An institution that grants degrees at the bachelor's level or higher, though some four-year institutions also grant degrees at the associate level.

FTE—Full-time equivalent or full-time equivalency. For students, FTE is based on credit-hour enrollment or attendance status. The federal Integrated Postsecondary Education Data System generally defines "full-time" as undergraduate students enrolled for 12-plus semester or quarter credits, and graduate students enrolled for 9-plus semester or quarter credits. For faculty and staff, FTE is based on workload; for instance, two or more part-time employees can accomplish a job requiring 1 FTE.

HBCUs—Historically Black colleges or universities. The USM's three HBCUs are Bowie State University, Coppin State University, and the University of Maryland Eastern Shore.

IBBR—Institute for Bioscience and Biotechnology Research, a joint research enterprise of the University of Maryland, College Park, the University of Maryland, Baltimore, and the National Institute of Standards and Technology.

IMET—Institute of Marine and Environmental Technology, a strategic alliance involving scientists from the University of Maryland Center for Environmental Science, the University of Maryland, Baltimore, and the University of Maryland, Baltimore County.

Knowledge economy—According to the Organisation for Economic Co-operation and Development, an economy in which "the production, distribution, and use of knowledge is the main driver of growth, wealth creation, and employment across all industries."

Maryland Momentum Fund—A USM-sponsored $10 million early-stage fund that invests in Maryland-based, USM-affiliated startups. The fund is administered through the Center for Maryland Advanced Ventures (see CMAV).

Micro-credentials—Certified documents providing proof of achievement of a set of learning outcomes or competencies (see Badges).

MPower—MPowering the State. A strategic partnership between the University of Maryland, College Park and the University of Maryland, Baltimore. The partnership was created in 2012 and codified in 2016 to significantly expand research collaborations, business development, and student opportunities at both institutions.

National Study of Learning, Voting, and Engagement (NSLVE)—An initiative of the Institute for Democracy & Higher Education at Tufts University, the NSLVE examines student voting rates, patterns, and conditions, and helps participating institutions understand the correlation between their campus climate for political learning and engagement and student learning experiences and voting.

NGOs—Non-governmental organizations. A non-profit entity operating independently of any government.

Nontraditional student—Students, particularly those ages 25 and older, who may not follow the typical pattern of enrolling in credit-bearing postsecondary courses immediately following high school or who are not seeking a degree.

Northeast region—Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and Maine.

P–20 or PreK–20—Prekindergarten through Grade 20. The linked range of education services and service providers extending from prekindergarten through the bachelor's degree (grade 16) and doctoral degree (grade 20).

PreK–12—Prekindergarten through Grade 12. The range of education services provided at the prekindergarten level (children ages 4–5 who will attend kindergarten the following fall) through the senior year of high school (grade 12).

Public two-year college—Also "community college." A public college-level institution offering courses through the first two years of instruction, typically ending in an associate degree or certificate.

Service Learning—A form of structured, experiential education that combines formal academic instruction with academically relevant service activities addressing human and community needs.

Socioeconomic demographics—The differences among population groups in terms of income, education attainment, financial security, and other more subjective perceptions of economic or social status.

UMVentures—A joint initiative of the University of Maryland, Baltimore and the University of Maryland, College Park commercializing university-based discoveries and creating economic impact by engaging partners in industry and launching social ventures.

URM—Underrepresented Minority. Those populations underrepresented in U.S. higher education: African American, Hispanic/Latino, and Native American or Pacific Islander.

Systemness—Credited to former State University of New York Chancellor Nancy Zimpher, "the coordination of multiple components that, when working together, create a network of activity that is more powerful than any action of individual parts on their own."

UNIVERSITY SYSTEM
of MARYLAND

USM 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 Center
  for Environmental Science

University of Maryland, College Park

University of Maryland Eastern Shore

University of Maryland Global Campus

EDUCATION CENTERS

Universities at Shady Grove

University System of Maryland at Hagerstown

University System of Maryland at Southern Maryland

USM Headquarters
701 E. Pratt St.
Baltimore, MD 21202

USM Adelphi Office
3300 Metzerott Rd.
Adelphi, MD 20783

VISION 2030
FROM EXCELLENCE TO PREEMINENCE
FOR OUR STUDENTS | FOR MARYLAND

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